# 1. The resurrection of the city

Great cities are not like towns, only larger. They are not like suburbs, only denser.
Jane Jacobs, 1961

Cities are as old as the road to Jericho. People tend to go where others are. That is where they can benefit from the merchandise that others have to offer and from the many opportunities to build a network, find jobs, exchange knowledge and ideas or seek a marriage partner. The geographical space is, therefore, not neutral. Activity concentrates in certain locations creating spiky economic landscapes. Due to the concentration of activity, those locations are appealing and the land is expensive. The price of land is the best measure of the attractiveness of such locations, and hence for the excess value of urbanisation.

The concentration of people in a certain location makes cities one of the most important targets for politics and public policy. After all, there are external effects: the well-being of city dwellers is inextricably linked to their neighbours' presence and activities. Therefore, they must mutually agree. That requires a complex form of political decision making. The advantages of urbanisation in both a material and immaterial sense are great. But how can these advantages be achieved? Furthermore, does everyone benefit equally greatly from the advantages, or are there winners and losers? In case of the latter, is there any compensation? These questions make urbanisation a key point of departure for economic policy, and they turn the measure of that urbanisation – land prices – into key policy information. For that reason, this study aims to provide more insight into the importance of urbanisation and the way in which the advantages can be utilised to the maximum through economic policy.

## THE FIRST WAVE: THE NEOLITHIC REVOLUTION

Cities emerged as a by-product of agricultural development during the Neolithic revolution, around 10 000 years ago. Around that time, agriculture started to gradually develop in what we now call the Middle East. Hunting and gathering, the traditional means of existence, gave way to active agriculture. Paul Bairoch gave a beautiful description of the rich history of urban development (see further reading). Independent of each other, Neolithic revolutions took place in multiple places around the world, beginning in the Middle East, then the Americas, Europe, and Asia and eventually reaching Africa. The Neolithic revolution was thus not a coincidence. Again and again, cities emerged shortly after the first stage of the revolution. Jericho is considered to be the oldest city. In a traditional society of exclusively hunters and gatherers, the density of the population in even the most fertile areas could not rise above a few persons per square kilometre. Agriculture enabled the density of the population to increase by no less than a factor of one hundred. This allowed for a small surplus in food production that could be transported to a central place, a city, where people could busy themselves with other activities. In a traditional society with its low density of population, the distances over which the food must be transported were simply too great. In an economic sense, the rise in population density is, therefore, equivalent to the decline in the food transportation cost. The proximity of others in the city allowed for specialisation, so that people could afford a more varied consumption pattern through mutual exchange. Cities were inevitably a marketplace to facilitate that exchange. Due to the high transportation costs, it was simply impossible in traditional societies to benefit from the advantages of specialisation. This is a recurrent topic in the history of urbanisation. It turns out that the declining importance of transportation costs actually makes it attractive to people to gather in one place. The world does not become flatter. On the contrary, more peaks emerge where economic prosperity clusters.

The city also offered another advantage. Violence is inherent in Neolithic societies. Azar Gat described how one in four people in Neolithic societies were killed by violence (see further reading). The advantage of the city was the relative safety offered by its high city walls. It was behind those walls that precarious specialisations such as goldsmiths could thrive that would be unimaginable without that protection against robbery and theft. Clive Ponting (see further reading) mentioned a second advantage of the walled town: it provided a clear demarcation of the urban area, and thereby also of the applicability of urban rules and legislation. That way, and with the help of a limited number of city gates, the city council could control trade and levy taxes.

The possibility of concentrating safety and surpluses in one place did, however, also create new opportunities for the gathering of larger groups in the shape of 'gangs of robbers' or 'armies'. These could be used for coordinated robbery or theft. The city – with its concentration of prosperity and economic activity – was a tempting magnet for these types of thievery. The pattern that has repeated itself throughout history, made its first entry. The risk of robbery opened up a market for protection. The distinction between robber and protector is, however, extremely subtle, as the mafia, in cities such as Naples, still demonstrates on a daily basis.

His status as lord protector gave the absolute sovereign the legitimacy for – often relentless – taxation. Those who did not want to submit to this protection – that is to say, those who did not want to pay taxes – fell prey to the unpleasant characteristics of the protector. The rise of the city thus went hand in hand with an explosion of income inequality. The ups and downs of the cities in that period were, therefore, more related to the magnitude of the tax base of the relevant sovereign than to the surplus value of specialisation and the marketplace that enabled it. Successful cities in that period were first and foremost key centres of prosperous kingdoms.

## THE SECOND WAVE: TRANSATLANTIC TRADE AND INDUSTRIALISATION

For a long period, however, agriculture remained a labour-intensive activity. The percentage of people who lived in cities therefore remained limited to approximately 10 per cent of the population. In successful regions, that percentage could be slightly higher. Table 1.1 shows the development of the urbanisation rate in a number of European countries since 1300. Around that time, the urbanisation rate in the then prosperous countries of Europe – Spain and Italy – was around 15 to 20 per cent. The only exception was the current Belgium, where the urbanisation rate was already around 30 per cent. During the following centuries little changed, except in the Low Countries. Urbanisation in Belgium continued to increase, but the development in the Netherlands was even more extreme. Around 1700, the urbanisation rate in the Netherlands was considerably above the rest of Europe, and it remained that way until well into the 1800s. Jan de Vries and Ad van der Woude referred to this period in the Netherlands as the first round of modern economic growth. The Netherlands can, therefore, be rightfully called the birthplace of modern urbanisation. What happened in Dutch cities in the sixteenth and seventeenth centuries was the preface to the Industrial Revolution. As soon as that revolution slowed, first in the current Belgium and during the eighteenth century also in the current Netherlands, urbanisation also came to a halt. In the course of the nineteenth century, the Netherlands surrendered its first place on the urbanisation ladder to the rapidly and successfully industrialising England. In the following period, the urbanisation rate in the Netherlands rose again – when the Industrial Revolution also unfolded there; the arrival of railways added a little extra. Like elsewhere,

*Table 1.1 Urbanisation rate of European countries (1300–1980)*

| Country | 1300 | 1500 | 1700 | 1800 | 1910 | 1980 |
|---|---|---|---|---|---|---|
| Belgium | 25–35 | 30–45 | 26–35 | 18–22 | 57 | 70 |
| England | 6–9 | 7–9 | 13–16 | 22–24 | 75 | 79 |
| France | 9–11 | 9–12 | 11–15 | 11–13 | 38 | 69 |
| Germany | 5–8 | 7–9 | 8–11 | 8–10 | 49 | 75 |
| Italy | 15–21 | 15–20 | 14–19 | 16–20 | (40) | 65 |
| Netherlands | 8–12 | 20–26 | 38–49 | 34–39 | 53 | 82 |
| Portugal | 8–11 | 11–13 | 18–23 | 14–17 | 16 | 34 |
| Russia | 3–6 | 3–6 | 4–7 | 5–7 | (14) | 61 |
| Spain | 13–18 | 10–16 | 12–17 | 12–19 | (38) | 73 |
| Switzerland | 5–7 | 6–8 | 6–8 | 6–8 | 33 | 58 |
| Europe | 7–9 | 7–9 | 9–12 | 9–11 | 41 | 66 |

*Notes:*
The urbanisation rate is defined as a percentage of the population that resides in municipalities with a population greater than 5000. The borders of the countries are based on the situation in 1913.

*Source:* Paul Bairoch, *Cities and Economic Development: From the Dawn of History to the Present*.

railway construction in the Netherlands halfway through the nineteenth century brought a revolutionary reduction in travel times. The travel times between the most important cities of Holland, compared to those achieved on the famous canal boats were, on average, reduced by a factor of five. Since at first it was mainly the cities that were connected through the railway network, it heightened the urbanisation trend. Cities became more than a match for the countryside. Today, urbanisation rates of 70 per cent or more are not unusual. In other words, urbanisation and the rapid economic growth after the Industrial Revolution are inextricably linked.

A key factor in the acceleration of economic growth in Europe was the intercontinental sea trade that expanded enormously after the discovery of America by Europeans and the sea route around the Cape of Good Hope. But why did Spain and Portugal, which were both at the origins of this trade, only benefit from it for a very short time? After a peak around 1700, the urbanisation rate in Portugal declined again strongly in the course of the eighteenth century. In that same period, urbanisation in the Netherlands, and later in England, continued at full speed. John Bradford DeLong and Andrei Shleifer (see further reading) as well as Daron Acemoglu, Simon Johnson, and James Robinson demonstrated (see further reading) that it was more difficult for countries with an absolute monarch to profit from the new opportunities offered by the sea trade than for countries where power was more widely distributed. Absolute monarchy kills entrepreneurship, as the monarch stifles every business initiative with high taxes for their pride and splendour. Madrid and Lisbon remained royal residences, where stolen gold from America was spent on palaces like the Escorial. The Netherlands had its Great Revolt and England its Glorious Revolution, which curtailed the power of the king and thereby created the conditions for later growth. That brought an end to the era of successful royal residences.

## THE THIRD WAVE: URBAN TRANSFORMATION AND THE CONSUMER CITY

However strong the connection is between urbanisation and economic growth, this link does not mean that every individual city in highly developed countries always flourishes. Philippe Oswalt's *Atlas of Shrinking Cities* (see further reading) provides an overview of cities that have shrunk significantly over the course of time. Table 1.2 includes some examples of cities in highly developed countries that underwent a period of decline in the course of the last century; it is more the rule than the exception and numerous successful metropolises are listed. The Dutch cities of Amsterdam and Rotterdam knew a period of decline; both lost more than 20 per cent of their population between 1960 and 1980. The emergence of

*Table 1.2 Periods of decline in a number of major cities*

| City | Starting year | Final year | Decline (in %) |
|---|---|---|---|
| Amsterdam | 1960 | 1988 | 21 |
| Barcelona | 1981 | 2000 | 15 |
| Boston | 1950 | 1980 | 30 |
| London | 1938 | 1991 | 23 |
| Milan | 1970 | 2001 | 31 |
| Munich | 1971 | 2000 | 9 |
| New York | 1970 | 1980 | 10 |
| Paris | 1954 | 1999 | 25 |
| Rotterdam | 1960 | 1988 | 21 |
| San Francisco | 1950 | 1980 | 12 |
| Tokyo | 1965 | 1999 | 11 |

*Source:* Philip Oswalt, *Atlas of Shrinking Cities*.

the squatter movement in Amsterdam was, therefore, not a reflection of an increase in left-wing activism or speculation by property owners, but rather a logical consequence of the enormous lack of occupancy resulting from the decreasing need for home and business properties. At that same time, the famous Times Square in New York mainly housed sex shops. Better tenants could simply not be found. Around 1980, when this phenomenon of decline was at its height, it became quite fashionable to speak of the 'death of the city'.

This obituary was a bit premature; after the mid 1980s, a great number of cities in highly developed countries were on the rise again. Although the communication and transportation costs were rapidly declining, a number of cities seemed to be recovering from the decline. They developed into appealing living environments, in which new ideas could sprout. Inner cities were turned into centres of entertainment, a process that Americans also refer to as the 'disneyfication' of the city. It was the time in which old docks were transformed into luxury residential areas, with fascinating examples such as Liverpool and Hamburg. Living at the waterfront became 'the thing to do'. Property prices rose. Populations grew again.

According to urban sociologists it was during this time of increasing globalisation that many people started to feel the need for the authenticity of the amenities in a (historic) city centre. Aesthetics and cultural and culinary experiences in those city centres turned out to be irreproducible on the Internet – a mistake that many made in the 1980s. A great number of goods could now be purchased over a distance, but not the perceptions and experiences that a city centre had to offer. That is the paradox of urban triumph. The development of the CD made it possible to bring a concert with perfect sound quality into your own living room. Nevertheless, the concerts of top artists sold out quicker than ever before. Digital sports channels allowed you to follow each game from beginning to end from your armchair, with a beer in your hand. Nevertheless, the crowds in the football stadiums were larger than ever. The need for new experiences, the urge to be there and feel it, the increased leisure time, the higher incomes and the greater work and care pressures all contributed to the desire of many consumers to have urban amenities as close to their homes as possible. It allowed them to spontaneously consume those amenities at any moment of every day. It allowed them to combine hard work with a large amount of relaxation. And this required *walking cities*: cities that have a great variety of urban amenities to offer at walking or cycling distance from home. The emergence of the consumer city explains in part the recovery of the city.

That recovery, however, is not typical of all cities. Take a trip to Detroit, for instance. The once flourishing city of Ford and General Motors continues to lose ground. Closer to home, the Dutch cities of Heerlen and Sittard have not been able to recuperate from the closure of the coal mines. Cities in the Randstad, the urban agglomeration of western Holland, are not immune to decline either. Rotterdam has not recovered from the crumbling of employment in its seaport, and the level of income there is one of the lowest in the Netherlands. The populations of Vlaardingen and Spijkenisse have been on the decline over recent years and even Almere, a newly planned town from the 1970s, has a reasonable chance of shrinkage in population in the not-so-faraway future. The pressing question is, therefore, why one city recovers, while another merely continues to be ailing. Why did Boston and Amsterdam manage to do what Detroit and Rotterdam could not? Edward Glaeser (see further reading) argued that the all-determining factor is the presence of universities: a permanent influx of higher-educated people enables a city to revive itself. When the ports of Boston were forced to close down during the 1970s and 80s, the flood of alumni from Harvard and MIT spawned the emergence of new activities: IT, investment banking and biomedical research. Now, Boston is flourishing as never before. Likewise, Amsterdam has had greater success than Rotterdam in holding on to its alumni and attracting the highly educated from elsewhere. It is thus the interplay of the appeal as a consumer city and the capability of putting oneself on the map as a production city that are decisive for urban success. Especially the most talented people, who are able to develop new production activities, need the varied cultural amenities that are typical of the consumer city. It is especially the higher educated who greatly benefit from living in the modern, attractive cities. They are, not surprisingly, prepared to pay more for a dwelling in the city. Consequently, on average there are more city dwellers among them than any other group – which raises numerous pressing policy questions about segregation and social cohesion.

The current blossoming of the city and the emergence of the knowledge economy are thus closely knit. Especially when it comes to innovation, the physical distance is still a decisive bottleneck. Coincidental meetings – a good talk near the coffee machine – are key ingredients for the development of new ideas. In itself, that phenomenon goes much further back than the 1980s. Klaus Desmet and Esteban Rossi-Hansberg (see further reading) showed how in the first decades of the last century, industry gradually moved to large cities. The invention of the electromotor and, more generally, the availability of electricity enabled a complete reorganisation of manufacturing processes. Electricity is a general purpose technology, an innovation that enabled a revolution in the entire production process and the city offered the ideal environment in which to benefit from that development. Once this innovation wave had died down, the city was no longer the right environment for industry. Industry is a land-intensive activity and the high land prices made the city an unattractive location. In the 1950s, a gradual de-industrialisation process began: Table 1.2 clearly shows its consequences for the urban population. In the 1980s, a new general purpose technology made its entrance: information technology. This technology caused a revolution, especially in the service industry. Again, the city proved to be the ideal environment to utilise these new opportunities. Instead of manufacturing industry, it is now the service industry that moves to the city. More than during the Industrial Revolution, information technology makes a strong appeal to the higher educated, causing a strong migration to the city especially of this group – with consequences for the composition of the population, both between and within cities.

This short sketch of history shows that the growth of a city is not self-evident. Cities grow and decline, depending on the success of their specialisation. The once very successful textile industry in the Dutch cities of Tilburg, Helmond and Enschede was moved to Asia some decades later. The textile cities were in danger of being swept away in its fall. When the fine days of the car industry in the United States were over, Detroit was hit hard. After the fall of Lehman, London and New York were suffering. On a macroeconomic level, it turns out that there is a pattern in the growth and decline of cities. The rule of thumb is that the results achieved in the past offer no guarantees for the future. It is partly a matter of coincidental growth and decline, which contributes to a very specific distribution in the magnitude of cities, known as Zipf's Law.

## THE IMPORTANCE OF LAND PRICES

The great importance of clustering similar activities in one location (also referred to as agglomeration) has the effect that the activities performed by the one specific location exert great influence on the appeal of that location as a place of business or residence to others; that is how cities emerge. The land prices in urban locations are, therefore, higher than those in rural areas. In turn, these high land prices lead to a selection process. The activities that have little to win by agglomeration with others go and look for a cheaper place. The spot that becomes available is filled by exactly those who stand to gain more than averagely from it. Through productivity effects that correlate with clustering, the wages in cities are also higher than in rural areas. Again, a circular process arises through which workers and businesses move to the city.

This way, a specialisation pattern comes about with the specific structure of a city, often with a Central Business District (CBD) and an extensive layout of residential neighbourhoods and suburbs surrounding it. But a specialisation pattern between the city and the countryside also emerges, in which industrial activities for which proximity is relatively unimportant congregate in the more peripheral areas, and services concentrate in the densely populated urban areas. A need arises for a transport infrastructure, to transport people from home to work. That infrastructure in itself leads to new differences in land prices, and thereby to further spatial specialisation. Land prices thus reflect the quality of the environment, and wages are partly the reflection of the productivity effects that go together with agglomeration. Since land prices reflect the quality of the environment – the public amenities and the concentration of knowledge and jobs – they are an ideal point of departure for the valuation of investments in it. The effect of the development of a public facility on the land prices in its direct surroundings is an adequate measure for its added social value. Land prices are, therefore, an important input for social cost–benefit analyses (SCBAs). That is why spatial differences in land prices and wages are central to this book.

Hidden behind the impact of the proximity of amenities on land prices and wages lies a deeper question: how can this process of spatial specialisation and city formation be best organised? Can we let nature take its course, and do cities then grow by themselves, or do we need some form of spatial planning? What are the consequences for social cohesion? City formation is clearly accompanied by major external effects: the choice of location by the one has great consequences for the value of other locations. That fact in itself already suggests that political intervention is needed. But how can that intervention best be designed?

## THE FIVE MOST IMPORTANT CONCLUSIONS

Industrialisation caused the degree of urbanisation to jump from 20% to 70%; that step was first taken in the Netherlands in the seventeenth century.

The success of cities is not self-evident. Cities grow and decline according to a pattern that is difficult to predict.

The modern city is inextricably linked to the knowledge economy, as the exchange of new ideas runs quicker face-to-face.

During the last decade, the variety in consumption possibilities developed into an important added value for the city.

Land prices reflect the value of public facilities and are, therefore, an important input for social cost–benefit analyses (SCBAs).

## FURTHER READING

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