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GREAT CONVERGENCE OR THE THIRD GREAT DIVERGENCE?

CHANGES IN THE GLOBAL DISTRIBUTION OF WEALTH, 1500–2008

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In a *Financial Times* article entitled "In the Grip of a Great Convergence," Martin Wolf (2011) argued that today, "we are witnessing the reversal of the 19th and early 20th century era of divergent incomes." According to Wolf, the economic story of our times—characterized by convergent incomes and divergent growth—is fundamentally different from nineteenth- and early twentieth-century patterns. "In that [earlier] epoch," Wolf wrote,

> the peoples of western Europe and their most successful former colonies achieved a huge economic advantage over the rest of humanity. Now it is

> being reversed more quickly than it emerged. This is inevitable and desirable. But it also creates huge global challenges.
>
> (Wolf 2011)

Wolf is not alone in describing the radical economic transformations of the early twenty-first century as a reversal of the *Great Divergence* between the West and the rest of the world. Indeed, different versions of this argument have repeatedly been made since the 1990s. It has been argued that globalization has produced a trend toward global convergence in income levels between countries (Firebaugh 2000), and that global income inequality has started to decline for the first time since the industrial revolution (Milanovic 2013). These arguments suggest that modernization theory is not dead. On the contrary, the rapid economic growth of China, India, and many other peripheral countries of the Global South at the turn of the twentieth century has revived this theory in significant ways.

In the post-World War II era, modernization theory was one of the most respected theories of international development. It maintained that all "traditional" countries are able to catch up with the standards of wealth enjoyed by the advanced, developed, modern countries thanks to the spread of industrialization and modernization (Rostow 1960). In the 1970s, however, modernization theory was challenged by new critical perspectives on international development, especially by the dependency school and world-system perspectives. The dependency school emphasized the implausibility of "catching up" with the advanced capitalist countries by pointing out the polarizing tendencies of capitalist relations, which simultaneously produce "development" in one part of the world and "underdevelopment" in other parts of the world, as two sides of the same coin (Frank 1967; Amin 1974; Cardoso and Faletto 1979). Building upon but further extending the dependency school, the world-system perspective pointed to a division of labor within the capitalist world-economy, which produced a relatively stable trimodal hierarchy (i.e., the core-semiperiphery-periphery division) (Wallerstein 1979; Chase-Dunn and Rubinson 1977; Arrighi and Drangel 1986).

In their critique of modernization theory, both dependency and world-system perspectives emphasized the relative stability and *reproduction* of existing global hierarchies and inequalities. Until the mid-1990s, there was strong empirical support for the stability argument. Through an analysis of changes in world population residing in distinct zones of world-economy from 1936 to 1985, for instance, Arrighi and Drangel (1986) found strong evidence for a relatively stable trimodal distribution as expected by a world-system perspective. Follow-up research also supported these claims (Korzeniewicz and Martin 1994; Arrighi et al. 1996; Babones 2005). Until the mid-1990s, there was no strong evidence for income convergence between countries (Korzeniewicz

and Moran 1997; Arrighi, Silver, and Brewer 2003; Wade 2004). Yet, since the turn of the century, mostly due to the rapid rise of China, India, and some other peripheral countries of the Global South, this trend has started to change. Not only did the relatively stable trimodal distribution start to dissolve (Karataşli 2017), but also global income inequality started to decrease (Hung and Kucinskas 2011; Milanovic 2013). Not surprisingly, many scholars, like Wolf (2011), have interpreted these events as the reversal of the long historical *Great Divergence* process, producing, for the first time, a *Great Convergence*.

This chapter provides an alternative explanation for these contemporary transformations in the global hierarchy of wealth. Instead of seeing contemporary trends as evidence for modernization theory or a complete rupture from long historical dynamics of capitalism that produced the *Great Divergence* between West and East, our analysis demonstrates that these contemporary trends have interesting similarities with historical trends of the *Great Divergence* itself. We show that changes in the global hierarchy of wealth have been characterized by a series of *great divergence*s in the *longue durée*, from the sixteenth century to the present. Each of these *great divergence*s took place during periods of world-hegemonic crises and transitions, mostly as a consequence of the geographical relocation of capital during financial expansion periods, incorporation of new regions into capitalist world-economy as well as changing practices of imperialism during systemic crises of capitalism. We show that these successive *great divergences* in the world-economy have eventually shifted existing mode(s) of global wealth distribution from unimodal to bimodal during Dutch-led financial expansion and the transition to British-led world hegemony in the late eighteenth and early nineteenth centuries, and then from bimodal to trimodal during the British-led financial expansion and the transition to US world hegemony in the late nineteenth and early twentieth centuries.

What we have been observing since the 1990s—namely the rise of China, India, and a cluster of peripheral countries from the Global South—is not a *Great Convergence* but another *Great Divergence* process linked to US-led financialization and the current crisis of capitalism. These transformations have been dissolving the relatively stable trimodal distribution of the twentieth century and producing a quadrimodal distribution for the twenty-first century. What is different in this latest period is the geo-economic locations of the recipients of financial flows and new centers of global production and trade. While these transformations have been altering global inequality trends, these changes do not necessarily occur in the way expected by modernization theory. Neither China and India nor the rest of the world is catching up with the core countries. The distribution of wealth in the world-economy is not converging into a unimodal distribution either. On the contrary, what we see is a *Third Great Divergence* process, which has been producing a new four-tiered—quadrimodal—hierarchical structure.

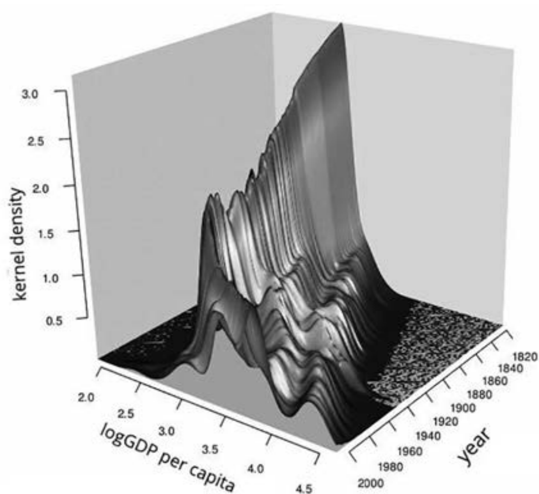
The Changing Distribution of Global Wealth in the *Longue Durée*

This chapter builds upon and extends Arrighi and Drangel's (1986) method, which was designed to assess the validity of Wallerstein's claim that the capitalist world-economy was characterized by a stable trimodal structure. Arrighi and Drangel (1986) suggested that the existence of distinct zones of the capitalist world-economy can be empirically observed through an examination of smooth distributions of world population along a logged Gross National Income (GNI) per capita hierarchy. In order to develop a *longue durée* analysis of the changing global wealth hierarchy, we revised their method using (a) Gaussian kernel densities (instead of smoothed histograms) and (b) a revised version of Maddison's GDP and population estimates, in which missing values are imputed using linear interpolation and extrapolation methods based on the growth rates of nearest neighbor as used by Bourguignon and Morrisson (2002).

As Figure 5.1 shows, the global distribution of wealth was not stable over the *longue durée*. It was a unimodal distribution from the sixteenth century to the nineteenth century; it moved from a unimodal to a bimodal distribution in the early nineteenth century (during the transition from the Dutch to the British world hegemony), and from a bimodal to a trimodal distribution in the late nineteenth century (during the transition from the British to US world hegemony). Furthermore, since the turn of the twenty-first century (during the crisis of the US world hegemony) the world-economy has been moving from a trimodal to a new quadrimodal structure. To understand these successive transformations, below we will analyze mobility patterns and changes in the distributional structure of global hierarchies of wealth in selected years.

Polarization Without Great Divergence: The Unimodal Distribution of the Long Sixteenth Century

From the sixteenth century to the eighteenth century, the world-economy had a clear unimodal distribution of wealth. The majority of the world population was stationed in the middle of the income distribution, constituting a singular mode. This unimodal distribution was a consequence of the low level of variation of wealth between different regions of the world in this early period of historical capitalism. While differentiation of wealth between different regions of the world was *not* high enough to disturb this unimodal structure until the nineteenth century, it was high enough to produce an emerging differentiation of wealth between world regions (see Figure 5.2). Western Europe—i.e., the Italian peninsula (Italy), the Low Lands (Netherlands, Belgium), and the United Kingdom—was at the top of the wealth scale (with log-GDP per capita values around 2.9–3.0 in 1500 and around 3.00–3.30 in 1700). The majority



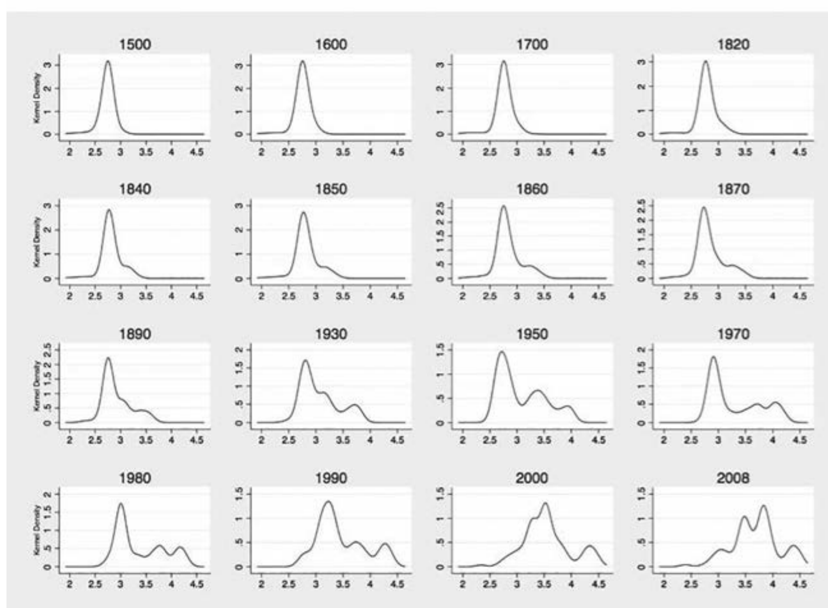


Figure 5.1 Changing Modes of Wealth Distribution in World-Economy, 1500–2008

Note: Figure on the top excludes the years before 1820 and presents a three-dimensional graph showing the transformation of kernel densities across years. The figure below shows two-dimensional kernel densities for selected years. Each figure is a population-weighted Gaussian kernel density graph of log-GDP per capita with a bandwidth of 0.10. The y-axis represents relative size of world population and the x-axis is GDP per capita on a logarithmic scale.

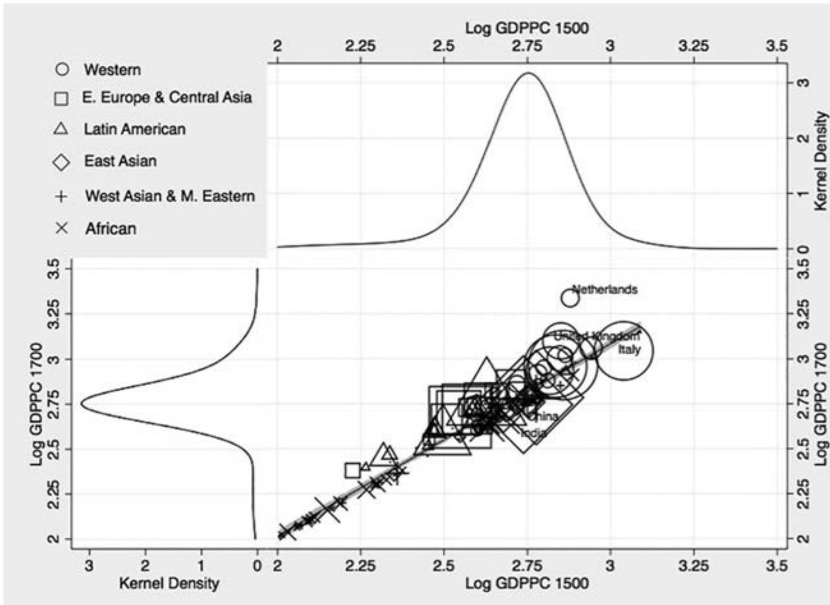


Figure 5.2 Unimodal Distribution From the Sixteenth to the Eighteenth Century

Note: Horizontal and vertical graphs are population-weighted Gaussian kernel density graphs of log-GDP per capita with a bandwidth of 0.10 for years 1500 and 1700 respectively. The graph at the center shows the population-weighted scatterplots of each region used in the analysis. The regression line with 5% confidence intervals shows the average growth rate of the world.

of the world population and most world regions—including countries like China, India, Ottoman Turkey, and Russia—were stationed around 2.75 log-GDP per capita from 1500 to 1700. At the bottom of the world hierarchy was a group of Latin American and sub-Saharan African regions/countries.

Interestingly, from 1500 to 1700, upward and downward mobility at the right tail of the unimodal distribution resembled the dynamics of systemic cycles of capitalist accumulation as explained by Arrighi (1994). Former centers of systemic cycles of accumulation (i.e., the northern Italian city-states) were at the top of this hierarchy in the fifteenth century, but they gradually declined. The center of the new systemic cycle of capitalist accumulation and the emerging hegemonic power of the capitalist world-economy of the era—the United Provinces/Holland—had the highest upward mobility from 1500 to 1700. In Figure 5.2, we can also see that the United Kingdom—center of the systemic cycle of accumulation and the world-hegemonic power of the long nineteenth century—was also gradually rising as the crisis of the Dutch hegemony started to unfold in the eighteenth century.

As both Marx (1992 [1867]) and Arrighi (1994) observed,[1] these transformations were linked to financial expansion processes initiated by declining centers of historical capitalism. From the mid-sixteenth century to the mid-seventeenth century, the financial expansion process was led by Genoese merchant-traders—who were the backbone of the Great Discoveries and the rise of the transatlantic trade by Iberian powers (i.e., Spain and Portugal) in the long sixteenth century (Arrighi 1994). As the initiators of the financial expansion process gradually started to decline, the new recipients of global financial flows (i.e., Dutch business–government complexes) started a new systemic cycle of accumulation on a global scale and experienced significant upward mobility.

At the lower end of this unimodal distribution, we see a group of African regions which were growing at the rate of the world average, as well as some Latin American and Eastern European regions that were growing at rates slightly higher than African regions. Considering that the capitalist world-economy had not yet incorporated African regions, only some Latin American and Eastern European regions, patterns in Figure 5.2 suggest that in this early period of historical capitalism some peripheral regions of the capitalist world-economy (i.e., American settler colonies) were doing relatively better than "external areas" of the capitalist world-economy. More interestingly, we do not see a significant downward mobility in East Asian colonies produced by Portuguese expansion in the Indian Ocean or Dutch colonization of the Indonesian archipelago. These patterns are the opposite of the trends during the British systemic cycle of the long nineteenth century.

There was not significant downward mobility in Asian economies in this early period of historical capitalism because Asia-centered world-economy was too large and too strong to be affected by activities of European merchants in this era. It would not be an exaggeration to suggest that European merchants only added new communities to the already diverse and heterogeneous merchant populations in Asia (Braudel 1984 [1979]). While European military intrusion in Asia was much higher during the Dutch rather than the Genoese-Iberian systemic cycles, it still was not high enough to disarticulate the Asia-centered world-economy. Hence, despite gradual polarization, a great divergence process did not take place in this era.

First Great Divergence*: **From a Unimodal to a Bimodal Distribution of Wealth***

From the eighteenth century to the mid-nineteenth century (during the transition from Dutch to British world hegemony), the world-economy gradually moved from a unimodal to a bimodal distribution (Figure 5.3). This transition—analogous to Pomeranz's (2000) *Great Divergence* process—was a consequence of a major *bifurcation* in the global distribution of wealth. This *First Great*

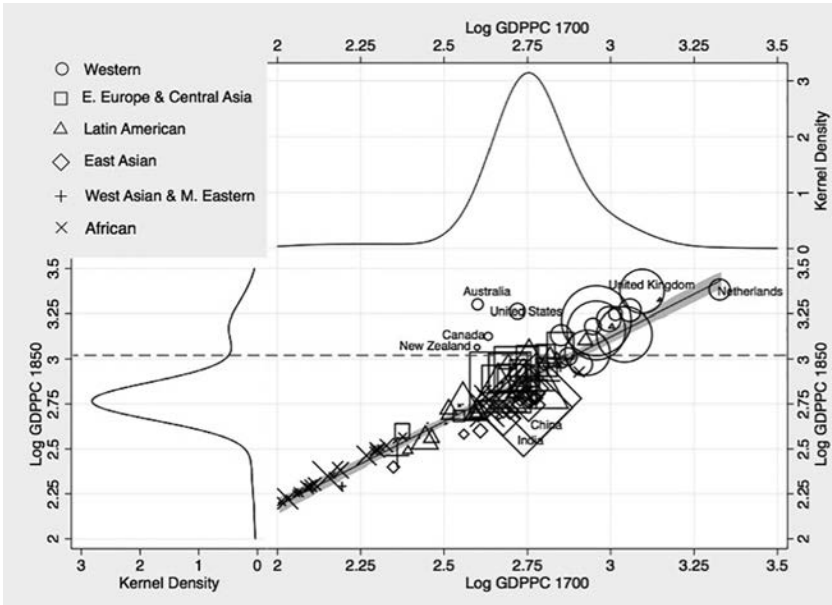


Figure 5.3 Transition From Unimodal to Bimodal Distribution, 1700–1850

Note: Horizontal and vertical graphs are population-weighted Gaussian kernel density graphs of log-GDP per capita with a bandwidth of 0.10 for years 1700 and 1850 respectively. The graph at the center shows the population-weighted scatterplots of each region used in the analysis. The regression line with 5% confidence intervals shows the average growth rate of the world.

Divergence emerged due to the increasing levels of capital accumulation and upward mobility of Western Europe, especially the United Kingdom and some of the *settler colonies* of the British Empire (including the United States, Canada, Australia, and New Zealand), which rapidly moved from the lower end of the global distribution of wealth to its higher end. Together with higher growth rates in Europe, this upward mobility constituted these "Western" regions as a distinct cluster in the global distribution of wealth—widely labeled as the "core." The rest of the world constituted a second, distinct and "peripheral" mode of the world-economy.

The effects of the transition from the Dutch to the British systemic cycle of accumulation on mobility at the higher end of global wealth distribution were similar to the transition from the Genoese (Italian) to the Dutch systemic cycle of accumulation (see Figure 5.2). In the 1700–1850 period, the leading center of the systemic cycle of capitalist accumulation and the declining world-hegemonic power (i.e., United Provinces/Netherlands) initiated a financial expansion process and had lower growth rates on a logarithmic scale than most other core countries. Similar to its Dutch counterpart in

the previous era, the British Empire—the major recipient of global financial flows, the emerging center of the systemic cycle of accumulation, the initiator of industrial capitalism, and the new world-hegemonic power of the long nineteenth century—was rising to the top of global wealth hierarchy together with some of its settler colonies. One of these colonies, the United States, not only gained its independence during this transition period, but also became the world hegemon in the next long century.

Figure 5.3 shows two interesting patterns regarding the mobility at the middle and the lower end of global wealth distribution from 1700 to 1850. First, the rise of the "West" in 1700–1850 did not coincide with a simultaneous decline of the "Rest" of the world as a whole. On the contrary, the majority of world regions remained in their relative positions from 1700 to 1850. This can partly be explained by the effects of the limited expansion of the capitalist world-economy in this period. After all, in the 1700–1850 era, the European-centered capitalist system—Wallerstein's capitalist world-economy (with a hyphen)—had not yet incorporated the China-centered world-system in East Asia, the southeast Asian hinterland of this system, or sub-Saharan Africa (except for some areas on the Western African coast). In addition to the Americas (which had already been incorporated), the only new areas incorporated during the transition from the Dutch to the British systemic cycle were parts of the West African coast, Russia, the Ottoman Empire, and the Indian subcontinent.

Second, unlike the previous 1500–1700 era, peripheral regions of the capitalist world-economy were no longer doing relatively better than the external areas of capitalism. On the contrary, the newly incorporated and peripheralized regions of the world-economy experienced a significant loss of wealth and economic power. The clearest example is the Indian subcontinent. The military, political, and economic conquest of India took place during the second half of the eighteenth century (see Arrighi, Ahmad, and Shih 1999: 223). As Figure 5.4 shows, these newly incorporated and peripheralized regions of the Indian subcontinent—including India, Pakistan, Sri Lanka, Bangladesh, and Nepal regions—experienced a significant downward mobility in global distribution of wealth, which started the gradual disarticulation of the Asia-centered world-economy. This was how a bimodal distribution of wealth emerged in the midst of the Dutch-led financialization and the advance of industrial capitalism.

Second Great Divergence*: **From a Bimodal to a Trimodal Distribution of Wealth***

While the world-economy had a relatively stable bimodal distribution from the mid-nineteenth to late nineteenth century (partly resembling the center-periphery structure as described by dependency theorists), at the turn of the

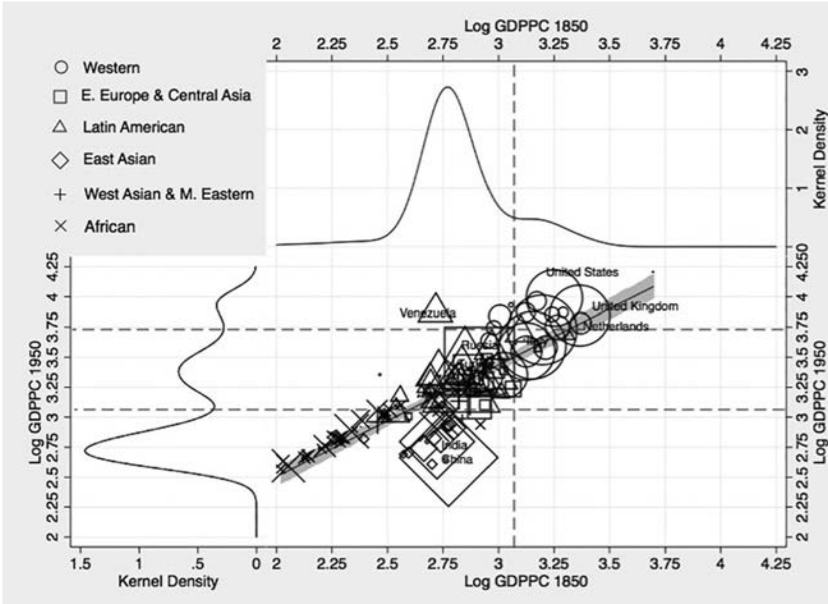


Figure 5.4 Transition From Bimodal to Trimodal Distribution, 1850–1950

Note: Horizontal and vertical graphs are population-weighted Gaussian kernel density graphs of log-GDP per capita with a bandwidth of 0.10 for years 1850 and 1950 respectively. The graph at the center shows the population-weighted scatterplots of each region used in the analysis. The regression line with 5% confidence intervals shows the average growth rate of the world.

twentieth century a trimodal distribution of global wealth emerged (resembling the core-semiperiphery-periphery structure postulated by world-system theory). This transition from a bimodal to a trimodal distribution occurred due to a *second bifurcation* among noncore locations that took place during the crisis of British world hegemony beginning around the 1873/96 depression and the rise of British-led financial expansion (Figure 5.4). This *second bifurcation* divided former world periphery into two distinct groups. The lower half (the new periphery of the long twentieth century) was mainly composed of sub-Saharan African regions and the South and East Asian regions/countries (the Indian subcontinent and China and its former hinterland). The upper half (the emergent semiperiphery) was mainly composed of countries in Southern Europe (Italy, Spain, Greece), Eastern Europe and Western Asia (including Russia and the Ottoman Empire/Turkey), and Latin America.

With this *second bifurcation*, East Asian and South Asian economies were pushed down—for the first time in history—almost to the level of sub-Saharan African regions, which were also being colonized due to the inter-imperialist rivalry and race for colonization of the post-1873 era. During the transition

from British to US world hegemony (and from a bimodal to a trimodal distribution of global wealth hierarchy), the ongoing rise of the core went hand in hand with a sharp economic decline of East Asia and South Asia. This rapid decline (Figure 5.4) was a consequence of the British Empire's ability to subordinate and disarticulate the China-centered East Asian world-economy (Arrighi, Ahmad, and Shih 1999: 225) and the incorporation of East Asia into the British-centered capitalist system using its military might (Arrighi 2007).

Hence, there is some truth in Andre Gunder Frank's claim that the Chinese decline started only after 1860, not before (Frank 2015: 3–8, 100). While the First Opium War of 1839–42 and the Nanjing Treaty of 1842 weakened the Chinese Empire, the real decline did not come until the Second Opium War of 1856–60, interlinked with social rebellions and followed by renewed militarized conflicts. These struggles were decisive in undermining traditional economic structures of the Qing dynasty, producing the rapid decline of China and disarticulating the China-centered East Asian world-economy in the last quarter of the nineteenth century (Frank 2015: 100; Arrighi 2007: 336–44). Together with the imperial race for colonization of sub-Saharan Africa during the last quarter of the nineteenth century and continued exploitation of the Indian subcontinent, the decline of the China-centered East Asian world-economy split the periphery into two zones, creating the peripheral and the semiperipheral regions of the twentieth century. Thus, a trimodal distribution of global wealth hierarchy emerged in the midst of British-led financialization and globalization of industrial capitalism.

Third Great Divergence: From a Trimodal to a Quadrimodal Distribution of Wealth

The three-tiered global wealth structure emerged in the late nineteenth century, stabilized after the terminal crisis of the British world hegemony (the 1929 Great Depression), and remained relatively stable until the 1990s. Despite the expectations of modernization theorists and all developmentalist attempts, the gap between core, semiperipheral, and peripheral locations did not disappear in the twentieth century. There was a strong stability in the trimodal structure (Arrighi and Drangel 1986). While the semiperipheral mode came close to catching up to the core mode in the 1968–73 era (see Figure 5.1), in the course of the next two decades, the trimodal distribution was re-stabilized when the world-hegemonic power and its allies started to restructure the global political economy by switching from "development project" to "the globalization project" (McMichael 2016). In both the Reagan and Clinton eras, these transformations went hand in hand with financial expansion processes led by the world-hegemonic power.

Like all previous financial expansion periods, the US-led financial expansion fundamentally changed global hierarchies of wealth. As one of the

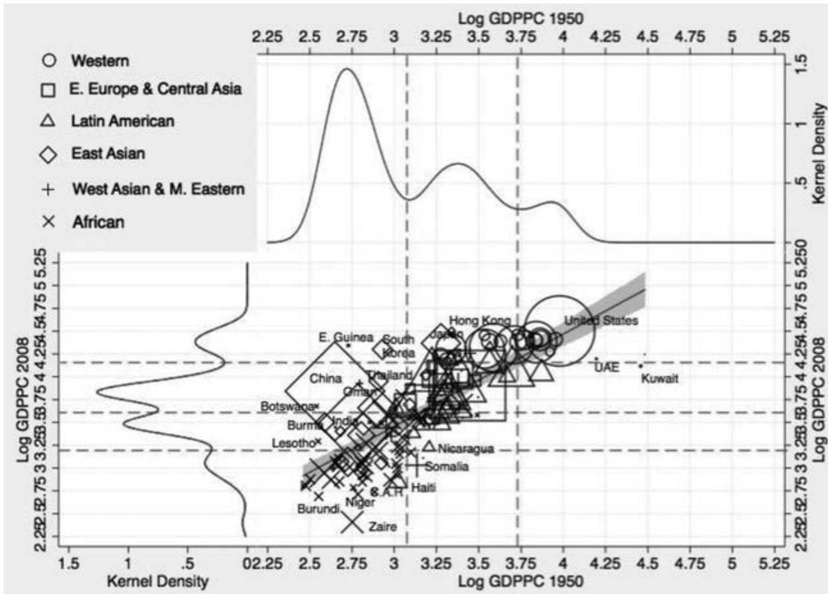


Figure 5.5 Transition From Trimodal to Quadrimodal Distribution

Note: Horizontal and vertical graphs are population-weighted Gaussian kernel density graphs of log-GDP per capita with a bandwidth of 0.10 for years 1950 and 2008 respectively. Graph at the center shows the population-weighted scatterplots of each region used in the analysis. The regression line with 5% confidence intervals shows the average growth rate of the world.

most striking consequences of the US-led financialization, the relatively stable trimodal distribution started to fall apart by the late twentieth and early twenty-first centuries, producing a quadrimodal distribution of global wealth (Figure 5.5). The transition from trimodal to quadrimodal distribution has similarities as well as stark differences with previous transition periods. While the key similarity is the role played by the financial expansion process led by the declining centers of capitalism, the main difference is the geo-economic positions of the recipients of global financial flows. Unlike the previous Genoese, Dutch, or British financial expansion periods, this time, it was not core or semiperipheral "Western" regions/countries (such as the United Kingdom in the late eighteenth century or the United States in the late nineteenth century) which attracted global financial flows and managed to start a new system-wide expansion of trade and production but a cluster of peripheral East and South Asian countries, including those with massive populations such as China and India (see Palat 2012). Similar to previous financial expansion periods, this led to a rapid upward mobility of the new centers of material expansion of trade and production in the late twentieth and early twenty-first centuries. Because

of their unique geo-economic locations, their gigantic populations, and their South-South commerce and production networks, upward mobility of these regions resulted in the advance of a cluster of peripheral countries to the middle of the global income distribution.

This trend, however, does not indicate the upward mobility of the world periphery as a whole. Similar to analogous past periods, we witness another major bifurcation of the periphery. The upward mobility of some East and South Asian countries (e.g., China, India, Thailand) and some African countries (e.g., Botswana, Lesotho) went hand in hand with significant downward mobility—sometimes even in absolute log-GDP per capita level—of sub-Saharan countries (such as Zaire, Niger, Burundi, the Central African Republic, Liberia, and Somalia), some Central/South American countries (such as Haiti and Nicaragua) and some Middle Eastern countries (such as Iraq). Hence, it would be a mistake to conceive of this process as a Great Convergence. Rather than producing a unimodal distribution, this double movement of upward and downward mobility is transforming former peripheral and semiperipheral zones and producing a quadrimodal distribution with a four-tiered structure consisting of a lower periphery, an upper periphery, a new expanded semiperiphery, and core regions. Contrary to the predictions of modernization theory, however, there is not much change in the size and composition of the core locations either (Karataşli 2017). In sum, in the early twenty-first century, there is no "catching up" with core locations but instead another reconfiguration of the hierarchy of wealth among noncore locations.

Conclusion

Wolf (2011) and many other proponents of the *Great Convergence* thesis argue that this catching-up process is not only already taking place in front of our eyes (and *inevitable*) but it is also desirable. Our analysis, on the other hand, not only shows why this convergence process is not happening but also provides insights into why it is not that desirable. As dependency school and world-system perspective scholars have correctly identified, "development" and "underdevelopment" are two sides of the same coin. In the long historical evolution of the capitalist world-economy, to maintain the standards of wealth of 15% of the global population residing in core regions, much of the world population has been peripheralized, working classes on a world scale have been subject to super-exploitation and lost their livelihoods, and the environment has been destroyed in a brutal, catastrophic, and irreversible manner. Thus, the ideal of increasing the size of the world population residing in "core locations"—or maintaining the standards of wealth enjoyed by advanced capitalist countries—without changing the polarizing, exploitative, and environmentally destructive tendencies of capitalism is not feasible

without destroying all human and environment sources. Instead, a more equal distribution of wealth can be maintained by de-accumulating capital from core regions to peripheral regions and catching up with the middle tiers.

Note

1. Originally introduced by Giovanni Arrighi (1994), the notion of systemic cycles of accumulation can also be found in an embryonic form in *Das Capital,* in which Marx (1992 [1867]) explains the relationship between financial lending by declining centers of global capitalism and the emergence of primitive accumulation processes in new centers. Marx observes three world-historically significant examples of these financial flows (Marx (1992 [1867]: Ch. 31). Building upon this idea and extending it with insights and historical observations from Fernand Braudel, Arrighi (1994) conceptualized historical capitalism as four overlapping systemic cycles of accumulation (the Genoese-Iberian, the Dutch, the British, and the US cycles) with (a) a phase of material expansion and (b) a phase of financial expansion.