

Overview

*Economic growth will be unbalanced, but development still can be inclusive—that is the message of this year’s **World Development Report**. As economies grow from low to high income, production becomes more concentrated spatially. Some places—cities, coastal areas, and connected countries—are favored by producers. As countries develop, the most successful ones also institute policies that make living standards of people more uniform across space. The way to get both the immediate benefits of the concentration of production and the long-term benefits of a convergence in living standards is economic integration.*

Although the problems of economic integration defy simple solutions, the guiding principle does not have to be complex. The policy mix should be calibrated to match the difficulty of the development challenge, determined by the economic geography of places. Today, policy discussions about geographic disparities in development often start and end with a consideration of spatially targeted interventions. The Report reframes these debates to include all instruments for economic integration—institutions, infrastructure, and incentives. The bedrock of integration efforts should be spatially blind institutions. As the challenges posed by geography become more difficult, the response should include connective infrastructure. In places where integration is hardest, the policy response should be commensurately comprehensive: institutions that unite, infrastructure that connects, and interventions that target.

Place and prosperity

Place is the most important correlate of a person’s welfare. In the next few decades, a person born in the United States will earn a hundred times more than a Zambian, and live three decades longer. Behind these national averages are numbers even more unsettling. Unless things change radically, a child born in a village far from Zambia’s capital, Lusaka, will live less than half as long as a child born in New York City—and during that short life, will earn just \$0.01 for every \$2 the New Yorker earns. The New Yorker will enjoy a lifetime income of about \$4.5 million, the rural Zambian less than \$10,000.

A Bolivian man with nine years of schooling earns an average of about \$460 per month, in dollars that reflect purchasing power at U.S. prices. But the same person

would earn about three times as much in the United States. A Nigerian with nine years of education would earn eight times as much in the United States than in Nigeria. This “place premium” is large throughout the developing world.¹ The best predictor of income in the world today is not *what* or *whom* you know, but *where* you work.

Bumps, curves, and spills

These disparities in incomes and living standards are the outcome of a striking attribute of economic development—its unevenness across space. Somewhat unfairly, prosperity does not come to every place at the same time. This is true at all geographic scales, from local to national to global. Cities quickly pull ahead of the countryside. Living standards improve in some provinces



while others lag. And some countries grow to riches while others remain poor. If economic density were charted on a map of the world, the topography at any resolution would be bumpy, not smooth.

Location remains important at all stages of development, but it matters less for living standards in a rich country than in a poor one. Estimates from more than 100 living standard surveys indicate that households in the most prosperous areas of developing countries—such as Brazil, Bulgaria, Ghana, Indonesia, Morocco, and Sri Lanka—have an average consumption almost 75 percent higher than that of similar households in the lagging areas of these countries. Compare this with less than 25 percent for such developed countries as Canada, Japan, and the United States. In contrast, as a country grows richer, location becomes more important for economic production. Ghana, Poland, and New Zealand—three medium-size countries with land areas of about 250,000 square kilometers—have vastly different per capita gross national incomes of about \$600, \$9,000, and \$27,000, respectively. The most economically dense 5 percent of the country's area produces about 27 percent of gross domestic product (GDP) in Ghana, 31 percent in Poland, and 39 percent in New Zealand.

Put another way, as countries develop, location matters less for families and more for firms. Development seems to give a place the ability to reap the economic advantages of rising concentrations of production, and to obtain the social benefits that come from a convergence in consumption. Economic development thus brings with it the conditions of even greater prosperity, in a virtuous circle.

Another stylized fact: neighborhoods matter. A prosperous city seldom leaves its periphery mired in poverty. A province's prosperity is sooner or later shared with those nearby. And neighboring countries share not just political borders but economic destinies. North America, Western Europe, and East Asia are now prosperous neighborhoods. Within these regions, all countries did not grow in lockstep. Within countries, some provinces did better, and within each province, prosperity came at different times to cities, towns, and villages.

Less widely appreciated is the fact that places near prosperous provinces, countries, and regions have invariably benefited. Prosperity produces congestion and causes economic activity to spill over, but only to places that are well connected to these prosperous parts. The detrimental effects of poverty, instability, and conflict spill over as well. To prosperous places, proximity is a blessing, to poor places, a curse.

These three attributes of development—geographic unevenness, circular causation, and neighborhood effects—have not always received much attention. They should, because they have radical implications for public policy.

- **Geographic unevenness**—the first attribute of development—implies that governments generally cannot simultaneously foster economic production and spread it out smoothly.
- **Circular causation**—the second attribute—provides hope for policy makers wishing to pursue progressive objectives. Rising concentrations of economic production are compatible with geographic convergence in living standards. And the market forces of agglomeration, migration, and specialization can, if combined with progressive policies, yield both a concentration of economic production and a convergence of living standards.
- **Neighborhood effects**—the third attribute—come with a principle for policy making: promote economic integration. Unevenness and circularity imply that it is more difficult for places left behind to catch up. But spillovers point to the promise for surmounting this handicap. Economic integration is an effective and the most realistic way to harness the immediate benefits from concentration to achieve the long-term benefits of convergence.

Putting this principle of economic integration into practice requires identifying the market forces and government policies that best support the concentration of economic mass and the convergence of living standards across different locations. It also requires recognizing that these market forces can be strong or weak depending on economic geography. Earlier *World*

Development Reports have studied these phenomena. This Report advances the influence of geography on economic opportunity by elevating space and place from mere undercurrents in policy to a major focus.

The problem—at three geographic scales

Depending on the “geographic scale,” the market forces to be harnessed or supported differ. At a smaller scale—say, an area within a country (a province or state)—geography poses different challenges than at a larger geographic scale—say, a country. At an even larger geographic scale—say, a group of countries that form a geographic region—the market forces that work toward integration can be blocked by even greater geographic and political obstacles (see box 1).

Locally, the concentration of economic production as countries develop is

manifest in urbanization. In East Asia, for example, if current trends continue, the urban population is expected to increase by about 450 million people over the next two decades, as countries in the regions grow, adding the equivalent of a Paris every month. In South and Central Asia, the increase is expected to be almost 350 million. And in Sub-Saharan Africa—if economies continue to grow—the urban population could increase by 250 million between 2005 and 2025. In other parts of the developing world, within-urban transformations will be as important.

The question is whether growing concentrations of humanity will increase prosperity, or produce congestion and squalor. Another concern is the divergence in living standards between those who benefit most from this geographic

BOX 1 Three geographic scales: local, national, and international

Consider the “neighborhoods” of Lagos State, Nigeria, and West Africa (see the maps below).

- *The first geographic scale is the area.* The state of Lagos in southwestern Nigeria has the five districts of Badagry, Epe, Ikeja, Ikorodu, and Lagos, covering about 3,500 square kilometers. Its estimated population density—with the smallest land area but among the two most populous in the nation—is about 2,600 persons per square kilometer. Metropolitan Lagos has a density more than three times that, fueled by

agglomeration economies and rural-urban migration.

- *The second geographic scale is the country.* With its 36 states and capital area and covering 924,000 square kilometers, Nigeria is the world’s 32nd largest country. The distance from Lagos to the northeastern tip of Nigeria is almost 1,500 kilometers. The southern states have seaports and oilfields. The northern part, once a seat of ancient empires, now has higher poverty. Migration between the north and the south is not an easy matter because

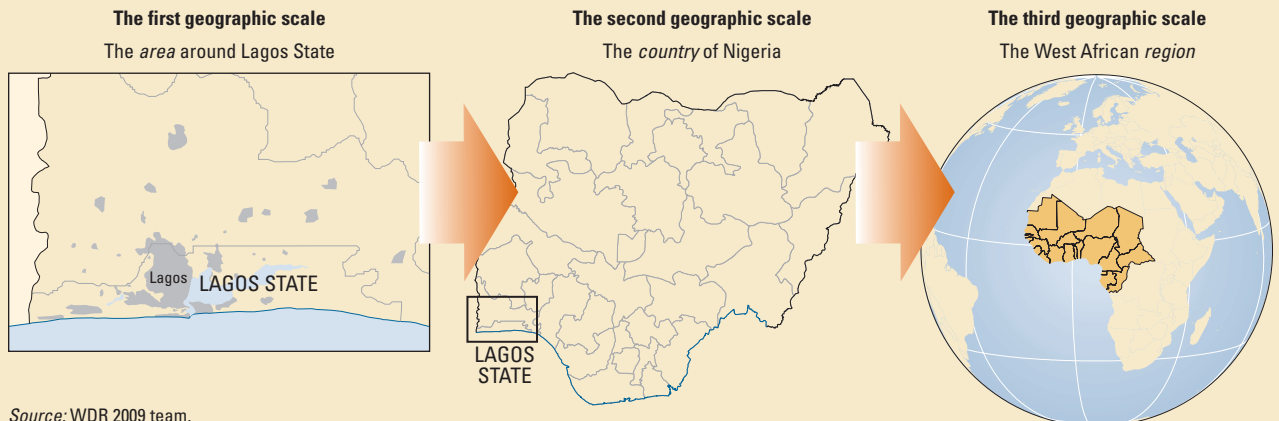
of religious and linguistic differences. The sharing of oil wealth is a source of tension.

- *The third geographic scale is the region.* Nigeria’s West African neighbors include Cameroon, the Central African Republic, Côte d’Ivoire, Equatorial Guinea, Ghana, Niger, and Togo. The region covers more than 6 million square kilometers, divided by some of the world’s thickest borders.

Source: WDR 2009 team.

Three geographic units: area, country, and region

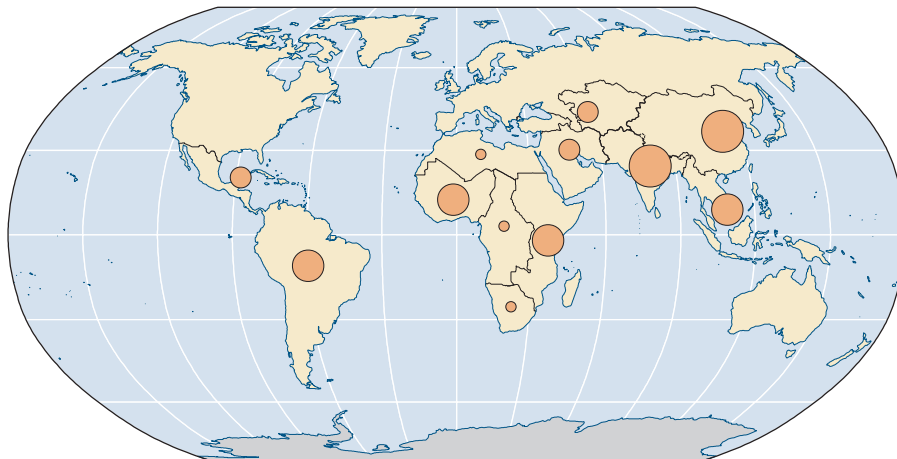
Lagos State, Nigeria, and West Africa represent the local, national, and international scales



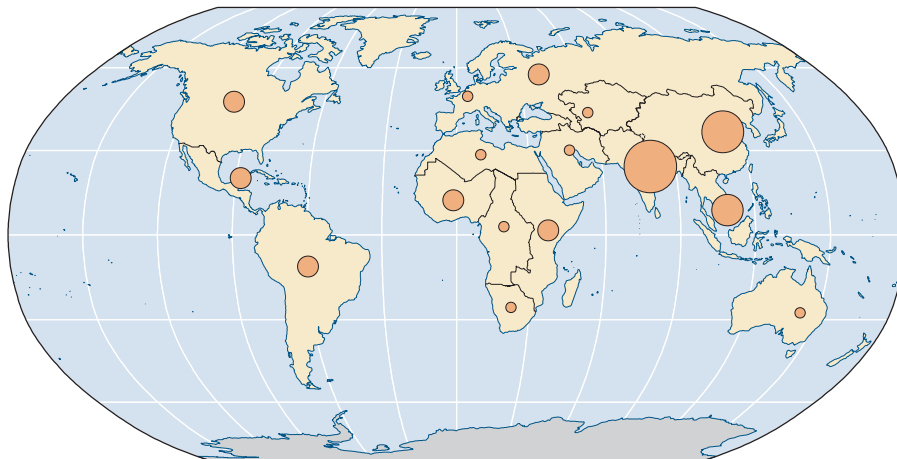
Source: WDR 2009 team.

Map 1 The biggest development challenges—at the local, national, and international geographic scales

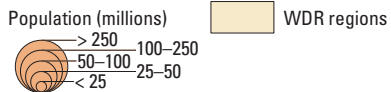
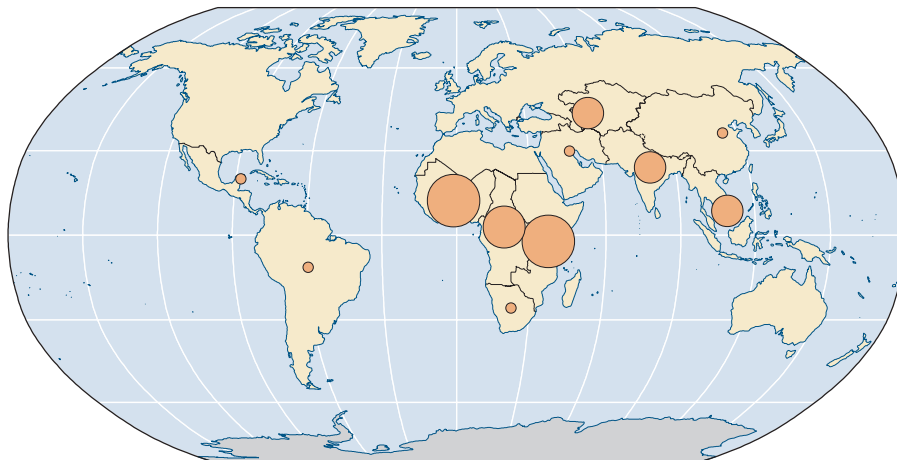
a. A billion in slums



b. A billion in remote areas



c. The bottom billion



Sources: Panel a: United Nations 2006a; panel b: WDR 2009 team, based on household survey data; panel c: Collier 2007.

concentration—essentially urbanites in prosperous neighborhoods—and those left behind in villages and those living in slums, estimated to number about 1 billion in the developing world (see map 1, panel a). The (ineffective) policy responses so far have been to try to slow down urbanization.

At the national scale, economic growth displays a similar unevenness, as places close to large markets prosper sooner than places more distant. In China the coastal provinces—mainly in the three areas known as the Bohai Basin, the Pearl River Delta, and the Yangtze River Delta—accounted for more than half of the country's GDP in 2005, with less than a fifth of its area. In Brazil the south-central states of Minas Gerais, Rio de Janeiro, and São Paulo account for more than 52 percent of the country's GDP, with less than 15 percent of its land area. Greater Cairo produces 50 percent of the Arab Republic of Egypt's GDP, using just 0.5 percent of its land area.

Politicians generally view this economic imbalance disapprovingly. In communist Russia the government labored to reduce the economic share of the old industrial area of St. Petersburg, the Center, and the mid-Urals from 65 percent to 32 percent, forcibly shifting production to the eastern areas. It boosted the share of the east in economic production from 4 percent in 1925 to 28 percent at the end of communism, whose demise probably was hastened by the spatial inefficiency that these efforts engendered. Because governments care so much about domestic disparities, they jeopardize competitiveness and risk collapse. Policies to reduce interstate or provincial disparities in production and living standards are commonplace—but largely ineffective. About 1 billion people continue to live in these inhospitable lagging areas (see map 1, panel b).

At the international scale, economic growth has concentrated global production in a few regions, with commensurate differences in incomes. In 2000 about three-quarters of world GDP was concentrated in North America, Western Europe, and Northeast Asia. This concentration is not new. Three centuries ago, China and India accounted for about two-thirds of the world's wealth. What was different then

is that they also had more than half of the world's population; the European Union (EU), Japan, and the United States have less than one-sixth.

Today, the worry at the international level is the high poverty, illiteracy, and mortality in some parts of the world, set against the prosperity, literacy, and longevity in others. The policy responses include foreign aid and multilateral efforts to ease international trade and investment flows. But barriers to the agricultural exports of developing countries remain considerable, and apathy for people distant or distinct renders aid flows miniscule. Aid will be a small part of the solution. Even in the European Union, with a combined GDP of about €8 trillion, annual aid through the structural and cohesion funds will average less than €50 billion between 2007 and 2013. Foreign aid is less than 0.5 percent of the gross national income of giving countries, and not even a large fraction of the GDP of countries home to the “bottom billion” who have 12 percent of the world's population, but less than 1 percent of its GDP (see map 1, panel c).²

A billion slum dwellers in the developing world's cities, a billion people in fragile lagging areas within countries, a billion at the bottom of the global hierarchy of nations—these overlapping populations pose today's biggest development challenges. Seemingly disparate, they share a fundamental feature: at different spatial scales, they are the most visible manifestation of economic geography's importance for development.

Concern for these intersecting 3 billion sometimes comes with the prescription that economic growth must be made more spatially balanced. The growth of cities must be controlled. Rural-urban gaps in wealth must be reduced quickly. Lagging areas and provinces distant from domestic and world markets must be sustained through territorial development programs that bring jobs to the people living there. And growing gaps between the developed and developing world must be addressed through interventions to protect enterprises in developing countries until they are ready to compete.

World Development Report 2009 has a different message: economic growth is seldom balanced. Efforts to spread it

BOX 2 *The three dimensions of development: density, distance, and division*

This Report uses three geographic dimensions to describe the transformation of economies as they develop (part one) and the conditions to keep in mind when formulating policies (part three). The words are easy metaphors, since density, distance, and division summon images of human, physical, and political geography. But they can be measured. Consider this illustration.

In 2003 Nigeria had 45 million goats and kids, 28 million sheep and lambs, and 15 million cattle. In a typical year 8 million sheep, 7 million goats, and 0.5 million cattle are slaughtered, mostly in five northern states including Kano. More than half the hides are consumed as *pomo*. The rest are sold to tanneries. The demand from tanneries exceeds local supply, so animals are imported from nearby Chad, Niger, and Cameroon. Goat and sheep skins are good business—in 2001 Nigeria produced 30 million to 35 million of them, exporting almost all to Europe.

Density. Consider the market conditions for a tannery that produces leather in the city of Kano in Northern Nigeria. Officially, the population of Kano State is about 9 million, large enough to provide the skilled labor and infrastructure for its tanneries. Due to the concentration of people in and around Kano city, the

area's economic density (GDP per square kilometer) was 35 times that of Nigeria in 1990. The capacity of the tanneries in and around the city even makes it worthwhile to illegally import live animals—the most important intermediate input—from neighboring countries. But Kano is neither large enough, nor rich enough, to consume more than a little of what is produced. The goods must be exported to people willing to pay enough to make production worthwhile.

Distance. Wealthy Europeans want goods made with "Morocco leather," a lot of which comes from Kano. To get to Europe, Kano's bulky exports must travel through Lagos, which along highways and railways is about 1,000 kilometers away. It might as well be 4,000 kilometers. A railway goes to Lagos through the cities of Kaduna and Ibadan, but it is narrow gauge and poorly maintained. Most commerce is by road, obstructed by roadblocks and piracy. Shipping companies charge more than \$1,200 for a 30-ton trailer from Kano to Lagos. Once the goods get to Lagos, there are port fees, pilferage, and delays. It takes 26 days to get the goods onto a ship. The economic distance from Kano to Lagos, measured as money, is several times the Euclidean (straight-line) 829 kilometers.

Division. But the journey is not yet complete. The goods must surmount the division caused by differences in currencies and conventions between Nigeria and Europe. Between December 2007 and March 2008, Nigeria's currency depreciated from 170 naira to €1 to 180 naira, but appreciated from 246 naira to the British pound in November 2007 to 235 naira in March 2008. Buyers and sellers of leather goods have to contend with these fluctuations. They must also deal with two sets of laws and customs. The United Kingdom has 30 procedures for enforcing a contract, Nigeria 39. These divisions multiply the costs of doing business. Few cargo ships make landfall in Lagos, so it costs much more to transport goods from Lagos than from busier places such as Shanghai. It costs less than \$400 to ship a container to the United Kingdom from China, more than \$1,000 from Nigeria.

Low local density, costly internal distances, and international divisions conspire against Kano. Making matters more difficult are religious and other divisions within Nigeria.

Sources: World Bank 2007; Phillips, Taylor, Sanni, and Akoroda, (FAO 2004); Government of Nigeria 2003.

prematurely will jeopardize progress. Two centuries of economic development show that spatial disparities in income and production are inevitable. A generation of economic research confirms this: there is no good reason to expect economic growth to spread smoothly across space. The experience of successful developers shows that production becomes more concentrated spatially. The most successful nations also institute policies that make basic living standards more uniform across space. Economic production concentrates, while living standards converge.

Part one of the Report describes the geographic transformations that are necessary for development. Part two analyzes the drivers of these changes and identifies the markets that deliver both concentration and

convergence. Part three proposes the principle of economic integration—between places that producers prefer and places where people live—to guide policy making. Using this principle, it reframes the debates on urbanization, territorial development, and international integration, calling for a change in orientation of policies away from geographic targeting toward integration.

By using a well-calibrated blend of institutions, infrastructure, and interventions, today's developers can reshape their economic geography. When they do this well, they will experience unbalanced growth and inclusive development.

The three dimensions of development

The geographic transformations for economic development can be characterized in

three dimensions—density, distance, and division. These three words are not just metaphors for the policy challenges just outlined. They conform closely to the more technical notion of “market access” (see box 2). And they represent the dimensions of economic geography that have to be reshaped if the development challenges are to be met.

Understanding the transformations along the dimensions of density, distance, and division helps to identify the main market forces and the appropriate policy responses at each of the three geographic scales—local, national, and international (see table 1).

- **Density** is the most important dimension locally. Distances are short, and cultural and political divisions are few and shallow. The policy challenge is getting density right—harnessing market forces to encourage concentration and promote convergence in living standards between villages and towns and cities. But distance can be important as rapid urbanization leads to congestion, and divisions within cities can be manifest in slums and ghettos.
- **Distance** to density is the most important dimension at the national geographic scale. Distance between areas where economic activity is concentrated and areas that lag is the main dimension. The policy challenge is helping firms

and workers reduce their distance from density. The main mechanisms are the mobility of labor and the reduction of transport costs through infrastructure investments. Divisions within countries—differences in language, currency, and culture—tend to be small, though large countries such as India and Nigeria may be geographically divided because of religion, ethnicity, or language.

- **Division** is the most important dimension internationally. But distance and density are also relevant. Economic production is concentrated in a few world regions—North America, Northeast Asia, and Western Europe—that are also the most integrated. Other regions, by contrast, are divided. While distance matters at the international level, for access to world markets, divisions associated with the impermeability of borders and differences in currencies and regulations are a more serious barrier than distance. Having a large and dynamic economy within the neighborhood can help smaller countries, especially in regions distant from world markets. For economies in other regions such as Central Africa and Central Asia, international integration is hardest.

But the potential problem at each of these geographic scales is the same—people in one place, production in another. Places

Table 1 Density is most important locally, distance nationally, and division internationally

Unit	Geographic scales		
	Local	National	International
	Area	Country	Region
Examples	Guangdong (178,000 km ²) Rio de Janeiro State (44,000 km ²) Lagos State (3,600 km ²) Greater Cairo (86,000 km ²)	China (9.6 million km ²) Brazil (8.5 million km ²) Nigeria (933,000 km ²) Egypt, Arab Rep. of (995,000 km ²)	East Asia (15.9 million km ²) South America (17.8 million km ²) West Africa (6.1 million km ²) North Africa (6.0 million km ²)
Most important dimension	Density Of rural and urban settlements	Distance Between lagging and leading areas	Division Between countries
Second-most important dimension	Distance Because of congestion	Density Of population and poverty in lagging areas	Distance To major world markets
Third-most important dimension	Division Between formal settlements and slums	Division Between areas within countries	Density Absence of large country in the neighborhood

Source: WDR 2009 team.

Note: Throughout the Report, “areas” are within-country economic neighborhoods or administrative units such as states or provinces, and “regions” are groupings of countries based on geographic proximity.

attract production and people at different speeds, and these differences determine geographic disparities in income. Across provinces, nations, and the world, development comes in waves and leaves behind a bumpy economic landscape—prosperity in some places, poverty in others.

The world is not flat

Development is neither smooth nor linear—at any geographic scale. Growth comes earlier to some places than to others. Geographic differences in living standards diverge before converging, faster at the local scale and slower as geography exercises its influence. These are the stylized facts, based on the experiences of successful developers over the last two centuries.

Economic production becomes more concentrated

As countries develop, people and economic activities become more concentrated. But the speed varies, depending on the spatial scale—economic forces do not operate in a geographic vacuum. The concentration of people and production is fastest locally, slowest internationally.

- *Concentration is fastest locally.* Economic concentration at the local scale is most conveniently measured by the rate of urbanization—the growth of economic and population density in towns and cities. A large part of this geographic transformation has been completed when countries reach per capita incomes of about \$3,500, roughly the threshold for crossing into upper-middle incomes. The speed of this transformation is no different from what was seen in today's developed countries when they transformed. The implication is that all nations must manage a rapid growth of cities when they still have low incomes and nascent institutions.
- *Concentration is steadier nationally.* Here, it can best be measured by area development indicators—the accumulation of production and people in leading areas. A large part of this transformation generally is completed when countries reach per capita incomes of about

\$10,000–\$11,000, about the threshold for crossing into high incomes. This is the experience of successful developers. The implication is that developing countries should expect rising subnational disparities in income and production when they still have underdeveloped infrastructure and institutions.

- *Concentration is slowest internationally, and it continues longer.* Production and wealth continue to concentrate in countries beyond per capita incomes of \$25,000, the upper reaches of the international income distribution. Neighborhoods of nations seem to grow or stagnate together—nearness to prosperity helps, while nearness to poor nations hurts. The implication is that growth strategies for later developers are not the same as the strategies that worked for those who have already grown to high-income levels; for today's developing countries, economic integration with the rest of the world—neighbors and distant countries—is even more essential.

Local concentration (in towns and cities) happens quickly.

Consider first the rising concentration of people in towns and cities. As countries develop, the economic density in some places increases as more people move to live in or near towns and cities (see figure 1, panel a). The urban share of the population rises sharply—from about 10 percent to 50 percent—as countries grow from low income to lower-middle incomes of about \$3,500. (It is difficult to make international comparisons because countries define “urban” differently.³) Between 2000 and 2005, the average urban population growth for low-income countries was 3 percent a year, more than twice the rate for middle-income countries and more than three times the rate for high-income countries. Sometimes, this can mean rapid growth of a single city, such as Bangkok, Thailand, producing even greater concentration.

The share of urban residents in total household consumption rises too. Urbanites in Malawi, Jordan, and Panama—countries with per capita GDPs of about \$160, \$1,600, and \$5,600 respectively—account for 36, 63, and 80 percent of aggregate consumption.

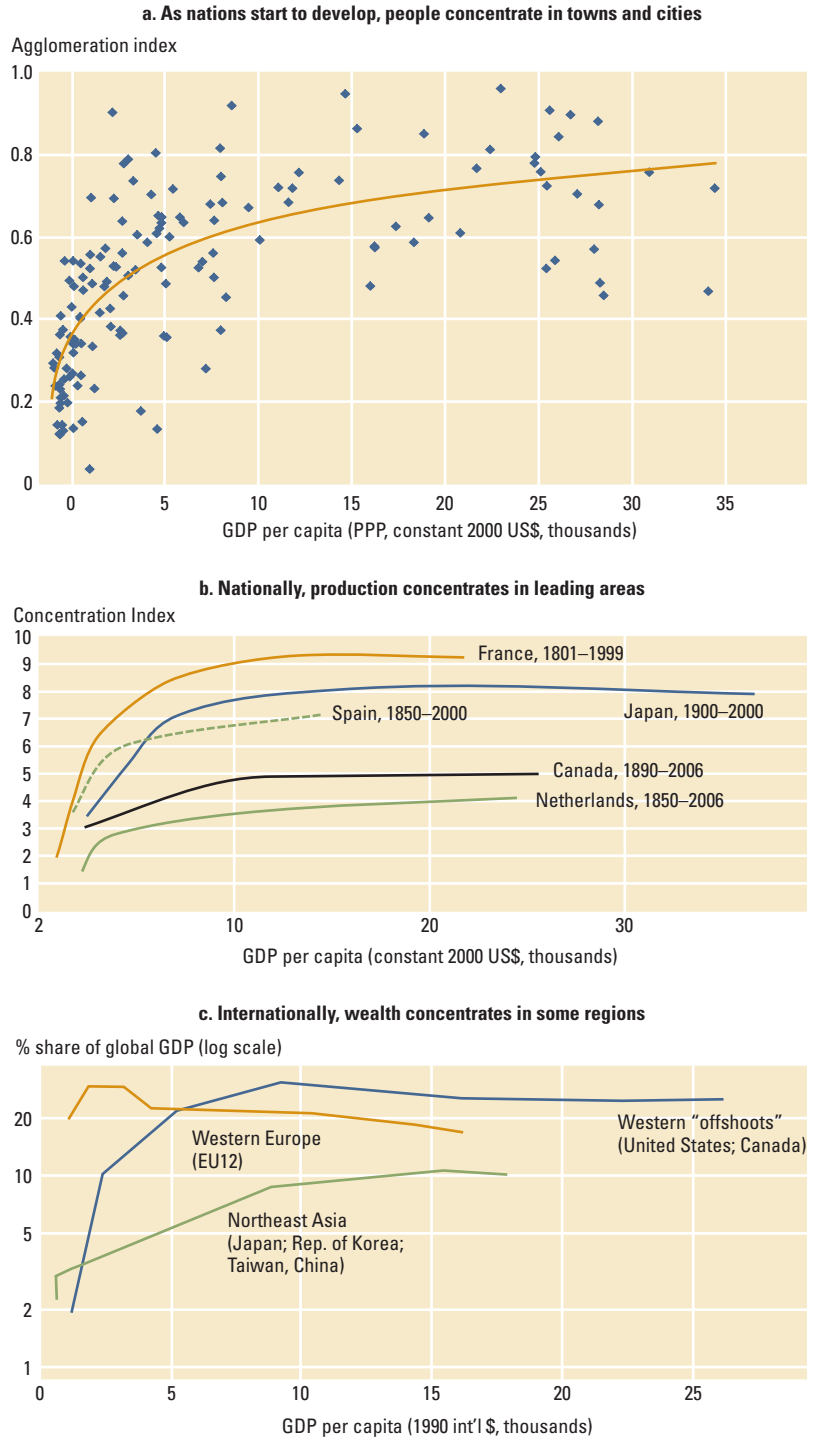
These spatial transformations are closely related to the sectoral transformation of countries from agrarian to industrial and then, in a postindustrial economy, to services. Today’s high-income countries experienced a similar rush to urbanize as they industrialized (see chapter 1). All the evidence indicates that the shift from farming to industry is helped, not hurt, by healthy agriculture, which helps towns and cities prosper.⁴ People move to make their own lives better. But when agriculture is doing well, migration makes not just them better off, but also the villages they leave and the cities in which they settle.

National concentration (in leading areas) continues for longer. What is true of cities is also true of areas within countries, but at a slower speed. With development, people and production become concentrated in some parts of countries, called “leading” areas. Economic density grows in these parts—Marmara in Turkey, for example—while incomes in places economically distant—such as southeastern Anatolia in the east—can lag far behind. This concentration is hard to quantify, but it appears to slow or stop at per capita incomes between \$10,000 and \$15,000 (see figure 1, panel b).

Initially, the concentration increases rapidly. The share of total consumption of the leading areas in countries with incomes ranging between \$500 and \$7,500—Tajikistan, Mongolia, El Salvador, and Argentina—increases from 30 percent to 65 percent. Comparing GDP concentrations in countries with the same land area—Lao PDR, Ghana, Poland, and Norway—but with incomes from \$600 to \$27,000 shows concentration rising as incomes increase.

This is nothing new. Production in today’s developed economies grew more concentrated until they reached high incomes. Concentration in France’s leading area quadrupled between 1800 and 1960, and French incomes grew from \$1,000 to \$6,000. But at some point, nations continue to grow wealthier but not more concentrated—about when they enter the ranks of high-income countries. There are no reasons to expect greatly different patterns today (see chapter 2).

Figure 1 At all three geographic scales, the patterns of concentration of economic activity are similar



Sources: Panel a: WDR 2009 team (see chapter 1 for details); panel b: WDR 2009 team (see chapter 2 for details); panel c: WDR 2009 team (see chapter 3 for details).

International concentration (in some world regions and leading countries) continues for a while. A similar concentration of economic mass has occurred internationally. Today, a quarter of the world's GDP can fit into an area the size of Cameroon, and a half into one the size of Algeria. In 1980 the shares of the EU15, North America, and East Asia added up to 70 percent; in 2000 the sum was 83 percent.⁵ Within these regions, economic activity became more concentrated in a few countries over time before it became more dispersed. The shares of France, Germany, and the United Kingdom in the EU15 regional GDP rose to about two-thirds by 1940, before falling to about half today. In East Asia, the share of Japan in the region's GDP rose to 83 percent in 1975 and then fell to 62 percent by 2000.

There is no reason to expect that, when they prosper, other parts of the world will not experience the same patterns—a rising concentration in some countries, before overflowing to their neighbors (see chapter 3).

Living standards diverge before converging

As incomes increase, living standards converge between places where economic mass has concentrated and where it has not, but not before diverging.

- ***Essential household consumption converges soonest.*** Rural-urban gaps in essential household consumption diminish quite rapidly. Even for countries that have urban shares of about 50 to 60 percent, these differences can be small. Area differences in poverty rates are more persistent, international differences even more so. But as the world has developed, these gaps have diminished at all geographic scales.
- ***Access to basic public services converges next.*** Rural-urban gaps in basic education, health, drinking water, and sanitation persist until countries reach upper-middle incomes. But within-city disparities in these services—most visible as slums—persist well past high levels of urbanization and upper-middle incomes.
- ***Wages and incomes converge last.*** Indeed, wages and incomes diverge between lag-

ging and leading areas of a country as it grows through low and lower-middle incomes, the same range of per capita incomes needed for territorial concentration to increase. And global divergence in wages and wealth appears to go on for much longer. East Asia saw per capita incomes diverge between 1950 and 1970 as Japan pulled ahead. Then, Japan's prosperity spilled over into the neighborhood, and incomes converged as countries in the region that integrated internationally prospered. Among the countries of West Asia, by contrast, there was no divergence in incomes—nor was there rapid growth.

Convergence in living standards, like concentration of economic activity, takes place faster at the local geographic scale and slowest at the international. But this happens only in prosperous neighborhoods. Even in such places, some measures of living standards (such as per capita consumption, income, or earnings) take a long time to converge, sometimes even with an initial divergence (see figure 2). For others, such as education and health indicators, it can be quicker.

Locally, convergence in basic living standards sets in early. Urban-to-rural gaps in consumption levels rise until countries reach upper-middle-income levels (see figure 2). But they fall soon after, and become small even before they get to high-income levels of around \$10,000 per capita. Access to water and sanitation in urban areas is more than 25 percent higher in urban areas for the less urbanized countries. For countries with urbanization rates of about 50 percent, such as Algeria, Colombia, and South Africa, the disparity in access is about 15 percent. For such countries as Brazil, Chile, Gabon, and Jordan, the disparity is less than 10 percent.

This pattern is also seen within countries. Provinces that are more prosperous and urbanized have smaller rural-urban gaps in living standards. This is true even in countries at low levels of income, such as China, India, and the Philippines. But within highly urbanized areas, gaps in basic living standards such as sanitation and schools tend to persist. Despite the best efforts of governments, for example, slums mark the urban landscape in countries well after they reach

high-income levels. It is common for one-third of a developing city's population to live in slums.

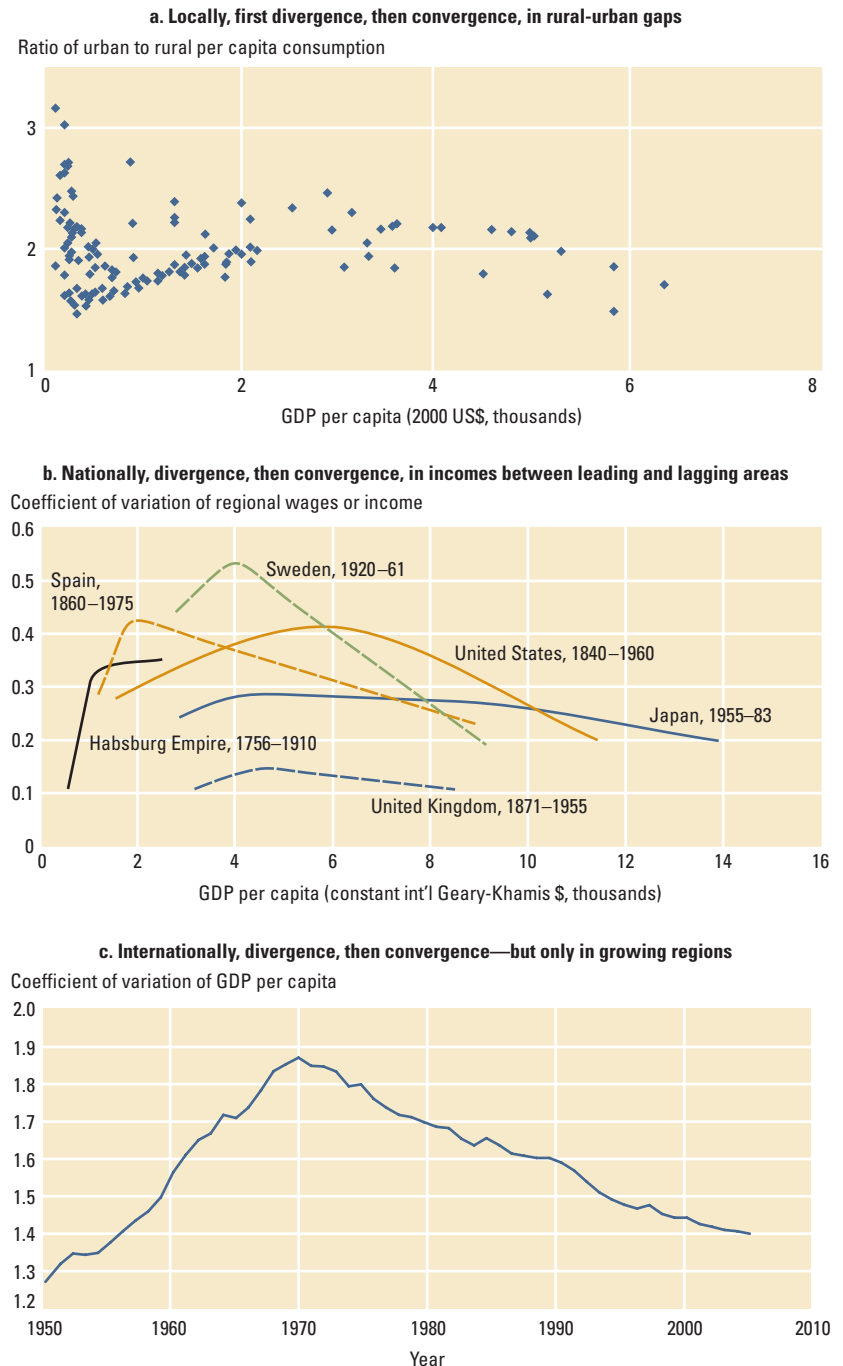
Nationally, divergence in living standards happens quickly, but convergence is slower. At early levels of income, provincial or interarea disparities in basic living standards can be small. But they increase quickly as countries grow. In low-income Cambodia, for example, the gap between leading and lagging areas in consumption of otherwise-similar households is almost 90 percent. In middle-income Argentina, the gap is 50 percent; but in contemporary Canada, it is just 20 percent. In the rapidly growing East Asian and Eastern European countries, for example, these gaps have increased rapidly.

A few countries such as Chile have been exceptions. Between 1960 and 2000, it experienced geographic convergence while its GDP per capita more than doubled to about \$10,500. In Colombia, the ratio of GDP of leading Bogotá to lagging Choco fell from 10 to 3 between 1950 and 1990. Less exceptional is convergence in poverty, basic health, nutrition, and education levels between areas within countries. Fast-growing countries everywhere have been able to quickly translate economic progress into spatial equity in these more basic living standards.

Internationally, divergence in incomes continues a while, and convergence is slowest. Global GDP per capita has increased almost tenfold since 1820. Life expectancy has doubled. Literacy rates have increased from less than 20 to more than 80 percent. But these gains have not been shared equally. Europe and its offshoots—Australia, Canada, New Zealand, and the United States—and more lately Japan and its neighbors have seen enormous increases in income and living standards.

For incomes, the convergence has happened only in the fastest-growing regions of the world. The pattern has been uneven within these countries—a few countries lead, resulting in divergence within the neighborhood, and then growth appears to spill over into their neighbors. In other regions such as Western Asia, there is no divergence—cold comfort because

Figure 2 At all three geographic scales, the patterns of convergence in living standards are similar



Source: Panel a: WDR 2009 team estimates from more than 120 household surveys for more than 75 countries; Panel b: WDR 2009 team (see chapter 2); Panel c: WDR 2009 team (see chapter 3).

these regions have been falling behind Europe, the European offshoots, and Japan. The importance of neighborhoods is shown most graphically by a comparison of the southern cone nations of Latin

America—Argentina, Brazil, Chile, and Uruguay—with Italy, Portugal, and Spain in southern Europe. Between 1950 and 2006, convergence within southern Europe took place at 1 percent per year, but in South America at just 0.3 percent.

In contrast to incomes, global inequality in access to basic living standards—life expectancy and education—has been falling since 1930. These improvements have picked up pace since 1960 and have been shared across all regions.

The world is different today, but the past provides useful lessons

The general patterns of concentration and convergence are likely to remain the same for today's developing countries as they were for early developers. But there are some differences because of reasons that are technological and political.

Bigger cities. Thanks to better medicine and transport, the world is now more populated and cities are much larger. Between 1985 and 2005, the urban population in developing countries grew by more than 8.3 million a year, almost three times the annual increase of 3 million for today's high-income countries between 1880 and 1900, when their incomes were comparable. If China and India are excluded, though, the annual increase is less than 4.5 million, about 50 percent more than a century ago. The big difference is that the world's largest cities are today much larger. London had fewer than 7 million people in 1900; the largest city among low-income countries today (Mumbai) is three times that size. So is Mexico City, the largest city in middle-income countries. The average size of the world's largest 100 cities has grown to almost 10 times their size in 1900 (see figure 3, panel a), and almost two-thirds of these cities are in developing countries.

Wider markets. Because of advances in communications and transport technology, the notion of markets is more global. Global trade as a share of production is now more than 25 percent, almost five times more than in 1900 (see figure 3, panel b). The openness to trade and capital flows that makes markets more global also makes subnational disparities in income larger

and persist for longer in today's developing countries. Not all parts of a country are suited for accessing world markets, and coastal and economically dense places do better. China's GDP per capita in 2007 was the same as that of Britain in 1911. Shanghai, China's leading area, today has a GDP per capita the same as Britain in 1988, while lagging Guizhou is closer to Britain in 1930. China's size, the openness of coastal China to world trade, and Shanghai's location are the reasons.

More borders. While markets are becoming more international because of better transport and communications, the world has become more politically fragmented. In 1900 there were about 100 international borders (see figure 3, panel c). Today, there are more than 600, as nations in Asia and Africa gained independence from European colonizers, and the Soviet Union and other communist countries broke up into smaller nations. The fragmentation of the world into more nations means smaller domestic markets. But at the same time, the potential for accessing foreign markets has been growing. In any case, thinner borders between countries now bring greater pay-offs for producers and workers.

Do such differences in technology mean that the past provides no lessons? Are cities in developing countries too large, and would these countries be better off if urbanization were slowed? Should today's developing countries be more concerned about regional disparities in production and income than developed countries were at a comparable stage of development? Is it easier today for all developing countries to access global markets and offset the disadvantages associated with greater fragmentation? This Report shows why the answer to all these questions is no.

Markets shape the economic landscape

Rising densities of human settlements, migrations of workers and entrepreneurs to shorten the distance to markets, and lower divisions caused by differences in currencies and conventions between countries are central to successful economic development. The spatial transformations along

Figure 3 Later developers face a different world

Source: WDR 2009 team.

these three dimensions—density, distance, and division—have been most noticeable in Japan, North America, and Western Europe. Fast and frequent movements of people and products have helped North America, Western Europe, and Northeast Asia account for about three-fourths of global production with less than a sixth of the world's people.

The same market forces of *agglomeration*, *migration*, and *specialization* are

changing the economic landscape of today's most successful developing countries, in ways similar in scope and speed. Growing cities, mobile people, and vigorous trade have been the catalysts for progress in the developed world over the last two centuries. Now these forces are powering the developing world's most dynamic places.

The realm of "agglomeration economies"

A trip on National Highway 321 east from Chengdu in Sichuan province to Shenzhen in Guangdong is a journey through economic development. Migrating workers who travel these highways often leave their families behind. But they also help their families escape poverty and propel China through the ranks of middle-income countries. As they travel eastward, they leave an agrarian realm in which they receive few benefits from working in proximity to others. Instead, they enter the realm of "agglomeration economies," in which being near other people produces huge benefits.

Shenzhen attracts young workers—90 percent of its 8 million residents are of working age. It specializes in electronic goods. But it makes them in enormous quantities. In 2006 its exports exceeded India's, making its seaport the fourth busiest in the world. Propelled by the forces of agglomeration, migration, and specialization, and helped by its nearness to Hong Kong, China, Shenzhen has grown the fastest of all cities in China since 1979, when it was designated a special economic zone.

This story is being replayed in India. In 1990 Sriperumbudur was known mostly as the place where Prime Minister Rajiv Gandhi was assassinated. In 2006 his widow, Sonia Gandhi, watched as Nokia's telephone plant churned out its 20-millionth handset.⁶ The plant had begun production just earlier that year. With neither Shenzhen's favored administrative status nor its infrastructure, Sriperumbudur may be on its way to becoming a national, perhaps even regional, hub for electronic goods. The key is the town's proximity to Chennai, just as Shenzhen's proximity to Hong Kong, China, was instrumental in its growth.

In 1965, when independence was thrust on Singapore, it was not near any prosperous or peaceful place. Instead, it lay between Malaysia and Indonesia, two poor countries that had been ravaged by war between colonizers. Three-quarters of Singapore’s population lived in tenements. By 1980 it had industrialized, specializing in electronics, much as Shenzhen is doing now. By 1986 it was the world’s busiest container port and Southeast Asia’s financial hub. Along the way, by instituting land markets, building efficient transport infrastructure, and intervening to improve housing, it cleaned up its slums. Prosperity spilled over into neighboring Malaysia. Malaysia’s manufacturing-led prosperity in turn helped more than 2 million Indonesians who streamed in to fill jobs in construction and services. Singapore’s businessmen jet around Asia, fueling growth in places farther than Shenzhen and Sriperumbudur. The “little red dot” on a map—as reportedly derided by a neighboring president⁷—has transformed itself, integrated its neighborhood, and overtaken Britain, its former colonizer (see map 2).

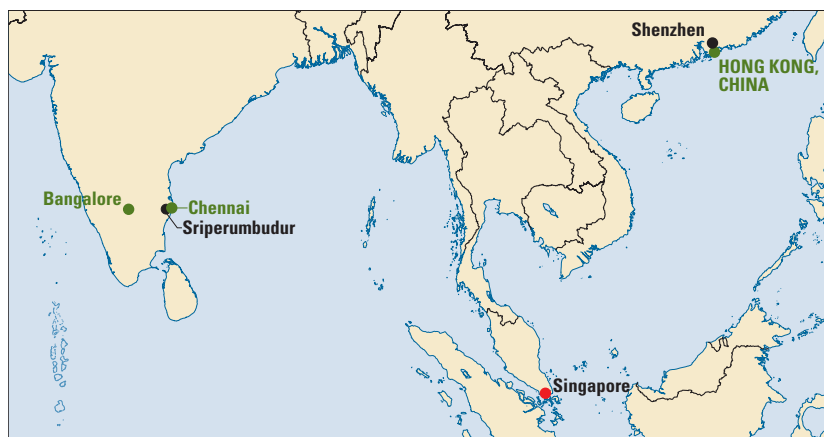
Singapore, Shenzhen, and Sriperumbudur show how scale economies in production, movements of labor and capital, and falling transport costs interact to produce rapid economic growth in cities and countries both large and small. These are the engine of any economy, with a role so fundamental in prosperity and poverty reduction that they are the subject of the

first three chapters of the most influential economics text ever written, Adam Smith’s *The Wealth of Nations*.

The economies of scale emphasized by Smith can be categorized into three types—those exclusive to firms, those shared by firms in the same industry and location, and those more generally available to producers in a larger urban area.

- With fewer than 17,000 people, Sriperumbudur was large enough for Hyundai to set up a big plant there in 1999. By 2006 the town had helped Hyundai produce its millionth automobile. Basic education and health services, proximity to a port, and basic infrastructure were all it needed to facilitate plant-level scale economies. The evidence is that internal scale economies are high in such heavy industries as shipbuilding, and low in such light industries as garments. The town has enough workers to enable matching workers and jobs in big plants. So towns like Sriperumbudur are large enough to facilitate *internal economies*.
- Shenzhen Special Economic Region—with an area of just 300 square kilometers but a population of almost 3 million—is home to a bustling electronics industry. With a ready supply of skilled and semi-skilled young workers, the area is investing in better education and research facilities to ensure that the city supplies what the industry needs. Its port ships in intermediate inputs and ships out final products. It shares expensive facilities, such as top-notch container ports and convention centers, and matches workers to the growing number of jobs as firms rapidly expand their operations. Proximity to Hong Kong, China, provides access to finance, though Shenzhen is home to a rapidly expanding financial sector. And competition for customers among the multiple suppliers of inputs produces cost savings. The area excels in providing, in economic jargon, *localization economies*.
- Singapore has passed through these stages and is now one of the world’s top centers of commerce. By providing a stable economic environment, excel-

Map 2 Settlements of varying size facilitate different scale economies



Source: WDR 2009 team.

lent transport links, livability, and efficient finance, it provides services to the entire Asia-Pacific region. These services are used by a wide range of industries, from shipping to manufacturing, to education, and to finance, insurance, and real estate. They thrive on economic density. With fewer than 5 million people packed into less than 700 square kilometers of space, Singapore is the world's most densely populated country. In 2006 its exports of \$300 billion approached those of the Russian Federation, which has more than 16 million square kilometers. Singapore's diversity facilitates sharing, matching, and learning, providing what economists call *urbanization economies*.

In most countries, such towns and cities coexist. Brazil's Rio de Janeiro state has about 14.5 million people. Volta Redonda, not too far from Rio city, originally supplied goods and services just to meet the needs of CSN, the largest steel plant in Latin America. Duque de Caixas, about 15 kilometers from Rio, meets the needs of an industry producing petrochemicals. And the diversified Rio de Janeiro metropolis, with about 6 million people, supplies financial services to settlements that surround it. And with other metropolises like São Paulo, Rio connects Brazil to the rest of Latin America and the world. The pattern is so familiar that it is almost a law of urban economics.

The functions and fortunes of settlements are linked. Industrialized places are different from their agrarian predecessors not just because they are more concentrated but also because they are more specialized. The largest cities may be well suited for startup enterprises; the smaller ones may be better suited for those more established. In agriculture, sowing and reaping must happen in the same place. Not so for industry and business services. Falling transport and communications costs allow firms to spatially separate sowing and reaping. Products may be designed and financed in large cities—and produced in small towns.

As firms adjust to changing market conditions, places have to perform different functions or risk decay. The most immobile

of all inputs to production—land—must become mobile between uses. Access to oceans and rivers might be the reason a place is settled, but the nimbleness of its land markets will largely determine how much it will grow. Governments may not be good at picking places that will prosper. But how well they institute regulations, build infrastructure, and intervene to make *land use* efficient will decide the pace of prosperity for the entire neighborhood.

Depending on what type of agglomeration economies they deliver, places can be large or small. Function is far more important than size. But locating farther away from economic density generally reduces productivity. Doubling this distance in Brazil apparently reduces productivity by 15 percent and profits by 6 percent. Better infrastructure reduces economic distance. But in a developing country, the most natural way for workers and entrepreneurs to close this distance is to move closer.

Migrating to profit from proximity

Agglomeration economies attract people and finance. Today, capital tends to move quickly over long distances to exploit opportunities for profit. People also move, but they move more quickly to nearby agglomerations than to those far away. Once plants and people come to a place, others follow.

- Locally, the move toward density is quick in fast-growing economies, manifest in a rapid rural-urban migration that accompanies the shift from agriculture to industry. As the Republic of Korea grew between 1970 and 1995, the urban share of population quadrupled to 82 percent, with migration accounting for more than half the increase in the 1960s and 1970s.
- Nationally, workers move to reduce distance to markets in parts that are prospering. About 3 million people moved in the second half of the 1990s from the lagging Indian states of Bihar and Uttar Pradesh to leading Maharashtra and prosperous Punjab (see map 5). In Vietnam, a much smaller country, more than 4 million people migrated internally during the same period.

- Internationally, regional migration is a big part of labor mobility. Migration among neighbors is considerable. Côte d'Ivoire, India, and the Islamic Republic of Iran have been among the top destinations for their neighbors. Germany, Italy, and the United Kingdom still rank among the top 10 sending countries. But interregional migration is sluggish. Fewer than 200 million of the world's 6.7 billion people live outside their region of birth. And just 2 million people move from poorer countries to the developed every year, half of them to the United States.

Map 3 Migrating to reduce distance to density: Despite the obstacles, Chinese workers have migrated in the millions

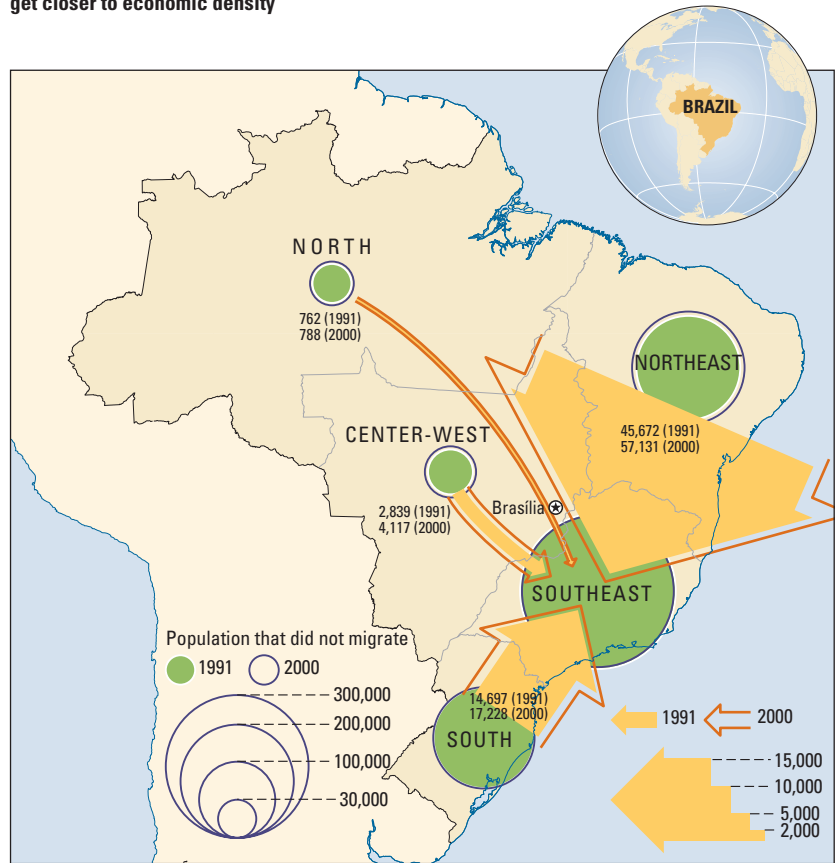


Source: Huang and Luo 2008, using data from the population census of China.

This sum is not likely to increase, even though the gains from greater migration from developing to developed countries are considerable.⁸ International migration has been high in the past: fully 20 percent of Europeans emigrated to new lands in the Americas, Australia, and South Africa. Today, these movements have slowed. Just 500,000 Chinese emigrated abroad in 2005. But internal migration has picked up in the developing world. More than 150 million people moved internally in China despite restrictions (see map 3). In Brazil's high-growth years during the 1960s and 1970s, almost 40 million people left the countryside for cities; even today, young workers migrate in large numbers (see map 4). Vigorous internal migration is not new. Between 1820 and 2000 per capita incomes in the United States multiplied 25-fold, and Americans earned the reputation of being among the most footloose of people. In Japan internal migration peaked in the 1960s, as it grew to become the world's second-largest economy.

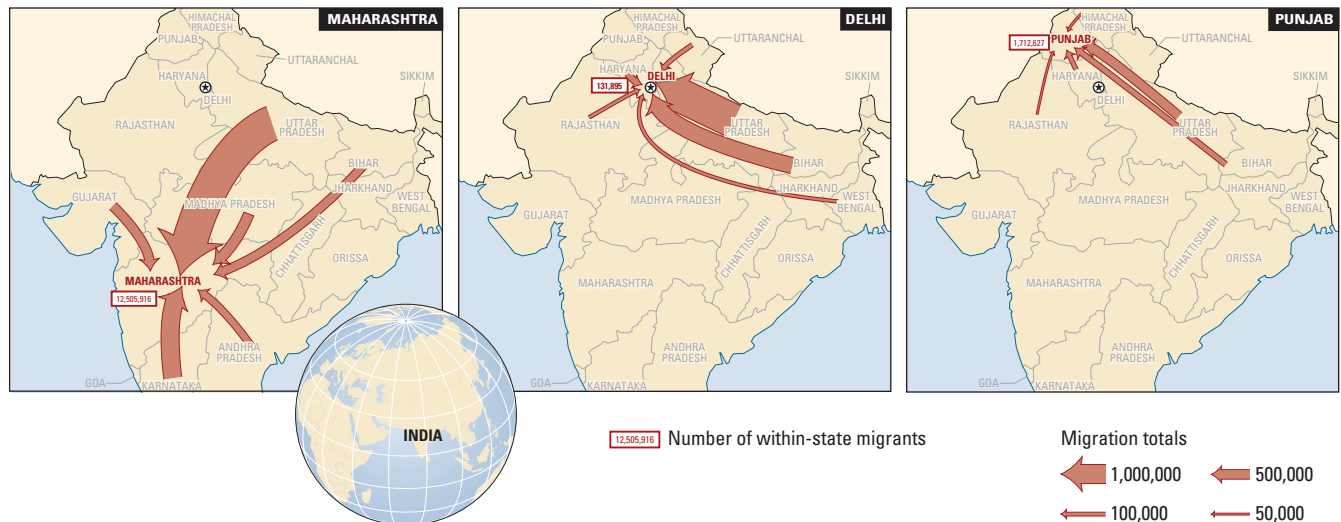
Despite aggressive area development policies, 1.7 million people—more women than men—have left East Germany for the West, helping to make incomes more equal. Since the transition to market economies, firms and people have picked places better suited for production. More than a million people—about 12 percent of

Map 4 Migrating to reduce distance to density: Brazil's young workers move in thousands to get closer to economic density



Source: WDR 2009 team, based on census data from the Instituto Brasileiro de Geografia e Estatística.

Map 5 Migrating to reduce distance to density: Migration in India has been less frenetic



Source: WDR 2009 team, based on census data from the Census of India.

residents—have left Siberia and the Russian North and Far East for the western parts of Russia.

West Africa has sustained regional labor mobility through institutional cooperation. But independent Africa is generally less integrated. Africans—especially the most skilled—have been leaving the continent, seeking and getting higher rewards in the North. Other parts of the world show how to deal with this brain drain. Educated workers will be pulled toward places where other skilled people agglomerate. This is beneficial for both places. But when people are pushed out by the lack of security or basic services, migration is beneficial for the migrant but not always for the nation. Pull migration is better than push, but both are hard to stop or slow. Policy makers are realizing that the challenge is not how to keep people from moving, but how to keep them from moving for the wrong reasons.

China illustrates the benefits. Except for a brief period during the Cultural Revolution, China has treated its diaspora well, according them both rights and respect.⁹ Internally, its policies have gone back and forth, but now they are shifting from trying to discourage people from moving to delivering basic services to people wherever they live. The policies are paying dividends. As Chinese migrants are moving to the coast by the million, many of the 57 million overseas Chinese are bringing finance and expertise back to some of the same places. Internal and international migrants are coming together in a way that is not accidental. The willingness of the Chinese to move—leaving the country for other parts of the world to escape war and squalor in the first part of the twentieth century and then bringing finance and know-how to coastal China during the last quarter—promises to bring to southeast China a “reversal of fortune” rivaling the U.S. Northeast (see “Geography in Motion: Overcoming Distance in North America”).

Countries do not prosper without mobile people. Indeed, the ability of people to move seems to be a good gauge of their economic potential, and the willingness to migrate appears to be a measure of their desire for advancement. Governments

should facilitate *labor mobility*. For decades since independence, India treated its 40 million emigrants as “not required Indians.” Encouraged by a change in attitude since the 1990s, expatriate Indians are pulling distant places like Bangalore and Hyderabad closer to world markets, just as the overseas Chinese did for Shanghai and Guangzhou more than a decade earlier. Falling costs of transport and communications have helped greatly.

Specializing and trading as transport costs fall

Transport and communication costs have indeed fallen rapidly over the last century, especially in the last 50 years. Since the 1970s, railroad freight costs are down by half. Road transport costs, despite higher energy and wage costs, are down by about 40 percent. For worldwide air freight, the price has fallen to about 6 percent of its 1955 level. The price for tramp shipping services is half that in 1960. A three-minute phone call from New York to London was almost \$300 in 1931. Today, the same call can be made for just a few cents.

With falling domestic transport costs, economic production should have become more evenly spread within countries. With lower costs of transporting and communicating internationally, countries should have traded more with distant partners. What happened was the opposite. Falling transport costs have coincided with greater economic concentration within countries. And while countries now trade more with everyone—exports as a share of world production quadrupled to 25 percent over the last three decades—trade with *neighbors* became even more important.

Why did this happen? The answer lies in the growing importance of scale economies in production and transport (see chapter 6). As transport costs have fallen, they have allowed greater specialization and radically altered the location of firms and the nature of trade. With high transport costs, firms had to be near consumers. But as transport costs fall, they can avail of internal, local, and urban economies of scale, and transport the product to consumers. Internationally, the same thing. With high transport

costs, England imported only what it could not grow or produce at reasonable cost—spices from India and beef from Argentina in exchange for British textiles and china. As transport costs fell, it imported more spices and beef. But it also traded more with France and Germany—Scotch whisky for French wine, English ale for German beer. Trade to fulfill basic needs was joined and soon overtaken by trade to satisfy a variety of wants.

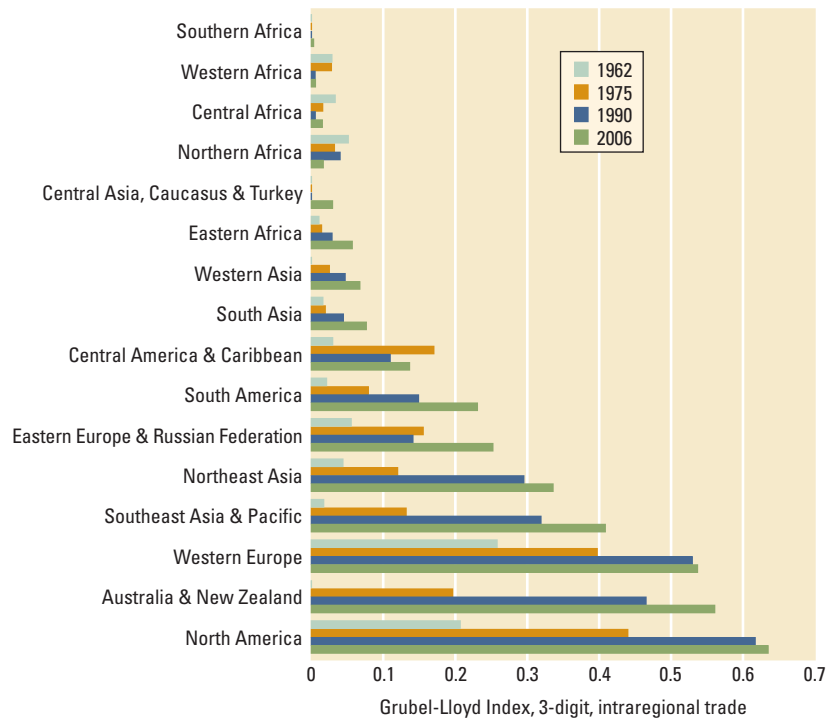
Falling costs of transportation and communication have made the world smaller. But they have also made economic activity more geographically concentrated.

- Locally, with falling costs of commuting and a greater potential for exploiting scale economies, towns and cities can grow bigger and denser.
- Nationally, as leading and lagging areas within countries are connected through better modes of transport, production is more concentrated in the more economically dense areas to take advantage of agglomeration economies.
- Internationally, countries that have lowered the costs of transport more have benefited most from greater trade. Greater specialization has made these countries more competitive still, concentrating trade and wealth in a few parts of the world.

Scale economies are evident in the transport sector, too. More trade means lower costs of transportation, which in turn means more trade. This is especially true for intraindustry trade, which has been the most rapidly growing part of international trade during the last half-century. Since 1960 the share of intraindustry trade in the world's total has doubled from 27 percent to 54 percent. Within-region intraindustry trade is low in most regions, and high in a few. It is close to zero for Central Africa, Central Asia, East Africa, Northern Africa, South Asia, and Southern Africa. It is highest for Australia, East Asia, New Zealand, North America, and Western Europe (see figure 4).

Regional cooperation has advanced much faster and further in these parts of the

Figure 4 Intraindustry trade is high in North America, Western Europe, Oceania, and East Asia



Source: Brühlhart 2008 for this Report.

Note: The Grubel-Lloyd Index is the fraction of total trade that is accounted for by intraindustry trade.

world, explaining why the friction of borders on trade has fallen. Aided by a deepening integration, the intraregional share of trade in the EU has risen above 60 percent (see “Geography in Motion: Overcoming Division in Western Europe”). In East Asia, the fastest-growing region, the share of regional trade is now more than 55 percent (see “Geography in Motion: Distance and Division in East Asia”).

Development in a world of greater specialization and concentration is even more challenging. Developing countries have higher transport costs and small markets, which do not support specialization. But several countries—mainly in East Asia—have shown that these markets are accessible for low-income countries. The answer lies in the fastest-growing component of intraindustry trade: trade in “intermediate inputs” of production (see box 3).

In agriculture, industry, and services, the potential for fragmenting production is almost without limit. Thailand may not be able to make a television set better than Japan, but it could make parts of televisions

BOX 3 *Intraindustry trade and intermediate inputs*

More than half of world trade today is intraindustry trade, with industries classified in 177 (3-digit) categories, up from about a quarter in 1962. So countries are becoming more similar in their economic structures. This trade consists of

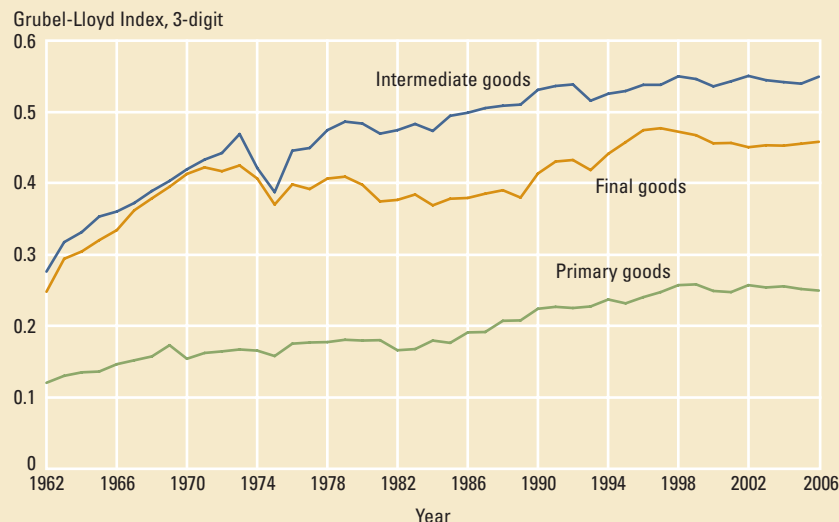
final and intermediate goods, with both having increased considerably over the last 50 years. This rise in intraindustry trade is not just for manufacturing. Intraindustry trade in machines and transport equipment is the highest, but the larg-

est increase is in food and live animals. Consumers like variety for farm produce, and that means profit in trade between two countries that raise similar food and animals (see figure at left).

But the largest rise is for intermediate inputs—the produced means of production. Marginal intraindustry trade—a reliable measure of change—is highest in intermediate inputs. This is not just for manufacturing. Agriculture needs inputs, too. And falling communications costs have resulted in greater fragmentation of services into “components,” supplied to final consumers from different parts of the world.

Trade in intermediate goods is more sensitive to transport costs than is trade in final goods. Consider the following illustration: if intermediate inputs are two-thirds of the value added for a good, a 5-percent increase in transport costs can mean the equivalent of a 50-percent tax. Little wonder that intermediate goods trade has increased fastest in parts of the world that have reduced trade and transport costs the most.

Intraindustry trade has risen for primary, intermediate, and final goods



Source: Brülhart 2008, for this Report.

Source: WDR 2009 team.

equally well and much cheaper. Anchored by China and Japan, countries in East Asia have developed production networks that trade intermediate goods back and forth. By specializing in a small part of the production chain, they have broken into this most lucrative and fastest-growing component of trade in manufactures.

Countries in other regions can also benefit from the growing *trade in intermediate goods*. The key for most is making a concerted effort to lower the costs of transport. This means more concentration within developing countries, but—by allowing them to specialize at earlier stages of development and exploit economies of scale—it will help them converge to the incomes and living standards in the developed world. Over the last two decades, such interactions between scale economies, mobility of capital and labor, and

transport costs have occupied the interest of researchers (see box 4).

Their insights should change what to expect from the markets. They should also inform what governments can do to promote the geographic transformations necessary for development.

Putting development in place

Prosperity will not come to every place at once, but no place should remain mired in poverty. With good policies, the concentration of economic activity and the convergence of living standards can happen together. The challenge for governments is to allow—even encourage—“unbalanced” economic growth, and yet ensure inclusive development. They can do this through economic integration—by bringing lagging and leading places closer in economic terms.

BOX 4 *New insights from a generation of analysis*

Researchers have been taking a fresh look at industrial organization, economic growth, international trade, and economic geography, having incorporated the effects of scale economies in production. The results can be surprising for those schooled in conventional economic analysis. Here are some of the new insights:

Plants have to be big to exploit economies of scale, but places do not have to be big to generate them. Increasing returns to scale arise because of fixed costs of production (internal to a firm) and proximity to workers, customers, and people with new ideas (external to a firm, even an industry). The size of settlements matters less than their function.

The reason: with reasonable transport costs, towns can be large enough to facilitate internal scale economies. Medium-size cities are often large enough for “localization” economies that come from

thick input markets, but not for “urbanization” economies—especially those involving knowledge spillovers—generated mainly by large cities (see chapter 4).

The implication: policy makers should focus on the functions of cities.

Human capital moves to where it is abundant, not scant. Conventional economic analysis implies that people should move to where their skills are scant. But the opposite seems to happen: educated migrants seek places where many others have similar skills. Among the 100 largest metropolitan areas in the United States, the 25 cities with the highest share of college graduates in 1990 had, by 2000, attracted graduates at twice the rate of the other 75.

The reason: educated workers gain from proximity to others (see chapter 5).

The implication: policies should not fight the market force that pulls skilled people together.

Falling transport costs increase trade more with neighboring, not distant, countries. With a decline in transport costs, countries should trade more with countries that are farther away. But trade has become more localized than globalized. Countries trade more with countries that are similar, because increasingly the basis of trade is the exploitation of economies of scale, not the differences in natural endowments.

The reason: falling transport costs make specialization possible (see chapter 6).

The implication: falling transport costs change the composition of international trade and make it even more sensitive to such costs. Policies to reduce trade and transport costs should be a big part of growth strategies for late developers.

Recognizing scale economies and their interaction with the mobility of people and products implies changing long-held views about what is needed for economic growth. *Source:* WDR 2009 team.

This integration can best be done by unleashing the market forces of agglomeration, migration, and specialization, not by fighting or opposing them. How well markets and governments work together determines the speed and sustainability of geographic transformations. Look at what is happening in Bogotá, Turkey, and West Africa:

- Bogotá has almost 7 million citizens, but migration from rural Colombia continues. A third of its population growth is due to rural migrants, who mostly settle in poor, crowded neighborhoods as the city grows denser. Since 2000 a new public transportation system, the *TransMilenio*, has eased congestion, now carrying a million passengers a month. For the poor neighborhoods especially, it has reduced the distance to economic opportunities. But many people still live in slums, and crime and violence are getting worse. A municipal initiative has addressed these social divisions since 2003, helping almost a million people integrate into the city and change their neighborhoods.
- Turkey is trying to change neighborhoods too, in a different way. The country of 70 million has been looking toward integration with the EU. Because of higher agglomeration economies and lower transport costs, areas near Istanbul and Izmir may be better suited for integrating with Europe. The more distant areas of eastern and southeastern Anatolia and the Black Sea have 40 percent of the land but less than 20 percent of the national product, with a GDP per capita about half that of the western areas. The disparities persist despite government efforts to spread economic mass toward the east. Meanwhile, public investments in social services help lagging areas, while fiscal incentives for firms to locate in those areas seem ineffective.¹⁰
- The Economic Community of West African States (ECOWAS) has a protocol that allows free movement of its 250 million people between member states. This has helped the neighborhood maintain regional labor mobility at preindependence levels, even as it fell in East and Southern Africa. But trade is another

story. In the most dynamic parts of the world, the exchange of similar goods and services—intraindustry trade—has been rising rapidly. But in West Africa, international borders are thickened by red tape and illicit checkpoints, which divide the region and thwart the efforts of ECOWAS members to specialize and trade.

As the lens of economic geography is widened, different movements, stresses, and strains come into view.

- Locally, in places like Bogotá, land must accommodate more and more people. If *land markets* work well, land will be mobile between uses and allocated productively. The cities that do this best will grow, and even more people will be attracted to their economic density.
- People and products move much faster in and around Bogotá than they do in Turkey. But even in Turkey, the western areas will become more prosperous and dense, if at a slower pace. Spatial disparities in incomes and poverty rates between the west and the east will likely rise and then diminish as people move to take advantage of economic density. If *labor markets* in Turkey are fluid, people will reduce their economic distance to these agglomerations.
- Internationally, these movements are likely to be fewer and even slower. If regional and global markets were integrated, countries in West Africa would specialize in a few tasks and become competitive in world markets. As divisions diminish, neighboring countries

trade similar goods and services, motivated more by the benefits of specialization and scale than by differences in natural endowments. Trade can only partially offset the immobility of land and labor, but it will help convergence when developing countries can tap into the most rapidly growing component: *trade in intermediate goods*.

Private motives are the main shapers of the economic landscape, but it can be reshaped by collective action, most potently by governments. Seen through the lens of economic geography, land use, labor mobility, and intermediate goods trade come into focus (see table 2). Governments should pay special attention to land, labor, and product markets. When they do not work well, the forces of agglomeration, migration, and specialization weaken, and the economy stagnates. When they do, land, labor, and input markets bring the economic efficiency that comes with geographic concentration, and the equity associated with converging living standards.

A rule of thumb for economic integration

The concern of policy makers is that production will concentrate in some places, people in others. Cities will have economic density, and the countryside most of the poor. Leading areas will have the economic mass, while the poor are massed in lagging areas. Some countries will have much of the world's wealth, others most of the world's poor. Even if this were temporary, it seems unfair. But the disparities may be long lasting, destabilizing parts of a country, entire nations, and even some world regions.

Governments have many reasons to worry about disparities in welfare in and among countries. They also have many policy instruments for promoting economic integration to reduce those disparities.

- *Institutions*—shorthand in the Report for policies that are *spatially blind* in their design and should be universal in their coverage. Some of the main examples are regulations affecting land, labor, and international trade and such social

Table 2 Agglomeration, migration, and specialization are the most important forces—and land, labor, and intermediate inputs the most sensitive factor markets

	Geographic scales		
	Local	National	International
Economic force	Agglomeration Speeded by migration, capital mobility, and trade	Migration Influenced by agglomeration and specialization	Specialization Aided by agglomeration and factor mobility
Key factor of production	Land Immobile	Labor Mobile within countries	Intermediate inputs Mobile within and between countries

Source: WDR 2009 team.

Note: Throughout the Report, "areas" are within-country economic neighborhoods or administrative units such as states or provinces, and regions are groups of countries based on geographic proximity.

services as education, health, and water and sanitation financed through tax and transfer mechanisms.

- **Infrastructure**—shorthand for policies and investments that are *spatially connective*. Examples include roads, railways, airports, harbors, and communication systems that facilitate the movement of goods, services, people, and ideas locally, nationally, and internationally.
- **Interventions**—shorthand for the *spatially targeted* programs that often dominate the policy discussion. Examples include slum clearance programs, fiscal incentives for manufacturing firms offered by state governments, and preferential trade access for poor countries in developed country markets.

Today, policy debates often begin and end with discussions of spatially targeted incentives. The debate on how to promote healthy urbanization is polarized between those who emphasize villages, where a majority of the world's poor still live, and those who believe the way out of poverty lies in cities, where much of the world's wealth is generated. As urban poverty increases, the focus is shifting from villages to slums. Motivated by within-country geographic disparities in living standards, the debate on territorial development is similarly fixated on economic growth in lagging areas. At the international level, preferential market access for

the least developed countries can end up dominating policy discussions.

This Report calls for a rebalancing of these debates to include all the elements of a successful approach to spatial integration—institutions, infrastructure, and incentives. Using the findings in part one and the analysis of market forces in part two, part three reframes these debates, calling for a shift from spatial targeting to spatial integration.

The world is complicated, and the problems of economic integration defy simple solutions. But the principles need not be complex. The bedrock of integration policies should be spatially blind institutions. Where the integration challenge spans more than one geographic dimension, institutions must be augmented by public investments in spatially connective infrastructure. Spatially targeted interventions are not always necessary. But where the problem is low economic density, long distances, and high divisions, the response must be comprehensive, involving spatially blind, connective, and targeted policies.

For each spatial dimension, an instrument of integration (see table 3). The rule of thumb: “an I for a D.”

- For a one-dimensional problem, the mainstay of the policy response should be (spatially blind) institutions.
- For a two-dimensional challenge, both institutions and (spatially connective) infrastructure are needed.

Table 3 “An I for a D?” A rule of thumb for calibrating the policy response

Complexity of challenge	Place type—local (L), national (N), and international (I) geographic scales	Policy priorities for economic integration		
		Institutions Spatially blind	Infrastructure Spatially connective	Interventions Spatially targeted
One-dimensional problem	L. Areas of incipient urbanization N. Nations with sparse lagging areas I. Regions close to world markets	●		
Two-dimensional challenge	L. Areas of intermediate urbanization N. Nations with dense lagging areas I. Regions distant from world markets	●	●	
Three-dimensional predicament	L. Areas of advanced urbanization that have within-city divisions N. Nations with dense lagging areas and domestic divisions I. Regions distant from markets with small economies	●	●	●

Source: WDR 2009 team.

Note: Throughout the Report, areas are within-country economic neighborhoods or administrative units such as states or provinces, and regions are groupings of countries based on geographic proximity.

- For a three-dimensional predicament, all three instruments are needed—institutions, infrastructure, and (spatially targeted) interventions.

The primary dimension at the local geographic scale is density; nationally, it is distance; internationally, division. At each of these geographic scales, policies designed without explicit consideration to space should be seen as the primary instrument. In some places, these can be a large part of integration policies. The task of integration is relatively straightforward in areas of incipient urbanization (as in lagging states in many low-income countries), in countries with mobile labor and capital (such as Chile), or in regions that are close to world markets (such as North Africa). In such places, the integration challenge can be seen as one dimensional. Explicitly spatial policies are not generally necessary. Universal or spatially blind institutions—made available to everyone regardless of location—form both the bedrock and the mainstay of an effective integration policy.

As the task becomes more complicated, these institutions must be assisted by infrastructure. Locally, rapid urbanization can congest the area, increasing economic distance and choking off agglomeration economies. In places such as Mumbai, whose population has doubled since the 1970s, rising congestion has to be met by investments in transport infrastructure, so that the benefits of density are shared more widely. Nationally, changing economic and political fortunes can leave

behind a misplaced density of populations in lagging areas, so that in some countries (such as Brazil) lagging areas have higher poverty rates *and* high population densities. Internationally, developing regions are all deeply divided, but some also may be distant from world markets. Even if regional institutions take hold and make South Asia a more integrated region, some countries (such as Nepal) may need concerted policy action to improve the infrastructure to reach growing regional and international markets. For places that face two-dimensional integration challenges, investments in infrastructure that connects lagging to leading places and aid market access should supplement the institutions that bring people together.

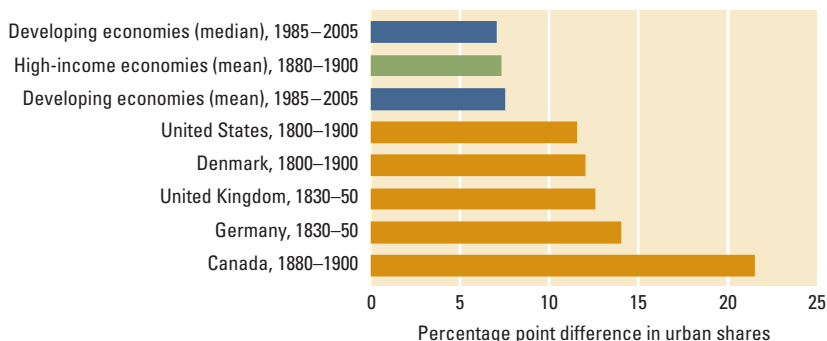
The integration challenge is greatest where adverse density, distance, and division combine to pose a “three-dimensional challenge.” In highly urbanized areas (such as Bogotá), the fear is that economic density and population density may not coincide. Within-city divisions may prevent the integration of slums and spawn problems of crime and grime. In some countries (such as India), ethnic, religious, or linguistic divisions discourage the poor in densely populated lagging areas from seeking their fortunes elsewhere. And in the most fragmented and remote regions (such as Central Africa or Central Asia), a clustering of small and poor nations can lead to spill-overs of the wrong kind—disease, conflict, or corruption.

Slums in large cities, densely populated poor areas in divided nations, and the “bottom billion” countries—approximating the three billions discussed at the beginning—are the most difficult challenges for integration. The policy responses should not be timid. But they should also be deliberate.

Efficient and inclusive urbanization

No country has grown to middle income without industrializing and urbanizing. None has grown to high income without vibrant cities. The rush to cities in developing countries seems chaotic, but it is necessary. It seems unprecedented, but it has happened before (see figure 5). It had to have, because the move to density that is manifest in urbanization is closely related

Figure 5 In charted waters: the pace of urbanization today has precedents
Change in urban shares since 1800



Source: WDR 2009 team calculations based on data from various sources (see figure 1.13).

to the transformation of an economy from agrarian to industrial to postindustrial.

Governments can facilitate the spatial transformations that lie behind these sectoral changes. Depending on the stage of urbanization, sequencing and priority-setting require paying attention to different aspects of the geographic transformation. What does not change is that a foundation of institutions must be universal and come first, investments in connective infrastructure should be both timed and located well and come second, and spatially targeted interventions should be used least and last.

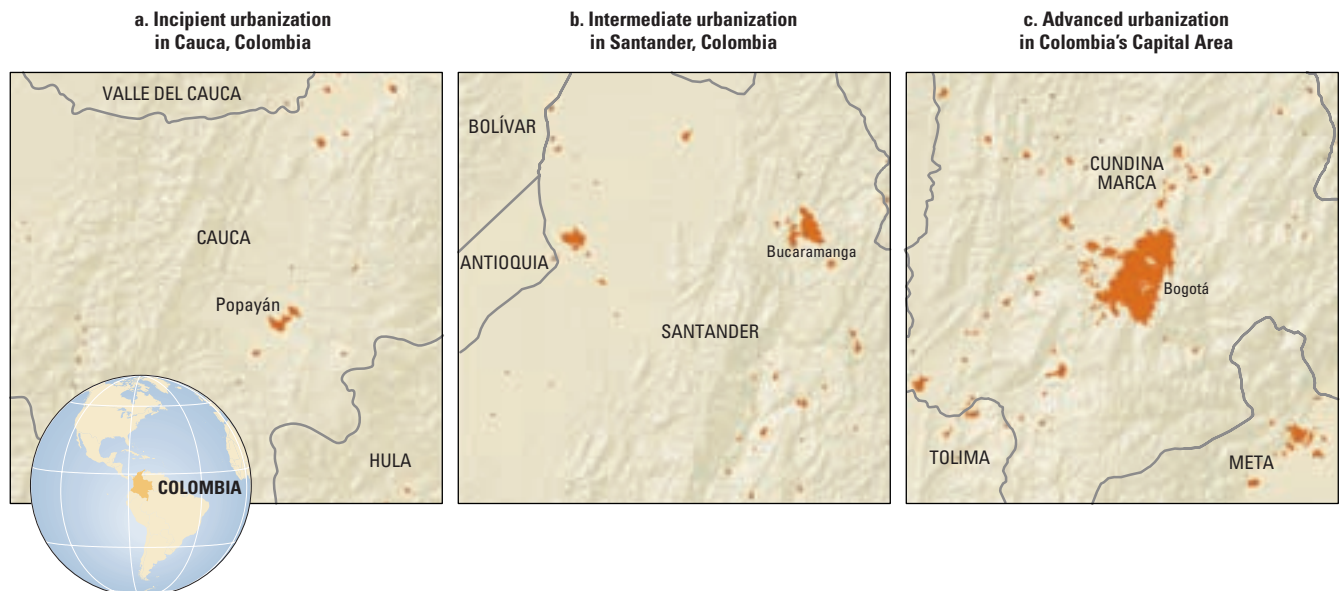
The approach requires the discipline of following the integration principle set out earlier. The payoff is a spatial transformation that is both efficient and inclusive (see chapter 7).

The principles outlined in the Report help to prioritize policies for different stages of urbanization, providing the elements of an urbanization strategy. Map 6 shows three areas in Colombia, each with a specific geography. But the principles are quite universal.

- **Incipient urbanization.** In places that are mostly rural, governments should be as neutral as possible and should

establish the institutional foundation of possible urbanization in some places. Good land policies are central, and so are policies to provide basic services to everyone. For example, the universalization of land rights in Denmark at the turn of the eighteenth century contributed greatly to the nation's take-off into industrialization a few decades later. Indeed, policies to strengthen rural property rights are seen as instrumental for higher agricultural productivity in sixteenth-century England, which freed workers to migrate to towns to work in manufacturing and services. A close complement to the institutions for better land markets is the universal provision of basic social services—security, education, health services, and sanitation. In 1960, the Republic of Korea had a per capita income level that Benin has today. Seventy-five percent of its people lived in rural areas, more than a third of Korean adults had no schooling, and fewer than 5 percent of children had been immunized against preventable diseases such as measles. By 2000, more than 80 percent had urbanized, almost everyone was literate and immunized, and the Republic of Korea's income had

Map 6 As urbanization advances, policies must evolve



Source: WDR 2009 team, using data from Schneider, Friedl, and Potere 2008.

BOX 5 *Concentration without congestion in western China: Chongqing and Chengdu*

An experiment in China might change the future of urbanization policy in the developing world. Policy makers should take notice.

China is taking inland the urbanization strategy that was successful in the leading coastal areas in the 1980s and 1990s. The “area approach” is being implemented in two places—Chongqing and Chengdu, both located in the near west. At about 40 percent, they have the same urbanization ratio as the average for China. The aim is to increase that to 70 percent by 2020, promoting both concentration and rural-urban convergence.

Chongqing has a population of about 40 million, with a portfolio of a capital city, six large cities, 25 small and mid-size cities, 95 central townships, and 400 townships. Chongqing has been accorded the status of a special municipality, as Beijing, Shanghai, and Tianjin have had for some years. Like them, it will enjoy greater financial autonomy. Chengdu is smaller, a sprawling metropolitan area with 11 million people. Along with the 2,000-year-old capital city of Sichuan province, it has eight medium-size cities, 30 central townships, 60 townships, and 600 villages.

The urbanization strategy involves “three concentrations” of land, industry, and farmers. The idea is to reap the benefits of scale economies, promote the mobility of goods and workers, and improve the well-being of new migrants to cities. Consistent with the policy priorities outlined for areas with intermediate urban shares of about 40–50 percent, the emphasis in both places is on universal institutions and connective infrastructure, not spatially targeted interventions.

Better institutions. The emphasis is on coordination across government levels to manage land use and conversion. In the countryside, the plan concentrates rural land by transferring use rights to firms and farmers. In towns and cities, the creation of industrial zones is a key part of the wider framework. Large and medium cities are developing high value-added manufacturing, while smaller cities and towns are specializing in labor-intensive industries, pulling in labor from nearby villages, and facilitating localization economies.

More infrastructure. Massive trunk infrastructure is planned. Chongqing will spend billions on infrastructure, from the central government and through increased private investment from Hong Kong, China, and from Singapore. In Chengdu, about 117 billion yuan will be invested in 71 infrastructure projects, including rural-urban transport networks, and water and sanitation projects in both rural and urban areas. Another 16.5 billion yuan will be invested in 34 social projects to improve the living standards of lagging rural residents.

If markets favor the two places as much as the government has, they will improve the lives of millions in the Chinese hinterland. The integration already has had a local impact. In Chongqing, rural incomes in 2007 increased faster than those of urban residents. In Chengdu, farmer concentrations are believed to have led to a productivity increase of 80 percent, as industry has been absorbing about 100,000 farmers a year.

Source: WDR 2009 team.

of rising economic density are more widely shared. Industrialization involves changing land use patterns as activities concentrate, and requires moving goods and services around quickly. Land use regulations can affect location decisions, and they continue to be the institutional priority. Spatially blind social services should continue as part of rural-urban integration, so that people are pulled to cities by agglomeration economies, not pushed out by the lack of schools, health services, and public security in rural areas. But even if these services are provided, transport costs can rise quickly because of growing congestion, affecting the location choices of entrepreneurs. Connective infrastructure is needed to keep such areas integrated. State and central governments that work well together can provide the trunk infrastructure necessary to ensure that prosperity is widely shared. Making the administrative jurisdiction wider can help in coordinating infrastructure investments. A good example is Chongqing in western China (see box 5).

- **Advanced urbanization.** In highly urbanized areas, besides institutions and infrastructure, targeted interventions may be necessary to deal with the problem of slums. Services and learning require people to be in proximity to livable surroundings. This is the stage in which slums can compromise a city’s ability to deliver the economies that come from proximity. Slum-improvement programs may not be a priority at earlier stages of urbanization, but at this stage they become necessary. The lesson from assessments of slum-improvement initiatives is that targeted interventions will not be enough by themselves. These interventions will not work unless institutions related to land and basic services are reasonably effective, and transport infrastructure is in place. A three-dimensional challenge must be met by a three-pronged policy response, requiring coordinated policies at the central, state, and city levels of government. Singapore’s success shows the advantages of such coordination in a city-state. More recent examples are Shanghai

reached that of modern-day Portugal. Another good example is Costa Rica.

- **Intermediate urbanization.** In places where urbanization has picked up speed, in addition to these institutions, governments must put in place connective infrastructure so that the benefits

and Guangzhou in China. An even more recent (and perhaps more generally applicable) example is Bogotá in Colombia.

The experience of successful urbanizers indicates that the basis of successful rural-urban transformations is a set of spatially blind policies—“institutions” in the shorthand of this Report. Investments in infrastructure that connects places form the second tier. Geographically targeted interventions should be used only when the challenge is especially difficult, but should always be used together with an effort to improve institutions and infrastructure.

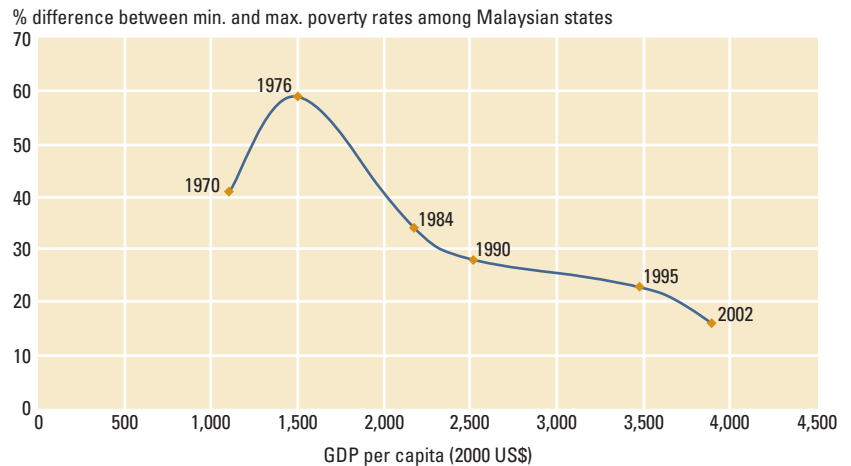
Area (territorial) development policies that integrate nations

Some parts of a country are better suited for agriculture, others for industry, and still others for services. And as industry and services flourish, the spatial distribution of economic activities must change.¹¹ No country has grown to riches without changing the geographic distribution of its people and production.

A rising concentration of people and production in some parts of a country has marked economic growth over the last two centuries. To fight this concentration is to fight growth itself, and policy makers must show patience in dealing with these imbalances. But aided by government policies, successful development also has been marked by falling disparities in living standards between places favored by markets and those less fortunate. Policies can speed up the convergence in basic living standards, so that people in the least-fortunate places do not have to wait for basic public amenities until their nations reach high income levels. The experience of successful developers also justifies impatience in equalizing basic living standards.

Consider Malaysia. Economic growth and government policies have reduced poverty and improved living standards, speeding progress toward meeting the Millennium Development Goals. But in the early years of growth (between 1970 and 1976), poverty rates between different states diverged briefly, to later converge as they declined for all states (see figure 6). Health indicators (infant mortality) declined more

Figure 6 Quicker geographic convergence in basic living standards in Malaysia



Source: Malaysia Economic Planning Unit 2008.

in the slower-growing states, implying that tax and transfer mechanisms worked well. Such impatience with spatial inequality in living standards is paying off in other countries such as China, Egypt, Indonesia, Mexico, Thailand, and Vietnam.

But not all countries have experienced geographic convergence in the Millennium Development Indicators, such as child mortality, maternal health, basic education, safe water, and sanitation. What should they do?

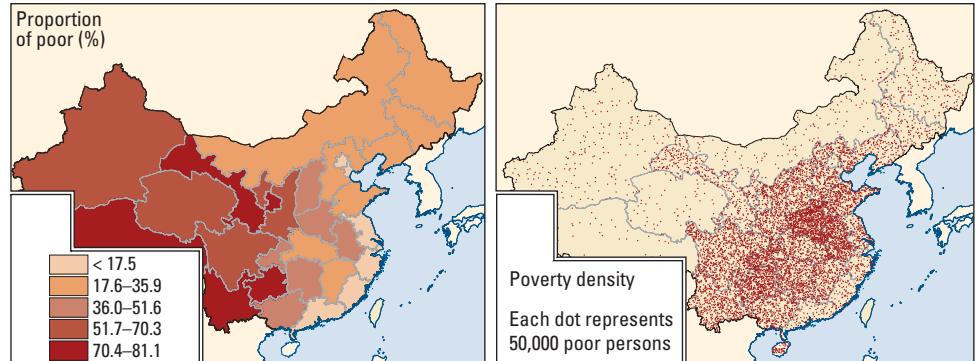
The answer lies in integrating lagging and leading areas, using policies that are tailored to the level of difficulty of integration. While economic motives are important, social and political conditions influence the speed of these spatial changes. The location choices that people make reflect the strengths and inclinations of societies and political structures. Poverty maps provide a snapshot of where the poor are concentrated (high poverty mass—that is, the “poor people”), and which places are the poorest (high poverty rate—that is, the “poor places”). These maps can tell us a lot about the social and political conditions in a country: the movement of poor people may best reflect the constraints to mobility, because they have the most reason to move and the fewest resources to do so.

Using information on where poor people are located and which places are poor, the policy response can be calibrated to country conditions.

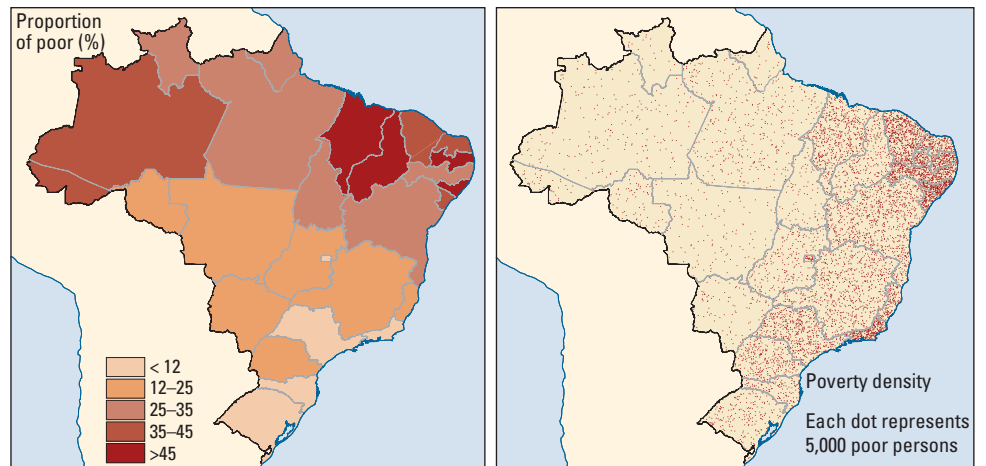
- **Countries with sparsely populated lagging areas.** In China the highest poverty rates

Map 7 Three types of countries, differing challenges for area development

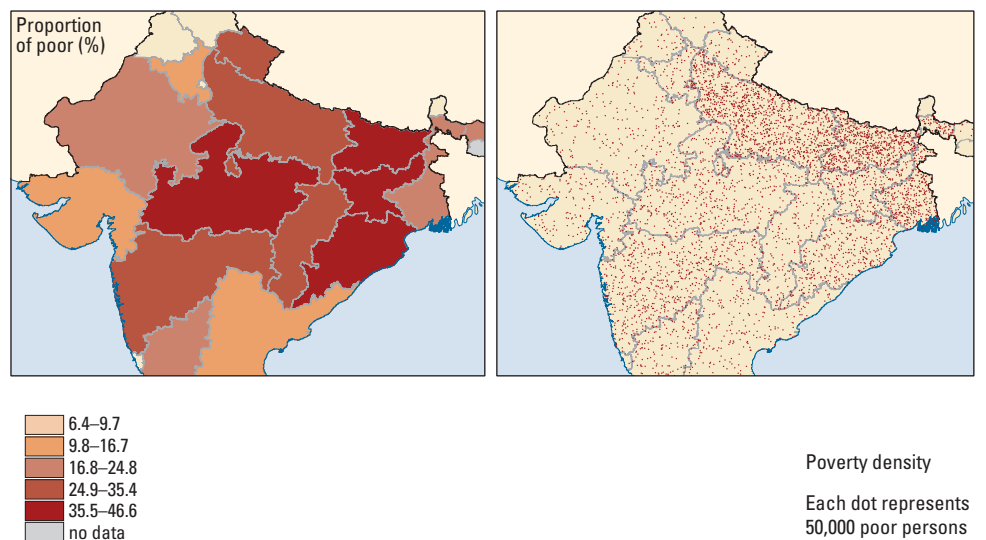
a. China: Poverty rates are high in the west, but most poor people are in the east



b. Brazil: Poverty rates are high in the north and northeast, but most poor people live along the coast



c. India: Poverty rates are high in the central states, and many poor people live there



Source: WDR 2009 team (see chapter 8 for details).

are in the western provinces, but the poor are concentrated in the southeast and central areas (see map 7, panel a). Economic density and population density overlap. The country has few divisions—linguistic and other barriers are not high—and people, including the poor, can move to reduce their distance to density. Spatially blind institutions that ensure well-functioning land markets, enforce property rights, and deliver basic social services such as schooling and health care can be the mainstay of an economic integration strategy to reduce the economic distance between lagging and leading areas. Chile, Egypt, Honduras, Indonesia, Russia, Uganda, and Vietnam are other examples of countries where the area development challenge is unidimensional—the main problem is distance.

- **Undivided countries with densely populated lagging areas.** In Brazil the poverty rates are highest in the north and northeast: eight of the ten poorest states are in the northeast, the other two are in the north (see map 7, panel b). But the economic mass and the concentration of poverty are highest in the urban agglomerations near the coast, from the poor northeast to the thriving southeast. Economic and population densities coincide only partially. The poverty-related symptoms are those of a country where within-country divisions such as ethnolinguistic differences and political fragmentation are low, but where population densities are—for historical and policy-related reasons—in the “wrong places.” Bangladesh, Colombia, Ghana, and Turkey have similar conditions. In such places the pull of agglomeration economies in leading areas and the mobility of labor may not be strong enough to induce concentration and convergence. The problems of “long distance and wrong density” must be met by a two-pronged policy of economic integration: spatially blind institutions should be augmented by spatially connective infrastructure, such as interregional highways and railroads and improved telecommunications.
- **Divided countries with densely populated lagging areas.** In India more than 400 million people live in the central lag-

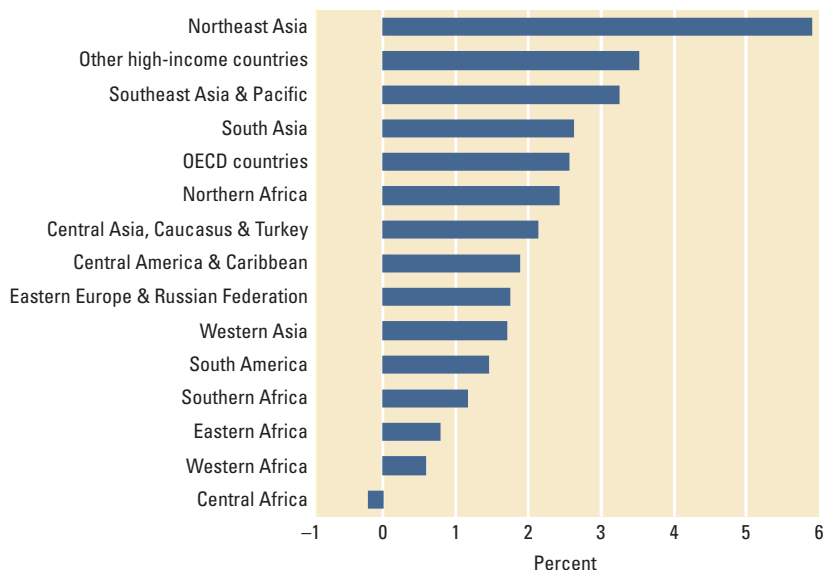
ging states, home to more than 60 percent of the nation’s poor (see map 7, panel c). People live there for a reason: it is a fertile plain and was the cradle of Indian civilization. But their location is less fortunate now, as the world has changed. Labor mobility is limited because of linguistic and class divisions. Mobility has not been helped by policies that sought to revive growth in these lagging provinces through subsidized finance and preferential industrial licensing. The debate is now shifting toward economic integration—policies more consistent with mobility of labor such as interregional infrastructure and better health and education services. These policies and the interstate migration they encourage will, if given time, reduce the divisions that have made the distances long between leading areas and densely populated lagging areas. In the meantime, these areas may need a helping hand—from geographically targeted incentives that encourage local production. Another country with a three-dimensional integration agenda of distance, densely populated poor areas, and domestic divisions may be Nigeria. In such places, the policy response has to be a blend of spatially blind, connective, and targeted policies.

Governments should not be faulted for being impatient with markets, and for trying to help lagging areas. But targeted interventions should be designed to work with the institutional reforms and the investments in infrastructure. Experience suggests that incentives should not be provided for activities that depend on agglomeration economies or international market access. Incentives for agriculture are prime candidates in these largely rural and agrarian areas. Relying mainly on targeted incentives for industry—as India did for decades—will not help the lagging states improve living standards to levels in the leading states.

Regional integration to increase access to global markets

The merits of global versus regional trade agreements have been debated for years. The debate is now largely concluded. Where

Figure 7 Northeast, Southeast, and South Asia have been catching up to developed nations
Average annual growth rates of GDP per capita, 1960–2006



Source: WDR 2009 team.

regional or bilateral pacts do not discourage trade with countries in other regions, and where they are accompanied by measures to facilitate the flows of goods, people, and finance—such as infrastructure and compensatory mechanisms—they can help. Otherwise, they are not worth the trouble.

This Report does not reopen that debate. Instead, it takes up the question of how developing countries can best gain access to markets within their neighborhoods and across the world. Geography matters greatly in deciding what is needed, what is unnecessary, and what will fail. But with the right mix of policy actions, even countries in parts of the world that have been left far behind can overcome their geographic disadvantage. The way to tell if the actions are paying dividends is whether market access improves noticeably.

Some regions of the world have done better than others (see figure 7). Countries in these regions now have thinner economic borders (see map 8, panel a). They can afford to have thin borders, because their neighbors are prospering too. For them, regional markets are world markets. Others, like the East Asians, have allowed production relationships to grow strong and cut paths even through thick borders. But specializing can increase efficiency only

if the scale of production is big, and that requires reaching the big markets of the Northern Hemisphere.

What do late developers have to do to accelerate development? The common condition is division—that is, thick borders. What differs is their distance from large world markets and whether or not there is a large country in their neighborhood (see map 8, panel b).

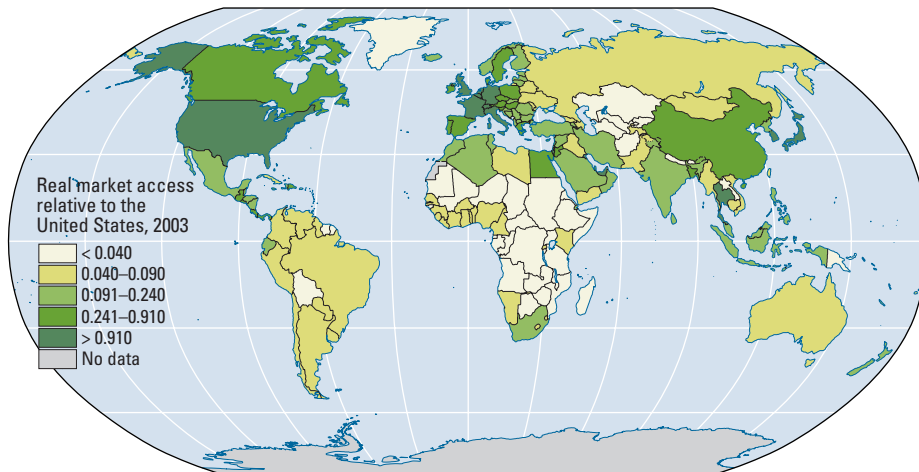
- Countries in regions near large world markets.** For countries near large markets, regional and global integration does not require geographic differentiation. Spatially blind measures such as improving economic policies and the investment climate will attract capital and technology from the more sophisticated markets nearby. Their underused talent and cheaper labor are powerful draws. Whether they lag or lead within the region is hardly relevant; the presence of a sun nearby makes them all small planets. Mexican exports to the United States are about 1.7 percent of the U.S. economy. Mexico should build even stronger links with the United States. But for other countries in Central America, the payoffs to infrastructure connections to Mexico are small—the market in North America dwarfs all of Central America’s. And market access likely depends most on economic stability. Spatially blind institutions should be able to integrate Central America with world markets. The same is true for Eastern Europe and North Africa. Countries in these regions have better-than-average market access, though depending on their economic policies and regulations, this access is not uniform even within these regions (see map 8, panel c).
- Countries in regions distant from large world markets that have a large economy.** To integrate regions more distant from large world markets but with a sizable economy—East Asia, Latin America, Southern Africa, and South Asia—such spatially blind measures are just as necessary, but they may not be sufficient. For lagging countries in these regions, such as Mongolia,

Map 8 Market access distinguishes world regions

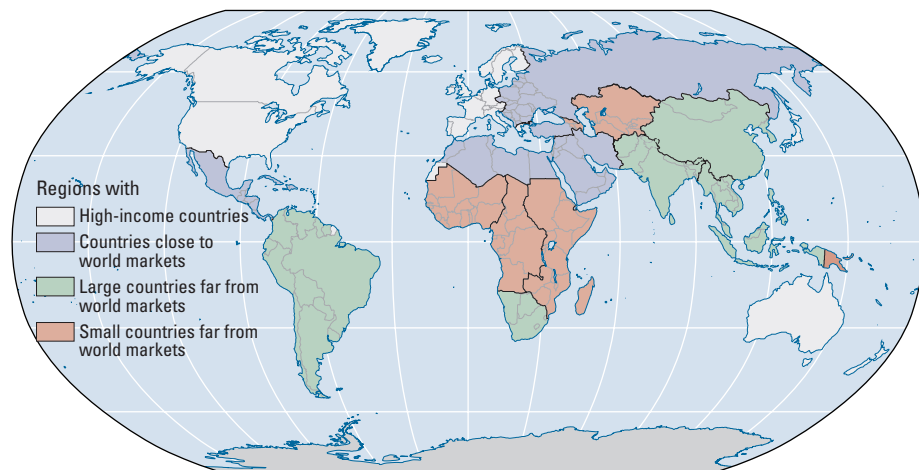
a. Borders are thicker in developing regions



b. The size and access to markets differs greatly by region



c. The three D's suggest a simple taxonomy of the world's neighborhoods



Sources: Panel a: WDR 2009 team (see chapter 3 for details); panel b: Mayer 2008 (see chapter 9 for details); panel c: WDR 2009 team (see chapter 9 for details).

Nepal, Paraguay, and Zimbabwe, some of the paths to world markets may go through their larger neighbors. Brazil, China, and India are attractive to investors because of their potential market size, and these “home market effects” can generate the impetus for specialization and help their enterprises compete in world markets. A qualification: for market access, the relevant measure of distance is economic, not Euclidean. With a combination of bilateral accords, inspired transport policies, and aggressive specialization in primary products, Chile reduced distance to North America and built global rather than regional links. But such cases are exceptions. For the smaller countries in these regions, both institutional reforms and regional connectivity will be necessary for economic integration.

- ***Countries in regions distant from world markets without large economies.*** The most difficult challenges are for the countries in parts of the world divided by thick borders, distant from world markets, and without a large country that can serve as a regional conduit to world markets, as Brazil and India might. For these regions, economic geography poses a three-dimensional challenge. Côte d’Ivoire or Tanzania

can hardly be blamed for worrying most about their own poor, and not their less fortunate neighbors such as Burkina Faso or Burundi. Indeed, seeing the benefits of regional cooperation, they have made repeated efforts to foster integration in their neighborhoods. The ECOWAS even includes a clause that allows workers to cross borders, a stage of integration rivaled only (and only recently) by the EU. It also has tried to share regional infrastructure. Other such regions are Central Africa, Central Asia, and the Pacific Islands. Countries in such regions face a three-dimensional challenge (see “Geography in Motion: Density, Distance, and Division in Sub-Saharan Africa”). A combination of efforts to improve institutional cooperation and regional infrastructure investments is needed—but it is not enough. Targeted incentives also will be necessary, through preferential access to developed country markets, perhaps made conditional on regional collaboration to improve institutions and infrastructure.

Everyone should support the efforts of these “bottom billion” countries to integrate their economies, within and across borders. A billion lives depend on it.

We are familiar with the sectoral transformations needed for economic growth—the changes in work and organization as agrarian economies become industrialized and service oriented. This Report discusses the spatial transformations that also must happen for countries to develop. Higher densities, shorter distances, and lower divisions will remain essential for economic success in the foreseeable future. They should be encouraged. With them will come unbalanced growth. When accompanied by policies for integration calibrated to the economic geography of nations, these changes also will bring inclusive development—sooner, not much later.