

world development report

2009

*Reshaping
Economic Geography*





Three Special Places

- ***Tokyo—the biggest city in the world***
 - 35 million out of 120 million Japanese, packed into 4 percent of Japan's land area
- ***USA—the most mobile country***
 - More than 35 million out of 300 million changed residence in 2006; 8 million people changed states
- ***West Europe—the most integrated continent***
 - About 35 percent of its GDP is traded, almost two thirds within the region



Crowded cities

Tokyo's trains have been moving 8 million people every day





Packing in the subways

Tokyo's "trainpackers" crush commuters into metrorail carriages





And piling up wealth— the fruits of proximity

Japan's economic mass is concentrated in the Tokyo-Yokohama area

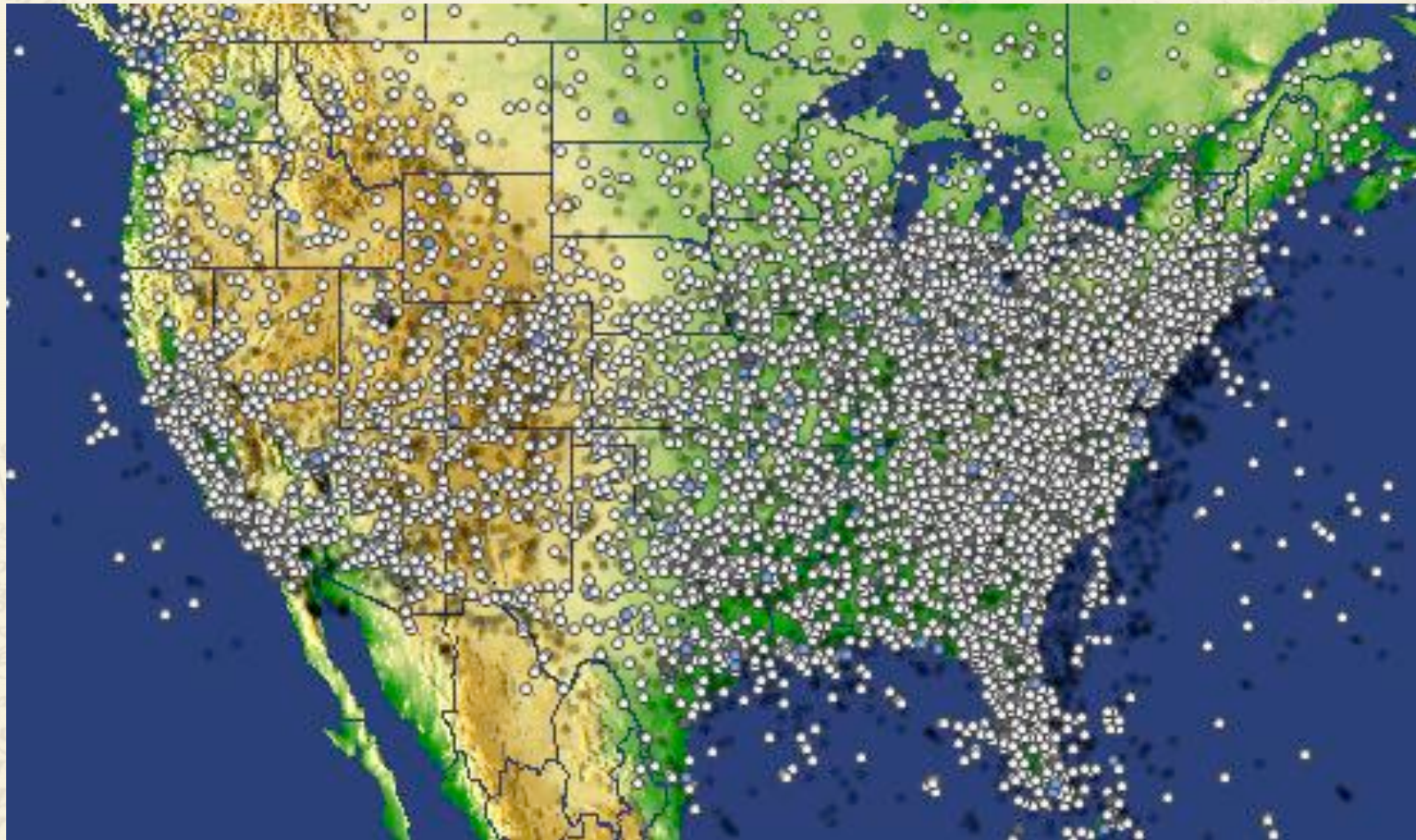


Source: WDR 2009 team and World Bank Development Research Group based on subnational GDP estimates for 2005. See also Nordhaus (2006).



Going home for the holidays

Planes in the air on the Tuesday before Thanksgiving in the US





Going home for the holidays?

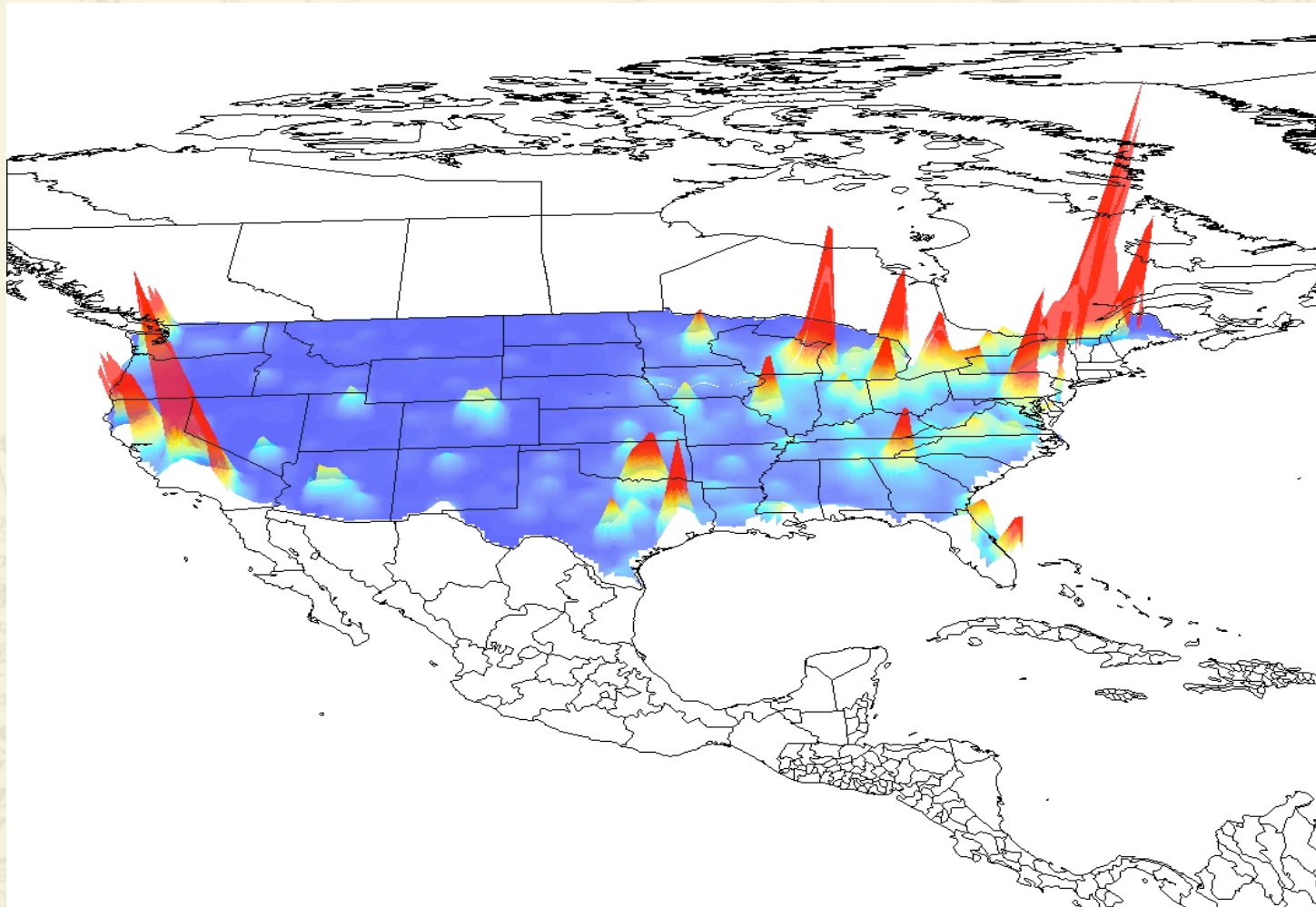
Stranded by storms before the Thanksgiving weekend





Why Americans put up with the pain of moving

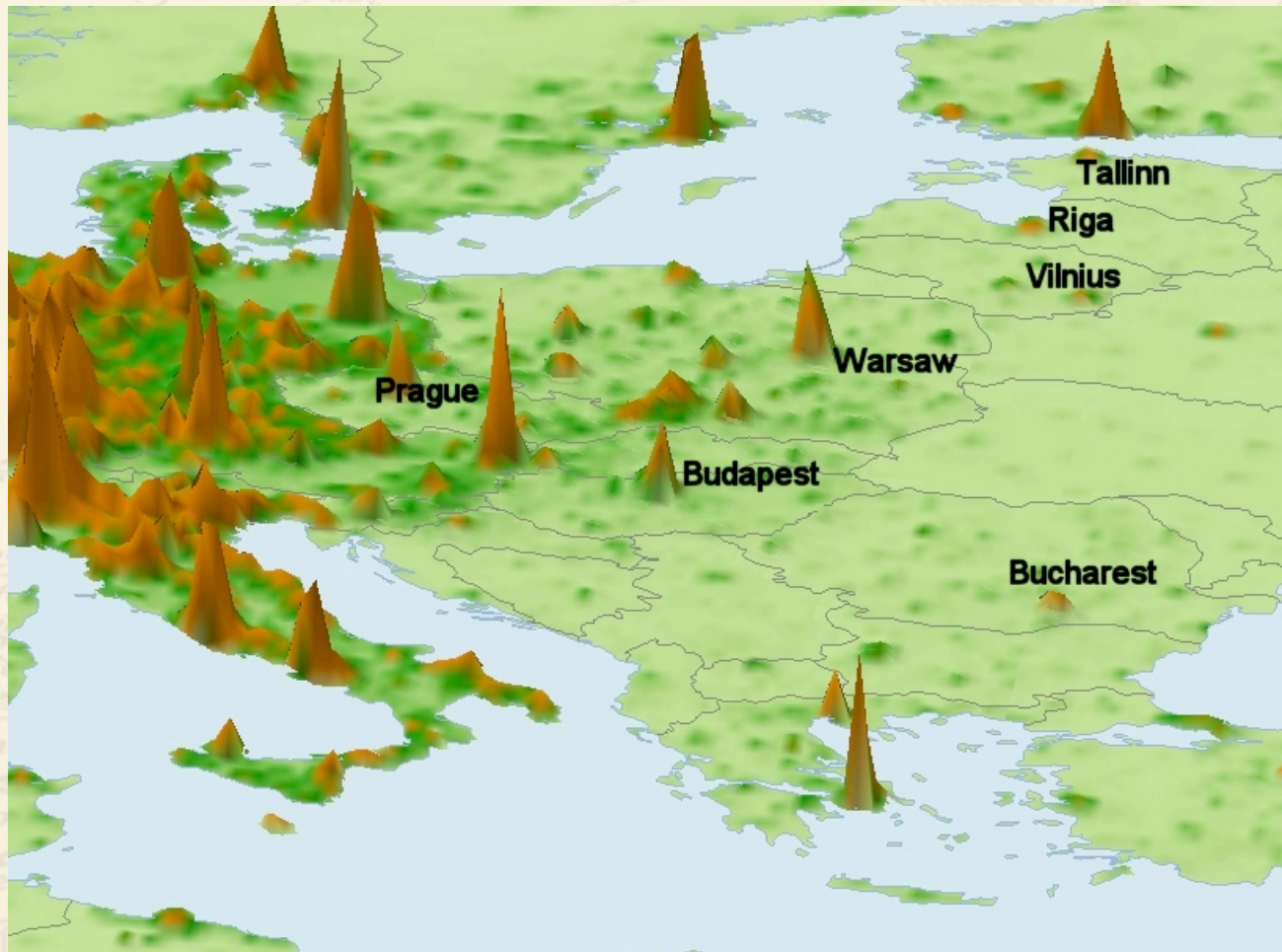
Economic mass is concentrated in a few parts of a big country





How Central Europe stacks up

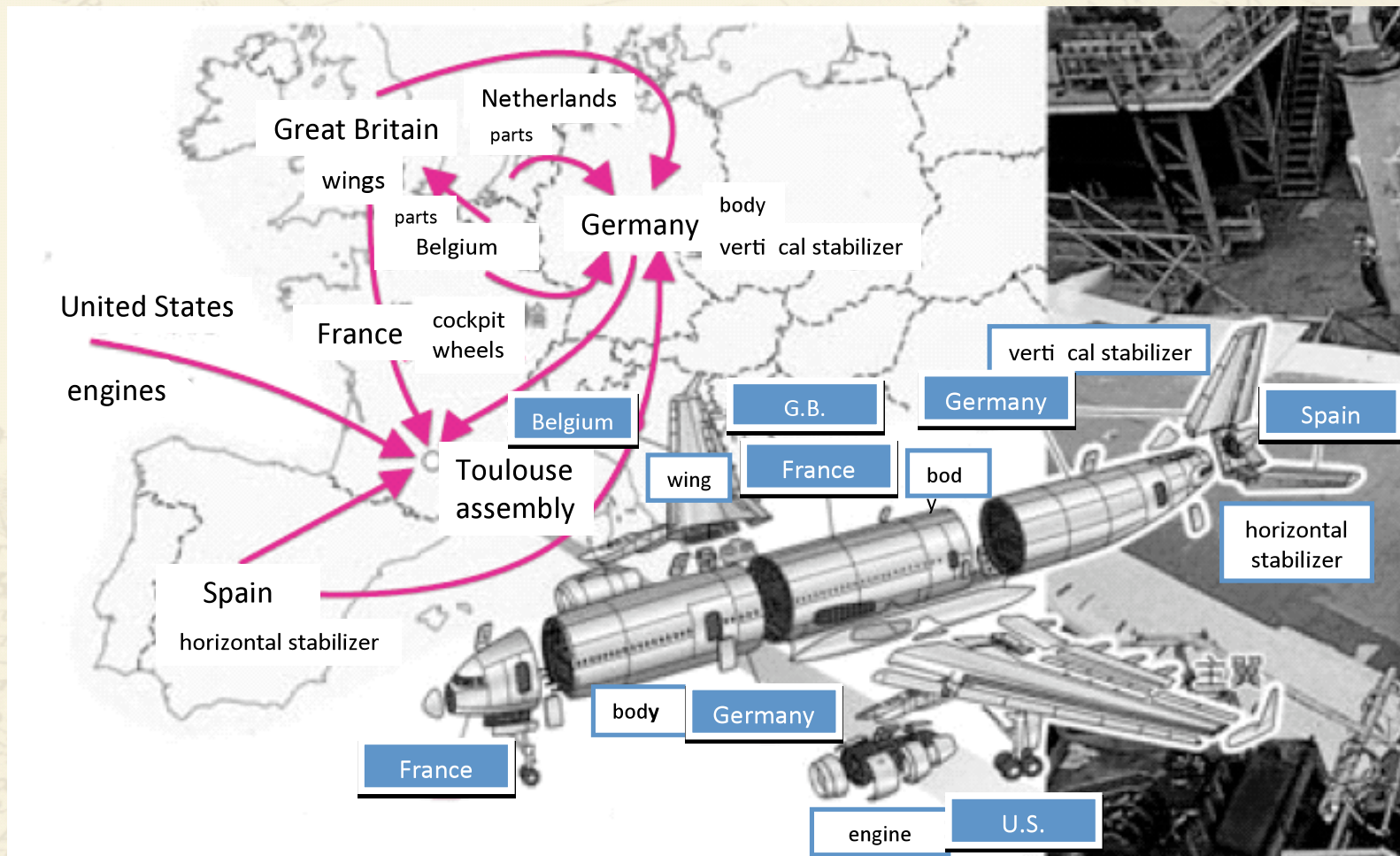
Mountain ranges in West, mostly hills in the East





Specializing and trading in Western Europe

Airbus parts are made, moved, and assembled all over Western Europe





Loading and moving the fruits of specialization

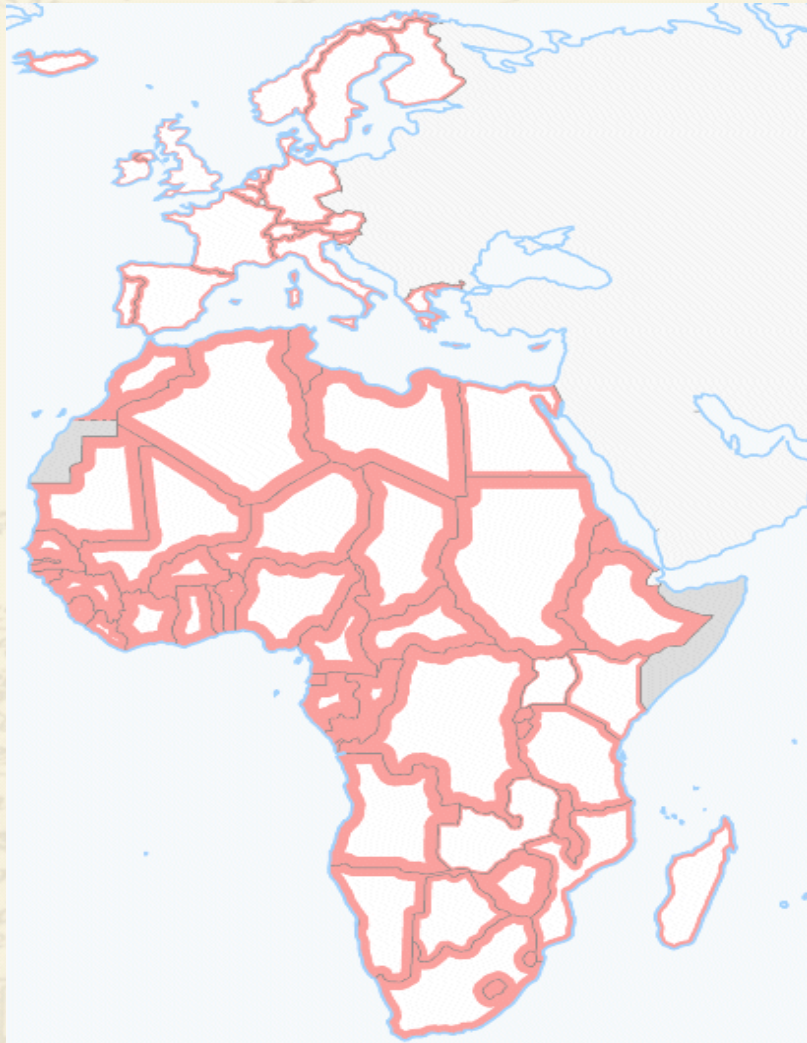
Airbus parts are made, moved, and assembled all over Western Europe





Made possible by a slow and painful integration

Thin borders in Europe, thick in Africa

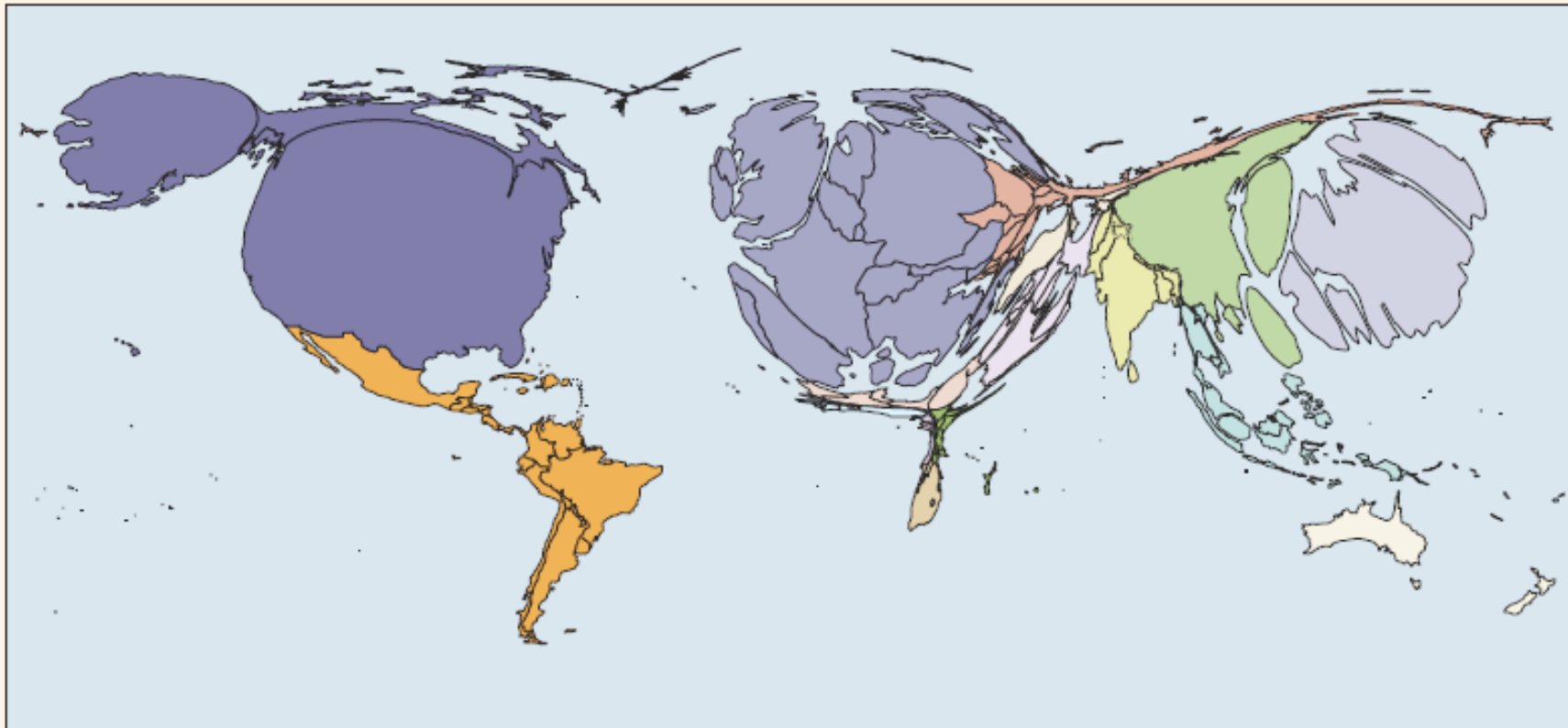




The result?

The US, EU-15, and Japan cover much of the economic globe

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.



Stories being repeated now in developing Asia

- ***Mumbai—the most densely populated city***
 - About 30,000 people per sq. km.; already twice the population density of Seoul, Shanghai, and Bogotá
- ***China—the most mobile developing country***
 - 60 million migrant workers traveled from home on the last day of Chinese New Year holidays in 2006
 - 200 million travelers were stranded due to snow storms days before Chinese New Year in 2008
- ***Southeast Asia—the most rapidly integrating developing region***
 - Trade is a big part of GDP
 - More than 25 percent of its trade is within Southeast Asia; more than 50 percent if Northeast Asia is included



Stuffed trains in Mumbai

Mumbai's trains move millions every day





Trainpackers needed

People die every day on Mumbai's trains





China: Millions of workers migrated during the 1990s

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.



Going home in China

Guangzhou railway station during Chinese New Year, 2008

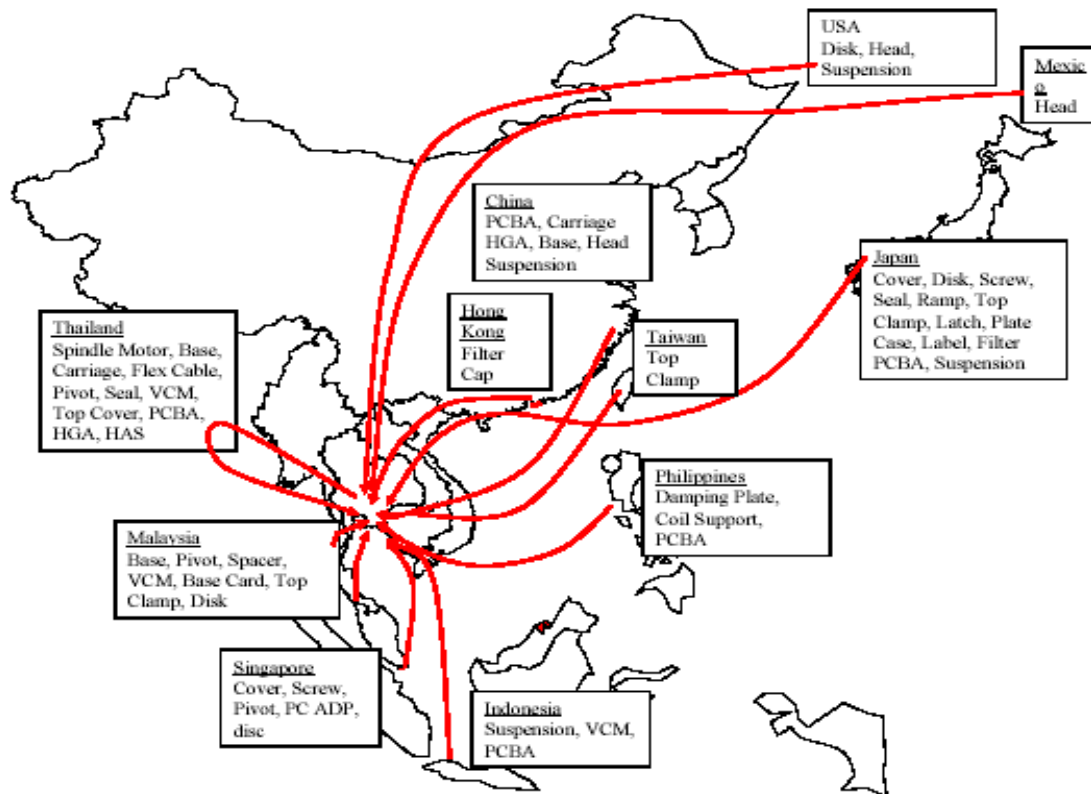




Specialization and trade in East and Southeast Asia

Computer parts are made and assembled all over East Asia

Figure 8: An example of interdependence in 'Factory Asia.'



Note: This shows the nations where parts are sourced for a hard-disk drive assembled in Thailand; the disk drives are then shipped on to various markets to be used in various electronics.

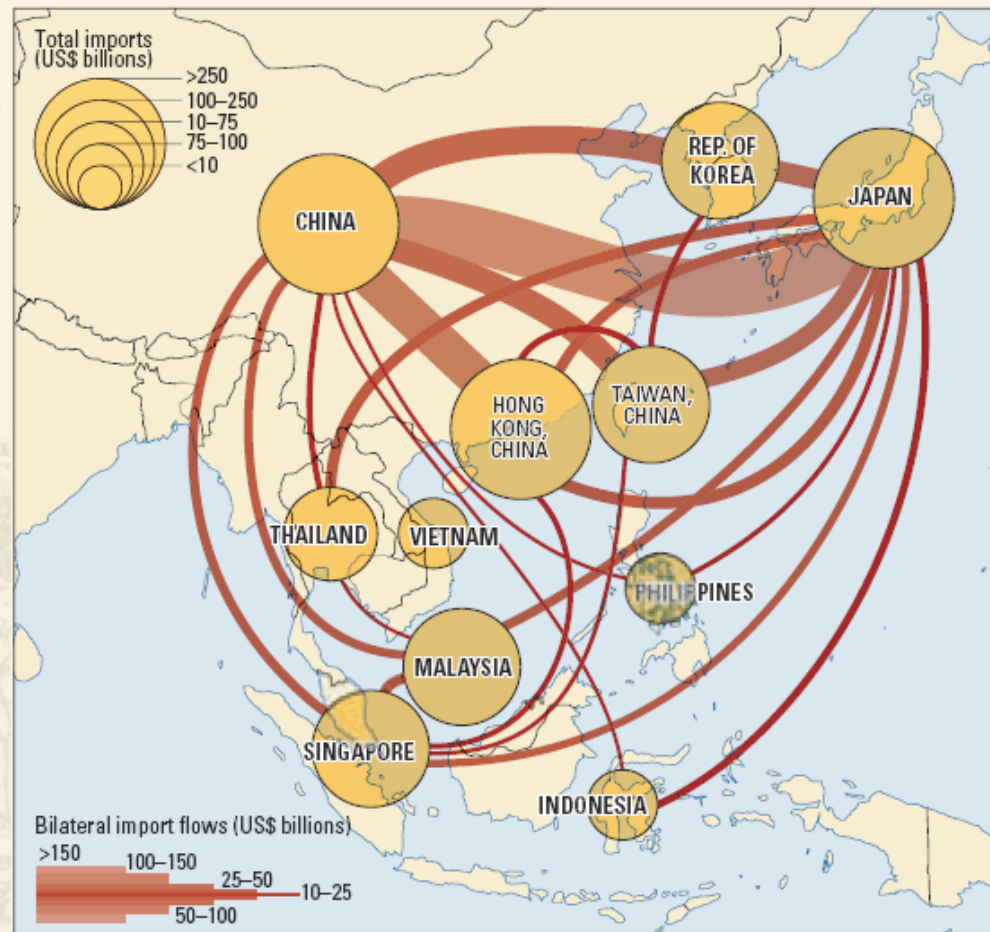
Source: Adapted from Hiratsuka (2005). Figure 2



Not just computers—vigorous trade flows in East Asia

Vigorous trade flows in East Asia, anchored by China and Japan

Map G3.2 Asia integrated: trade at the end of the twentieth century



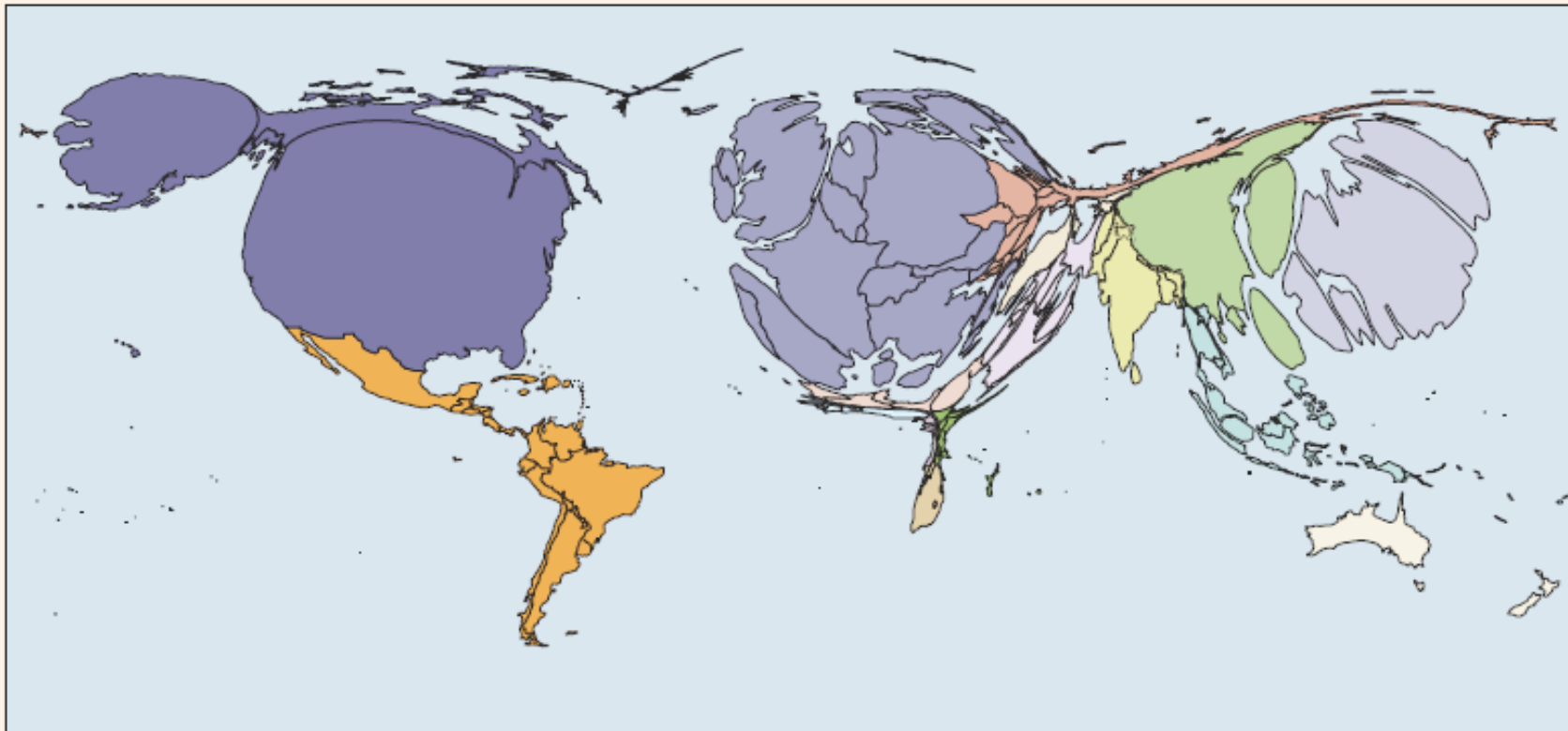
Source: Gill and Kharas 2007.



The result?

China, India and Southeast Asia can again be recognized on a map of the world's economic geography

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.



Geographic transformations needed for progress

- ***Higher Densities***

- No country has grown to high income without urbanizing

- ***Shorter Distances***

- Growth seldom comes without the need to move closer to density

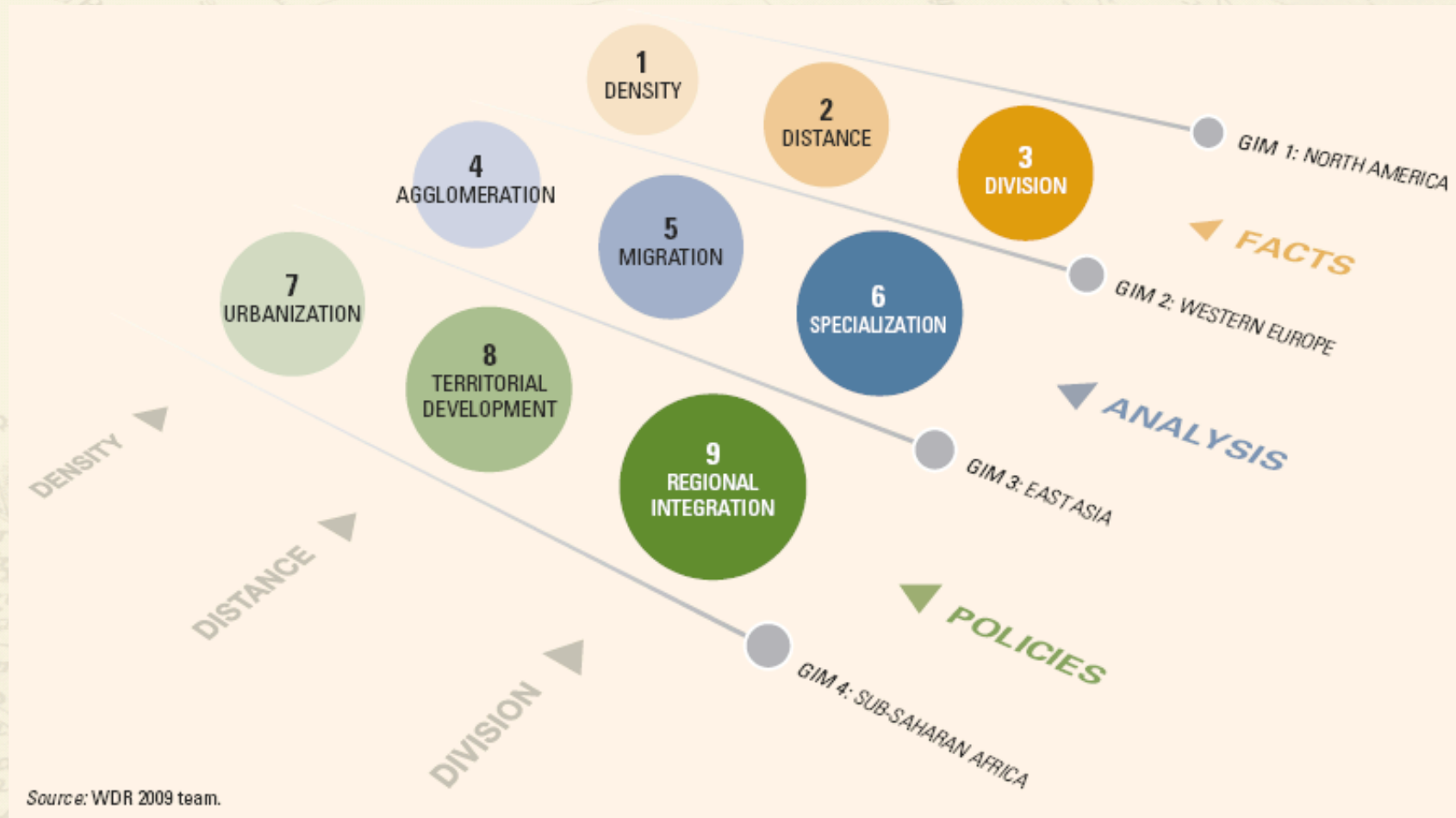
- ***Fewer Divisions***

- Growth seldom comes to a place that is isolated from others



Report structure

The report can be read by part or by policy





Geographic scales

The report examines policy issues at the local, national and international geographic scales

Shanghai, China, and East Asia exemplify the local, national, and international scales

The first geographical scale

The *area* around Shanghai Province



The second geographical scale

The *country* of China



The third geographical scale

The *East Asian region*



Source: WDR 2009 team.



Policy concerns at each geographic scale

- ***Local: Concentration of people in cities will outstrip concentration of economic mass***
 - A billion people in the world's slums
- ***National: Spatial disparities in living standards will widen as economic mass concentrates in leading provinces***
 - A billion people in remote and lagging areas
- ***International: Poor people will be trapped in isolated countries that are not developing***
 - The new third world: the “Bottom Billion”



WDR 2009 messages

- ***Growth will be unbalanced***
 - Trying to spread out **economic production** amounts to fighting the forces of economic growth
- ***Development can still be inclusive***
 - Persistent spatial disparities in **basic living standards** are neither desirable nor inevitable
- ***How to get both unbalanced growth and inclusive development? Economic integration***
 - Changing debates on urbanization, regional development, and global integration **from spatial targeting to spatial integration**



Policy makers think about spatial targeting first, and most

Common institutions and connective infrastructure are the most potent instruments for economic integration

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	●	●	●



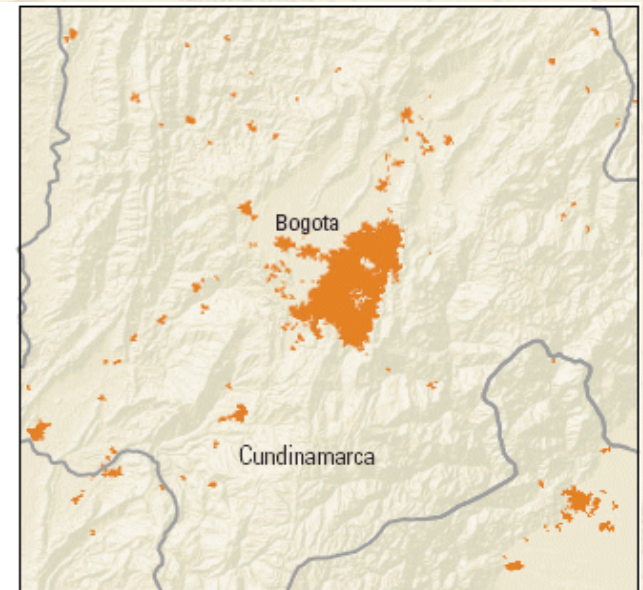
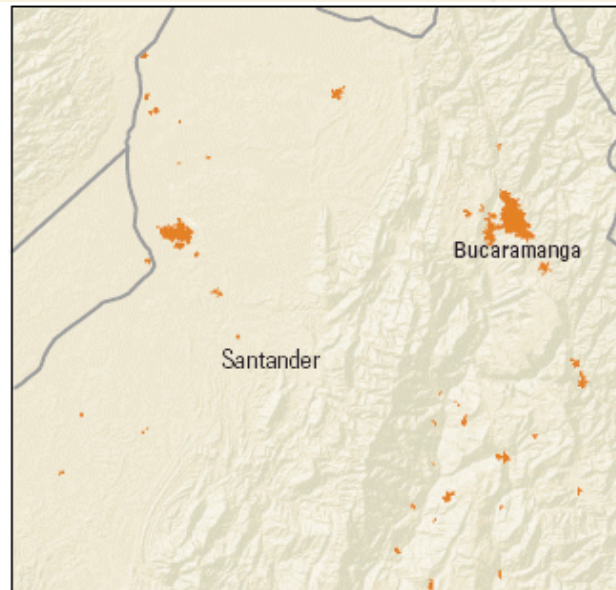
Incipient, intermediate and advanced urbanization present different policy challenges

Locally, as urbanization advances, the dimensions of the integration challenge increase

Encouraging density in Popayan, Colombia

Encouraging density and reducing distance in Bucaramanga, Colombia

Encouraging density, reducing distance, and lowering divisions around Bogota, Colombia





Incipient, intermediate and advanced urbanization require different policy responses

All countries have such a portfolio of places



1D Guizhou, 2D Changsha, 3D Guangdong





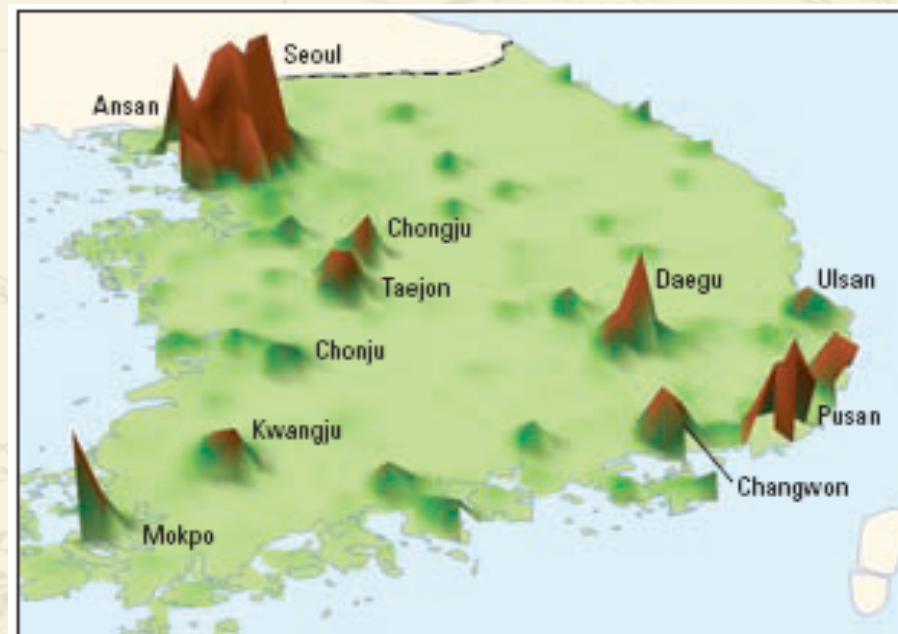
An instrument per dimension?

As urbanization advances, more instruments for integration are needed

1D: Institutions in Eumseong

2D: Institutions and infrastructure in Daegu

3D: Institutions, infrastructure and interventions in Seoul



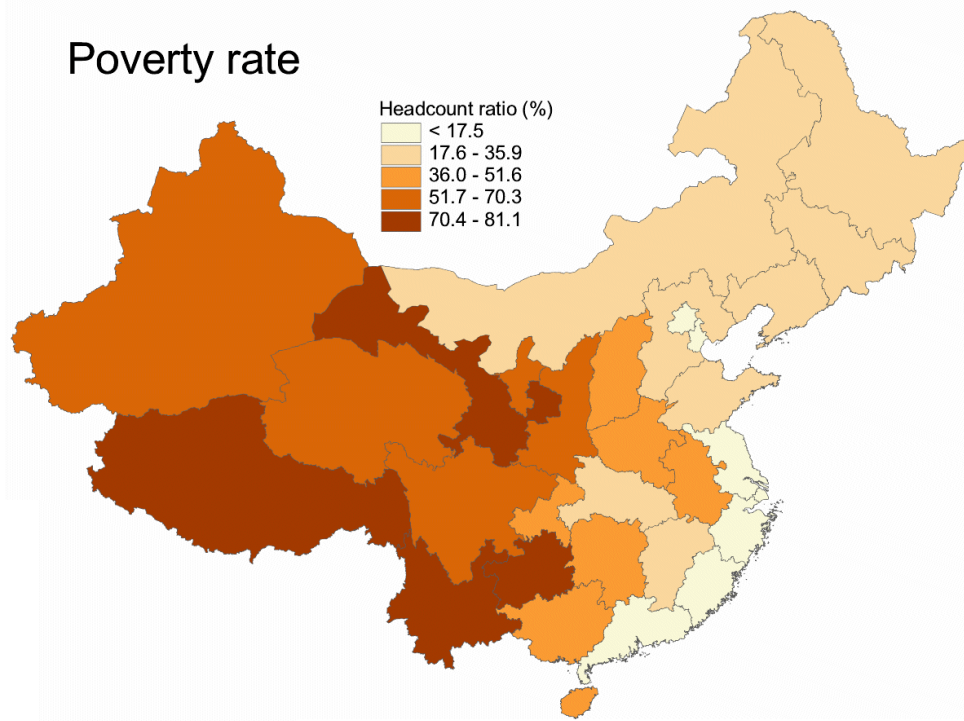
Source: WDR 2009 team and World Bank Development Research Group, based on subnational GDP estimates for 2005. See also Nordhaus 2006.



1D—China: Lagging areas have high poverty rates, but leading areas have most of the poor

Nationally, the dimension—economic distance; the instrument—institutions that unify

Poverty rate



Number of poor

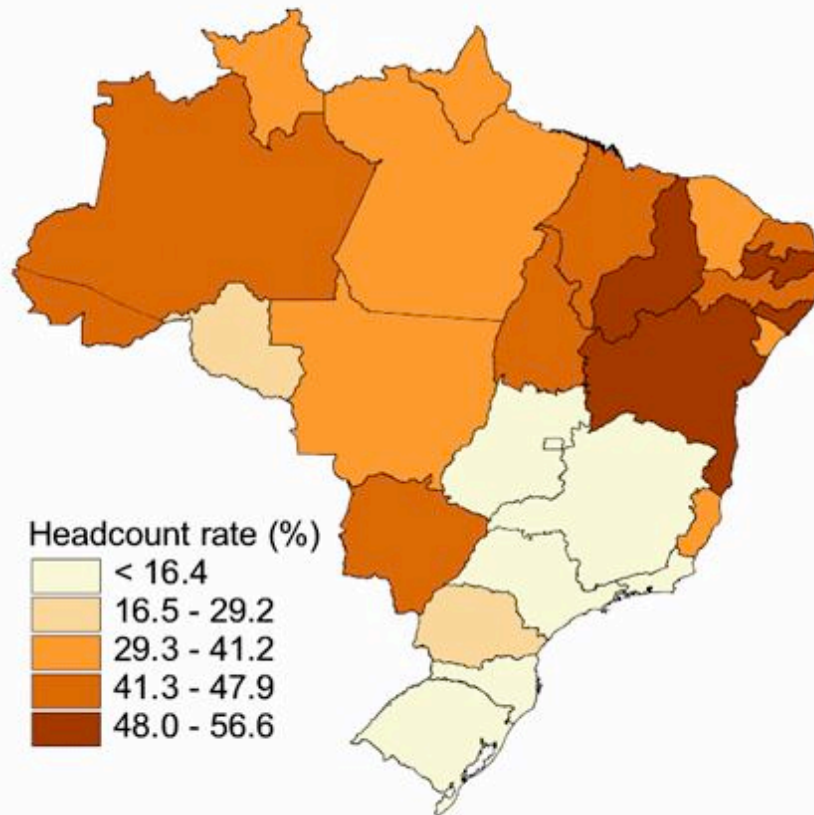




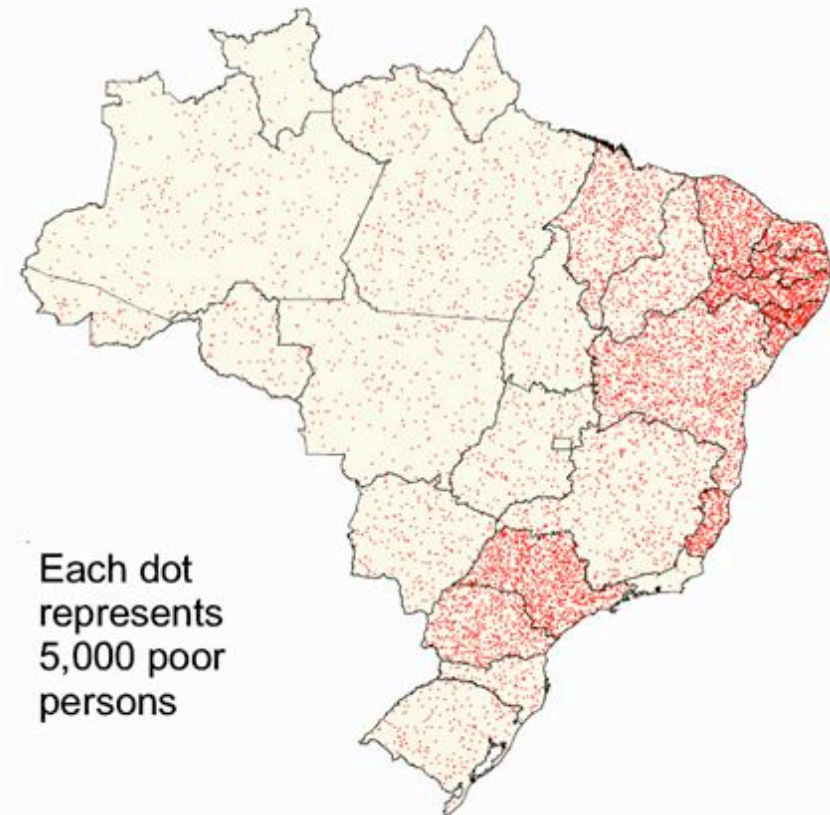
2D—Brazil: Lagging areas have high poverty rates and many of the poor

The dimensions—long distances and misplaced densities; the instruments—institutions, and infrastructure to connect leading and lagging places

Poverty rate



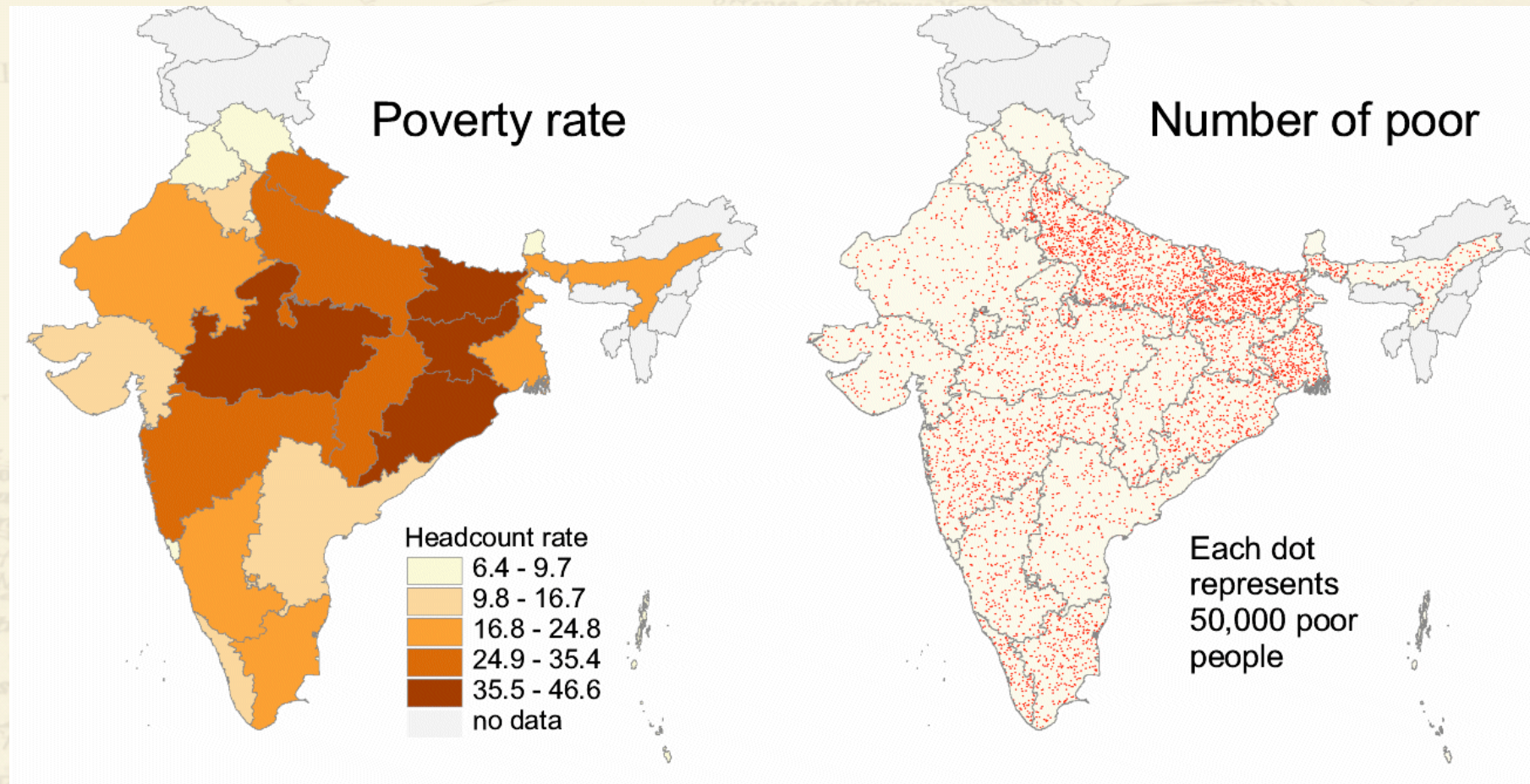
Number of poor





3D—India, lagging areas have high poverty rates and a big share of the poor

The dimensions—long distances, misplaced densities, and domestic divisions;
the instruments—institutions, infrastructure, and incentives that target





Division impedes market access

Borders are thicker in developing regions



Source: WDR 2009 team.

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. Gray areas = insufficient data.



Division impedes market access

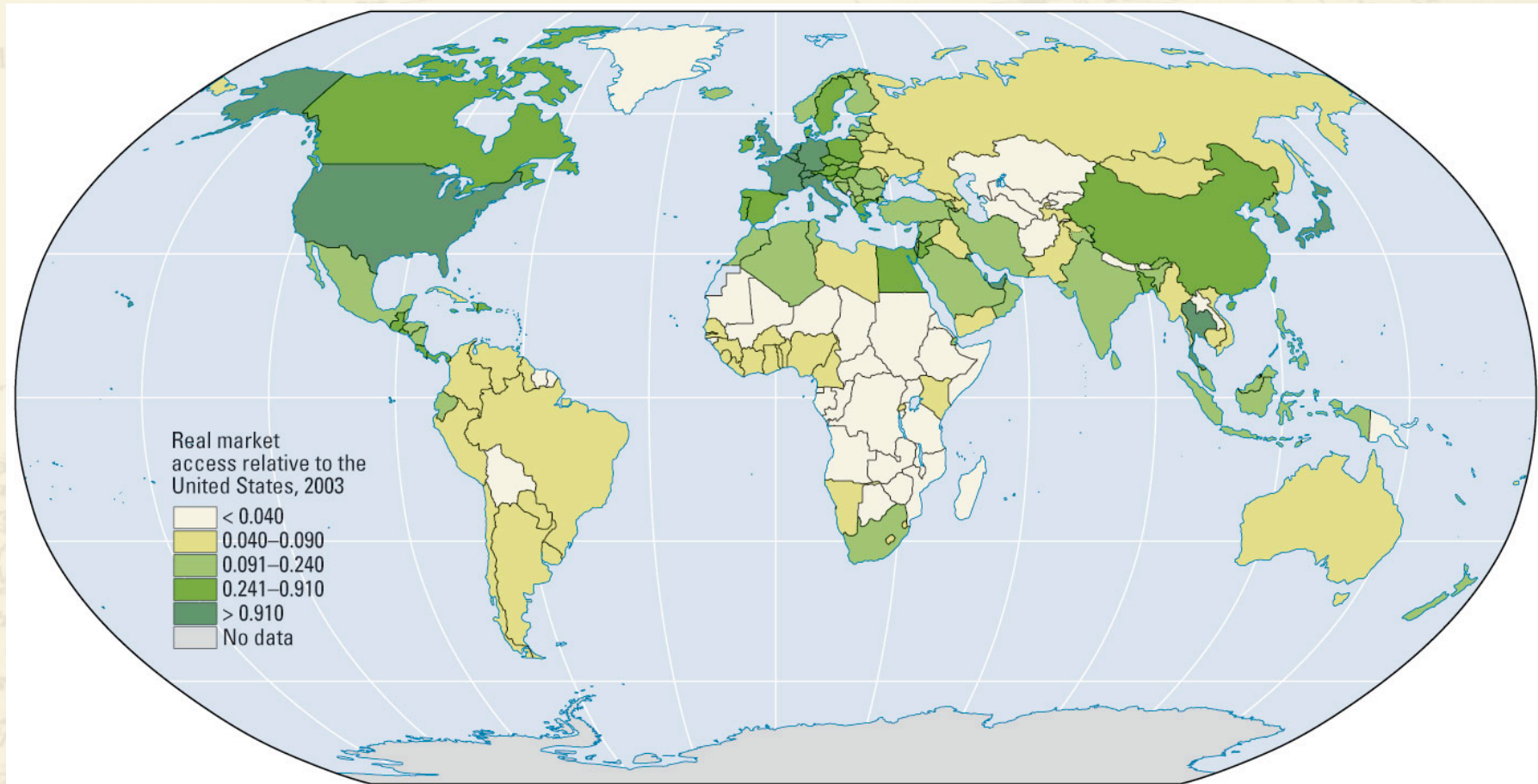
Borders are thicker in the EU's New Member States





Market access helps to classify the developing world's neighborhoods

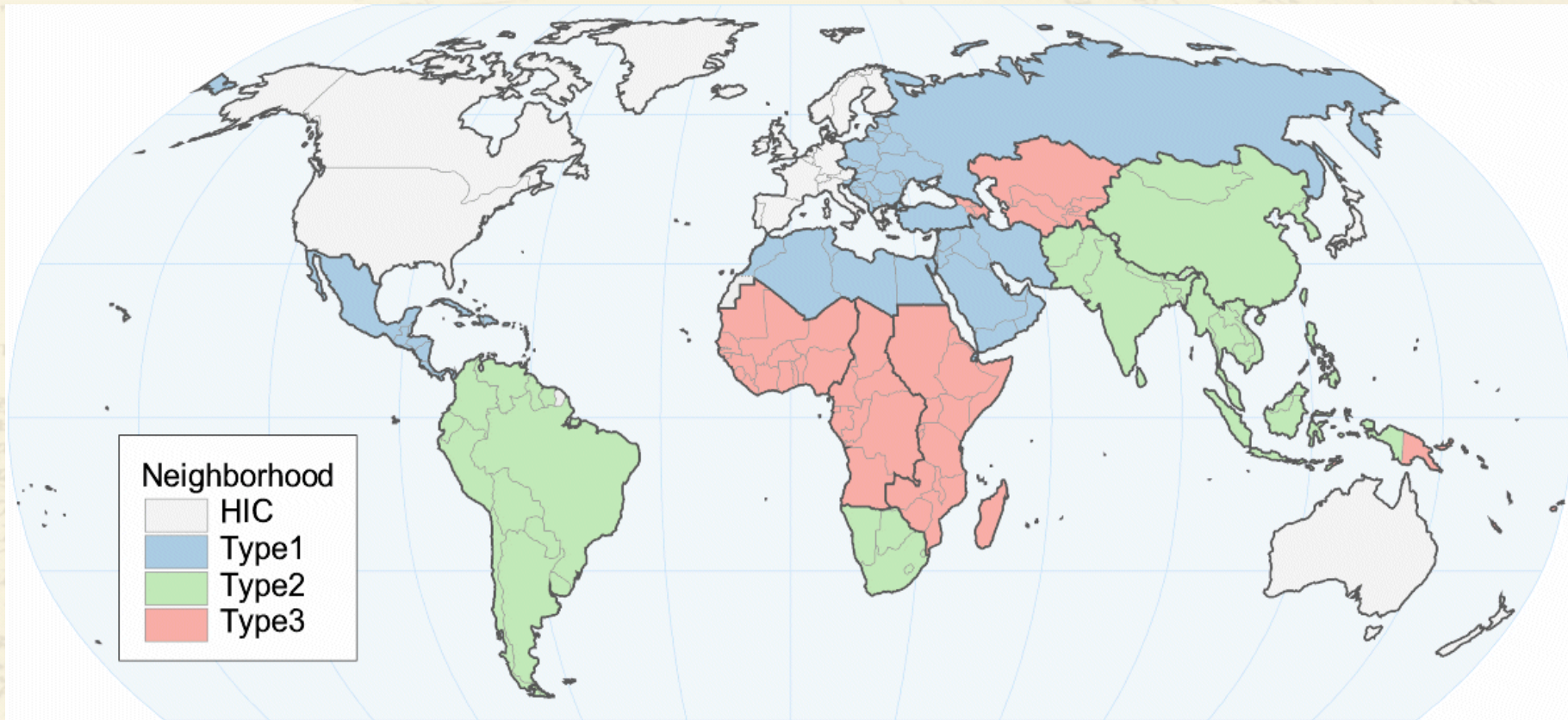
Market access differs greatly, depending both on geography and governance





The developing world's neighborhoods, classified by economic geography

Density, distance, and division can be used to characterize the difficulty of international integration for countries in different regions of the world





Calibrating integration policies—an “I for a D”

A simple framework for tailoring integration policies to the economic geography of places

Complexity of challenge	Place type—local (L), national (N), and international (I) geographic scales	Policy priorities for economic integration		
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What the report proposes

- **Understand the spatial transformations necessary for progress**
 - Higher Densities, shorter Distances, and fewer Divisions
- **Unleash the market forces that promote economic concentration and social convergence**
 - Agglomeration, Migration, and Specialization
- **Calibrate policies to economic geography of places**
 - “Institutions” which unite—helping labor and capital move to opportunity
 - “Infrastructure” to connect—but do not expect production to spread out
 - “Interventions” that target—but only where necessary
- **The result: unbalanced growth, inclusive development**



For more information

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