

The regional structure of the global economy: Economic hierarchies and growth strategies

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The dominant globalization narrative of the last quarter century has overlooked the fact that the global economy has not so much globalized as regionalized. Three world's major economic regions (North America, Western Europe, and East Asia) together account for as much as 80 percent of the global economy, with the North American region clearly dominant in terms of GDP per capita. These regions are also mostly self-contained, with intraregional trade comprising a majority of total trade. This contrasts sharply with the remainder of the world, in which most trade is external trade with the three major regions. National development strategies should thus take regional positioning into account. Middle-income countries that are well-integrated into the major economic zones might have the opportunity to develop through upgrading within existing production networks, but their peers that are isolated from the major economic zones cannot realistically pursue upgrading strategies. Perverse elite incentives may in any case prevent countries from pursuing strategies that would lead to positive economic transitions.

#### Introduction

Between 1995 and 2008 global levels of merchandise trade increased from around 20 percent of global GDP to around 30 percent. The world globalized as goods (and services) traversed the world as never before in human history. The previous 1913 peak in international trade was dwarfed as new transportation technologies — from leviathan container ships to just-in-time air freight — reshaped global production networks. Now nearly one in three things bought on earth (by value) comes from somewhere else. The era of globalization has arrived.

And departed? Global trade as a percent of GDP has been flat since 2008, and an increasing proportion of that trade is trade in intermediate goods. On average around one-quarter of the value-added embodied in the world's exports actually consists of intermediate goods that are then incorporated into products for re-export. And this doesn't include the oil and gas used to power factories, the food used to feed workers, and all the other indirect inputs into a country's economy.

For countries that are highly integrated into regional production networks the foreign-origin component of exports can be much higher. For many export-processing economies it is nearly one-third. The foreign-origin component of exports by value is 32.4 percent for Poland, 32.2 percent for China, and 31.7 percent for Mexico, respectively. For smaller countries on the edges of Germany and Japan the numbers are higher still: 41.7 percent for Korea, 45.3 percent in the Czech Republic, 46.8 percent in Slovakia, and 48.7 percent for Hungary. Only the city-states of Singapore and Luxembourg score higher.

Other emerging markets in South Asia and Latin America are much less integrated into international economic networks. The foreign portion of export value for India is just 24.1 percent, for Indonesia 12.0 percent, for Brazil 10.8 percent, and for Argentina 14.1 percent. For South Africa the figure is 19.5 percent. These are also middle-income or emerging economies, but they are much less integrated into the global economy, presumably because they are much less integrated into regional economies. In terms of production networks they are relative isolates.

These patterns suggest that the story that we have called “globalization” for the last quarter century may not be very global at all. Seen from the North American perspective, the perspective of most academic research, the influx of imports from Asia, Europe, and Mexico may look like globalization. But viewed from a more objective standpoint, the story might better be told as one of hierarchical regionalization, with the North American region at the apex of a triangle of regions that also includes East Asia and Western Europe, with the rest of the world largely peripheralized in global economic processes.

The coalescence of the global economy around three major regional economies may have important implications for what growth strategies are desirable (or even possible) for countries that occupy different structural positions in that global economy. Embedded regional economies are enmeshed in dense structural networks that tie them into particular relationships with regional leading economies, while isolated national economies may not have access to the advanced skills and technologies that are concentrated in the major regions. Though such ideas are speculative, they are based on hard facts that are difficult to operationalize in conventional growth regression models. Regional networks might be hard to study but that doesn’t (necessarily) mean that they are unimportant. Common sense suggests that they may be very important indeed.

#### A hierarchy of regions

Today’s world economy is not really a global economy. It has coalesced around three well-integrated regional economies: East Asia, Western Europe, and North America. Together the countries that make up these three regions have a combined GDP of some \$60 trillion, constituting some 80 percent of global economic output. The combined GDP of all of the countries of the world that lie outside these regions is less than that of the United States or the European Union. In essence, the global economy consists of these three major regions, plus a large number of countries that do little more than provide economic feedstocks like energy and foodstuffs to support production in the big three regions.

This regionalization of the global economy is not just about size. It’s about integration. Each of the big three economic regions has much more within-region trade among neighboring countries than external trade with the rest of the world. The big three regions are in effect economic units, regional economies, not collections of national economies that trade with each other. This is most visible in Western Europe, where the European Union has merged 28 countries plus Switzerland and Norway into a single customs area. It is also visible in North America, where NAFTA connects the United States, Canada, and Mexico. But it is also happening in Asia, where firms based in Japan, Korea, and Taiwan are among the top investors and producers in China and Southeast Asia.

The East Asian economic region consists of high value-added offshore centers like Japan, South Korea, Taiwan, Hong Kong, and Singapore combined with the enormous manufacturing base of mainland China. The offshore centers have extensive production of their own but also coordinate enormous investments in mainland China. Additional large-scale offshore production occurs in the Southeast Asian countries of Indonesia, Malaysia, Thailand, and Vietnam. The East Asian economic region is highly integrated economically but poorly integrated politically, with the hard international borders in the East China Sea ensuring that intraregional trade and investment is subject to substantial sovereign oversight. But even these political borders do not prevent human integration, with several million people from Japan, South Korea, Taiwan, Hong Kong, and Singapore living and working in mainland China and Southeast Asia.

The Western European economic region consists of high value-added centers like the UK, France, Germany, Austria, Switzerland, Italy, the Benelux countries, and the Scandinavian countries combined with lower-cost manufacturing and services centers in the eastern European Union countries and Turkey. This region is “Western” European in the sense that it does not include Europe east of the European Union. Countries like Belarus, Russia, and Ukraine are not well-integrated into the production networks that emanate from the high value-added centers of Europe. Additional production for the Western European economic region occurs in Latin America, Asia, and elsewhere but these production networks do not seem to exhibit strong defining patterns. The relevant networks of the Western European economic region are almost entirely contained within the European Union and countries that aspire to join the European Union. As a result, the European Union effectively governs the entirety of this region.

The North American economic region consists of the high value-added centers of the United States and Canada combined with lower-cost manufacturing in the poorer regions of the United States itself and of northern Mexico. Compared to the East Asian and Western European economic regions, the North American economic region has a high level of political integration: nearly the entire region is included in NAFTA, with the United States alone comprising 87 percent of total NAFTA GDP. Thus although NAFTA has much weaker governance mechanisms than the European Union, the fact that the United States is much more politically-integrated than the European Union combined with the fact that the United States dominates the North American economic region implies that the North American economic region as a whole (or on a weighted-average basis) is more politically-integrated than the Western European region.

The world’s three major economic regions are not distinguished merely by size. There are three world regions as defined by the World Trade Organization for which intraregional trade comprises a majority of total trade: Asia, Western Europe, and North America. The WTO does not break out statistics for segments of Asia, but given that production networks are much denser in East Asia than in South Asia it seems certain that East Asian intraregional trade is much higher than the 52.3 percent recorded for Asia as a whole. For Western Europe, broken up into relatively small country units, the corresponding figure is 68.5 percent. And even though North America is overwhelmingly dominated by a single country, intraregional trade at 50.2 percent is still a bare majority of total trade. No other region comes close to these levels of internal integration; the closest is Latin America at 25.8 percent. Even in the Commonwealth of Independent States, theoretically a single political entity, intraregional trade accounts for only 17.8 percent of total trade. Africa and the Middle East follow respectively at 17.7 percent and 8.8 percent.

In addition, the unique structural position of the United States in the global economy, buttressed by a century of dominating foreign direct investment flows starting around 1910, has given the North American economic region a global reach that far outstrips that of the East Asian and Western European regions. This is not apparent in trade statistics but is obvious from ad hoc evidence about the dominance of US multinational firms in global production networks. It also seems clear from levels of GDP per capita. The GDP per capita of the United States is some 1/3 higher than that of other major regional centers like Germany and Japan, despite the fact that much of the United States itself consists of an internal periphery (equivalent to Poland for Germany or South Korea for Japan). The GDP per capita of the leading sections of the United States (the Northeast and Pacific Coast) is roughly 50% greater than that of Germany and Japan. In terms of GDP per capita, Germany ranks below New Mexico, Japan below West Virginia.

Thus one might reasonably depict the world’s three major economic regions as a triangular hierarchy, with East Asia and Western Europe on the base and North America at the apex. The rest

of the world consists of a mix of rich and poor countries, some of them highly developed, but none of them embedded in structured transnational economic regions. For example, Australia is a rich country of 23 million people but it is not deeply enmeshed in dense transnational production networks in the same way as peer countries like the Netherlands and Taiwan. Similarly, major energy exporters like Russia, Saudi Arabia, and Venezuela may typically export to particular countries along fixed patterns, but their economies are not deeply integrated into the economies of their trading partners. With a population of 1.25 billion, India is perhaps large enough to be considered a minor economic region of its own, but a very small one, roughly 10 percent of the size of each of the other three regions. The big three integrated economic regions tower over the rest of the global economy, and it might be said that the United States towers over them.

#### Different strategies for different peripheries

Countries like China, Poland, and Mexico have relatively large populations and somewhat advanced economies but are nonetheless much poorer than the dominant core countries in their respective economic regions, and much much poorer than the United States. In many ways it can seem like they have no choice but to depend on investment, orders, and managerial talent from their richer neighbors. Liberal economic advisors from the IMF, the ECB, and the world's top business schools all recommend greater economic integration as the key to prosperity. Yet these countries are already deeply integrated into their respective economic regions; it is difficult to see how openness to even greater integration will advance their levels of productivity. The southern states of the United States have been in a monetary and customs union with the north for two centuries, with no apparent catch-up. Why should external peripheries like China, Poland, and Mexico be expected to do any better than the internal peripheries of the American south?

Many economists and social scientists point to China in particular as a country that will inevitably catch up with and perhaps surpass leading economies like Japan, Germany, and maybe even the United States. But why should China be expected to surpass the United States when the American south, despite all its advantages of location, openness, rule of law, positive demographics, and massive federal subsidies, has failed to catch up with the American north? Predictions of China's inevitable transition to high productivity seem to be based on wishful thinking, fearful thinking, and/or linear extrapolation. On most of the variables that mainstream economists use to predict long-term growth, the American south strongly outperforms China. Some economists do believe that the south will ultimately overtake the north. But if this outcome is in motion, it has been a long time coming. It is hard to imagine a United States in which Atlanta and New Orleans are the leading centers and New York and Silicon Valley are the laggards.

If greater integration seems *prima facie* to be an unlikely panacea for relative economic stagnation, what is the alternative? Economic self-sufficiency seems to be out of the question. It would be disastrous for any of these countries to try to separate themselves from the regional economies to which they belong. China was a middle-income area of the global economy from the time of its global integration c. 1550-1650 until the depredations of Western colonialism and Japanese militarism beginning in 1840. It returned to middle-income status only upon integrating into the East Asian economy after 1980. There is no precedent for a high-income, autarkic China (though admittedly this does not mean that it is an impossibility). The countries of east-central Europe were deeply integrated into the German economy before World War II, and despite five decades of Soviet occupation and control they are once again. Like China they have been middle-income economies for as long as there has been a modern global economy. Mexico may (or may not) have been wealthy during the heyday of New Spain in the early 1600s, but that is hardly a precedent for contemporary economic management.

These peripheral countries of the major economic areas do, however, maintain a large degree of fiscal autonomy, policy autonomy, and (with the exception of Slovakia) even some monetary autonomy. In this they differ dramatically from the states of American south, which have relatively limited scope to set their own economic policies. Thus the lower level of political integration in the East Asian and Western European economic regions might be leveraged by peripheral regional economies to promote their own economic interests. Though there is no consensus on what policy set best promotes economic growth, these states at least have substantial policy autonomy with which to experiment. The overall objective for Poland and the other countries of east-central Europe should be to restructure their economies and societies to resemble those of Germany and the developed countries of western Europe. Full integration into the western European economic region as a relatively poor internal periphery would seem to be a sure strategy for long-term economic subordination.

Of course, China has much greater policy autonomy than countries on the eastern periphery of the Western European economic region. It has already taken advantage of this autonomy to build a mixed economy that is characterized by a high level of economic and political coordination. Though much of the Chinese economy operates in a market environment, the state still provides (or imposes) economic coordination for the major investment and employment decisions of all large business entities and the Communist Party of China (CPC) still imposes (or provides) political coordination on both private and state-owned enterprises. China also in principle has broad fiscal, policy, and monetary autonomy, though each of these has been compromised by self-imposed limits: China's fiscal capacity is limited by its reliance on indirect taxes, China's policy autonomy is limited by its long-term liberalization program, and China's monetary autonomy is limited by its ambition to turn the Renminbi into an international reserve currency. All of these self-imposed limits are questionable on their own merits, but they also restrict China's development options.

China's Thirteenth Five-Year Plan covering the years 2016-2020 lays out an ambitious development program including massive rail, road and urban mass transit expansion, goals for rural development, targets for continued housing expansion, and an expansion in health and education services for the poor and near-poor. This is all commendable. But the plan also envisions major tax cuts for corporations, increased marketization of the economy, and a strong currency. It is difficult to see how China can accomplish all of these goals at the same time. The extraordinary rise in China's government budget deficit (from a minimal level in 2014 to 2.3 percent of GDP in 2015 to by some estimates up to 11 percent of GDP in 2016) combined with enormous capital outflows that have sometimes reached more than \$100 billion a month raise questions about China's ability to make good on the promises of the Thirteenth Five-Year Plan. Just one month after officially adopting the plan in March, 2016 the party-state started raising the possibility that its goals might not be affordable. China needs massive tax increases to meet its spending goals and major currency devaluation to stop capital flight. Neither of these options seems to be on the table.

The problem for China and the other peripheral countries of the three major economic regions is that the policies they need to support the transition to high-income social models are policies that tend to be resisted by the rich, high-income, and high-skill people who dominate their (and all) political systems. Undervalued currencies and higher income taxes both impose costs on elites for the benefit of the country as a whole. Though there may be debates over exactly what policies are best for growth, it is fantastical to think that a step-change in economic productivity can be achieved with no sacrifices. It is of course possible that the rich could impose sufficient sacrifices on the poor to finance the necessary investments at no cost to the political elite, but as the aphorism suggests it is difficult to squeeze blood from a turnip. It may not even be in the interests of the political elite to

promote the transition of a peripheral economy to core levels of productivity, even if they could do so at no costs to themselves, because a fully developed core economy may present fewer opportunities for rent-seeking behavior on the part of political elites. This may be the ultimate cause of the middle-income trap, and it is difficult to see how it can be escaped.

For countries that are relative isolates in the global economy (not integrated into one of the three major economic regions) the technical challenges preventing their economic development may be greater but the political challenges may (or may not) be less. The technical challenges are likely to be greater because these economies are not well-integrated into global production networks and thus lack opportunities for technological upgrading within such networks. It is presumably much more difficult to develop technologies from scratch than to adopt them incrementally. From a political standpoint, however, the relative isolation of these economies (Brazil, India, Russia, South Africa, etc.) from the three major economic regions may increase the relative attractiveness of upgrading for national political elites. This is entirely speculative. But it is possible to imagine that political elites in countries that are not well-integrated into global production networks face different structures of rent opportunities compared to elites in the subordinated peripheries of the major economic zones. If this is the case, they may (or may not) have incentives to pursue self-penalizing or poor-penalizing strategies that could over the long term lead to the emergence of entirely transformed economies.

Conclusion: A consolidating hierarchy

Since the turn of the millennium the United States has experienced faster and more consistent economic growth than the leading areas of the world's other two major economic regions. This had tended to extend the dominance of the North American region over the East Asian and Western European regions. Perhaps more importantly, while multilateral World Trade Organization negotiations have made no progress since 2001, the three North American economies have moved ahead with TPP trade and investment integration with several leading East Asian economies and the United States has opened TTIP negotiations with the European Union. Moreover it seems certain that a post-Brexit United Kingdom would seek to swiftly agree to a mini-TTIP with the United States. There are no significant trade and investment treaties connecting the Western European region to the East Asian region.

China's One Belt, One Road initiatives (the Silk Road Economic Belt and Maritime Silk Road) involve the building of trans-Eurasian transport infrastructure, but levels of economic integration across Eurasia are trivial compared to the seaborne trade between East Asia and the other two major economic regions. In any case 1B1R is a trade facilitation program, not a program of economic integration akin to the TPP and TTIP. East Asia already has substantial trade with Western Europe and any additional trade facilitated by 1B1R is not likely to change the character of that relationship. Whether Chinese exports arrive in Western Europe by ship or by train is irrelevant for the hierarchical structure of the global economy.

Over the very long term it is not impossible that the African Union, Mercosur, and/or India could emerge as additional major economic regions of the world. Given that if they did so they would be late-developing regions, it seems likely (but not inevitable) that they would arise with hierarchical relationships to the North American region that are similar to those exhibited the East Asian and Western European regions. The earliest that these regions could have a major impact on the structure of the global economy would be the early 2100s for Mercosur and the middle 2100s for the other regions, and even this would require consistent long-term trend growth 2 percentage

points higher than the North American growth rate for a century or more. These are very long odds to say the least.

By contrast, the well-established trend toward rising inequality could rapidly strengthen the dominance of the North American region over the other two major regions of the global economy and the dominance of all three regions over the rest of the world. The much-discussed reduction in “global” inequality since 2001 has been driven entirely by rising GDP per capita in China. It seems noteworthy in this context that China is the only one of the five BRICS countries that is closely integrated into one of the three major economic regions. It might be a productive avenue for research to estimate the trajectory of “global” inequality in terms of inequality between economies (economic units) rather than inequality between countries (political units), treating the three major economic regions and the remaining isolates as the cases for analysis. It seems clear that the hierarchical regional structure of the global economy is very robust, but it would be interesting to know whether or not it is strengthening.

#### Data sources

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