

# Urban development of a Latin American world city: the case of São Paulo

Eduardo A. C. Nobre

*University of São Paulo, Rua Pirapóra, 325 04008-060, São Paulo, SP, Brazil  
e-mail: eacnobre@usp.br*

This paper discusses the growth of São Paulo, the major changes caused by urban land markets in the pattern of urban development and the role of development control in orientating this process.

With approximately 10 million inhabitants in the municipality and 16 million in its metropolitan area, São Paulo, the capital city of the Brazilian state of the same name, is the fifth largest conurbation in the world. It is also the primary financial centre of Brazil, representing 16.44% of Brazil's GDP (US\$ 71.8 billions) (PMSP, 1996).

The metropolis has been in the forefront of Brazilian industrialization. Recently, the city has turned to the tertiary sector, assuming administrative, managerial and service related functions and has developed a financial system that moves around US\$ 65.4 billions a year in credit operations. Its stock market hosts 544 listed companies, representing a total market capitalization of US\$ 149 billions (SEADE, 1996). Owing to these characteristics, the city is considered to be one of the 'world cities', i.e. a network of urban regions that, through stock markets, transnational and financial corporations, constitute the system of control over production and market expansion of the global economy (Friedmann and Wolff, 1982).

This economic growth has greatly influenced urban land markets. It has played an important role in shaping the city, as the urban form has been adapted to a 'westernized' pattern of living for its élite, based on the 'gleaming towers of capitalism' (Nobre, 1994). However, urban land markets have done nothing to improve the situation of the lowest strata of society, as, despite all of this prosperity, there is an uneven distribution of income reflected in the housing market. Worse still, land speculation generally has caused an impoverishment of life quality for the poorest sectors of the population, through eviction and the diversion of resources. Development control has been unable to tackle these problems and there is an urgent need for them to be reformulated in the light of these needs.

## São Paulo's evolution

São Paulo has not always been the financial core of Brazil. Until the late nineteenth century, the city had little economic importance to the Portuguese Crown. Its functions varied from a local trading post and an advanced military base, to a crossing of various routes from inland villages to the coast.

During the late nineteenth century, the city underwent transformations that started its development process. The coffee boom in the west of São Paulo State brought great prosperity

to the city and accelerated the process of urbanization. This was the start of a period that lasted until the 1930s when the effects of the 1929 New York stock market crash put an end to the influence of the coffee barons.

However, due to capital accumulation from coffee exports, the city had started a process of industrialization. This industrialization increased after World War II, with the establishment of multinational corporation factories – especially car manufacturing – in neighbouring towns. The city consolidated its position as a leading industrial centre and expanded to form a metropolis.

Population growth has followed the pace of economic development. The population grew from 579 033 inhabitants in 1920, to 1 326 261 in 1940, 2 198 096 in 1950 and by the 1970s it had reached almost 6 million. The growth reached its peak in the 1950s period of industrialization, when it reached 5.3% a year. Since then it has been slowing down, declining to 1.2% in the 1990s and suggesting more stable growth for the future (Fig. 1)(PMSP, 1996).

Recent decline in population growth can be explained in part by the decentralizing policies and environmental protection laws that have been enforced since the 1970s. Policies restraining industrial development within the municipality have caused their migration to São Paulo State inland, and it is not by chance that some inland cities have experienced accelerated growth ever since, resulting in the so-called Macro-Metropolis, a group of cities that are found within a 200 km radius of São Paulo: Campinas increased its growth from 3.24% a year in the 1960s to 4.40% in the 1970s, Sorocaba from 2.32% to 2.69% (Instituto de Engenharia, 1988).

Presently São Paulo Metropolitan Region encloses 39 municipalities occupying an area of 8051 km<sup>2</sup>, that host a population of 16 080 140, from which 61.38% (9 869 990 inhabitants) live in the city of São Paulo itself (Fig. 1).

As a result of the 1970s environmental policies, São Paulo has been turning to the tertiary sector, losing industrial jobs ever since. This clear process of de-industrialization is still in evidence, as can be seen in the recent variation of jobs according to sector (Table 1).

Since present liberal policies seek greater intervention by Brazil in the international market, the

**Table 1.** Jobs according to sector (source: SEADE, 1996).

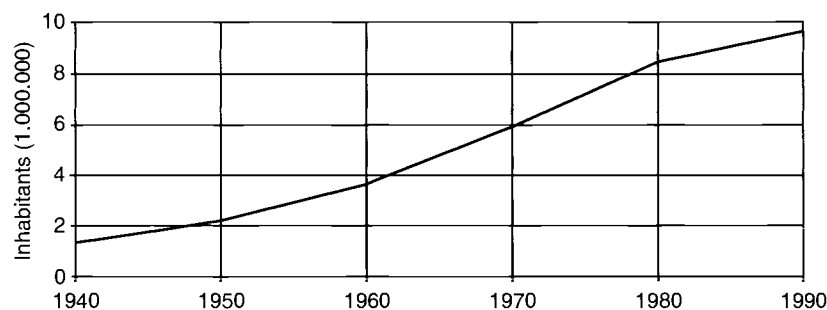
Jobs according to sector	1985	1990	1993
Industry	38.97%	36.76%	32.60%
Commerce	15.52%	17.03%	17.69%
Services	45.50%	46.20%	49.70%

role of São Paulo as a world city tends to be reinforced. This will accentuate the process of de-industrialization and loss of industrial jobs and enhance the participation of the commercial and service sectors. Considering that present urban form is a result of global capitalism (Smith and Feagin, 1987), the increase of business will require more affordable space for transnational and national corporations, administration, finance, insurance and legal related activities, as well as to house white collar workers, reflected clearly in urban land markets.

## Urban growth and the land market

Land markets and property speculation have played a major role in shaping the city (Devas and Rakodi, 1993). The growth has occurred in two different ways. Consolidated central areas, with clear location advantages, have undergone a renewal and redevelopment process in order to house the elite. On the other hand, urban sprawl has established distant neighbourhoods where the lowest strata live.

The increase of both public and private investment in central areas has led to a concentration of white collar jobs and economic activities in these areas, producing a clearly polarized and segregated urban form (Rolnik *et al.*, 1990). Despite this concentration, there is a considerable amount of vacant land (27% of the area of the



**Fig. 1.** São Paulo population evolution (source: PMSP, 1996).

municipality) retained for speculative reasons between the central areas and the city outskirts.

According to these characteristics the city was divided by the Municipal Plan into three homogeneous zones (PMSP, 1985).

#### 1. The central area

This includes the so-called Historical and Expanded Centres, enclosing an area of approximately 5–10 km radius from the city centre. It is generally characterized by:

- high densities;
- high incomes;
- intense economic activity;
- traffic congestion.

#### 2. Intermediary ring

Adjacent to the central area, delimited within a range of 10–15 km radius. This area is characterized by:

- medium densities;
- varied incomes;
- vacant land.

#### 3. Peripheral ring

The outer area of the municipality, 15–30 km away from the city centre, with:

- poor infrastructure;
- low densities;
- low incomes;
- lack of efficient public transport system.

The urban land market has been highly developed in consolidated areas and suffers the visible influence of economic cycles. Haddad (1982) recalls that land value in the city began to increase after the 1930s industrialization and increase in population growth. By that time, the first high rise buildings for commercial uses appeared in the central area. After another period of stability, values increased remarkably in the 1970s, again as increasing exports and foreign investment caused a period of extremely rapid economic growth for Brazil from 1967 to 1974, the so-called 'Brazilian Miracle'. Promotional slogans like 'São Paulo must not stop' were very common at that time and most consolidated areas went through a redevelopment process (Kowarick and Bonduki, 1994). However, the 1970s oil crisis and subsequent 1980s recession brought a restructuring of the São Paulo urban land market. Urban development that has historically been concen-

trated in central areas started to move towards the periphery, reaching the intermediary ring. Areas within this ring presented a series of advantages over the centre in attracting investment: the presence of vacant or undeveloped land, lower prices as well as the presence of good infrastructure.

The restructuring can easily be seen in the office development market. The skyrocketing land values of established business districts caused developers to find new opportunities in areas of previous low rise housing, close to the river expressway (part of São Paulo's ring road) from the mid-1970s on. Office redevelopment in these areas generally occurred after public works, road restructuring and other improvements. An example of this is the Southwest Region, with the Pinheiros Rivershore expressway and more recent avenue extensions and infrastructure improvements in the area.

A new business district appeared, competing with the already established ones in the central area. Since the 1980s, commercial development has been concentrated in the South West Region and nowadays it contains 1.02 out of the 6 million m<sup>2</sup> of the city's built commercial area (Bolsa de Imóveis, 1995). Its new buildings with modern facilities and bigger floor areas became the preferred location for transnational and national corporations' offices and headquarters. In recent years many of them have moved there (AT & T, Arthur Andersen, Deutsche Bank, Nestle, Philip Morris, Merck, Sharp & Dhome, amongst others), together with related facilities (WTC, Melliá Hotel etc). The São Paulo land market has even attracted transnational corporations that deal with urban development (real estate advisors, contractors and even architects such as SOM). This shows that the more the city increases its role in the global economy, the more its urban land market suffers its influence.

One visible influence is the alteration in the relation between the residential/non-residential built-up areas. Recently, the built areas of the commercial and service sector have been growing more rapidly compared to the residential sector. Historically, the proportion of residential to non-residential has remained around 67% residential to 33% non-residential. Due to service and commercial growth, this proportion has been changing slowly, with the rise of the tertiary

sector and a decline in industry, with a slight reduction in the proportion of residential development (Table 2).

In addition to the slight reduction in the areas for residential use there has also been a shift in the spatial distribution of housing from consolidated central areas to the intermediary ring. According to the city planning department figures (Rolnik, 1992), in the 1980s, urban development was concentrated in the Southwest Region, accounting for 17% of the new built-up area, followed by the South and East Region with 15% and North and South End Regions with 11% of the built-up area. However, these vibrant land markets are not accessible to the majority of poor population. Rolnik *et al.* (1990) estimate that 60% of the population lives in precarious housing conditions.

## Development control and the land market

At the beginning of the century, the control of urban development in São Paulo was part of the Municipal Code (Código de Posturas) which governed a wide range of city matters, varying from the dates of religious festivals to the prohibition of street beggars. Development control used to work on a limited basis, only defining the height of buildings, entrances and fenestration dimensions, setbacks and the location of incompatible uses, such as slaughterhouses.

The first specific development control legislation appeared only with the 1930s development boom. As technological development allowed buildings to grow in height, it became important to establish some criteria for urban development. The 1934 *Artur Sabóia* Code established building heights according to street width in order to guarantee solar access at street level, in a similar

way to the 1916 New York Zoning Law. It also established some sort of zoning by establishing higher limits towards the city centre. However, it did not contain any intention to plan the city as a whole, or to consider future growth.

Despite many later attempts to plan the city, urban planning acquired a legal significance when the military seized power in 1964. With the pretext of modernization, but in reality with the objective of concentrating their political power, the generals established a national framework for urban policy in the country (Bolaffi, 1992).

In 1965 the Serviço Federal de Habitação e Urbanismo – SERFHAU (Federal Housing and Urban Development Agency) – was created to finance and provide technical assistance to enable cities and states to design urban and regional master plans. A Federal Decree established that states and cities which had not drawn up their master plans by 1970 would be disqualified for federal funding.

Following these recommendations, the city of São Paulo produced its master plan in 1968 (PMSP, 1968). In 1972 the municipal planning agency – Cordenadoria Geral de Planejamento (COGEP) – was created to implement urban planning according to the master plan. The land use legislation that still governs urban development was created at that time.

The 1972 bylaw on Zoning and Land Use established the zoning system for the first time, defining densities expressed by FAR (Floor Area Ratio) that varied from 1:1 to 1:4 according to the zone. It has also established plot coverage and setbacks for new constructions. The city was divided into 8 initial zones: Z1, low density, strictly residential; Z2, low density, predominantly residential; Z3, medium density, predominantly residential; Z4, medium/high density, mixed use (neighbourhood centre); Z5, high density, mixed use (CBD); Z6, predominantly industrial; Z7, strictly industrial; Z8, special use (institutional, recreational, conservation areas, etc.).

Most of the urban area was zoned Z2 (FAR 1:1–1:2) as this legislation was drawn up based on the 1968 Master Plan (PUB – Plano Urbanístico Básico). This plan was conceived during the

**Table 2.** Land use of built-up areas (source: PMSP, 1996).

Land use	1980	1990	1995
Residential	66.9%	67.3%	63.9%
Commercial, services and others	21.5%	22.1%	27.5%
Industrial	11.6%	10.6%	8.6%

'Miracle' phase, with its optimistic forecasts for living standards and growth in car ownership. It adopted a typical American suburban model for the city, based on an extensive expressway network (in São Paulo city, 815 km), medium and low densities for the major part of the city (96.23%) and high densities for the CBD (3.75%).

Since then the Zoning Law has had many amendments, twelve other zones have been created and the existing ones have changed (PMSP, 1994). In the 1980s, Z2 represented 62% of the city blocks area. Presently it represents something around 50% (Rolnik, 1992). This means that zoning has been changed in order to accommodate land market expansion. Attempts to enforce restrictions have faced strong resistance and have completely failed, as happened with the left wing Erundina administration's attempts to reduce the FAR of the whole city to 1:1 and to tax developers on additional built area.

Since the 1980s new tools have been developed in an attempt to make developers contribute to urbanization costs. In 1984 the 9275 bylaw created a transfer of development rights (TDR) tool so that historical areas could be safeguarded from speculative pressures by selling their development rights.

In 1986, the Operações Interligadas (joint transactions) bylaw was enforced. According to this law, private developers can ask for zoning revision of a property if they contribute to the city social housing and shanty towns eradication programmes, through funding or further works. From its inception until the end of 1992, there were 230 zoning revision applications from which 50% were located on Z2 (Rolnik, 1992).

The previous administration created the CEPACs (Certificados de Potencial Adicional da Construção - Additional Development Rights Certificates). They are public bonds that allow developers to build higher densities in areas that will undergo infrastructure improvements. The concept embodied in this idea is to fund public works with part of the future developers' profit. These bonds were first created for an important Southwest avenue extension. Despite public works which had already been carried out, up to now the bonds have been of little interest to developers.

## Conclusion

São Paulo's economic development has had a clear reflection in the physical pattern of development of the city. While the city has been increasing its role in the national and international economic arenas, urban land markets have had an increased influence in shaping city form. The city has intensified through central area redevelopment to accommodate its international elite and also in the suburban sprawl where the lower classes live. The recent de-industrialization process has tended to emphasize the importance of services and commercial uses, which have spread to adjacent urban areas.

It is important to note that the growth of urban land markets have caused many impacts that are embodied in the process of land speculation. The first consequence of land market growth is that it generally overrules city planning attempts. Increasing densities demand infrastructure expansion that will be funded basically by public expenditure as in Brazil private developers are not obliged to contribute to urbanization costs.

Besides diversion of public resources, another negative consequence of urban redevelopment has been the general expansion of the lower income population (Batley, 1982), aggravating social problems and exclusion in a city that has already uneven income distribution and a segregated form.

On the other hand, higher investments and increase in land values of these areas also represents an increase and a concentration of tax revenues. In the case of São Paulo, the consolidated central area represents only 17% of the area of the Municipality but accounts for 67% of municipal property taxation, of which high rise areas represent 64% in area and 68% in taxation, i.e. 10% of the total area and 45% of total tax revenues (Rolnik, 1992).

Development control is sometimes held responsible for this concentration as it establishes major densities for central areas yet does not control land speculation. However, the 1972 legislation appeared as an answer to land speculation in the city centre, where some buildings achieved a FAR of 22:1.

The famous answer given at that time to the

business elite by mayor Figueiredo Ferraz was that, on the contrary to what they think, São Paulo had to stop. So, instead of being the cause of the concentration of investment, legislation has legitimized the status quo and sought to reduce the negative impacts by control. Present legislation has, however, failed to address negative impacts and sometimes has even aggravated them. There is an urgent need to implement more modern and efficient planning tools that take into account the strength of urban land markets in the city, trying to take advantage of this strength to the municipality as a whole.

Tools such as Operações Interligadas and CEPACs, where the municipality allows higher densities in exchange for social housing or public works funding, should be more widely implemented so that developers would also pay for the costs and not only benefit from the profits. However, their application should be defined according to a minimum criterion in order to avoid lower income eviction, and over-development that would aggravate the present situation.

## References

- Batley, R. (1982) Urban renewal and expulsion in São Paulo, in Gilbert, A. and Hardoy, J. (eds) *Urbanisation in Contemporary Latin America*. Chichester, John Wiley and Sons, pp. 231–62.
- Bolaffi, G. (1992) Urban Planning in Brazil: Past Experience, Current Trends, *Habitat International*, 16(2), 99–111.
- Bolsa de Imóveis (1995) Os números da marginal pinheiros, *Boletim de Investimentos Imobiliários da Bolsa de Imóveis do Estado de São Paulo*, 3, 2–4.
- Devas, N and Rakodi, C (1993) *Managing Fast Growing Cities*. Harlow, Longman.
- Friedmann, J. and Wolff, G. (1982) World city formation: an agenda for research and action, *International Journal of Urban and Regional Studies*, 6(3), 309–44.
- Haddad, E. (1982) Report on urban land market research in São Paulo, Brazil, in Cullen, M. and Wollery, S. (eds) *World Congress on Land Policy*. Lexington, Lexington Books, pp. 201–15.
- Instituto de Engenharia (1988) *A Cidade de São Paulo: Caminhos Possíveis*. São Paulo, Instituto de Engenharia.
- Kowarick, L. and Bonduki, N. (1994) Urban space and political space, in Kowarick, L. (ed.) *Social Struggles and the City: The Case of São Paulo*. New York, Monthly Review Press, pp. 121–47.
- Nobre, E. A. C. (1994) *Towards a Better Approach to Urban Regeneration: Defining Strategies for Intervention in the Central Area of São Paulo*. Joint Centre for Urban Design, Master of Arts dissertation. Oxford, Oxford Brookes University.
- PMSP (1968) *Plano Urbanístico Básico*, São Paulo, GEP.
- PMSP (1985) *Plano Diretor do Município de São Paulo*, São Paulo, Sempla.
- PMSP (1994) *Coletânea das Leis de Parcelamento, Uso e Ocupação do Solo*, São Paulo, Sempla.
- PMSP (1996) *Dossiê São Paulo*, São Paulo, Sempla.
- Rolnik, R., Kowarick, L. and Samekh, N. (eds) (1990) *São Paulo: Crise e Mudança*. São Paulo, Sempla.
- Rolnik, R. (1992) Zoneamento e Mercado Imobiliário: Subsídios para a transformação da legislação urbanística de São Paulo, *DOMSP*, 24 December (Suplemento) 1–23.
- SEADE (1996) *São Paulo em dados*. São Paulo, SEADE.
- Smith, M. and Feagin, J. (eds) (1987) *The Capitalist City*. Oxford, Blackwell Publishers.