

URBANIZATION AND ITS CONSEQUENCES

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Summary

To show a general picture about urbanization and its consequences, we introduce the most common concept of urbanization and review the urbanization history briefly. Dedicated to the development of the urbanization, four mainstream urbanization theories and their respective pros and cons have been discussed. While urbanization is a powerful “master” process of long historical duration, current vibrancy, and even

stronger future impact, it is not monolithic or unidimensional. On the contrary, urbanization carries several important dimensions that collectively and individually produce macro and micro impacts on the society and everyday life. We introduce and explore a number of these dimensions with a heavy demographic emphasis through illustrative research findings and empirical examples, which also help pave the way for us to examine the socioeconomic consequences of urbanization.

While it is not always possible to fully disentangle the mutual causation between urbanization and the other major processes such as population growth, industrialization/deindustrialization, social transformation, and so on, it is forever important and necessary to identify a range of significant consequences of urbanization. Among the many consequences, we select the aspects of environments, job creation, housing, education and health as the spotlight for our discussion. How these consequences may play out in rapidly urbanizing countries that remain less developed and thus less equipped to deal with them are also emphasized.

1. Definition and Background

By definition, urbanization refers to the process by which rural areas become urbanized as a result of economic development and industrialization. Demographically, the term urbanization denotes the redistribution of populations from rural to urban settlements over time. However, it is important to acknowledge that the criteria for defining what is urban may vary from country to country, which cautions us against a strict comparison of urbanization cross-nationally. The fundamental difference between urban and rural is that urban populations live in larger, denser, and more heterogeneous cities as opposed to small, more sparse, and less differentiated rural places.

To locate the origin of urbanization today, we go back in time to identify the earliest form of urban life as beginning in the Middle and Near East—near what is today Iraq—around 3,500 BC. In other words, the oldest urban communities known in history began approximately 6,000 years ago and later emerged with the Maya culture in Mexico and in the river basins of China and India. By as early as the thirteenth century, the largest cities in the world were the Chinese cities of Chang'an (Xi'an today) and Hangzhou, which had over one million people. And London didn't reach one million people until the 1700s. However, until the nineteenth century, constrained by the limits of food supply and the nature of transportation, both the size and share of the world's urban population remained very low, with less than three percent of the world's population living in urban places around 1800 (Clark, 1998).

Sparse and often ambiguous archeological and historical record (Grauman, 1976) indicates that the urban population fluctuated between four and seven percent of total population from the beginning of the Christian era until about 1850. In that year, out of a world population of between 1.2 and 1.3 billion persons, about 80 million or 6.5 percent lived in urban places. While 80 million was a large number then, they were dispersed over hundreds of urban places worldwide. In 1850, only three cities, London, Beijing, and Paris, had more than a million inhabitants; perhaps 110 cities had more than 100,000 inhabitants (Golden, 1981). Of the 25 largest cities then, 11 were in Europe, eight in East Asia, four in South Asia, and only two in North America.

During the century 1850-1950, there was, for the first time in human history, a major shift in the urban/rural balance. In his classic work *The Growth of Cities in the Nineteenth Century* (1899), A. Weber provided a historical account for the limited level of urbanization at the global scale. Only three regions in Great Britain, North-West Europe, and the USA were more than 20 percent urban in 1890. Urbanization in the first half of the twentieth century occurred most rapidly and extensively in Europe, the Americas, and Australia. The number of large cities (city has more than 100,000 inhabitants) in the world increased to 946, and the largest city – New York—had a population of 2.3 million in 1950, while urbanization proceeded very slowly in much of the rest of the world. Although only a quarter of the world's total population lived in urban places in 1950, urbanization in the developed countries had largely reached its peak (Davis, 1965).

The acceleration of world urbanization since 1850 partly reflects a corresponding acceleration of world population growth; but urbanization is not merely an increase in the average density of human settlement (Lowry, 1990). For example, in 1960, nearly all less urbanized regions of the world had low rates of rural out-migration – under 1 percent annually – and high rates of urban immigration – 1.5 to 3.2 percent annually (Lowry, 1990). With a few exceptions, urban and rural rates of natural increases were about the same, yet urban growth rates were two to five times above rural growth rates, reflecting the strong effect of rural-to-urban migration in regions with relatively small urban sectors.

The urbanization of the developing world began to accelerate in late twentieth century (Timberlake, 1987), although there was no clear trend in overall urban growth in less developed countries due to inconsistent definition of urban and the lack of quality in their census data. According to the United Nations, the levels of urbanization in 1995 were high across the Americas, most of Europe, parts of western Asia and Australia. South America was the most urban continent with the population in all but one of its countries (Guyana) being more urban than rural. More than 80 percent of the population lived in towns and cities in Venezuela, Uruguay, Chile and Argentina. Levels of urban development were low throughout most of Africa, South and East Asia. Less than one person in three in sub-Saharan Africa was an urban dweller. The figure was below 20 percent in Ethiopia, Malawi, Uganda, Burkina Faso, Rwanda and Burundi. An estimated 40 percent of China's 1.2 billion people and 29 percent of India's 0.96 billion lived in cities and towns. The Himalayan kingdom of Bhutan was reckoned to be the world's most rural sovereign state, with only six percent of its population living in urban places.

The transition from the twentieth to the present century marked a new and more striking era of global urbanization. In 2008 the world crossed that long-awaited demographic watershed of half of the people on earth living in urban areas. Further acceleration of urbanization going forward is likely to raise the share of the world's urban population to 75 percent by 2050, significantly higher than the mere 10 percent in 1900. While the USA, Britain, and Germany have already surpassed 75 percent urban and won't exceed 90 percent by 2050, newly industrializing countries like South Korea and Mexico, which were half-way urbanized at 50 percent in 1950, are likely to pass 75 percent by 2030. Moving along a steeper upward trajectory, China will urbanize from 20 percent in 1980 to over 60 percent around 2030. China's urbanization from the 1980s on reflects

the global shift of the world’s urban population from developed to developing countries, which will account for about 80 percent of the world’s urbanites by 2030 doubling from 40 percent in 1950 (Soja and Kanai, 2007).

Another salient aspect of this intensified urbanization is the accelerated growth of million-plus cities, which grew from only two (London and Beijing) around 1800 to 16 around 1900 to roughly 70 in 1950, to approximately 180 by 1975, and then soared to over 450 in 2005. Of this number, China claimed almost 100, India about 40, while the USA and Europe had 40 respectively, and so did the African continent, with 57 million-plus cities in Latin America and the Caribbean. While London was the first and only megacity of 10 million people around 1900, the list expanded to over 20 in 2005. In addition, while only three of the world’s largest cities with five million or more people were in developing countries, eight of the 10 largest cities and 15 of the 20 megacities of 10 million people in 2005 were in developing countries (Soja and Kanai, 2007). The trend of mega-urbanization will become stronger in developing countries, especially India and China, which is expected to have more than 220 million-plus cities and 25 cities with five million people by 2025 (www.chinabusinessservices.com/blog, April 6, 2008).

While urbanization has intensified in terms of the growing megacities, the overall rate of urban growth has consistently declined in most world regions in the past half century and probably in the coming several decades (see Figure 1). Therefore, the rapid rates of urban population growth are no longer the most pressing concern but the absolute population size of the huge urban centers, especially those in Asia and Africa.

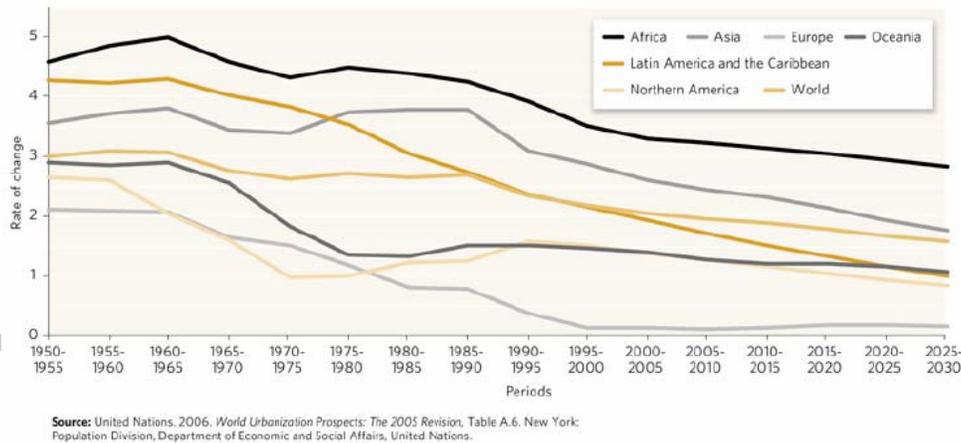


Figure 1. Average Annual Rate of Change of the Urban Population, by Region, 1950-2030

2. Urbanization Theories

Theories on urbanization have been around for such a long time that they have blended into and intersect with theories that also pertain to cities, industrialization, and more recently, globalization. At the risk of being subjective and circumvent, we introduce and discuss four such theories, which provide both earlier and recent explanations for why

and how urbanization occurs. First, there is what may be labeled the theory on self-generated or endogenous urbanization. This theory suggests that urbanization requires two separate prerequisites—the generation of surplus products that sustain people in non-agricultural activities (Childe, 1950; Harvey, 1973) and the achievement of a level of social development that allows large communities to be socially viable and stable (Lampard, 1965). From a long temporal perspective, these changes took place simultaneously in the Neolithic period when the first cities emerged in the Middle East (Wheatley, 1971) as mentioned earlier. A much later period in which these two preconditions interacted strongly was the late eighteenth century when the rise of industrial capitalism led to the emergence of urban societies in Great Britain, North-West Europe and North America (Pred, 1977).

In a demographic sense, this theory focuses on the rural-urban population shift as the foundation of urbanization but it identifies industrialization as the basic driver behind the movement of rural population to urban areas for factory jobs. The historical evidence undoubtedly bears this out. Before the Industrial Revolution in Great Britain, no society could be described as urban or urbanized. And all countries, primarily in the West, that began to industrialize rapidly after Great Britain became highly urbanized by the mid-twentieth century, which was followed by accelerated industrialization and then urbanization in the rest of the world through the last century and into the present. If we focus on cities instead of urbanization, this theory accounts for the endogenous conditions that facilitate the transition from pre-industrial to industrial cities, first in the West and then in the rest of the world, in an uneven manner. Perhaps the first theoretical perspective that remains relevant today in light of the close relationship between industrialization and urbanization, it suffers from the drawback of focusing narrowly on the rural-urban shift within countries as the key to urbanization. Besides the authors cited above, this theoretical tradition was enriched by scholars like Kinsley Davis in the 1950s through the 1970s (Davis, 1951, 1965, 1969, 1972).

The second theory on urbanization actually emerged from a broader theoretical school known as the modernization theory that became prevalent and influential from the 1950s through the 1970s. While overlapping with the first theory in the timing of development, modernization theory had a wider set of assumptions and scope of influence (see So, 1990 for a comprehensive critique of modernization theory). Looking at urbanization through the lens of modernization, first, the present state of urbanization in any given society is set by its initial state at the onset of modernization. Secondly, technology is fundamentally more important than a society's social organization in shaping urbanization. Finally, the path and pattern of urbanization within and between developed and developing countries are most likely to converge through cultural diffusion, despite breeding inevitable social disequilibria (Kasarda and Crenshaw, 1991). We could trace the intellectual underpinning of the modernization view on urbanization in developing countries to an even earlier theoretical paradigm, namely, human ecology. While developed to describe the structure and evolution of the American city, primarily Chicago in the 1920s-1930s by Robert Park and others, human ecology is based on strong assumptions about the interactive role of population dynamics, market competition, material technology (e.g., transport infrastructure), and the built environment in making and remaking urban life (Hawley, 1981; Orum and Chen, 2003). These assumptions became the predictive elements in how modernization theory would

view subsequent developing-country urbanization as being driven by industrialization, technological progress, information penetration, and cultural diffusion. This optimistic prospective view was very developmentalist in heralding the more positive outcomes of accelerated urbanization in the developing world, but only to be challenged by the more depressing reality of economic and spatial inequalities, as well as other social problems from urbanization in poor countries (Smith, 1996).

As modernization theory failed to account for both the conditions and consequences of urbanization in developing countries, it opened the door to a compelling theoretical alternative—the dependency/world-system perspective on urbanization. Advanced by Frank (1969) and Wallerstein (1979), as well as others like Goldfrank (1979), dependency/world-system theory links recent changes in the roles and organizations of the economies of developing countries to the growth and extension of capitalism in the capitalism world system. From this world-systemic perspective, urbanization can be seen as an internal locational response to global economy. First, dependency theorists assume that a uniquely capitalist development pattern exists, asserting that capitalism is a unique form of social organization. Second, capitalism requires a certain social structure, which is characterized by unequal exchange, uneven development, individual social inequality, core-periphery hierarchies, and dominance structure. Finally, dependency theory models social organization, technology and population dynamics as endogenous factors in development and urbanization that are constrained by exogenous forces (Timberlake, 1987). The spread of capitalism to and its entrenchment in the developing world is the most recent stage in the development of capitalism as a world economic system (Chase-Dunn, 1989). It is a result of changes in the ways in which wealth is accumulated, and the evolution of the world-system of nations (see Table 1). Dependency theory also suggests that underdevelopment is a result of the plunder and exploitation of peripheral economies by economic and political groups in core areas (Hette, 1990).

View from the dependency/world-system perspective, urbanization in developing countries, to the extent it occurs and at what speed, is a major spatial outcome of global capitalism and its own spatial organization. This is an inherently uneven process leading to geographic disparities between urban and rural areas and between cities, particularly so if taking into account the unequal conditions at the start of urbanization. Empirical studies, whether explicitly from this theoretical perspective or not, have borne out the serious undesirable consequences of rapid urbanization in developing countries such as rural-urban imbalance, lopsided city hierarchy, housing segregation, and income inequality both within and across nations (Chen and Parish, 1996; Findley, 1993; Linn, 1982; Smith and London, 1990; Todaro, 1981). Besides challenging directly the basic assumptions and predictions of modernization theory for urbanization, the dependency/world-system theory goes a long way in accentuating the external, and often negative, impact of the capitalist global economy on domestic urbanization in developing countries. This powerful insight from the 1970s laid the ground work for a more systematic global perspective on urbanization, especially on the rise of networked world or global cities in the 1990s and beyond.

As the debate between modernization and dependency/world-system theories on urbanization continued from the 1970s into the 1980s, world-wide urbanization itself

began to take on the striking feature of a growing number of megacities becoming more functionally influential and structurally linked. This prompted geographer John Friedmann to advance a research agenda for world cities in the early-mid 1980s (Friedmann, 1986; Friedmann and Wolff, 1982), suggesting that world cities are a small number of massive urban regions at the apex of the global urban hierarchy that exercise worldwide control over production and market expansion. With their global control functions directly reflected in the structure of their production sectors and employment, world cities also are major sites for the concentration and accumulation of international capital. This new focus on world cities marked a theoretical extension from the world-system perspective by highlighting the study of individual or a network of cities for understanding broader urbanization trends and tendencies.

The globalization of urbanization theories didn't stop there. Sociologist Saskia Sassen, with the publication of the book *The Global City: New York, London, and Tokyo* in 1991, brought a definitive touch to the study of the global city through a sharp conceptualization and a systematic comparison of three such cities. According to Sassen, global cities function as 1) highly concentrated command points in the organization of the world economy; 2) key locations for finance and specialized services, which have replaced manufacturing as the leading industries; 3) innovative sites of production in these leading industries; and 4) markets for the products and innovations of these industries.

From Sassen's perspective, the hallmark of a global city is the growth and extent of its producer services, which include accounting, banking, financial services, legal services, insurance, real estate, computer and information processing, etc. While not a theory on urbanization in the same sense as the other theories, the global city perspective has moved the theorizing of urbanization both backward and forward to explicating the historical and contemporary relationship between industrialization (and now deindustrialization in the West), urbanization, and globalization. In sharpening this relationship further, Soja and Kanai (2007) contend that globalization leads to a different round of urban-industrialization and thus to a new global geography of economic development. Testing this line of argument is a growing stream of rigorous empirical studies that use network analysis to uncover the complex structure of both hierarchical and horizontal ties among world cities (see Carroll, 2007).

Individually, each of the four theories reviewed here, selective as it is, offers a distinctive perspective on urbanization during different times that were conducive to the gestation and evolution of each theory. To a large extent, each theory has transcended these times in either sustaining or losing its applicability to countries (cases) that have experienced urbanization differently. While the so-called theory on self-generated or endogenous urbanization uncovered its important general conditions, it does little to account for the recent urbanization of developing countries. Besides failing on the same score, modernization theory does not stress class relations or capitalism per se, but rather the inevitable tensions created by the shifts in social organization encouraged by industrialism (Kasarda and Crenshaw, 1991). Dependency/world-system theory is stronger in suggesting the association rather than proving a causal relationship between urbanization and capitalist development. It may also fall short in explaining the large scope and powerful ways of the state in creating and sustaining rapid urbanization in the

context of China and the rise of Shanghai as a new global city (see Chen, 2009). Scholars like John Friedmann and Saskia Sassen have alerted students of the city to see and appreciate the real impact of global forces on the city. Armed with this global perspective, we should be in a stronger position to examine and understand how the global forces play out in the specific context of a city. One major weakness of the global city perspective may be that its theorizing and analysis are based primarily on a few dominant and heavily studied cities in Western industrialized countries (Orum and Chen, 2003).

	1780-1880	1880-1950	1950-
<i>Mode of Accumulation</i> Economic formation Source of wealth Representative unit of production	Industrial capitalism Manufacturing Factory	Monopoly capitalism Manufacturing Multi-national corporation	Corporate capitalism Manufacturing and services Transnational corporation, Global factory
<i>World-System Characteristics</i> Space relations System of supply Hegemonic powers	Atlantic basin Colonialism/Imperialism Britain	International State imperialism Britain, USA	Global Corporate imperialism USA
<i>Urban Consequences</i> Level of urbanization at start of period (%) Areas of urbanization during period Dominant cities	3 Britain London	5 North-western Europe, the Americas, coasts of Empires London, New York	27 Africa and Asia New York, London, Tokyo

Source: Clark, 1998

Notes (added by authors): This table can be updated to reflect some important developments since the 1980s and into the 21st century. While corporate capitalism under *Mode of Accumulation* remains dominant, state capitalism has gained strength. Services, especially producer services have become a stronger source of wealth. City-centered and networked regions have emerged as another representative unit of production. Under *World-System Characteristics*, the Asia-Pacific region, China in particular, has become the most salient dimension of globalized space relations. Again, China has risen to hegemonic power status with the USA. Under *Urban Consequences*, the level of urbanization reached 50 percent in 2008 as mentioned at the beginning of this chapter. Finally, cities like Shanghai, Mumbai, Sao Paulo, and Moscow have closed their gaps with New York, London, and Tokyo as the world's dominant cities.

Table 1. Principal Stages in Global Urban Development

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SAMPLE CHAPTERS