Geography in motion



The Report at a Glance—Density, Distance, and Division

Growing cities, ever more mobile people, and increasingly specialized products are integral to development. These changes have been most noticeable in North America, Western Europe, and Northeast Asia. But countries in East and South Asia and Eastern Europe are now experiencing changes that are similar in their scope and speed. **World Development Report 2009: Reshaping Economic Geography** concludes that such transformations will remain essential for economic success in other parts of the developing world and should be encouraged.

Seeing development in 3-D

These transformations bring prosperity, but they do not happen without risk and sacrifice. Look at three of the world's most prosperous places:

- The first is Tokyo, the largest city in the world with 35 million people, a quarter of Japan's population, packed into less than 4 percent of its land.
- The second is the United States, the largest economy in the world and perhaps also the most mobile, where about 35 million people change residences each year.
- The third is Western Europe, the most connected continent in the world today, where countries trade about 35 percent of their gross domestic product (GDP), more than half among neighbors.

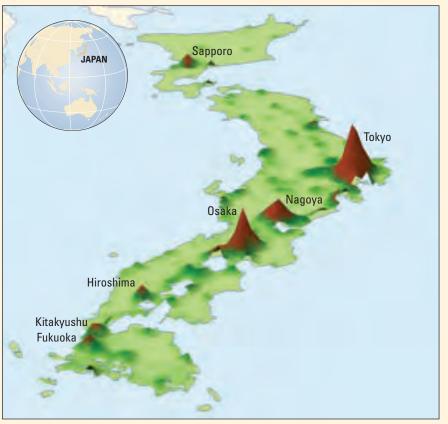
Visitors to Tokyo can see people being crushed into trains by professional train-packers. Millions of people willingly subject themselves to the unpleasantness of such a crush. A map of Japan's economic density shows why. Tokyo generates a big part of Japan's wealth—to get a share of it, people have to live close by (see map G0.1). The most striking feature of this map is density—the concentration of wealth in Tokyo and Osaka.

In the United States, each year in the days before the Thanksgiving holiday, about 35 million people try to get back to their families and friends. It is the start of winter in some parts of the country, so flights often are canceled. But Americans put up with the pain of leaving friends and family, because economic activity is concentrated in a few parts of the country (see map G0.2). To get a part of this wealth, you have to get closer to it. That is why 8 million Ameri-

Map G0.1 Density—why it pays to be close to Tokyo Economic production per square kilometer in Japan

cans change states every year, migrating to reduce their distance to economic opportunity. The most striking feature of this map is distance. Across the Atlantic, in Western

Europe, another massive movement takes place every day—not of people but of products. One example is Airbus,



Source: WDR 2009 team and World Bank Development Research Group based on subnational GDP estimates for 2005. See also Nordhaus (2006).



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which makes parts of planes and assembles them in France, Germany, Spain, and the United Kingdom as well as in other countries. Huge sections of aircraft are loaded onto ships and planes, as places specialize in making different parts and producing them in scale. Countries in

Map G0.3 Division—what prevents progress in Africa does not in Western Europe

Border restrictions to flows of goods, capital, people, and ideas



Source: WDR 2009 team (see chapter 3 for details). Note: The width of borders is proportional to a summary measure of each country's restrictions to the flow of goods, capital, people, and ideas with all other countries.

a region that was divided not so long ago now trade with former enemies to become an ever-more-integrated European Union (EU). As this integration has increased, economic divisions have decreased, making specialization and scale possible (see map G0.3).

What is the payoff for this pain? A map of economic geography, which resizes the area of a country to reflect its GDP, shows the benefits of big cities, mobile people, and connected countries. The United States, Western Europe, and Japan dominate the world's economy (see map G0.4).

Cities, migration, and trade have been the main catalysts of progress in the developed world over the past two centuries. These stories are now being repeated in the developing world's most dynamic economies.

- Mumbai is not the largest city in the world, but it is the most densely populated. And it keeps growing.
- China is not the largest economy in the world, but it is the fastest growing and may be among the most mobile.
- Southeast Asia may not have formed a political union like Europe, but it trades parts of goods back and forth as the EU does.

People risk loss of life or limb on Mumbai's packed trains to take advantage of economic density. Despite the crush among commuters and in such slums as Dharavi, Mumbai's population has doubled since the 1970s. Since the 1990s, millions of Chinese workers have migrated to get closer to economic opportunity concentrated along the coast. Just as Americans travel during Thanksgiving, more than 200 million people in China travel during the Chinese New Year. Regional production networks in East Asia are spread far wider than Airbus sites in Western Europe. East Asian countries may not trade airplane parts, but nations that once were enemies now trade parts of cars and computers with the same frequency and speed.

And what is the payoff? We can again recognize the shapes of China, India, and Southeast Asian countries on the map of the world's economic geography (see map G0.4). Contrast these shapes with that of the mighty continent of Africa, which shows up as a slender peninsula.

The World Development Report argues that some places are doing well because they have promoted transformations along the three dimensions of economic geography:

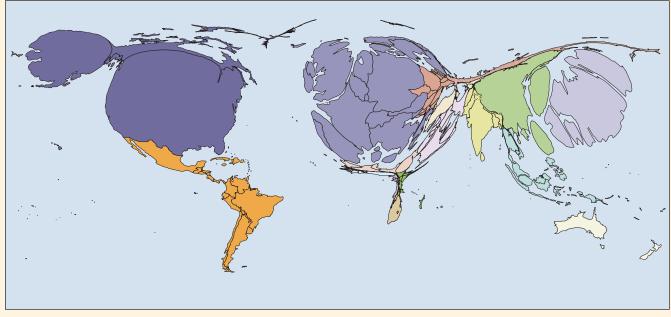
- Higher densities, as seen in the growth of cities.
- Shorter distances, as workers and businesses migrate closer to density.
- Fewer divisions, as countries thin their economic borders and enter world markets to take advantage of scale and specialization.

The United States and Japan reshaped their economic geography along these lines in the past. China is reshaping its economic geography now. This Report proposes that these will be the changes that will help developing nations in other parts of the world, most notably Africa.

Unbalanced growth, inclusive development

That is what this *World Development Report* proposes, and the Report is

A country's size shows the proportion of global gross domestic product found there



Source: WDR 2009 team using 2005 GDP (constant U.S. dollars).

Note: The cartogram was created using the method developed by Gastner and Newman (2004). This map shows the countries that have the most wealth when GDP is compared using currency exchange rates. This indicates international purchasing power—what someone's money is worth if spent in another country.

structured to bring out the message (see figure G0.1).

- Part one describes the changes along the dimensions of density, distance, and division—taking up each in turn. It summarizes the experience of the past century or so.
- Part two analyzes the drivers of these transformations—the market forces of agglomeration, migration, and specialization and trade. It distills the findings of policy research during the past generation or so.
- Part three discusses the policy implications of the experience and analysis in the first two parts. It provides a common framework for reframing three policy debates—on urbanization, on lagging areas within countries, and on regional integration and globalization.

The Report is structured and written in such a way that people interested in only one of these debates can read just some of it. That is, it can be read vertically. The chapters on density, agglomeration, and urbanization should interest all countries—small and large, low income and middle income. The chapters on distance, factor mobility, and regional development may be of most interest to larger middle-income countries. And the chapters on division, transport costs, and regional integration may be of most interest to low-income and smaller economies.

Four spotlights on *Geography in Motion* examine the interplay between market forces and government policies in North America, Western Europe, East Asia, and Sub-Saharan Africa. By highlighting the interactions among the three dimensions, they also connect the Report's different parts.

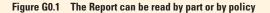
Seen another way, the Report examines the most important policy issues of economic geography, from local, to national, to international. Locally, the policy issue in areas such as Lagos state in southern Nigeria is how to manage urbanization. Nationally, the policy issue in Nigeria is how to manage the disparities in resources and living standards in the north and the south. And internationally, the policy issue in West Africa is how to make a better economic union that benefits both the landlocked and the coastal countries, the poorest and the more prosperous.

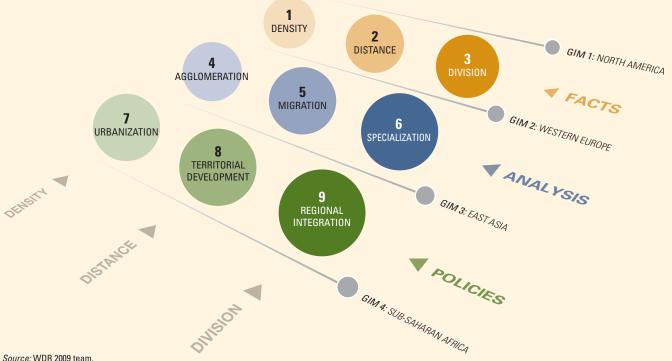
As the geographic scale increases from local to national to international, the specific policy issue changes. But the underlying problem is the same some places do well, others do not. And it is difficult for anyone to accept this as inevitable.

The Report's main message is that economic growth *will* be unbalanced. To try to spread out economic activity is to discourage it. But development can still be inclusive, in that even people who start their lives far away from economic opportunity can benefit from the growing concentration of wealth in a few places. The way to get both the benefits of uneven growth and inclusive development is through economic integration.

Economic integration—local, national, and international

The Report makes it clear what economic integration means. It means one





Source: WDR 2009 team

thing to integrate rural and urban areas, and slums with other parts of cities. It means another to integrate lagging and leading provinces within a nation. And it means yet another to integrate isolated and well-connected countries. These notions of economic integration are central to three debates in development-urbanization, territorial development, and international integration.

Urbanization

The arguments and evidence in World Development Report 2009 can set priorities for policies at different stages of urbanization, essentially providing the elements of an urbanization strategy. Each territory or area within a nation has a specific geography. But the principles are quite universal.

• In places mostly rural, governments should be as neutral as possible and should establish the institutional foundation for possible urbanization in some places. Good land policies are central, and so are policies to provide basic services to everyone. A good example is Costa Rica.

- In places urbanizing rapidly, governments must put in place, in addition to institutions, connective infrastructure so that the benefits of rising economic density are more widely shared. A good example is Chongqing, China.
- In places where urbanization has advanced, in addition to institutions and infrastructure, targeted interventions may be necessary to deal with slums. But these interventions will not work unless institutions for land and basic services are reasonably effective and transport infrastructure is in place. A good example is Bogotá, Colombia.

Territorial development

The principles also can reshape the debate on territorial or regional development. The tools of geography can identify which places are poor-the lagging areas-and where most of the poor live. Often, the two are not the same, because the poor have the most reason to move from poor places. The Report discusses how governments can tailor policies to

integrate areas within nations, while reducing poverty everywhere.

Lagging areas have one thing in common-they are economically distant from places doing well. But besides this, the economic geography of different areas is not the same:

- In some countries, such as China, lagging areas are sparsely populated. It does not make a lot of sense to spread expensive infrastructure into these places-or to give firms incentives to move to them. What makes much more sense is to provide basic services everywhere, even if it costs more to reach these distant areas. Encouraging mobility of people is the priority, and institutions that make land markets work better and provide security, schools, streets, and sanitation should be the mainstay of integration policy.
- In other countries, such as Brazil, lagging areas are densely populated. As in China, poor people have moved in the millions from the northeast to the southeast. Everyone speaks

the same language, and domestic mobility is not difficult. But many poor people still live in the northeast. Encouraging mobility of people from the northeast is important, but so is enabling access to markets in the dynamic southeast. In such cases, both institutions and infrastructure to connect the two coastal areas are necessary for economic integration. In a third group of countries, such as India, lagging areas are densely populated-almost 60 percent of India's poor live in these poor places-and people can find it difficult to migrate to places doing well, such as the capital area and the south. Language and cultural differences within some areas can be considerable. In such cases, institutions and infrastructure could be complemented by incentives to producers to locate in these lagging states. But these incentives should be carefully designed to avoid offsetting the unifying effects of common institutions and connective infrastructure. A promising possibility is providing incentives to agriculture and allied activities that are appropriate for states that are still mostly rural.

Regional integration

Finally, the principles developed in this Report inform the debates on how to make globalization work for all countries. The same logic applied at the local and national levels can be used at the international level to classify world regions by the difficulty of economic integration in these regions. The common problem is division—thick economic borders. Aside from this, the task of integration varies in different parts of the developing world:

- Countries in regions close to world markets, such as Central America, North Africa, and Eastern Europe, face a relatively straightforward task of integration. Common institutions can help them become extensions of these large markets.
- Countries in regions distant from world markets, but with large home

markets attractive to investors, face a more difficult challenge. Good institutions and regional infrastructure can help them access these markets. Examples include East Asia and, increasingly, South Asia. Southern Africa and South America can also integrate globally by making their home markets bigger and more specialized through regional institutions and infrastructure.

Integration is hardest for countries in regions that are divided, are distant from world markets, and lack the economic density provided by a large local economy. These countries include those nicknamed the "bottom billion"-East, Central, and West Africa: Central Asia: and the Pacific Islands. For these countries, all three instruments are needed-regional institutions that thin borders, regional infrastructure that connects countries. and such incentives as preferential access to world markets, perhaps conditioned on ensuring that all countries strengthen regional cooperation.

One thing is common to the policy debates on urbanization, area development, and globalization. In their current form, they overemphasize geographic targeting—what to do in rural areas or in slums, what to do in lagging states or remote areas, and what to do in the most poor or landlocked countries. The Report reframes these debates in a way that better conforms to the reality of growth and development. The reality is that the interaction between leading and lagging places is the key to economic development. The reality is that spatially targeted interventions are just a small part of what governments can do to help places that are not doing well. The reality is that, besides place-based incentives, governments have far more potent instruments for integration. They can build institutions that unify all places and put in place infrastructure that connects some places to others.

The Report calls for rebalancing these policy discussions to include all the instruments of integration—institutions that unify, infrastructure that connects, and interventions that target. And it shows how to use the three dimensions of density, distance, and division to tailor the use of these policy instruments to address integration challenges that range from the relatively straightforward to the most complicated.