the seat of government; the cultural capital; the centre for media and advertising industries; and has the largest concentration of institutions of higher learning in the world. The Tokyo metropolitan region is also the world's largest consumer market.

The unprecedented growth of the city has led to urban problems, including escalating land prices, shortage of office space, high-cost housing, congestion and excessive commuting journeys. In recent years the government has sought to encourage decentralisation through the construction of technopoles, small cities of around 50,000 built for high-technology industries, research institutes and colleges near existing medium-size cities. It has also discussed the relocation of capital functions to other parts of the Tokyo metropolitan region. This ties in with the long-range plan for the region, which has among its goals the development of a multi-core urban structure in which the functions of the city are dispersed to reduce distances between place of employment and place of residence.

has encouraged the migration of people from rural to urban areas, thereby leading to over-urbanisation (B ∞ 4.3).

In general, although there is a close relationship between the level of urbanisation and national levels of economic development, the range of potential influences suggests that different factors may be of importance in different national settings. Furthermore, the relative importance of factors that influence levels of urbanisation may change over time as a country becomes more urbanised.

THE URBANISATION CYCLE

The simplicity of the logistic-growth urbanisation curve (Box 4.4) should not be taken to mean that urbanisation is a unidirectional (low to high) process. In a large number of advanced countries the level of urbanisation actually decreased between 1965 and 1990. Although this can be a result of statistical underbounding of urban areas (see Chapter 2), it is now generally acknowledged to indicate a process of population redistribution which involves either the relatively faster growth of smaller urban places or the absolute decline of the largest cities.⁷ The shift in the incidence of strongest population growth away from the largest cities in the national urban system has been termed 'polarisation reversal'⁸ or, more commonly, 'counterurbanisation'.⁹ G eyer and K ontuly (1993)¹⁰ have incorporated these concepts into a theory of differential urbanisation which postulates that large, intermediate-size and small cities go through successive periods of fast and slow growth in a cycle of development. The main stages of this urbanisation cycle are summarised in Figure 4.7.

THE PRIMATE CITY PHASE

During the initial phase of urbanisation, the primate city phase, an increasing proportion of economic activity and population in a country concentrates in a limited number of rapidly growing **primate cities** (Box 4.5). This phase can be sub-divided into three stages:

- 1. First is an *early primate city* stage in which a primate city attains spatial dominance of the urban system, attracting a large proportion of net inter-regional migration.
- 2. An *intermediate primate city* stage follows, in which the rapidly growing primate city is still monocentric in form but with suburbanisation a prominent feature. Suburban nodes, the nuclei of a future multinodal primate city, may emerge. As a result of favourable locational

Region	1970	1994	2000	2015
World	11	22	25	33
Less developed regions	5	16	19	27
Africa	0	2	2	3
Asia ^a	2	10	12	19
Latin America	3	4	5	5
More developed regions	6	6	6	6
Europe	2	2	2	2
Japan	2	2	2	2
Northern America	2	2	2	2

TABLE 4.5 NUMBER OF MEGACITIES, 1970, 1994, 2000 AND 2015

Source: adapted from United Nations (1995) *World Urbanization Prospects: The 1994 Revision* New York: United Nations *Note:* ^aExcluding Japan

TABLE 46 REGIONAL DISTRIBUTION OF THE WORLD'S POPULATION IN 'MILLION CITIES' AND THE LOCATION OF THE WORLD'S LARGEST 100 CITIES

	Pi	Proportion of the world's:				<i>No. of the world's 100 largest cities in:</i>			
	Urban population		<i>Population in 'million cities'</i>						
	1950	1990	1950	1990	1800	1950	1990		
Africa	4.5	8.8	1.8	7.5	4	3	7		
Eastern Africa	0.5	1.7	-	0.8	-	-	-		
Middle A frica	0.5	1.0	-	0.8	0	0	1		
Northern A frica	1.8	2.8	1.8	3.2	3	2	5		
Southern A frica	0.8	0.9	-	0.8	0	1	0		

Western A frica	0.9	2.6	_	2.0	1	0	1
Americas	23.7	23.0	30.1	27.8	3	26	27
Central America and the Caribbean	2.8	4.2	2.2	3.5	2	2	3
Northern America	14.4	9.2	21.2	13.1	0	18	13
South America	6.5	9.7	6.7	11.1	1	6	11
Asia	32.0	44.5	28.6	45.6	64	33	44
Eastern Asia	15.2	19.7	17.6	22.2	29	18	21
South-East Asia	3.7	5.8	3.4	5.6	5	5	8
South-Central Asia	11.2	14.8	7.0	14.6	24	9	13
Western Asia	1.8	4.1	0.6	3.3	6	1	2
Europe	38.8	22.8	38.0	17.9	29	36	20
Eastern Europe	11.8	9.3	7.7	6.3	2	7	4
Northern Europe	7.7	3.4	9.0	2.1	6	6	2
Southern Europe	6.5	4.0	6.7	3.2	12	8	6
Western Europe	12.8	6.2	14.6	6.2	9	15	8
Oceania	1.1	0.8	1.6	1.3	0	2	2

Source: adapted from United Nations (1996) *An Urbanising World: Global Report on Human Settlements* Oxford: Oxford University Press

BOX 4.3

Overurbanisation

The concept of overurbanisation in less developed countries implies that economic growth is unable to keep pace with urban population growth, thereby leading to the major social and economic problems evident in most large cities of the Third World. It is also argued that Overurbanisation is detrimental to national economic growth, since, with limited investment available to most Third World states, the political influence of cities and resultant high level of investment in urban areas will reduce investment in other productive sectors of the economy.

The concept of overurbanisation is not accepted by those who reject the implication that the form of urbanisation in the North represents a model for the South and that any departure from this pattern represents 'overurbanisation'. Despite the simplicity of the logistic curve (see Box 4.4) urbanisation is not a single process followed by all countries in the process of development, and it would be surprising if urban trends in the South mirrored patterns in the North. The much weaker position of most developing countries in world markets, and the fundamental differences between the world in the nineteenth century and late twentieth century must affect the social economic and political factors. that influence levels of urbanisation.

The notion of overurbanisation is useful to the extent that it emphasises the dynamic links between different economic sectors and areas of a country. Given that there are 600,000 agricultural villages in India where the infant mortality rate is still 100 per thousand, literacy is less than 40 per cent, malnutrition is widespread, the supply of drinking water is inadequate, electricity is lacking and half the population live in mud huts,⁵ it is little wonder that rural-urban migration is a feature of many Third World nations. In such situations the problem of 'over-urbanisation' might be addressed via rural development policy, which could also benefit the national economy in countries such as India where a significant part of GDP comes from the agricultural sector.

Although it is not inappropriate to use the term 'overurbanisation' to describe a situation of high levels of primate city urbanisation, rapid in-migration, saturated urban labour markets and overburdened urban services, in seeking explanations we must look beyond these urban problems to national and international economic and political forces.

attributes, certain intermediate-size cities develop faster than others.

3. Phase 2 is followed by an *advanced primate city* stage in which the primate city becomes so large that owing to agglomeration diseconomies, such as congestion costs, a monocentric urban structure becomes unwieldy. By means of intra-regional decentralisation the primate city develops a multicentred or megalopolitan character, and dominates the rest of the urban system economically and spatially. Expansion of the urban system as a whole may lead to one or more intermediate-size cities becoming as large as existing cities. At some point in the development history of most countries the growth rate of the primate city slows and a process of spatial deconcentration commences.

THE INTERMEDIATE CITY PHASE

The slowing growth rates of the primate city and spatial deconcentration of urban population are often accompanied by growth of intermediate-size centres close to the primate city. This 'population turnaround' or 'polarisation reversal' has been documented in a number of countries including the USA, the UK, France, Greece and Brazil.¹² This phase can be subdivided into two stages:

1. An *early intermediate city* stage characterised by the uneven growth of a limited set of intermediate-sized cities that are close to but not contiguous with the primate metropolitan region. Although the primate city is still gaining population in absolute terms, it is starting to lose in relative terms to the intermediate cities. Suburban centres within the primate metropolitan region are now growing faster than the central city.

BOX 4.4

The urbanisation curve

Urbanisation is a process of population concentration whereby towns and cities grow in relative importance through first an increasing proportion of the national population living in urban places and, second, the growing concentration of these people in the larger urban settlements. It has been suspected that all nations pass through this process as they evolve from agrarian to industrial societies. For Davies (1969)⁶ the typical course of urbanisation for a nation is represented by a logistic curve.



The first section of the curve is associated with very high rates of urbanisation associated with large shifts of population from rural areas to towns and cities in response to the creation of an urban economy. This is followed by a longer period of consistent moderate urbanisation. As the urban percentage reaches above 60, the curve begins to flatten, approaching a ceiling of around 80 per cent. This is the level at which rural and urban populations appear to reach a functional equilibrium. At any one time individual countries are at different stages in the urbanisation curve.

2. An *advanced intermediate city* stage in which the suburbanisation process that characterised the development of the primate city during the advanced primate city stage is reproduced in the fastest-growing intermediate-size cities but on a smaller scale. In addition, in contrast to the early intermediate city stage, all centres within the primate metropolitan region begin to lose population in absolute terms, with the central city losing more than the suburban centres.



Figure 4.7 G eneralised stages of differential urbanisation

Source: H.G eyer and T.K ontuly (1993) A theoretical foundation for the concept of differential urbanization *International Regional Science Review* 17(2), (2), 151–11

THE SMALL CITY PHASE

The small city phase represents a continuation of the previous stage during which deconcentration takes place from the primate and intermediate-size cities towards small urban centres which may eventually grow at a faster rate than either the primate city or the intermediate-size cities. By the end of this phase the urban system has reached a 'saturation point' where the rural population cannot be reduced much further (see the logistic curve in Box 4.4) and rural-urban migration ceases to be a major contributory factor in the urbanisation cycle. Since population growth through natural increase may also be very low in advanced societies (see the demographic transition model in Box 4.1), urban growth in general may be slow.

However, as the model shows (Figure 4.7), the 'small city phase' marks not only the end of the first cycle of urban development but also the beginning of a new one which follows the sequence of major metropolitan, intermediate-size city, and small city growth. Significantly, the set of major metropolitan areas experiencing the highest rates of net in-

BOX 4.5

The law of the primate city

The law of the primate city refers to a situation in which a single city accommodates a disproportionately large number of a country's population. In some instances the primate city size distribution is the result of outside or foreign influences on the settlement pattern. In many present-day Third World countries, for example, primate cities developed as a result of the intervention of a colonial power. Bangkok is one such example.

Jefferson (1939)¹¹ argued that, in the early stages of a country's urban development, the city that emerges as larger than the rest develops an impetus to self-sustaining growth that enables it, over time, to attract economic and political functions to such an extent that it dominates the national urban system. Capital cities such as Paris or Vienna occupy this niche.

In some countries a variety of forces, such as nationalism in Spain and territorial size in the USA, have led to several cities growing to comparable size rather than the emergence of a single primate city.

The law of primacy is most relevant to countries that have a relatively simple economy and spatial structure, a small area and population, low incomes, economic dependence upon agriculture and a colonial past.

migration during the urbanisation phase of the second cycle may or may not be the same set of large urban areas from the first cycle (as indicated by differential urban growth rates in the rustbelt and sunbelt areas of the USA). Large urban centres able to retain their dominant position in the national and international urban hierarchy, along with a limited group of rapidly growing intermediate-size urban areas from the first cycle, will constitute the new set of major metropolitan centres.