col·lecció: prospectiva

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Martí Parellada
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Editors

Includes CD

Pla Estratègic Metropolità de Barcelona

torino wireless
ICT and Innovation in Piemonte

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Note. On the CD that accompanies this book you will find the complete report for the following cities: Barcelona, Lyons, Munich, Turin, Belo Horizonte, Concepción, Córdoba, Guadalajara, São Paulo and Liverpool.

Globalisation and Urban Srategies. Introduction

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Since the second half of the 1980s, both local and international competitive scenarios have been in turmoil. There is ever-growing uncertainty, markets are continuously mutating, demand is being diversified and globalised, and new technologies offer new possibilities and applications on a permanent basis. Within this framework, international trade and direct foreign investment flows in particular have appeared as new international cooperative approaches between companies. These constituents of the internationalisation of the economy are inherent to the globalisation process and stem from the reduction of tariff barriers, the gradual removal of trade restrictions and progress made in transportation and communication, thereby making it easier for activities to scatter physically while fostering greater global integration.

This globalisation process, with its increased levels of international competition and its advent of new emerging sectors, is noticeably modifying the sectorial specialisation and competitive capacity of many cities. The crisis experienced by traditional industrial sectors that began in the mid-1970s still continues, since these sectors are still being exposed to competition from less developed countries with much lower production costs. However, the new emerging sectors are linked to new technologies and the world of knowledge (advanced industries and services); they take advantage of growing demand, and use more sophisticated technologies and highly skilled labour. These changes have reshaped the productive structure of cities, although they have not all felt the impact in the same way. In cities with a high degree of industrial specialisation in more traditional fields there has been a considerable decrease in the number of jobs in these fields, while the expansion of more advanced activities usually takes place in economically larger cities that contain distinct productive traits.

It is evident that globalisation can have widely acknowledged positive impacts, such as increased trade, the expansion of the employment base, increased creativity, and the establishment of a more homogeneous society. Yet globalisation may also bring about some negative effects that entail greater inequities and poverty. It is clear that the benefits of globalisation will be smaller in those areas that are less exposed to new technologies and where the educational levels are also lower. Cities that are capable of being more flexible are likely to attract the largest investments linked to new technologies and economic growth.

The impact of globalisation on the urban setting may bring about a series of changes. For example, cities dominated by traditional services or the manufacturing world may be forced to reevaluate their economic foundation. The most advanced manufacturing sectors and high value-added services will tend to concentrate in city centres, whereas the more labour-intensive activities will move towards the outskirts. As a result, the newly restructured cities will specialise in activities with a greater added value and will be surrounded by areas where complementary and lower value-added activities will occur.

In view of this new reality, the *Torino Internazionale* consortium and the Columbus programme have put together this report on **Globalisation and Urban Strategies** together with the University of Barcelona. This report analyses various urban development models and scrutinises several specific cases. Five European cities and five Latin American cities have been selected. The purpose of the study is to analyse the initiatives put forward by these cities, which have all faced the consequences of globalisation to various extents. In spite of the many differences between the cities on both continents, each report identifies the determining factors and strategies proposed to adapt to the globalisation process, even though each city embodies different economic and social realities.

Three factors were taken into account when the cities were selected. First, all have a relatively high portion of manufacturing activities having undergone or currently undergoing productive restructuring processes. Also, each city has been forced to revisit and develop strategies to face these changes at some point in time. The chosen locations include the European cities of Barcelona (Joan Trullén, Universidad Autónoma de Barcelona and Francesc Santacana, Pla Estratègic Metropolità de Barcelona), Lyons (Laurent Laborde-Tastet, Lyons Management School), Munich (Raymond Saller, European Affairs, Department of Labour and Economic Development, City of Munich) and Turin (Elisa Rosso, Torino Internazionale) and the Latin American cities of Belo Horizonte (Rodrigo Ferreira Simoes, Audrey Goldner and Bernardo Campolina, Universidade Federal de Minas Gerais), Concepción, (Jorge Dresdner, University of Concepción), Córdoba (Eduardo Reese and Andrea Catenazzi, AYDET), Guadalajara (Luis Alonso Martínez and Patricia Elizabet Padilla Etienne, Dirección General Sectorial, Planeación y Gestión Estratégica Secretaría de Desarrollo Urbano, Gobierno del Estado de Jalisco) and São Paulo (Carlos Azzoni, Universidade de São Paulo). The case of Liverpool (Michael Parkinson, Institute for Urban Affairs – Liverpool John Moores University) is covered in an annex. This city is an interesting case study that supplements the initial goals of the study.

With the exception of Liverpool, the reports on each of the cities follow a similar pattern, since one of the main goals of the project is to compare the economic and institutional contexts as well as the strategies proposed by each of the cities. The full text of these reports can be found on the enclosed CD. A summary of them is available on paper. These summaries have been written by Tania Cruz, Javier Garcia and Claudia Tello. M. Àngels Gómez-Hidalgo has collaborated in formatting the reports.

Therefore, each report is organised around 4 main chapters:

- The first chapter describes the administrative and spatial characteristics of the metropolitan area surrounding each city along with the main economic indicators and growth model (sectorial structure, outward opening, size of the entrepreneurial sector, among others).

- The second chapter contains a diagnosis of each city's situation, and emphasises the external and internal factors that have led to the present situation. Strengths and weaknesses of the metropolitan area are examined, along with the development of those activities that are linked to knowledge-intensive sectors. The importance of R&D in the urban economy and the availability of a proper infrastructure are examined as well.
- The third chapter covers the methodology for strategic repositioning of the metropolitan area around each city, and the following factors are analysed: planning process leadership, key players, social stakeholder participation throughout the process, the design of the organisational model, its coordination, and its development over time.
- Finally, in the last chapter of the reports, the authors set out the strategic vision of each city, including the strategic project layout and an assessment of the strategic goals and projects whenever possible.

Profiles of the cities

Barcelona

The city of Barcelona, capital of the region of Catalonia, has a population of approximately 1.583 million spread over a surface area of 90 km^2. Along with 163 municipalities of varying size, the city makes up the Metropolitan Region of Barcelona with a total population of 4.4 million and a surface area of 3,229 km^2. In 1996, the per capita income of the city of Barcelona was 19,354.6 euros (34% higher than the average in Catalonia), whereas for the total Metropolitan Region the income was 11,333 euros, 22% below the Catalan average.

The Barcelona metropolitan area is one of the largest urban areas in Europe. Together with Madrid's metropolitan area it has contributed heavily to Spain's economic and population growth rate over the past few years. The urban structure of the Barcelona Metropolitan Region is polycentric in shape and it stems from the integration of existing consolidated cities with a historical industrial base inside the metropolitan area.

As of recently, the Barcelona Metropolitan Region is not an administrative body; in 1987 the Catalan Parliament adopted a series of laws leading to the dissolution of the Barcelona metropolitan corporation, a body that used to encompass the city of Barcelona and the municipalities surrounding it. However, several metropolitan institutions that manage certain public utilities exist, along with a volunteer organisation called Mancomunidad[1] of Municipalities of the Barcelona Metropolitan Area that is made up of the city of Barcelona and 30 municipalities surrounding it. For all practical purposes, besides the previously mentioned Mancomunidad, there is no specific organisation encompassing the entire Barcelona metropolitan area aside from transportation and environmental institutions.

However, a project is now underway that aims to create an institution that grants the municipality of Barcelona full powers in its fields of activity such as transportation, the environment and the Mancomunidad. This institution would also be charged with urban tasks along with others that are delegated from the various public administration sectors, such as transportation, water management, sewage, the environment, and land organisation actions that promote connectivity and mobility inside the territory.

Production in the Barcelona area is marked by a high level of diversity and a peculiar level of specialisation in various metropolitan centres. However, in spite of the high level of diversity, industrial employment remains relatively high. Over the past several decades, the economic growth model in the area has undergone significant changes. Neither capital- nor technology-intensive, the previous model was based on the production of industrial goods such as cars, textiles, and the agribusiness, and employed low-skilled workers. Conversely, the present model is more capital-intensive, export-oriented, and more technology- and knowledge-intensive. This transformation meant that between 1991 and 2001 industrial employment dropped by 50% while services grew steadily; for example, the advanced services industry doubled over this time period, reaching 26% of total employment in 2001.

1. Association.

The main reasons for Barcelona's improved competitive position include the diversity of its production structure and the transformation of its growth model, which have allowed it in recent years to increase the number of jobs offered, raise its production and export levels and improve the income levels of the population. However, there are some major weaknesses, including the high cost of housing (which experienced an increase of more than 300% between 1997 and 2003), the high level of traffic congestion, and the existence of inequities in both land and income distribution. Likewise, some structural problems remain, such as the low levels of: public and private capital intensity, big local industry and R&D expenditures.

Barcelona's strategic planning process started 15 years ago and has entailed the approval of three strategic plans. However, the need to institutionally organise the Barcelona metropolitan area was detected, since the surface area covered is considerably wider than the central city of Barcelona itself. As a consequence, an agreement was reached in the year 2000 to turn the Strategic Plan for Barcelona into a Metropolitan Plan. The breadth of this Plan covers 36 municipalities over a surface area of 600 km^2, with 3 million people and a density close to 5,000 inhabitants/km^2. The first Metropolitan Strategic Plan for Barcelona was approved at the beginning of 2003, and a management model for the metropolitan territory was established. The intention of this model was to promote a metropolitan policy, foster a global vision of the territory and its strategic projects and allow for the efficient management of those services deserving examination from a wider perspective, all while taking local identities into account.

The diverse group of economic and social players participating in this plan include public administrations (the town hall of Barcelona, other city halls within the area and the Mancomunidad), the Chamber of Commerce, the industrial chambers, trade unions and universities, among others.

Six assumptions have steered the design of the strategic plans:
The territory of Barcelona is highly saturated and needs to be managed more efficiently.

- The economic transformation process must reach out to those industries with the greatest added value, since they will uphold its level of competitiveness.
- Industrial models are becoming outmoded as new challenges arise.
- Culture plays a central role.
- Sustainability and the environment are crucial factors.
- Elements of governance typical of our modern society must be introduced.

The vision of the future focuses on three issues: emphasising innovation, creativity and knowledge as a basis for competitiveness, making the territory more productive and dynamic within a framework of economic and social sustainability, and involving mechanisms that will manage the area efficiently.

Lyons

The city of Lyons covers a surface area of 48 km^2 and in 1999 the population totalled 445,452 people. The city is located in the Rhône-Alpes region (the second largest region in France), and the Department of the Rhône. The metropolitan area, also called Greater Lyons, is made up of the city of Lyons and 55 municipalities totalling 487 km^2 and approximately 1.2 million people. This area represents 75% of the population of the Department of the Rhône though only 15% of its territory.

Lyons is one of the communities affected by a 1996 law that streamlined the public services management of the 36,000 French municipalities by way of inter-municipal cooperation. The Greater Lyons area was established in 1969, when it started managing some of the public utilities, such as water, sewage, urban waste and roads. Later on, the Greater Lyons area began to take over other roles such as planning and development (1982), certain economic areas (1992) and the development policy (1999). The urban area drawn according to population mobility criteria goes beyond Greater Lyons; it actually includes people living in both the Lyons and Saint Etienne departments, a total of 678 municipalities and around 2.6 million people.

Demographically, over the past few decades Greater Lyons has undergone population decentralisation from the inner city towards the outskirts, following the same pattern as many major European cities. In the particular case of Lyons, this process entailed a very high increase in the land occupied for urban purposes.

Greater Lyons' production is comprised of 48% in the services sector and 28% in the industrial sector. The industrial sector is highly diversified: traditional sectors (such as textiles, which have a long heritage and employ the most people in France) exist side by side with greater value added industries such as chemical, pharmaceutical, and mechanical engineering, electronics, and the automotive industry. The trend towards outsourcing has also affected Greater Lyons; the increased number of jobs in the services sector has led to the development of new industries such as finance, insurance, and computers.

The Greater Lyons area has several strengths that will help combat the city's future challenges. Its most important advantages include its diversified productive structure, its accessibility (its strategic location close to Switzerland and Italy), the development of digital technology, the competitiveness of its health-related activities (the health, pharmaceutical and biomedical industries), research activities carried out in the state-of-the-art facilities (with many laboratories and scientists), and the prominent development of the educational sector (its social environment, cultural life, proximity to the Alps and the Mediterranean).

Despite Greater Lyons' relatively positive competitive position, some weaknesses do exist. These include a low entrepreneurial capacity, the potential for poor structuring among emerging sectors (such as biotechnology, new technology, or the fashion business), the meagre attention paid to R&D, the low level of tourism and the complexity and splintered aspect of organisation around the city.

A number of solutions have been proposed in order to improve the position of Greater Lyons, both by the state and the urban community; the state developed a metropolitan-centered Territorial Master Plan and the urban community of Greater Lyons started the *Millennium 3* project in 1997 in order to carry out development projects for the urban community. This project is a long-term initiative in effect until 2007; it involves many diverse players including the Greater Lyons community, the Chamber of Commerce and various entrepreneurial associations.

The overall plan revolves around five main strategic goals: the internationalisation of the urban community, improving the quality of life, invigorating the spirit of entrepreneurship, the fostering of human capital (education, new technologies and continuous training) and increasing local participation. Economically, the plan encourages innovation, the creation of companies, and the development of infrastructure needed to increase competitiveness, along with the development of powerful industries such as biotech, leisure, and design. These goals are divided into 16 concrete measures, some of which have already been implemented.

Munich

According to data obtained in 2002, the city of Munich has a population of approximately 1.25 million and is the centre of a metropolitan area of around 2.5 million people, or 20% of the Bavarian population. Besides Munich, the metropolitan area encompasses seven counties and 185 much smaller local institutional authorities. The city of Munich and its metropolitan area have followed a downward demographical trend over the past few years. The city of Munich covers 310 km^2, with a population density of 4,032 inhabitants/km,^{2} while the metropolitan area covers 5,504 km.^{2} The Munich metropolitan area is one of the most dynamic economic areas in Europe and between 1998 and 2002, a period of economic stagnation throughout the rest of Germany, it has shown economic growth indices above the mean German values. Likewise, it has one of the lowest unemployment rates in Germany.

Even today the city of Munich plays a leading role in the demographic and economic spheres of its metropolitan area. However, like most other large European cities, it has undergone a population and employment decentralisation process over the past decades, from the inner city outwards; while in 1961 Munich contained 63% of the population and 81% of the employment of the entire metropolitan area, in 2002 the population percentage stayed at 63%, but employment dropped to 49%.

German cities have a vast number of competencies allocated to them by the Federal Government and as a result the city of Munich has managerial oversight of urban planning and development, primary education, and social well-being, among other concerns. There is a certain level of cooperation within the metropolitan area, although there is no metropolitan government as such. It is up to the Bavarian region to manage the local entities that make up the region.

The city of Munich, along with its metropolitan area, is one of the most thriving cities in Europe because of an adaptation process through which it developed innovation, the skills of its labour force, and accessibility. As a result of these efforts, the number of university graduates is very high, the productive grid is highly diversified, and the city is driven by the services sector (with 76% of total employment) and an entrepreneurial fabric where SMEs are predominant. Likewise, it contains several emerging industries (the so-called growth clusters) such as finance, IT, communications, biotech (linked to the traditional health sector), computers, and electronics. Within these industries, many highly competitive multinational companies are investing heavily in R&D, in cooperation with universities.

The city of Munich faces a number of challenges that will affect it over the next few years and will reposition the city on the international scene. For example, the city will have to tackle the effects of globalisation through the increase of international economic relationships. Also, the European Union's expansion has resulted in a considerable increase in the number of immigrants residing in Munich. Likewise, because of growing financial problems faced by the public sector, Germany's Welfare State is due for an overhaul that will have an impact on Munich as well. Finally, the city will face continuous demographic changes due to the local population shifts and immigration.

In view of these challenges for the future, both the regional Bavarian and the local Munich governments are working on upholding the city's competitiveness level. There is no strategic development project at a metropolitan level since the Regional Planning Association is regional by nature, but the federal government has been encouraging the creation of strategic development projects. The regional government's agenda is linked to the development of infrastructure and the improvement of transportation systems, which would foster R&D and the universities.

Locally, a development policy exists for the city of Munich through the "*Munich Perspective*", which has been operational since the end of the 1990s. This development policy revolves around varied aspects such as ecology, culture, new media, law and order, education and training of manpower, sports, and leisure. Some of the specific items being worked on aim to uphold economic diversity and promote emerging sectors, enhance those sectors linked to knowledge, foster entrepreneurial attitude, care for the environment, and promote the traditional trade infrastructure. Finally, one of the city's priorities is to create a strategic plan for the metropolitan area.

Turin

The city of Turin is home to approximately 1.5 million inhabitants, two thirds of whom live in the central city, which has a density of 7,000 inhabitants/km^2. It is the fourth largest city in Italy with a per capita income of 22,977 euros/inhabitant in 2001, 22% above the Italian average. Turin has been depopulating since the 1970s, and lost 14% of its population in the 1980s. Although the metropolitan area has experienced a population increase throughout that time period, it was not enough to offset the population decline in the central city.

The city of Turin is one component of a metropolitan area made up of two rings around the inner city. There is no consensus on the number of municipalities that make up this metropolitan area, but estimates range from 33 to 50. The metropolitan area of Turin has no specific competencies although some recent institutional changes have allowed for enhanced cooperation between the smaller municipalities, the city of Turin, the province, and the Piedmont region.

Historically, Turin is an industrial city with a high percentage of its jobs in the manufacturing industry (40% in 1999), especially in the mechanical and automotive sectors (with Fiat as the most significant example). Its production style shifted during the 1970s, moving away from a single industrial activity linked to the automotive industry to a more complex fabric encompassing traditional activities with a clear increase in innovative fields (aeronautical, biotech, and IT), the food industry, design, and financial services.

This change resulted from a production overhaul, the availability of less costly qualified human resources than those in the surrounding areas (such as the Lombardy region), a healthy entrepreneurial culture, the existence of a large market and most importantly, a clear project that encouraged and nurtured information and communication technologies. In spite of these transformations, the city's high percentage of industrial employment remains a main weakness in its economy.

In order to develop a strategic plan to promote the city and place it on the international scene, the *Torino Internazionale* project was initiated in 1998. Turin was the first Italian city with a strategic plan and, in order to carry it out, a number of committees were created. These committees analysed the city's condition and suggested several improvements. As a result, the *Torino Internazionale* Association was created in 2000 to coordinate the projects that were part of the Strategic Plan. The association is made up of 122 varied members representing the main stakeholders in the city, such as local development agencies, industrial associations, public utilities, the financial sector, universities, and research centres.

The diverse actions proposed by the Strategic Plan revolve around seven objectives: integrating the metropolitan area into the international arena, creating a metropolitan government, developing strategic industries, fostering entrepreneurial activities and employment, positioning Turin as a city of culture, tourism, trade and sports, increasing the quality of life, and taking full advantage of the organisation of the 2006 winter Olympic Games.

Belo Horizonte

The city of Belo Horizonte covers an area of 330 km^2 and, in the year 2000, contained a population of 2,239,000, comprising 12.5% of the population of the state of Minas Gerais and 1.3% of the national population. Metropolitan Belo Horizonte is made up of 33 municipalities and contains a total population of 4.8 million. The central city represents 75% of the combined production of the area and the metropolitan area is the third-largest economic centre in the country after Sao Paulo and Rio de Janeiro, however the metropolitan body is not an autonomous administrative entity.

According to data gathered in 2000, the central city's human development index is higher than that of its metropolitan area. Although there were improvements between 1970 and 2000, in 21 out of 32 municipalities it is still lower than the average for the region. The Belo Horizonte area's demographic dynamism was considerable between 1970 and 2000, with a population increase of 2.4% compared to the national average of 1.5%. Since the 1970s, the city of Belo Horizonte has benefited from the direct involvement of the central government through the National Development Plan. This plan was an investment project in both the manufacturing and infrastructure sectors aimed at fostering economic growth in the less-developed areas of the country.

In 1975, the Belo Horizonte metropolitan area accounted for 2.9% of national production, while in 2000 it accounted for 3.1%. This increase in GDP was due to a 3.9% growth in the national production index between 1975 and 1996, an increase that was greater than the national average of 2.7% and also larger than the increase experienced by Rio de Janeiro (0.9%) and Sao Paulo (2.1%). The productive structure of Belo Horizonte is services-focused; this sector represents 65% of total employment, while manufacturing only accounts for 12%. This greater demographic and economic dynamism is the result of a privileged geographical location and the city's great capacity to absorb economic activities. However, the metropolitan area shows some weaknesses such as accessibility, low economic density and a poorly skilled labour force.

The Belo Horizonte metropolitan area does not have a metropolitan legislative body to implement public policies for the area's municipalities. In fact, there are only a few consulting forums for certain specific policy areas (the environment, transportation and sanitation) that influence the decisions of higher public administration bodies. Therefore, the Belo Horizonte metropolitan area does not have a comprehensive strategic plan. In spite of these limitations, the city of Belo Horizonte represents 75% of the area's economic power and contains specific policies that, when combined with other policies on a State and Federal level, help stimulate the economy of the whole metropolitan area. These policies focus on fostering economic activities and social rehabilitation, technological development (with business incubators based on new technologies, design centres and the Belo Horizonte Technological Park), and actions carried out to place the city on the international scene.

Concepción

The city of Concepción is located in the province of Concepción and the region of Biobío. It is part of Greater Concepción, which is made up of Concepción (217,800 inhabitants in the year 2000) and Talcahuano (252,000 inhabitants in the year 2000), along with the smaller cities of Coronel, Chiguayante, San Pedro de la Paz, Tomé, Lota, and Penco. The total urban area has a population of 871,231, and makes up 95% of the province of Concepción and 47% of the Biobío region. It covers an area of 1,569 km^2, 46% of the total area of the province, and only 4% of the area of the region. Concepción's human development index is 0.745, slightly above the index for the region (0.704). However, there are large internal differences between the municipalities within the area; for example, the city of Concepción has the highest index (0.805), while the city of Lota has the lowest (0.659). The Greater Concepción area does not have an administrative body and any public participation is dependent on either the regional or the municipal governments.

The demographic growth index for the Greater Concepción area was quite low between 1992 and 2002, reaching only 1.1%; the main reason for this low growth is the tendency of the city's population to emigrate, mostly to Santiago, the capital of Chile. In terms of economic growth, production grew by 4.5% between 1985 and 1995, 2.5% less than the national average. This lower growth rate is due to the productive specialisation of the Greater Concepción area in industries that were greatly affected by the economic crisis (especially in the manufacturing sector, where steel, fishing, construction and electrical power distribution all suffered). However, after a period of production stagnation, the economy seems to have been improving since 2002. Also, the economic situation of the Greater Concepción area is similar to the situation in the region as a whole. The area's present productive structure focuses on the services sector (70% of total employment), and the manufacturing industry (24% of employment).

Over the past several decades, the Greater Concepción area has undergone a series of changes that have also had an impact on other areas of the country. These changes include a demographic transition, an increase in urbanisation, economic integration processes, the development of new technologies, the expansion of the services sector, and the insertion of women into the labour market. The Greater Concepción area has had a number of advantages that have allowed it to face these challenges, including a diversified productive structure, good communication as a result of the area's harbours, the existence of commercial and financial services, a university centre with a very old tradition in research activities that is growing, and the shaping of a scientific and technological development policy in the fields of biotechnology and chemistry.

However, the area does have some weaknesses that may jeopardise its capacity to grow, such as the young and skilled population's outward migration, a high poverty level in some rural areas, the low capacity of the area to create jobs, the existence of several low value-added productive activities, and the lack of a cultural identity of its own.

The Chilean institutions are not currently involved in planning for the future of the Greater Concepción area, since such activity generally takes place at a regional or municipal level. However, regional planning does entail a spatial division that allows for a separate analysis of the strategic proposals specifically designed for the Greater Concepción area. Explicit territorial planning implementation is a relatively new phenomenon in Chile that began on a regional scale in the beginning of the 1990s. The first such endeavour was called "Regional Development Strategy, Biobío Region 1995-00"; it was followed by another project that addressed the time period between 2000 and 2006. All government levels (regional, provincial and local), the public utilities' technicians, and representatives of various territorial bodies participate in these projects. The strategic plan for 2000-2006 revolves around economic growth, the integration of the inhabitants and territory into a modern environment, and comprehensive and participatory human development. The measures that affected the Greater Concepción area the most included the improvement of the coastline, the restructuring of the mining industry and a common management of certain aspects such as traffic, water, and a segment of the educational spectrum. Some concrete measures include the integration of the harbour system, the development of a logistics platform for the Concepción-Talcahuano axis, the revival of the shipyard industry, the revitalisation of the most depressed urban areas, the development of a biotech platform and the creation of a technological park for the plastics industry.

Córdoba

The city of Córdoba is the second largest urban centre in Argentina, with a population of 1,267,774 in 2001 (41% of the population of the Province of Córdoba) and 576 km^2 in area. Córdoba is the centre of an urban grid of municipalities; the first ring encompasses Greater Córdoba (1.37 million inhabitants and 750 km^2), the second ring includes a radius of 35 km around the central city, or the metropolitan area related to the city of Córdoba (1.5 million people and 1,500 km^2) and the third ring encompasses the CMA (Córdoba Metropolitan Area), with 1.7 million people and 2,500 km^2. A mobility survey confirms the functional relationships between the city of Córdoba and the various metropolitan spaces. These spaces do not have an administrative coordinating unit; instead, the metropolitan government is made up of organisations at different levels (federal, provincial, municipal and interjurisdictional) that act simultaneously but not always in concert.

During the period 1991-2001, the population growth index for the city of Córdoba was around 9%, much lower than its index during previous decades. This was due to the economic recession of the last few years and people moving away from the city centre towards the outskirts, where the population growth index was much higher. The economy of the city of Córdoba is based on the services industry, which represents almost 80% of total employment. Within the manufacturing field, the most important industries include the automotive industry, the food industry and, more recently, some IT-linked activities.

The city of Córdoba has undergone important social and economic changes leading to higher unemployment and poverty levels. The most recent economic downturn had an impact on the entire nation and led to an increase in the poverty index in the area by 20% between 2001 and 2003. In spite of this state of affairs, the city of Córdoba is a regional centre that experienced steady economic growth until 1999. It has several strengths, including a diversified productive structure, a powerful network of institutions, a university infrastructure, and a dynamic services industry.

At the same time there are also many weaknesses, such as the limitations of companies in terms of training and operating in international markets, the poor quality of the urban structure in the most central portion of the city, inadequate transportation services leading to shortcomings in both efficiency and productivity, the lack of adaptation to technological developments, the separation between the scientific/technological systems and the needs of local companies, the poor coordination of technological policies, and the need for investment in infrastructure.

Argentine urban development planning did not occur until very recently; in fact, the Strategic Plan for Córdoba was the first such plan and it was created in 1993. This plan intended to modernise and decentralise the city and show the local authorities how the territory needed to adapt to the changes of the previous decades. It proposed new methods in order to solve problems linked to political, social, economic and cultural aspects of life that were changing because of globalisation. Approximately 190 public and private institutions participated in the design of the plan, and once the preliminary tasks were finished, the project began to be implemented between 1995 and 2000. Although the plan has not been fully effective, some projects are still in place today.

The strategic plan intended to integrate the city with the metropolitan area, to increase its competitiveness in the regional, national and international scenes, to create the social grid needed for Córdoba to become an attractive city with a high quality of life, and to build a city with equal opportunities and social integration. These goals have resulted in several concrete projects, including political decentralisation, the revamping of the central urban area, the increase in the quality of life and the number of open public spaces, improvements in the infrastructure and transportation systems, and the enhancement of public and private coordination for the development of the city.

Guadalajara

The city of Guadalajara is the second largest in Mexico and, together with the cities of Zapopán, Tlaquepaque and Tonalá, it makes up a metropolitan area with a population of almost 3.5 million, 55% of the total population of the state of Jalisco. The urban area of Guadalajara has a population of over 4 million and is composed of the Guadalajara metropolitan area and the municipalities of Tlajomulco, El Salto, Juanacatlán & Ixtlahuacán and Los Membrillos. It is among the twelve largest urban areas of Latin America, but in spite of the importance of the central city in demographic and economic terms, the urban grid of Guadalajara is polynuclear.

The Guadalajara Metropolitan Area is a metropolitan institution that reports to the state of Jalisco, and is responsible for coordinating the public administrations of water, sewage, and transportation management. However, besides this institution, there is no governmental body that coordinates the efforts of the various municipalities making up the metropolitan area.

The Guadalajara area's growth has slowed down over the past years; while the population increased by 2.6% between 1990 and 1995, it increased only 1.4%

between 1996 and 2000. This deceleration was caused by a slowing birth rate and a drop in the number of immigrants, who were choosing to move to the United States instead of Guadalajara.

The productive structure of the Guadalajara metropolitan area differs considerably between the central city and its surroundings. The city of Guadalajara is essentially service-oriented (services represent 72% of total employment). This percentage drops to 65% for the metropolitan area, and in the smaller towns the main economic engine is the manufacturing industry, which represents 54% of total employment. The industrial sector grew substantially between 1940 and 1980, led by small industries and traditional sectors of the area. However, this sector has been restructured and large US multinational companies have taken over the leading role.

The restructuring process has taken advantage of many of the area's strengths. The area belongs to NAFTA and is therefore in a position to attract substantial foreign investments. It attracts new companies in many advanced industries (40% of the new companies established in the region between 1995 and 1999 chose the Guadalajara area) and its district is located in a strategic area. However, the Guadalajara area also has a number of major weaknesses, such as a lack of water and its residual treatment in the central area (which has led a portion of the economic activity to move to other areas where the problem is not as severe), the need to invest in infrastructure in order to increase the degree of connectivity with other areas in the state of Jalisco, the wide demographic and economic imbalance within the region, the excessive dependence on the international markets of key sectors such as electronics, and almost exclusive dependence on the USA for its investments.

Faced with these limitations and challenges, the State of Jalisco has initiated regional development projects in order to guarantee that the city and its metropolitan area remain competitive, to revamp its productive structure, and to reorganise its territory and the metropolitan area of Guadalajara. The Development Plan for the state of Jalisco 2001-2007 is presently underway.

At a lower administrative level, a number of institutions in charge of establishing an urban policy for Guadalajara have existed since the 1940s. The Guadalajara metropolitan area was established by law in 1993 with a budget and a role in urban development, transportation and traffic, water and sewage, the environment, natural resources, and finance. The state, regional, and municipal governments of the main cities manage and finance the area in order to invigorate and regulate urban growth, to efficiently manage the public utilities, and to decide on the most effective way to carry out large-scale infrastructure and equipment works.

São Paulo

The São Paulo metropolitan area is one of the largest urban concentrations in South America and the entire world. With a surface area of 8,051 km^2 and 38 municipalities, it had a population of approximately 17,821,000 in 2000, with 10,434,000 people residing in central São Paulo. The metropolitan area represents 48% of the total population of the state of São Paulo and the geographical proximity between the large cities of São Paulo, Rio de Janeiro, Belo Horizonte, and Curitiba results in one of the largest urban areas in the world.

The relative importance of the metropolitan area vis-à-vis the state of São Paulo as a whole has evolved erratically since the 1960s. While the metropolitan area's population accounted for 41% of the total population of the state in 1950, in 1980 that level climbed to 50%, and then decreased to 48% in 2001. The central city of São Paulo has followed a similar pattern: it accounted for 24% of the total population of the state in 1950, 34% in 1980, and 28% at present. The decrease in recent years is a result of smaller population growth in the metropolitan area's municipalities as compared to the growth in the state's other municipalities. In fact, slower population growth is a general hallmark in most Brazilian metropolitan areas, although the trend is more acute in São Paulo. The metropolitan area's population growth in the 1960s was at 4.5% while in the 1990s it was at approximately 1.6%; likewise, the growth rate in the central city of São Paulo was similar to that of the metropolitan area in the 1960s and is now lower (0.9% in the 1990s).

A metropolitan authority that is made up of 38 local administrations was created in the beginning of the 1960s in order to coordinate the various governmental levels that affect the metropolitan area. However, this organisation was mostly unsuccessful due to coordination difficulties and a lack of cooperation among the municipalities involved.

The state of São Paulo represents 34% of Brazil's GDP and 50% of the country's total industrial production, and the São Paulo metropolitan area's economy accounts for 80% of the economy of the state as Brazil's main industrial centre. Twenty-five percent of all jobs in the metropolitan area are in the industrial sector, while only 20% are employed in this sector in the central city of São Paulo.

In the 1980s, the competitive position of São Paulo's metropolitan area was similar to that of other Brazilian cities. However, by the middle of the 1990s the competitiveness of the São Paulo area was much higher in terms of both productivity and company benefits. This surge in competitiveness has also led to substantial labour cost increases. The São Paulo metropolitan area improved its competitive position as a result of its productive restructuring, higher incentives, technological innovation, the modernisation of its production, and, with the assistance of multinational companies, the increase in the number of jobs in sectors with a greater share of R&D than more traditional activities such as the automotive and chemical industries, among others. However, the area also contains several weaknesses that make it seem less attractive and constrain its capacity to grow. The main weaknesses involve low investment levels in transportation networks (which have brought about greater problems with traffic jams), a relatively high cost of living, and great disparities in quality of life between the various municipalities that make up the metropolitan area, with the central city and the industrial locations being better off than the satellite dormitory towns.

Public intervention in the area occurs at federal, state, and local government levels. The metropolitan authority is in charge of coordinating all the tasks carried out by the public administrations, but it has been largely unsuccessful.

However, there is an initiative called the "Consorcio Gran ABC"[2] that attempts to resolve this institutional entanglement. It is an agreement between local administrations and the private sector in the most industrialised cities in metropolitan São Paulo. It intends to foster discussion regarding the common problems in the area, especially those linked to the restructuring of the region's industrial sector. So far a number of studies have been carried out and meetings have been held with various stakeholders in order to further evaluate the competitive strengths and weaknesses of the area.

2. Translator's note: Great ABC Consortium.

Barcelona: A polycentric metropolis undergoing transformation

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1. Main characteristics of the urban agglomeration

Barcelona is the capital of Catalonia and the most important economic region of Spain. The urban area has an estimated population of 4.7 million, with approximately 2.2 million employed people. Barcelona is strategically located at the crossroads of the European continent and the Iberian Peninsula, which has led the city to develop strong ties with Mediterranean cities such as Lyons, Tolouse and Montpellier in France, and Zaragoza, Valencia and Palma de Mallorca in Spain. Likewise, Barcelona has always had a close relationship with other Catalan cities, especially Girona, Lleida, Manresa, Vic, Olot, Ripoll, Tarragona, Reus and Valls.

Historically, Barcelona has always been Spain's industrial capital. From 1833 until the financial crisis in 1973, the economy of the city was based on the production of manufactured goods which it sold to a Spanish market protected from foreign competitors by high import duties. Therefore, production concentrated more on non-qualified labour than on capital intensive sectors. After a severe industrial crisis, its economy underwent a dramatic change, especially since 1986, when Spain joined the EU and Barcelona was nominated for the 1992 Olympic Games. Today, the city is an ever-changing polycentric metropolis that is facing the challenges of globalisation with a highly unique productive structure based on the importance of its small and medium-sized enterprises.

Now, at the beginning of the 21st century, Barcelona is one of the key urban centres in the European Union and produces 25% of all goods and services exported by Spain. Its exports rival those of Madrid, Valencia and Zaragoza. Together with Madrid, Barcelona has become the main economic and urban population driver of the European Union; it is a global metropolis with a high component of third level employment, internationally recognised for its urban renewal and an extremely high standard of living.

Barcelona and its metropolitan environment bring something new to the international debate on territorial competitiveness. The city and its environs presents a crucial case of a polynuclear metropolis comprised of a municipal centre with numerous real-estate rental advantages for high-tech service activities along with a polycentric satellite community made up of cities with some degree of industrialisation where Marshallian location-related advantages are created.

The new polycentric metropolis, open to international competition, allows for the existence of external economies of both an urban and productive nature. Together with the new network economies, this can explain the apparent paradox of gaining an international market share without the classic advantages provided by a large company.

The Metropolitan Region of Barcelona has a polynuclear structure. The main centre is Barcelona with an urban link to such important municipalities as l'Hospitalet de Llobregat, Cornellà de Llobregat, Badalona and Santa Coloma de Gramenet. The most important sub-centres are Mataró, Granollers, Sabadell, Terrassa, Martorell, Vilafranca del Penedès and Vilanova i la Geltrú.

The economic-territorial interpretation of the metropolitan region proposed is as follows: this is a metropolis that has extended from Barcelona and the central structure towards the outskirts. The metropolitan territorial expansion is similar to that found in many cities and is known as the "nursery". Certain commercial activities thrive in the central municipality until they need more space to operate, at which point they leave the centre of the city for the periphery. During the last five years, metropolitan growth has gone beyond the central metropolitan area, reaching cities such as Terrassa, Sabadell and Mataró. Thus, the extension of the metropolitan area has been a dual process of decentralisation involving both the population as well as economic activity. In addition, the diversity in production is also significant and the industrial employment level is high. This coexistence of diversity and specialisation can be defined under the *specialised polynuclear* concept.

2. Diagnosis of the situation

During recent years, Barcelona's model of economic growth has changed considerably. The previous model was based on the production of industrial goods, without significant investments in capital or technology and with high levels of unqualified labour. In contrast, the current model is more capital-intensive, export-driven, and more focused on technology and knowledge. During the sixties, two-thirds of Barcelona's jobs were concentrated in the manufacturing industry, whereas between 1991 and 2001, the share of industrial jobs decreased from 50% to 15% of total jobs. At the same time, employment in advanced services has doubled, reaching 26% of total employment in 2001. In the year 2004, 1.1 million jobs were concentrated in Barcelona's central area, mainly in the service sector. Half of these jobs took place in the medium- or high-knowledge sectors.

The productive structure is highly diversified overall, although as we have seen, there are sectoral foci throughout the relevant municipalities. The manufacture of electronic equipment, machine construction and transportation materials are worth mentioning because they concentrate employment in the high and medium-high industrial sectors. Advanced services are also of great importance, especially in healthcare (public and private), finance and insurance, education and IT.

On the other hand, Barcelona has certain structural problems such as its low level of capital accumulation (both public and private), a poorly educated labour force (below the EU average), a reduced number of major local industries and a low level of R&D investments. In the long-term, the principal challenge will be the arrival of China and the new Southeast Asian exporting countries to the playing field, as they challenge the competitiveness level of some industries that have based their business strategy on low costs.

Since Spain became a member of the European Union and Barcelona was nominated for the Olympic Games in 1986, the main characteristics of its economy may be summarised as follows:

1. The economy of Barcelona has substantially improved its relative production, employment and foreign competitiveness level.
2. Between 1986 and 1999 (the last year for which official information is available) the per capita GDP of Barcelona vis-à-vis purchasing power increased by 64.4%, one of the highest rates among large European cities. It jumped from 83% of the EU in 1986 to 101% in 1999, which is positive compared to the evolution of a good portion of the industrial regions of the European Union. Every year for the past four years, its growth rate was estimated to be 1% higher than the community average.
3. The Metropolitan Region of Barcelona has experienced a very high employment rate increase over the past years. Between 1996 and 2001, the employment rate has grown by 30%, with the number of social security enrollees rising from 1,300,405 in 1996 to 1,685,863 in 2001. In the central municipality, the net employment growth rate for the same period was 24%.
4. The unemployment rate has dropped substantially, and is now below the European average.
5. Since 1996, the immigrant population from outside the EU has gradually increased, accelerating rapidly in 2001-2002 and experiencing a spectacular leap in 2003. This was especially evident in the municipality of Barcelona, where immigrants already accounted for 12% of the resident population.

The economic strategy of the city consists of moving towards a new development model based not on cost competitiveness but on quality and specific human resources (talent, differentiators, creativity, innovation capacity, advanced training). The new strategy presents Barcelona as a "City of Knowledge" and changes the industrial city focus to that of a metropolis based on the exports of high-knowledge goods and services. Barcelona's new zoning laws allow for new knowledge-intensive activities to be located in the city, with a high density of skilled workers using ITCs.

3. Origin and methodology of the new metropolitan growth strategy

The city's strategic planning process started 15 years ago. However, the first Strategic Plan was not approved until 2003. It comprises the Barcelona metropolitan area with 36 districts covering 600 sq. km., involving three million inhabitants and a population density of 5,000 inhabitants per sq. km. Barcelona's development has been accompanied by proactive and intensive municipal policies linked to the 1992 Olympics, the "Barcelona, City of Knowledge" project (1999), the Poblenou project, 22@BCN in 2000 and the Universal Forum of Cultures in 2004.

The future vision is to be implemented along three lines:

- Innovation, creativity and knowledge must be bases for competitiveness.
- The elements involved in the productivity of the territory become more dynamic within the framework of economic and social sustainability.
- The necessary mechanisms are put in place that guarantee an efficient management of the area.

4. Outcomes and evaluation of the strategic planning

One of the main purposes of the strategic plan is to serve as a tool for change. Without a sincere and explicit will to change, the plan will have no positive results. The changes in trends cannot be measured in short periods of time. Thus, the Strategic Plan organisation, in cooperation with the University of Barcelona, has created a set of indicators to provide some indication in terms of the progress made towards attaining the plan's main objectives.

Knowledge
- Having the human capital needed in strategic sectors
- Educational levels of excellence

Innovation and creativity
- Establishment of companies in strategic sectors
- Percentage of skilled workers in strategic sectors
- Transfer of technology between the university, society and companies
- Strategic patent specialisation by Barcelona companies

Territory
- Adequate public transportation network vis-à-vis territorial expansion
- Territorial grid
- Volume of goods transported compared to GDP

Coexistence and social cohesion
- Existence of personal services
- Proportion of immigrants enrolled in the Social Security system

Quality of life and sustainability
- Recycling awareness index
- Land usage levels
- Air quality
- Consumption of energy

Greater Lyons and the challenge of globalisation: issues and strategy

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The Rhône – Alpes region is the second largest metropolitan area in France and includes 8 counties and 3 large urban areas: Lyons, Grenoble and Saint-Etienne. The region became a full-fledged territorial entity in 1986 with the election by universal suffrage of its Regional Council. This body is responsible for economic, social, health, cultural and scientific development in the region, as well as for territorial planning, and professional education and training. Rhône, one of its departments, comprises 293 districts and is home to Lyons, which is the biggest city. The Rhône Department is a territorial entity in its own right. The Departement Council has 51 members and deals with questions falling within the Department's purview. Its sphere of competence has been enlarged as a result of responsibilities transferred following decentralisation

1. Main characteristics of the urban agglomeration

The city of Lyons has 445,500 inhabitants. As a decentralised local authority, the municipality has its own deliberative body, the Municipal Council, elected by universal suffrage for a period of 6 years. The region has the following structure:
- Greater Lyons.
- The urban area: the metropolis of Lyons includes 4 counties, with a residential and employment area in the suburbs.

- The urban region: the metropolitan area that includes the Lyons urban area and the metropolis of Saint Etienne, with a population of 2.6 million people.

The changes recorded between the last two censuses, in 1990 and 1999, reveal no regional particularities or specific demographic phenomena; after years of sustained increase, population growth has slowed slightly, with 90,000 + inhabitants in the urban area. Responsible for 10% of the nation's wealth, the Rhône-Alpes Region is second only to the Ile-de-France. The industrial sector of the Lyons basin was based on textiles until the industrial revolution, when it began to diversify and expand into a range of fields: mechanical engineering, metallurgy, chemicals, pharmaceuticals, automobiles, electricity and household appliances. In comparison with other French cities, industry currently looms large in the economic structure of the Lyons area. The Lyons area is home to such major groups as Aventis, Alcatel, Vivendi, Valéo and Volvo-RVI, but the crucial element is its vast network of SMEs: 57,000 in all.

Since the 1980s, the city's economy has followed the pattern of many other European cities, with a shift from industry to tertiary sector activities. Despite the decrease in jobs that began in 1984, industry remains a major consideration in production terms (chemicals, metallurgy). The strength of the Lyons economy now lies in its great diversity and it is via the overlap of the service sector and industry that the metropolis is now building its competitiveness

The Lyon metropolitan area is situated between the Rhône-Saône lines of communication and those crossing the Alps, make it a geologically strategic European crossroads for both north-south and east-west connections. Lyons and its environs enjoy a good level of accessibility, with a network of high-speed and regional trains. In addition, it has an efficient transportation system and a good telecommunications network. From the 1950s to the early 1970s, marked population growth resulted in the development of central areas, but also in the expansion of suburbia. The period from 1975 until the early 1990s brought a massive building of detached houses, which contributed to ribbon urbanisation along the main highways. Since the 1990s, the dispersal of urbanisation has been affecting small municipalities further and further from the cities. Over the last twenty years, the population has increased by 70% – and space consumption, by 140%.

2. Diagnosis of the situation

The "Urban Communities" were created in France in 1966 with the aim of closing the gap between the administrative structure and the geographical reality of those urban areas. Their purpose was to unify and rationalise public services management and administrate urban development based on urban areas under a single authority rather than by individual districts. The Lyons urban community - as a big municipality - took the responsibility of managing urban services (water, sanitation system, etc.) with a view to incorporating planning and development activities in the future.

The Rhône-Alpes Conference of Centres of Major Conurbations (Annecy, Bourg-en-Bresse, Chambéry, Grenoble, Lyon, Roanne, St. Etienne and Valence) was created in 1992, but only took on its present scope in 1996. At this time, the cities decided to work with the region and to encourage it to use the urban network to develop "major regional functions". The idea was to strengthen ties between the main Rhône-Alpes cities, to enhance existing areas of expertise and to limit inter-city competition. Cooperation within the urban network was established in five main fields: the economy, sports, art and culture, science and technology, and housing and social diversity.

The main strengths and weaknesses of the conurbations are:

- A mediocre level of company formation compared to other regions. This can be explained by cultural braking factors, but also by the lack of introductory and support structures
- High-potential sectors with insufficient infrastructure: biotechnology, IT, fashion design, etc. Also, there are few alliances and cooperative ventures within these sectors and no unifying body
- Failure by company executives to appreciate the importance of innovation as a factor in competitiveness, especially in traditional sectors. Thus 30% of Lyons companies have still not integrated IT tools.
- Insufficient decision-making in comparison with other European metropolises.
- Inadequate international outreach: in terms of access, Lyons remains a north-south transit point (on the Rhône corridor) and suffers from the lack of east-

west connections, especially in terms of the railway. Lyons has limited tourist appeal given its architectural and cultural potential.
- The institutional organisation of the metropolitan territory is also problematical in that it is particularly complex and fragmented.

At the same time, the Lyons metropolis has its strong points, including:
- Digital technology: Lyons seems to be getting very involved in the "web economy", with services for business and the development of multimedia in the form of Atari (formerly Infogrames), the world's second-largest producer of video games.
- Health, pharmaceuticals and biomedicine: pillars of industry such as Mérieux and Aventis are confirming their presence in Lyons, despite mergers.
- Lyons has European-standard research. Some 15% of national patents are generated by Lyons research.
- Lastly, at a time when metropolitan dynamics are increasingly based on the quality of living and social and cultural life, the proximity of the Alps and the Mediterranean, the city's heritage (a UNESCO World Heritage site), its renown as a culinary paradise, its highly diverse culture, and the new leisure facilities of tomorrow are resources that Lyons can make the most of.

3. Origin and methodology of the new metropolitan growth strategy

The strategic approach is influenced by a range of factors: the institutional mode of organisation for urban territories, characterised in France by a marked rise in inter-municipal cooperation; the national political philosophy, notably the search for consensus; and the question of financial autonomy, which is a reality in French municipalities, whose resources come mainly from local taxation.
In terms of the Lyons metropolis, different strategic approaches have been tried at several levels. One is the directive approach, which is implemented by the state via the Territorial Planning Directive (DRA) at the metropolitan territory level; the other, initiated by the Lyons Urban Community for its own territory, is more participatory and has led, in economic terms, to a clearly defined project: the economic development plan.

Raymond Barre was elected president of Greater Lyons in September 1995 and in December 1997, he launched Millennium 3. This initiative was designed to provide the Lyon conurbation with a comprehensive, integrated development project based on sustainable development. There were two motives behind Millennium 3: to help the Lyon conurbation improve its ranking among the European cities that count in the current context of global competition between territories; and to create a more unified society. The theme for the approach as a whole was "people", in an aim to help citizens who seek meaning in a world of constant upheaval. The main tools involve the ongoing development of studies, the organisation of planning sessions, the formation of small work groups with representatives from the civil society and Lyons administration offices, and information and communication initiatives.

4. Outcomes and evaluation of the strategic planning

The current context of European enlargement, globalisation and technological innovation brings new perspectives in terms of economic, social and cultural development. The changes we are now witnessing involve risks for the conurbation but also great opportunities for development and fulfilment. The most immediate dangers lie in society, where divisions are certain to arise if conurbations do not succeed in moving from exclusion to inclusion. The approaches used are more encompassing, and the strategic plan, as mentioned earlier, is based on five lines of strategy used to simultaneously cope with all the development problems facing the city today:

1. A conurbation open to other cultures and the world at large.

2. An attractive, livable conurbation: quality of life is now a major criterion for business and residents. As such, it requires meaningful action in environmental terms (Agenda 21), top-grade schools and universities, a thriving cultural life, leisure activities and events with clear symbolic value. Thus the conurbation must work towards:
   - A territorial plan that allows for better organisation of urban development in urban area.
   - A transport system that is integrated and rational at all territorial levels.

- An urban regeneration policy: creating a new city out of the old.
- A metropolis clearly labelled "high quality" in terms of the environment.

3. A conurbation that encourages the entrepreneurial spirit.

4. A conurbation that encourages life-long learning: Local government should emphasise the "living together" side of education, encouraging the education of information and communication technology and developing continuing education (the basis for a skilled workforce) and cultural and environmental education. It is equally important to foster greater individual readiness, together with professionalism and the ability to learn how to learn. This means facilitating access to the digital society, participation in the knowledge society, training and the teaching of "living together - different but equal."

5. A conurbation that puts participatory democracy to work.

Local democracy now involves increased public discussion at all levels and a fresh approach to territorial governance. This enables the authorities to:

- draw up a resident-led charter for public debate;
- implement the "Chevènement law" on the simplification and reinforcement of inter-municipal cooperation;
- generate dialogue and create projects with peripheral inter-municipal groups; and
- set up the Development Council, which will allow for civil society involvement in the development of the conurbation as provided for by the legislation on territorial planning and sustainable development. Comprising representatives from public and private bodies, well-known experts, community association delegates and citizens representing the economic, social, cultural and environmental realms, the Council will advise the president of the urban community.

In international terms, Lyons must continue to increase its influence if it is to play a significant role in the Europe of cities now under construction. Therefore, the common goal of Greater Lyons and its partners is clear: to get the conurbation ranked among Europe's top 15 by 2005. This requires making Lyons more attractive, increasing its international renown and improving its competitiveness within Europe. Given the diversity of the different economic sectors of the Lyons metropolis, its economic strategy must allow for harmonious development of all activities, and not merely concentrate on some of them.

The Munich metropolitan area: between tradition and innovation

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Germany's political and administrative structure consists of a federal government, state governments (Länder) and local governments. The 16 state governments in the country enjoy a high degree of autonomy. Thus, state and regional planning are governed by state legislation, while federal and local planning is regulated by federal laws and the local government is in charge of managing the local community.

1. Main characteristics of the urban agglomeration

The metropolitan area of Munich is more or less similar to the territory of the Regional Planning Authority of Munich which includes not only the core city but also the surrounding counties of Munich, Ebersberg, Erding, Freising, Dachau, Fürstenfeldbruck, Landsberg am Lech and Starnberg and has a surface area of 5,504 km^2.
The Bavarian government, in turn, fosters regional development by implementing projects supporting investments in infrastructure and inter-community cooperation. Additionally, the Munich Chamber of Industry and Commerce (IHK) of the Upper Bavarian area plays a significant role in government policies and decisions. These three metropolitan institutions have sought to promote the region of Munich as an attractive area for high-tech activities.

In reference to its economic development, the Munich metropolitan region is one of the most dynamic business locations of Europe and it holds a leading position in most of the regional city rankings. Its development started after the Second World War and was built upon existing structures of motor manufacturing industries and mechanical engineering. In the following decades, industrial production increased in modern fields like mechanical engineering, electronics, aeronautic and space technology. One reason for the economic success of Munich - and one of the reasons why Munich has surpassed the rest of Germany in terms of growth over the past four decades - is the scope of economic activity. Its economic structure – often called the "Munich mix" - is rather diverse. On the other hand, this area concentrates significant know-how, which constitutes one of the main attractions for companies. Lately, Munich has been promoted as Bavaria's political and economic centre. In this regard, it is important to mention that metropolitan Munich produces one-third of Bavaria's GDP.

The metropolitan area has a great number of qualified workers, and its eleven universities – with their high international reputation - attract young people. The unemployment rate is less than half that of the German average. Thus, the Munich area has one of the lowest unemployment levels and is one of the most active in terms of generating employment. At the same time, privatisation policies have generated income that has been channelled into universities and R&D institutions.

The following aspects of the metropolitan area must also be considered:

- Munich has traditionally been a university and administrative city. Many companies operating at an international level have their headquarters in the capital of Bavaria.
- Immigration has been the main source of population growth. The regions of the former East Germany do not generate enough employment, thus producing an east to west migration that has been the main source for the local workforce.
- Munich's social structure and standard of living are high compared to the rest of Germany. During the last few years, income gaps have widened.
- Although the city of Munich has been the driving force in terms of generating economic development and innovation in the region, its suburban districts are also very active.

- Contrary to the opinion of many researchers that service provision is mainly concentrated in the core city of metropolitan areas, there was a strong increase in services in the region of Munich as well. The metropolitan area had lost its structural economic differences between Munich and the surrounding villages and had become a common business location.
- The population of the city of Munich has remained virtually unchanged since 1972, while the population of the whole metropolitan region is growing. Now more than half of the population of the metropolitan region is living in the villages surrounding the core city while, just 40 years ago, only one-third preferred to stay outside the core city. During the same period, and because of improvements in the traffic systems and lower costs of living, the number of commuters from outside the metropolitan area grew substantially.
- As Munich constitutes an integrated metropolitan area, and also due to the fact that a portion of the population has chosen to live in rural areas, there is an intensive use of the soil and a significant increase in regional traffic.

2. Diagnosis of the situation

Munich does not have a regional body accountable for regional policies. At the regional level, the Regional Planning Association is in charge of designing the Regional Plan (RP). The RP represents a commitment from all independent communities and the districts of the metropolitan area to the principles set forth in the Territorial Development Plan (LEP) formulated by the Bavarian government. Thus, regional projects and strategies are elaborated and implemented by different cooperation systems.

Munich has received the impact of the following trends:

- As a result of globalisation, transport costs - including communication – have been decreasing substantially in terms of both money and time. The increase of information/knowledge (ICT driven) allows for new production methods across international frontiers, making the world a "single production centre". The mobility of goods and services has increased tremendously. Still, the dependencies on business locations will increase. Therefore, changes in the global economy will have an growing importance for local performance. Global

sourcing and the specialisation of cities will be a direct consequence. For Munich, this trend means a loss of production activities and a further increase of the service sector and a concentration of well-paid economic activities like R&D and high-tech.
- The broadest adjustments in economic activities took place immediately after the fall of the Iron Curtain in the early 90s. Most industrial goods were free to be moved from place to place and numerous investments made by international companies in Middle and Eastern Europe. The strong focus of the Munich industry on growth clusters and branches whose importance is expected to increase in the future will ease the adaptation.
- Restructuring of the welfare state: Germany has growing financial problems in the public sector. This means that the frame of action for municipalities will be limited and the possibilities for self-governance reduced.
- Regarding demographic changes, there is a low fertility rate. However, this negative impact on the demographic structure of the metropolitan area could be offset by immigration.

Therefore, the main challenges for business locations are:
- overcome the lack of accessible housing.
- secure revenue for the public authorities.
- preserve the economic diversity, the so-called "Munich mix."
- preserve the cohesion of society.
- preserve environmentally friendly policies.
- foster a high quality of life (e.g. cultural and leisure activities).
- support an infrastructure of private and public institutes for lifelong learning.

The local competitive edge within the international framework must be maintained and reinforced through local contacts, providing big scale R&D opportunities; fostering Munich's development as a centre within the network for spreading knowledge; promoting the establishment of new companies, especially in the technology sector, and fostering cooperation between universities and with the local economy in order to transfer technology and apply knowledge to the productive structure.

3. Origin and methodology of the new metropolitan growth strategy

The vision of the future path to be tread by the region of Munich is only fragmentary. The government of Bavaria develops a vision for Bavaria, which is mainly implemented in the area of Munich because of its existing infrastructure and international standards. Additionally, the city of Munich formulates guidelines for future-oriented development of the city and for a land zoning plan to implement them. However, because of the limited power and competence of the Regional Planning Association at the regional level, there is no strategic development concept. In most cases, the Bavarian government was the driving force. The city and the surrounding communities supported the initiatives on a case by case basis. Future economic success could depend on improving infrastructure as a pillar for other activities. Except for the debate on the public sector reform, the Bavarian government does not seem to be working towards strengthening institutional capacities with a more active role.

4. Outcomes and evaluation of the strategic planning

The strategy is comprised of five steps:
- Definition of strategic fields of action.
- Analysis and description of regional development through the Statistical Office of the Bavarian government. At the regional level, the Regional Planning Association must compare development trends and their results. At a local level, the Munich administration office prepares a report stating the progress of economic development every two years.
- Urban development plans were changed by the Munich *Perspective*, which sets goals regarding the city's development policy. These goals include maintaining and promoting employment and economic prosperity, improving regional cooperation, reinforcing competitiveness certifications in the region, formulating community policies to ensure social harmony, developing neighbourhoods in order to consolidate identities, promoting sustainable development by modernising existing urban factories, preserving the city's façade, increasing urban quality and supporting all transportation means.

- Formulation of strategic plans to foster development: objectives are set within the Regional Plan and the city's Master Plan. Although the RP has a legal status, the Regional Planning Agency does not have the capacity to actually implement policies. As a result of the limitations imposed on the municipal government, there is usually no direct relationship between the strategic planning, programme formulation and project implementation.

Finally, the development of the metropolitan area should be evaluated. The data gathered reveal the current trend, but do not allow for direct control at a regional level. The RPV uses the data collected for revising the regional plan but, given its limited possibilities, it has to convince municipal and regional directors to use results in their own conceptions of development. The city of Munich is the only one that uses the results of the strategic development plan to evaluate the progress of the city by comparing them to the objectives previously set.

Turin: socioeconomic context and strategies for urban transformation

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1. Main characteristics of the urban agglomeration

Turin is the capital of the Piedmont Region, and its metropolitan area (MA) is made up of small districts located between the first and the second urban belts. In 1972, the Piedmont Region officially acknowledged this division, which includes 23 and 29 districts, respectively. The metropolitan area could be described as a territorial unit with functional interdependence between its various centres. The spatial configuration of its conurbation is dense and compact, due to the constant addition of new productive and residential areas around existing ones and along main traffic arteries.

Between 1970 and 1990, urban planning was carried out in different stages, with a low degree of decentralisation and little metropolitan competence. At the moment, the urban build-up has brought about higher metropolitan coordination: new competencies related to territorial planning have been created, bringing new specific responsibilities for the MA. Small districts have greater political autonomy and more decision-making power in issues involving plans, strategies and visions for the development of the area. Although there is no MA administrative authority, Turin plays a key role in metropolitan coordination, and the authority is linked to various government bodies in charge of directing, organising and operating programmes and policies. The change in the relationship between the central and local government has had significant effects on the regulation of local autonomy and the progress made towards decentralisation, which increases the decision-making power of local authorities and their independence regarding tax collection and distribution. This process calls for an increased institutional and operational coordination between the districts and Turin, and between the districts and the Piedmont Province.

In 2000, Turin concentrated over 50% of the population (2.2 million inhabitants) of the Piedmont Region. The demographic decrease is related to the migration process and to the crisis of Fiat, one of the most relevant companies in the area, which resulted in a shift of population from the centre towards the periphery. Turin's social structure is divided into three areas: the first is the upper middle class, made up of executives, businessmen and professionals; the second is primarily comprised of employers and workers living in the semi-central areas, the southern suburbs and the eastern area, and the third is located in the area surrounding the Dora River and mainly involves workers.

The urban build-up has created new productive structures and industrial restructuring. This transformation required a more flexible process, with a higher degree of decentralisation and the creation of more complex networks between the companies established in the area and its surroundings. At present, Turin's industries are highly concentrated (mechanical and automobile sectors) with high levels of specialisation and suburbanisation.

Urban and regional policies have encouraged investments in technology and have prioritised the central role of the city in activities such as infrastructure works, tourism, ensuring a better quality of life, providing quality services for the population and the companies and improving transportation and communication networks.

2. Diagnosis of the situation.

The economic growth that took place in Turin's MA during the last decades favoured new employment in different sectors, particularly in the service sector and other dominating sectors that now are responsible for 30% of local jobs. As a result of high specialisation and its skilled human capital, Turin has intense innovation in intangible services, such as software, databases, Internet, education, research and development. Furthermore, Turin has a competitive edge in the following industrial sectors: automation, aeronautical parts, information technologies and satellite systems, textiles, food and beverages, banking and insurance companies, design and advertising, science and biotechnology. A relevant indicator of the effort to sustain innovation in the local economy is the presence of about 90 R&D centres, while Pieamont has the highest share of national R&D private spending.

The region - and the new Italian market - has always maintained a close relationship with other countries thanks to companies that offer highly competitive quality and costs. Such companies require services and information and communication technologies and offer machinery, equipment, design and engineering services, parts and components, etc.

A key element for reorganising mobility within the city is the "Central Backbone" (Spina Central) Project, which proposes several transformations to promote commercial activities, services, culture and production. It also includes proposals to improve transportation services, enlarge networks, increase the number of lines and improve the parking system. The MA has developed a strong internationalisation policy to improve connections outside the area and improve cooperation with other metropolitan areas, since Turin is an important point between southern Spain and eastern Europe. Therefore, great emphasis was placed on the high-speed train, and its connections with the Mediterranean and central Europe.

Besides international geopolitical tensions and the "super euro," other causes of weak regional exports are the economic difficulties experienced by the region's main trading partners (Germany and France), the reduced penetration of Piedmontese merchandise in various markets with a high growth potential (like China), and the difficulties experienced by the region's most important chains of production.

Turin's economic growth for 2003 was 0.2%. Estimates for the following years are related to the investments and works carried out for the 2006 Winter Olympic Games, which led to the development of infrastructures and transportation services. However, these activities had a high environmental impact, increasing traffic congestion, waste, energy consumption, deforestation and biochemical impacts, among others.

The Turin area is witnessing the most important process of urban transformation since the end of WWII. In the city centre and in the suburbs, construction sites are everywhere. The approval of the General Zoning Plan (PRG) in 1995 was a determining factor in initiating the phase of urban transformation which the city is experiencing today. The most famous industrial reconversion project thus far is without doubt the Lingotto Factory. A project by the architect Renzo Piano transformed this former Fiat factory into a multi-functional complex which includes a trade fair area, a University faculty, an auditorium, a hotel, stores, offices, and general management offices.

3. Origin and methodology of the new metropolitan growth strategy

As a result of a new territorial policy applied since 1990, more emphasis has been given to urban plans, actions and the relationship between different players. There has been an increased interest in providing solutions to various urban problems; an all-encompassing review is being carried out to assess the autonomous initiatives planned for 2010. The Strategic Plan of the metropolitan area is based on three future scenarios, considering Turin as a European metropolis, a city of action and specialisation, and also taking into account the development of better quality of life. The first stage of the work programme consisted of a diagnosis of the current situation. Given that the ultimate aim of any strategic plan is future development, a correct assessment of the present is vital in order to effectively evaluate the changes to be made. To this end, the Scientific Committee set up an analysis grid and sought the assistance of researchers from the city's most important institutions (University, Polytechnic University, Fondazione Agnelli, Fondazione Einaudi, Ires, Fondazione Rosselli, etc.). Among the activities of Torino Internazionale, the following are of particular interest: the creation of work groups to verify the progress of the SP projects and various measures, and the creation of round tables to draft interventions.

The main objectives of the actions proposed (a total of 84 actions) were to develop international cooperation networks, increase Turin's accessibility and improve internal mobility. Within the political sphere, there is *supra-metropolitan* approach that involves coordination in the areas of tourism, culture, transportation and mobility, trade and strategic planning, and promoting actions such as attracting investments, improving water cycles, etc. On the other hand, there is also an *inter-municipal* political approach aimed at territorial agreements and at increasing the availability of basic services. In this type of policies, coordination between urbanism and territorial planning is more complex.

The agreements between the public and the private sector sought to provide more services and to develop construction, therefore promoting a city with 118 institutions, business conventions, the organisation of the 2006 Winter Olympic Games, the film industry, six territorial agreements between neighbouring districts, technology parks, the creation of new companies in innovative environmental areas, multimedia/virtual reality, the creation and promotion of wireless networks in communications and the information technology sector.

In 1997, the Region (www.regione.piemonte.it) created the Regional Territorial Plan (PTR) to pinpoint and provide for the socio-economic characteristics of the territory and the landscape; it also defines government efforts to transform the regional system. The PTR makes use of planning instruments provided by national and regional laws (territorial plans for regional coordination, operative territorial plans, changes in municipal regulatory plans, and the issuing of specific directives by the Regional Council) and also provides for research concerning limited areas of the territory.

In this context, the Territorial Plan for Provincial Coordination (PTC) has the duty of coordinating urban activity within certain territorial limits. The municipalities within the PTC are required to adapt their urban instruments to its own, and to promote cooperation between municipalities and with mountain communities through agreements with the local authorities of the individual areas. The PTC in Turin has several specific objectives: to reduce land deterioration; to limit dispersion of the urbanised areas, urban diffusion and fragmentation of the territory; to define a continuous system of green areas, including the outlying areas; to safeguard the landscape and its distinctive features; to redistribute strategic functions, creating new urban/metropolitan centralities; to improve the quality of constructed areas; to rationalise the distribution of the areas dedicated to productive activity, and to promote the formation of plans for sustainable development within the various local contexts.

4. Outcomes and evaluation of the strategic planning

As a result of the planning, Turin has important geographical connections, technology networks and institutional relations that contribute to metropolitan development. However, there are still several pending issues to be developed in the MA. The main goals include prioritising the metropolitan role, integrating marginal areas from the periphery with the participation of public and private institutions and achieving the initiatives proposed by activating local resources and attracting foreign investment.

The creation of a metropolitan government with new types of governance and providing a service selection from the MA requires the formulation and development of policies to consolidate technological districts, support universities and develop specific corporate activities including business incubators. All this should be based on a new model of economic and social development.

The city of Turin is strategically located; however this advantage has yet to be exploited. New strategies for the development of international cooperation networks and for improved accessibility and internal mobility are required. The evaluation revealed the need for the following: developing research and training activities on the basis of the strategic resources available; creating an internationally renowned university centre; linking development to economic initiatives; promoting professional training, employment and businesses, and developing innovation potential.

The promotion of local development is still insufficient. There is a need for new urban development centres, sustainable development and environmental renovation (Local Agenda 21). Withing this aim, priority will be given to autonomous and interdependent elements in projects such as: 1) strategic evaluation of the plan and government instruments, 2) a revised perspective on different issues, which can contribute to the creation of coherent policies regarding the internationalisation system, demography, the development of economic sectors and corporate employment, and 3) the promotion of the automobile industry.

Finally, promoting Turin as city of culture, tourism, trade and transportation involves an improved quality of urban life and spaces, the creation of natural areas, the establishment of social enterprises that provide security and social cohesion and the reduction of marginalisation.

The Belo Horizonte metropolitan area: economic characterisation and competitive insertion

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In the 1970s, the metropolitan area of São Paulo – the MASP – made a significant contribution to national industrial production and to employment (44% and 34%, respectively). However, in 1997, the share of the MASP industrial product dropped to approximately 25% and its percentage of employment fell to 24%. Diniz[1] analysed the reasons for this outcome, which has been termed "deconcentration" or "reverse polarisation" by several analysts. The author argues that *polygonal development* is forthcoming in the Brazilian case, with a restricted number of new growth poles or regions that have captured a major part of the new economic activities.

At present, a new spatial configuration is taking place in Brazilian metropolitan areas. This trend is marked by industrial deconcentration, with a reduced participation of dominant industrial centres such as the metropolitan areas or São Paulo and Rio de Janeiro. While there have been diseconomies of agglomeration (pollution, transportation expenses, among others) in the MASP, in other regions the government has fostered economies of agglomeration,

1. DINIZ, Clélio C. (1999). A nova configuração urbano-industrial no Brasil. In: XXVII ENCONTRO NACIONAL DE ECONOMIA, Belém. Anais... Belém: ANPEC, (3):1341-1362.

mainly characterised by a strong industrial policy and investments in infrastructure, aimed at promoting steel, oil and paper industries, among others. Diniz concludes that such deconcentration will fade over time and growth will be increasingly limited to the state of São Paulo and the large polygon nearby, a result of a polygonal agglomeration comprising Belo Horizonte – Uberlândia – Londrina / Maringá – Porto Alegre – Florianópolis – São José dos Campos – Belo Horizonte.

1. Main characteristics of the urban agglomeration

Together with the government's effort to promote homogeneous growth in the country, regions have sought to develop through their natural resources. The expansion of agricultural production - based on the spread of cultivated areas and the rise of productivity – together with increased and diversified mineral exploration – has provided additional growth for the economies of some regions.

Belo Horizonte's position in a national context can be understood through a comparative analysis of Brazilian metropolitan areas from the viewpoint of the conditions for capturing new investment based on the rising urban land rent in the MASP.

The city of Belo Horizonte is the capital of the state of Minas Gerais, one of the 27 states comprising the Federative Republic of Brazil. According to the Brazilian demographic census, the population of the municipal area was 2.239 million people in 2000 and it is the largest municipality in the state, comprising 12.5% of its population and 1.3% of the Brazilian population as a whole. The metropolitan area of Belo Horizonte (MABH) comprises the municipality named after it along with 32 other municipalities (MAP 2). The population of the area was approximately 4.8 million inhabitants in 2000, with a GDP totalling US$24 billion in 1996. Approximately 40% of the GDP of Minas Gerais is concentrated in the MABH and corresponds to 4% of the Brazilian GDP.

2. Diagnosis of the situation

In the 1970s, a period of high economic and industrial growth in the country, the MASP began to lose its relative position in terms of both industrial production and national GDPs. Conversely, the remaining Brazilian metropolitan areas – except for Rio de Janeiro – experienced significant economic growth. Between 1975 and 1980, the participation of the MABH in the national GDP increased from 2.9% to 3.1%. This was strongly influenced by the higher relative growth of the manufacturing industry: the participation of the MABH in the country's industrial production rose from 2.4% to 3.6%. The MABH industrial park was consolidated during this period when Fiat (the Italian automobile manufacturer) installed a factory in Betim.

During the 1990s, the MABH presented one of the highest growth rates among Brazilian metropolitan areas. With an annual growth rate of 4%, the MABH's participation in the Brazilian industrial production increased significantly, as did its GDP. In 1996, the MABH's share of national industrial production was approximately 4.6%, while its portion of the GDP was 3.8%.

Data on formal employment taken from the RAIS (the annual listing of information and wages and salaries of employees) for 1985-2000 show that 7,000 jobs were created in the MABH industrial sector. This was extremely positive compared to the performance of the other metropolitan areas; the MASP lost 500,000 jobs in the manufacturing industry in the same period.

The intraregional distribution of the GDP among the metropolitan areas is quite uneven - the municipal GDP data for 1996 show that 75% of the GDP is concentrated in the municipality of Belo Horizonte. Altogether, the remaining 30 municipalities of the MABH had only 7% of the GDP. Additionally, Belo Horizonte's income per capita reached US$ 8,880, an outstanding amount compared to the average income per capita in the state of Minas Gerais, which was US$ 3,666 in 1996.

If we focus on the municipality of Belo Horizonte alone, data from the sectorial GDP show that 60% comes from commerce and services, while the public administration and industrial public utility services are also important. On the other hand, data show that the manufacturing industry's share in the GDP has been decreasing. This indicates that there is a trend towards more specialised, sophisticated and expensive services in the municipality of Belo Horizonte.

3. Origin and methodology of the new metropolitan growth strategy

From a formal viewpoint, the metropolitan jurisdiction is not an autonomous entity in Brazil. Though institutionally delimited by the union, the metropolitan areas do not have the elements that would characterise them as independent entities according to public policymakers. This also means that the metropolitan areas do not possess legislative and executive representatives or fiscal autonomy. As a result, there is no metropolitan legislative body, an institutional device that would permit the formulation and application of general and comprehensive public policy for these areas. There are only consulting forums for specific sectorial policies – such as environment, transport and sanitation – which sometimes make joint actions for economic growth and a better insertion at the national and international levels quite difficult.

Despite this limitation, the municipality of Belo Horizonte – which represents 70% of the population and income of the MABH – has a series of specific policies that, when combined with state and federal actions, are designed to induce economic activity in its metropolitan area.

In the municipality of Belo Horizonte, three major actions have been taken:

1. The enhancement of socially inclusive economic activity
2. The technological development of the economy
3. A municipal internationalisation policy

As one of the supports for the socioeconomic development policy for Belo Horizonte, public action aimed at productive insertion is designed to recover the productive capacity of a portion of the population. This would thus enable people to search for their own sources of labour and income as well as decreasing their dependence on social assistance.

This policy is designed to affect potential socioeconomic agents in the municipality, such as private entrepreneurs, public entrepreneurs, labour unions, academics, and society as a whole. The operational tools for such an action include urban infrastructure, such as centres for labour training and re-qualification regionally distributed throughout the municipality.

The Forums for Regional Socioeconomic Development have fostered the idea of a "Popular Solidarity-Based Economy", which proposes organising production through cooperative work. It also encourages the development of individual micro-businesses, aimed at economic subsistence rather than accumulation. This initiative has been supported by the Brazilian government through the Assistance Programme for a Popular Solidarity-Based Economy.

In order to enhance competitiveness in the region with the creation of new areas for productive investment, the technological development policy in Belo Horizonte attempts to position the city nationally as a production centre with high added value. This policy aims to achieve its goals by focusing on high-tech sectors such as computer technology, biotechnology, fine chemistry, technology of materials, design, etc.

Therefore, three specific programmes may be highlighted in terms of encouraging technology-based economic development:

a. Incubators of technology-based companies
b. Design Centre
c. The Technological Park of Belo Horizonte

The major objectives of the internationalisation policy of Belo Horizonte are listed below:

1. To set out alternatives for development, by taking advantage of the opportunities of globalisation.
2. To profit from the new opportunities created by MERCOSUR (the common market in the Southern Cone) trade exchange.
3. To explore its potential as a socioeconomic, tourism-focused, and historical-cultural reference centre.

4. To develop the city's tourism and commercial pole.
5. To obtain foreign resources and attract business, investments, and companies.

Belo Horizonte is a member of City Networks, which endeavours to discuss the myriad problems of the world's big metropolises in the wake of globalisation, including:

1. "Democracy in the City."
2. The "Global Cities Dialogue."
3. "Metropolis": a cooperation network of cities with more than 1 million inhabitants as well as capital cities.
4. "Mercocidades" (MERCOSUR cities): a city network within MERCOSUR.

4. Outcomes and evaluation of the strategic planning

The MABH has shown significant progress in the social and demographic sectors, especially regarding health care, social work, education, food safety and physical infrastructure. Several factors are responsible for the imminent potential of MABH's economic growth, such as its academic and research infrastructure, an integrated industrial park, a service sector, and feasible productive integration in the metallurgical and mechanical segments. In addition, it is worth mentioning its proximity to São Paulo and Rio de Janeiro, which enables the supply of goods and services. Ultimately, a progressive broadening of the export base should be pursued by innovating and diversifying the city's productive base in order to avoid lock-in dynamics and to achieve an urban scale adequate for a competitive and dynamic insertion in the interregional labour division in Brazil.

Strategic repositioning for development: the case of Greater Concepción

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1. Main characteristics of the urban agglomeration

Chile's territorial and administrative organisation comprises thirteen regions. Greater Concepción is located in the VIII Region, also called BioBio Region, approximately 500 km south of Santiago, in the centre of Chile's continental territory. Greater Concepción is built around two important cities of southern Chile: Concepción and Talcahuano. These cities, adjacent in the past, grew and became unified, so that they now form a single large urban agglomeration. In addition, they have grown and incorporated neighbouring cities such as Chiguayante, San Pedro de la Paz, Penco and Lirquén. All these cities have a primarily urban population, which according to the 2002 census amounted to 95%. Greater Concepción covers an area of 1,569km^2 and has a population of 871,231.

The regional product grew at an average annual rate of 4.5% between 1985 and 1995. This rate is lower than the national average (7%) for the same period, but it is high if we compare it to the historical average growth rate of the regional economy, which reached only 3.2% between 1960 and 1996. One of the reasons for the poor regional economic growth during this period is the crisis of the coal mining industry. Between 1985 and 1995, the regional economy was primarily based on manufacturing and farming industries. However, sectors such as forestry and fishing, construction, transportation and financial services have grown more rapidly. After 1996, the product growth rate was very low. In fact, economic activity grew at an average annual rate of just 1.5%. The region was affected by the Asian crisis and the consequent domestic recession.

It is an export-oriented region. Services that supplement exports, such as ground transportation, communications, commercialisation and financial services, are also strongly concentrated in Greater Concepción. In the period 1997-2002, on average, the exports of the VIII Region reached 13.6% of total country exports. The total exported amount of the VIII Region was a little over US$2.5 billion in 2002. During the eighties and the nineties, exports almost exclusively involved two natural resources: forestry and fishing. More than 84% of the total exports in 2002 came from these two sectors. However, over the last few years, there have been important increases in export products from other manufacturing industries.

In terms of employment, the metropolitan area is highly oriented towards the tertiary sector. In effect, almost 70% of the employment is in the commerce, transportation and service sectors. The secondary industrial sector has 24% of the employment, which is high compared to the national average. Greater Concepción is characterised by significant infrastructure in terms of scientific and technological research and is one of Chile's main educational centres.

2. Diagnosis of the situation.

The following analysis of long-term trends constitutes a framework within which the region's socio-economic development will take place in the years to come:

- Demographic transition: the population will continue growing, but at decreasing rates.
- Increased urbanisation with resulting demographic concentration.
- Progressive insertion into the international economy: economic growth is closely linked to the international context.
- Technological revolution: There are ongoing renovations in the production process and the workforce must by ready to adapt to technological changes.

- Increased importance of the service sector in relation to the primary and the industrial sectors.
- Gradual incorporation of women in the workforce.

Greater Concepción is one of Chile's development centres. Some of the reasons for this include:

1. *Diverse Industrial Structure.* The manufacturing industrial sector is important to the local economy. This includes the steel industry, the petrochemical industry, the shipyard industry, the fishing industry, part of the forestry industry and the textile and footwear industry. Moreover, the services sector is highly important and complementary to the industrial activities. Greater Concepción is home to one of the country's most important port systems, and clearly the most important port system of the southern zone (seven ports, one international airport and several land access routes to the metropolis).
2. *Southern Zone's Services Centre*. Greater Concepción has significant infrastructure in terms of transportation, as well as commercial, financial and communication infrastructures.
3. The Region's Administrative Centre. It is the main seat of the regional authority; therefore, most administrative decisions are made there. For this same reason, many private corporations have their regional offices there.
4. *Traditional University Centre*
5. *Scientific and Technological Development Pole.* Scientific research is especially oriented to engineering, biology and chemistry. The technological research is fundamentally focused on forestry engineering, fishery and aquaculture, and agriculture and horticulture.

On the other hand, Greater Conepción faces the following threats, weaknesses and risks that could affect its future growth:

1. *Net Migration Process from Greater Concepción:* There is an exodus of young educated people to Santiago, Chile. The fundamental reason is believed to be the search for better jobs and opportunities for personal development.

2. *Existence of Great Urban Shantytowns*
3. *Low Growth of the Employment Rate,* due to the fact that most companies are capital-intensive and that mature companies grow very little.
4. *Activities with Little Added Value*
5. *Lack of Own Cultural Identity.*

3. Origin and methodology of the new metropolitan growth strategy

The first territorial planning process for the Greater Concepción started in 1994 and was materialised in the "Regional Development Strategy. Biobio Region. 1995-2000" document. This process included a wide participation of the most important social players. It was led by the regional government and implemented by the Regional Planning and Cooperation Department (SERPLAC).

The strategy was based on three main pillars:

a) *Economic Growth to Benefit People*
b) *Integration of every Inhabitant and Region to Modernity*
c) *Integral and Participative Human Development*

The regional development strategy for 2000–2006 includes a set of programmes and strategic projects that will have a significant impact on socio-economic and cultural development. Some of the main initiatives are:

a) *Integrated Port System*: Consists of improving the transportation network which includes border passages with Argentina and interior and port access roads in order to increase the trade exchange, especially with Argentina, MERCOSUR and the Asian-Pacific markets, through a national transportation network.
b) *Logistic Platform*. On the Concepción–Talcahuano axis, which is the core of Greater Concepción, the different transportation systems of the VIII region converge: road, railroad, and port and air transportation. This means that Greater Concepción has a geographical potential to offer storage, warehouse and product distribution services. For this to happen, the development of a logistical platform is required. This platform should allow attractive services to be offered to commercialisation or production firms

from MERCOSUR, the Asian-Pacific zone and the west coast of the United States.

c) Tridente Project (Frigate Project): The project is based on an investment plan that improves ASMAR's (the Chilean navy) equipment to increase its operations and boost its export capacity. Urban recovery of the northern bank of the Biobío river. The purpose of this initiative is to improve the fragile social conditions of many families living on the northern bank of the river.
d) Biotechnological Platform. The main idea is to use the region's human resources and institutional capacities in the biotechnological area.

4. Outcomes and evaluation of the strategic planning

The successful application of this strategy should be an important step in the right direction for the urban agglomeration - and for the whole VIII region. It should help to solve major social problems, increase the productivity and qualifications of the labour force, give better opportunities to young people, contribute to reducing economic instability and promote a sense of belonging and identity with the environment.

Public policies and territorial development during the Argentine crisis: the case of Córdoba

Eduardo Reese, Andrea Catenazzi, AYDET

Argentina is a federalist society with three levels of government; the top level is national (or federal) and the other two levels are territorial (provincial and municipal). In total, the federal government is comprised of twenty-four constitutional federated units: twenty-three provinces and one autonomous city (the city of Buenos Aires). The province of Córdoba is divided into twenty-six counties, each of which comprises a variable number of municipalities. The municipality of the city of Córdoba is the only one within the province whose territorial borders coincide with the county to which it belongs (the capital county).

1. Main characteristics of the urban agglomeration

The city of Córdoba had a population of 1,267,774 inhabitants, according to the National Population Census carried out in November 2001. The census shows an important drop in the population's growth rate, which may be associated with two different causes:

a) The economic recession may have reduced the city of Córdoba's attraction as a destination for internal migrants.
b) Some municipalities close to the city have absorbed a portion of the migrant population, thereby advancing the metropolisation process.

The current configuration is the result of a complex set of economic, political, social, geographical and cultural factors. Its material growth and the specific features of its location led to the formation of a network of satellite cities that have become the service centre of a vast region in the country, covering an area within a radius of approximately 50 km. However, in the case of Córdoba, it is necessary to define several levels of agglomerations that are located within the territory:

a The first level is comprised of the core city of Córdoba, and the bordering urbanised areas that, in Colón County, have a certain degree physical-space continuity with Córdoba. This first level, or Greater Córdoba, has an approximate area of 750 km^2 and a population of approximately 1.37 million inhabitants.
b The second includes Greater Córdoba and a set of surrounding cities and small towns within approximately 35 km. These cities and towns are functionally interdependent with the capital city. This second level, which comprises an approximate area of 1,500 km^2 and has a population of 1.5 million inhabitants, is known as the Metropolitan Area.
c The third level is a vaster geographical unit that comprises cities and towns located up to approximately 50 km from the core city. These cities are closely related to the dynamics of the main city on a daily basis. This last level, which comprises an area of approximately 2,500 km^2, is known as the Metropolitan Zone, and has a population of around 1.7 million inhabitants.

The construction process and infrastructure developed over the past 45 years accompanied its consolidation as a regional industrial and service centre and was in line with Argentina's process of urban expansion: a low population density in the peripheries and a high concentration in the centre. However, the small and medium-sized municipalities comprising Greater Córdoba and the metropolitan area have had the highest population growth levels in the province, whereas the city of Córdoba has one of the lowest rates.

Located in the middle of the country, Córdoba is the main urban agglomeration of the central, north and northwest areas of the country. Within this multi-provincial region of different geographical and economic characteristics, the city is the nucleus for trade and enterprise, for roads and communications, for the provision of specialised services and for its university. Córdoba also plays a significant role within MERCOSUR. The economic integration process is centred on an area comprising São Paulo, Rio de Janeiro, Buenos Aires and Santiago de Chile, crossing Argentina from east to west.

2. Diagnosis of the situation

The factor shared by all the metropolitan agglomeration (MA) processes in Argentina is the noteworthy absence of a public player committed to the specific needs of the MA. Thus, MA management is carried out through a structure made up of governmental agencies at different levels (federal, provincial, municipal and inter-jurisdictional) and all acting at the same time, without the required coordination.

Below, we summarise the main aspects that have characterised agglomerations during the last few years:

- Córdoba consolidated its role as significant regional centre due to a favourable growth period until 1999-2000. Its diversified economy is supported by an important institutional network and by worker training. The local university system plays a significant role in this regard. In addition, it is the second largest financial centre in the country, with high levels in healthcare, justice and education.
- Córdoba is a city undergoing a rapid metropolisation process, together with nearly thirty small and medium-sized suburban towns, with which it maintains strong ties.
- The services sector has been consolidated as the most dynamic within Córdoba's economy. Trade has undergone significant changes over the past 12 years, characterised by the centralisation of points of sale, geographical dispersion, changes in lines of businesses, the decreasing importance of retail, the establishment of new distribution channels, etc.
- During the past few years, a significant number of software companies have opened offices in Córdoba.
- It is expected to become an important regional telecommunications centre.

- Local companies have low levels of competitiveness. Little importance has been given to the training of human resources and to the external market. However, Córdoba boasts excellent natural and human resources, which could produce a significant upturn in the future.
- The urban structure is still characterised by the urban-metropolitan and regional relationships and the city's growth pattern, which stresses its centralised characteristics. This structure has a deeply negative impact on the urban-environmental quality of the central area.
- In relation to urban utilities, the city's main weaknesses are sewage and transportation services. Regarding transportation, the crisis in mass public service is generating serious problems for the efficiency and productivity of the urban system.
- In spite of the fact that Córdoba is a city with a strong university and academic base, the scientific-technological research field is experiencing several problems, including:
  - Lack of awareness regarding the importance of technological developments.
  - Role to be played by the government in the technological field has yet to be defined.
  - Science and technology institutions are not in tune with the needs of businesses.

There are currently many policies to foster technology, but they are not well-coordinated and have rarely been promoted. These drawbacks help explain the city's degree of technological backwardness, which directly affects the productivity of the companies in Córdoba. Therefore, the main variables are expected to change as follows:

- The economy of Córdoba will recover at a faster pace than many Argentine cities and provinces, mainly due to its myriad natural resources, its favourable geographical location, its diverse economic activities, its relatively higher level of education and training of human resources – resulting from its educational tradition and the initiatives of local companies - and a relatively superior infrastructure.

- The metal-mechanics industry will continue contributing the most in financial terms. However, there are several sectors that will potentially develop at higher levels over the next few years; these sectors include engineering services, machinery and equipment for the food industry, medical devices and equipment, tourism, home and office furniture, construction materials, the aeronautical industry, and information and communication technologies.
- The information provided by the local Commodities Exchange reveals entrepreneurs' interest in carrying out new regional strategies involving the Argentine provinces of Córdoba, Entre Ríos and Santa Fe in order to make these three provinces into an economic alliance that can compete with the historically important Metropolitan Region of Buenos Aires.

3. Origin and methodology of the new metropolitan growth strategy

The deterioration of public institutions and the decrease of public revenue has drastically changed the relationship between the central administration and local governments. The increasing diversity of social needs and the public's demands were significant factors, as was the need to establish new relationships between public and private players. Decentralisation emerged as a consequence of all these factors.

State modernisation plans have emphasised a new role for municipal governments, transferring power and authority to the local administrations so that they can promote social and economic development more actively in their territories. This entails a new role for cities in seeking the elimination of commercial barriers and a clear focus on competitiveness. Local development goes hand in hand with the accelerated process of globalisation in the economy, i.e. the transfer of information, technology, finance, goods and labour resulting from globalisation strengthens the importance of urban governments. Global pressures have an impact on cities and suburbs, rather than on countries.

The strategic plan for the city of Córdoba (CSP) was formulated in 1993 in order to implement important changes in the city's planning model. The plan combined different aspects: local characteristics, the expectations and perspectives of different players, a logical operating structure, simple planning instruments and techniques and limited resources.

The four strategic goals involved:
- Seeking a functionally-balanced city, integrated in terms of space, polycentric and with the ability to coordinate its metropolitan area.
- Promoting Córdoba as a competitive city, coordinating universities from the centre, north and west of the country, in an economy integrated with MERCOSUR.
- Creating the environmental and social conditions required to transform Córdoba into one of the most attractive and environmentally friendly metropolises in the Southern Cone.
- Fostering an equal-opportunity approach and social integration, implementing actions to reduce poverty.

4. Outcomes and evaluation of the strategic planning

The main CSP projects are:
1. *Deconcentration/Decentralisation*: This project comprised 9 implementation groups at community participation centres (CPC) located on the periphery. The following measures were adopted: the reorientation of investment towards the periphery, the gradual decentralisation of urban activities, the improvement of public spaces, the consolidation of commercial areas in small districts, the strengthening of local identities, new participation dynamics within districts, and equality in terms of the distribution of costs and benefits derived from the urban development process. However, CPSs competed with the traditional decision-making procedures. Due to the sudden economic crisis, the urban periphery revitalisation could not be achieved.
2. *The commitment to recovering the central area.* Improvement of pedestrian precincts, the restoration of historic buildings, an emphasis on cultural values and tourism, among others.
3. *Improvement of environmental quality and public areas.* Improvement of public areas, creation of new green areas, recovery of the Suquía River, promotion of environmental protection activities.

4. *Changes in highway structure and in the transportation system.* Improvement of regional access roads to contribute to reducing traffic and costs of transportation.
5. *Public-private coordination policies aimed at the city's economic development.* Creation of dynamic tools to implement a set of projects geared at increasing employment levels and multiplying and diversifying the productive base of the city.

An evaluation of the past 10 years reveals that, although actions related to the development of economies of agglomeration have been continuous and have attained their goals, actions aimed at improving social equality have been unsuccessful. The following aspects may explain the above-mentioned results:

- One of the main problems faced by local governments was how to improve the local response to turbulent market changes, transformations in the productive sector and the deterioration of living and employment conditions.
- The municipal government emerged as a solo and inexperienced player in tasks such as offering support to small and medium-sized companies and developing employment and the urban economy.
- Problems in the municipal government until 1999 hindered an in-depth study of the CPS strategies – there were contradictory views regarding municipal organisation, which brought about differences in the plan development. The lack of homogeneous political visions was common, as was the frequent tension dominating any complex decision-making process.
- The CPS implemented contradictory measures due to social requirements and to the increasing duality of Argentine society.
- Many times, municipal responsibility fell to the commissions, which addressed problems in a highly limited way, since only governmental political needs were considered.
- From the very beginning, priority was placed on the creation of multiple spaces for consensus, comprising a great number of local institutions. However, the participation of the various social players has remained uneven. This is mainly due to the fact that sectoral interests clashed with social interest, as well as the lack of organisation within certain social sectors.

The economic role of cities. Case study: Guadalajara. Jalisco

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1. Main characteristics of the urban agglomeration

Guadalajara is the capital of the state of Jalisco. It is the second most densely populated city in Mexico. Since the sixties and particularly in the last decade, Guadalajara has become a great metropolitan region, especially in terms of its economic and social dynamic. This is due in part to its geographic location, high technology sectors, communications industry and real estate market. Greater Guadalajara (ZMG) includes eight municipalities (Guadalajara, Zapopan, Tlaquepaque, Tonala, Tlajomulco, El Salto, Juanacatlan and Ixlahuacan de los Membrillos). With more than 4 million inhabitants, the ZMG has experienced decreasing demographic growth, from 6 percent 40 years ago to less than 2.5 percent at present. Two particular and contradictory features characterise this area: the provision of services at a rate above the national average, and irregular and polarised urban growth.

In 1996, a process of technical evaluation began, and institutional consensus was created to establish a new functional unit that would facilitate projects and activities geared towards the sustainable development of each region. By establishing regions as a new functional unit, the following characteristics were considered: geographic, productive, social and cultural homogeneity; the hydrological and agricultural basins of each locality; the existing communications and basic provision of services and finally, the location criteria for administrative public institutions in order to provide decentralised services.

The ZMG has a permanent relationship with small, medium and large companies, and its economic activity is based on various industrial sectors such as automobiles, plastics, food and beverages, tobacco, pharmaceuticals, restaurants and hotels, high technology and telecommunications. The service sector has recently gained prominence since it concentrates more than half of the economically active population and provides employment opportunities to professionals and technicians, as do the food and beverages sector and the production and assembly of information processing devices. It is important to note that the average income in Jalisco is below the national average.

The ZMG plays a significant role in the globalised economy and has commercial relations with countries from the European Union, Asia and Latin America. It is a node within the network economy and has attracted companies from the electronics and component assembly sectors. Unfortunately, the city failed to promote activities with higher added value, such as research and development.

2. Diagnosis of the situation

The signing of the North American Free Trade Agreement has paved the way for economic transformation in Mexico involving different productive sectors and industrial regions. Guadalajara has attracted companies from the manufacturing sector and the electronics assembly industry, increasing economic ties with the United States. This led to the production of materials for the electronics and software industries (particularly in the region of El Salto). The service and tourism sectors have also prospered, while agriculture producers have incorporated new technologies and are focused on exports on the coast and in the central region. Since 1995, direct foreign investment in the region has been one of the main drives for the economy of the ZMG. Almost 300 companies have opened offices in the state of Jalisco. Around 250 of them correspond to the commercial sector and 145 to the service sector, including financial services

The consolidation of the international communications corridor has placed Guadalajara within a continental network of metropolises extending from Los Altos up to the southern area, fostering port activities in Manzanillo. Due to the preeminence of the region in the electronic and telecommunications sector, the state of Jalisco has developed 12 industrial parks along the Lagos de Moreno-Guadalajara-San Luis Potosi highway; some of these industrial parks are currently being designed, others are in construction and still others are fully operational. Some industrial parks are located in the following terrestrial mobility corridor: El Salto-Ocotlan-La Barca and Tala-Ameca. Given that these industries may require local headquarters, which will probably be located in the Metropolitan Area, the provision of additional administrative and logistic centres must be considered.

Part of the industrial growth strategy for Greater Guadalajara is the construction of 19 industrial parks. We may conclude that land will continually be available for the construction of industrial parks. Private and public economic promotion institutions estimate that the capacity for greater industrial growth in the region has not yet been fully exploited. It is important to note that economic promotion strategies continue to favour productive decentralisation while, at the same time, promoting the productive growth of the region itself. It is suggested that, in quantitative and qualitative terms, other regions will need to increase their industrial park supply, basing their competitive strategy on the availability of natural and human resources, adequate infrastructure and services, as well as additional value-added products.

The quality of the present industrial parks in Greater Guadalajara is questionable due to the limited water and regional service provision and the fact that the parks lack the personnel required to maintain steady industrial growth. Guadalajara, one of the central communications poles in the country, has an important fibre optic infrastructure. This local fibre optic cable is connected to a national and international network covering Mexico City, Monterrey and Tijuana, as well as Houston and California.

One of the main weaknesses of the region is education. In 1997, the education level based on the regional municipal average was 5.6 years per person; the state average was 7.1 years. However, the regional education average rose to 7.4 years, exceeding the state average by 3 tenths of a percentage (in the year 2000, the state average increased to 7.3 years). The educational municipal average within the region evidences the disparities among the municipalities.

Water is the main infrastructure-related problem in the metropolitan area. Nonetheless, there is a lack of serious research on the real availability of underground and surface water in the region. As a result of this situation, the state government and social participation agencies such as the State Council for Urban Development have summoned specialists, private businesses and citizens to perform an analysis aimed at identifying alternative solutions. The analysts will evaluate possible solutions and establish their technical viability, potential for financial profit and their environmental and social impact.

3. Origin and methodology of the new metropolitan growth strategy

The challenges related to drafting an adequate metropolitan growth strategy are well-known. For several years now, authorities have been promoting municipal decentralisation, a strategy included in the National Development Plan, which would contribute to ensuring complete autonomy, control, regulation and administration of public services by the municipalities. It is important to note that the administration of some public services such as education and health is still in the process of decentralisation. Today, the problem of managing local services remains, particularly regarding services that lack clear territorial boundaries such as water, public safety as well as highway and traffic administration.

The state law for urban development contemplates the creation of a Metropolitan Council that will fall under the state's executive power. The council's priority tasks will include social consultation as well as governmental coordination and consensus building. The council is responsible for the development of the "Plan de Ordenamiento de la Zona Conurbada", the plan needed to regulate the growth of Greater Guadalajara. The municipalities in Greater Guadalajara have agreements on water, sewage and public transport. There were once agreements on public safety, but they have been discarded. The state government coordinates traffic and public transport.

Today, there is no metropolitan governmental structure or organism that can coordinate the administrative efforts of the different municipalities. The Council has restricted itself to the management of public works and projects on a metropolitan scale. It does not seem capable of regulating the city's development through the design of public policies for urban development.

The Metropolitan Council's priority task is to promote agreements on the following issues:

1. Ordering and regulating urban growth
2. Designing strategies to operate and administrate efficiently the provision of public services
3. Establishing the most efficient method to carry out the construction of important infrastructure and equipment projects
4. Coordinating transport services and highway and traffic management
5. Resolving in the Metropolitan Area the management of solid waste
6. Curtailing the process of atmospheric contamination
7. Ensuring public safety
8. Other issues that might be considered necessary or that may be proposed to the Council

The Metropolitan council consists of eight municipalities in Greater Guadalajara: Guadalajara, Zapopan, Tonala, Tlaquepaque, Tlajomulco de Zuñiga, el Salto, Juanacatlan and Ixtlahuacan del los Membrillos

4. Outcomes and evaluation of the strategic planning

The State Development Plan (PEDJ) 2001-2007 has made significant progress in the construction of consensus about challenges and vision; in other words, a strategic guide for the region and the metropolis.

In the process of consensus building on the PEDJ's strategic vision, three contributions are key due to their technical rigour and the richness of their proposals. One of these is "Jalisco in the Future: Building the Future, 1999-2005," by the Advisory Council. Under the coordination of the University of Guadalajara, this work involved the most representative and recognised organisations, institutions and specialists coordinated by the University of Guadalajara. In this process, objectives and strategic guidelines as well as the programme and other topics were reviewed and incorporated into the PEDJ. The second document is the "Plan: Aggressive, Risky, Ambitious and Sustainable Goals" a sub-product of "Jalisco in the Future," published under the title "Let's Build a Solid Future," promoted by the entrepreneurial congress of Jalisco. The plans were designed for different fields: social, political and economic.

The final contribution is the diagnosis and perspectives documented by the Instituto Technologico y de Estudios Superiores de Occidente (ITESO). This document provided the strategic vision for the management of Greater Guadalajara.

The São Paulo metropolitan area: size, competitiveness and the future

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1. Main characteristics of the urban agglomeration

The São Paulo Metropolitan Area (SPMA) is the largest urban concentration in South America. There are regions located near São Paulo, such as Camoinas and Santos, which are also considered metropolitan areas of the state, while cities such as Jundiai, Sorocaba and San José dos Campos are big cities near São Paulo that are considered urban agglomerations undergoing the metropolisation process. The total population of all these areas, including the population of the capital city (known as the "Extended Metropolitan Complex") exceeds 29 million, that is, slightly over 70% of the entire population of the state.

Considering the short distances between São Paulo, Rio de Janeiro, Belo Horizonte and Curitiba, these cities constitute one large conglomeration in terms of population. Moreover, it also constitutes a very large concentration of economic activities and income in the country. The southeast region, including the states of São Paulo, Rio de Janeiro, Minas Gerais and Espírito Santo, accounted for 58% of the GDP in 2000; the state of São Paulo alone was responsible for 34% of the GDP.

The metropolitan area showed higher growth rates in the 60s and 70s, but since 1980, it has grown at a slower pace than the rest of the state. The city of São Paulo grew faster than the metropolitan region as a whole until 1970, but since then presented slower growth rates than the metropolitan area and, of course, the state. Until the eighties, SPMA had high demographic growth rates, approximately 3.5%. However, this indicator was below 2% for the year 2000, which indicates the demographic growth of other neighbouring cities.

The SPMA authority was created in 1970 and it comprises 38 local administrations. Since then, it has experienced hardly any changes. According to the Brazilian Institute for Geography and Statistics (IBGE), Sao Paulo is the national metropolis. Many studies highlight the changes to its territorial, economic and social structure. Due to its system of cities, São Paulo can be promoted as the main urban agglomeration. As modern urban theory emphasises, size matters. All models stressing agglomerative factors suggest that a certain degree of agglomeration is needed for certain activities to develop in a city. However, excessive agglomeration can be an important negative factor. Therefore, in this section some negative aspects of SPMA will be explored, such as traffic, crime, and the cost of living. São Paulo is currently facing de-agglomeration due to high land and housing prices, forcing the population to live in the suburbs. However, these people must commute to the central area in search of better salaries and employment opportunities. The cities on the periphery play a key role as "dormitory" cities (at least four cities), accommodating the low-income population.

It has been mentioned before that the state of São Paulo accounts for 34% of the national GDP. For manufacturing, this share reaches over 50%. The metropolitan area accounts for 80% of the revenue from the property tax on vehicles in the state, a tax proportional to the value of the fleet; the city of São Paulo alone is responsible for 53%. The capital city holds 55% of total bank deposits in the state; the metropolitan area, 83%. The state of São Paulo accounts for 31.1% of national employment in manufacturing, 33.3% in commerce, and 35.1% in services. SPMA is responsible for 53.0% of the state's total employment in manufacturing, 63.5% in commerce, and 52% in services. Manufacturing accounts for almost one-fourth of employment in the region, with 20.3% in São Paulo City. Commerce and services, as expected, account for over 50% of employment; the latter is the largest sector in terms of employment. The industrial system in the industrial cities of SPMA presents low endogenous potential for technological innovation and modernisation, since no importance was found in terms of universities, research centres etc. However, manufacturing in developing countries such as Brazil is constituted mainly of "Fordist" plants, for which innovation consists more of adopting, or even copying, technology and ideas.

Dispersion in the region brings about high infrastructure and urban services costs. Indicators related to the spatial-territorial configuration show a high level of inequality, not only in spatial terms but also regarding income, well-being, infrastructure, education and health services, which limits access to better urban services.

The profits of the metropolitan region as a whole were 2% above the state average, with labour cost levels 15% above average. Labour costs are clearly a problem in this sector for the city of São Paulo; at 32% above the state average, such costs lead to below-average profitability. The other parts of the metropolitan area present comparatively low labour costs, and only the dormitory cities present above-average profitability. The loose classification criteria for grouping cities might partially explain this result. Again, the remaining non-metropolitan cities are all below average in terms of profitability, indicating that the metropolitan area as a whole is still competitive, in spite of the varying levels among its different cities.

2. Diagnosis of the situation

Brazil is a country with great economic disparity and SPMA is no exception, although economic inequality is not as high as in other metropolitan areas in the country. However, recently inequality has grown faster in SPMA than in other metropolitan areas. Between 1977 and 1988, all income brackets experienced negative income growth rates, but the four lower deciles presented even lower rates. This period is known in Brazil as the "lost decade," due to problems including high inflation rates, stabilisation plans and their failures, etc. For the second period, 1988-1999, only the four higher deciles had positive income growth rates, with the poorer groups experiencing further decreases in their income.

The scenario is one of decreasing income for the average citizen, due to macroeconomic conditions and increasing income inequality. Considering inequality and low average income levels, quality of life for all population groups has been damaged. Poor people tend to spend more time on transportation and rich people spend more income on security, because economic inequality affects crime rates. This imposes limitations on financing necessary public services for both poor and rich people, a subject to be dealt with later on.

"Dormitory" cities have rapid demographic growth, although their per capita income levels are far from those of the central areas. In addition, these cities have low levels of human development and high levels of inequality. People living on the outskirts are also forced to travel longer distances, incurring higher opportunity costs and wasting more time. This affects their purchasing power, reducing the amount of money they can spend on other goods and therefore deteriorating their quality of life. The congestion in the transportation system evidences the need for higher investments in order to eliminate bottlenecks. The underground system has a limited number of lines and stations, which doubles or triples the city traffic. Most highways converge in São Paulo. Although the road network is currently being improved, it is still deficient due to limited resources, bringing about important environmental restrictions.

3. Origin and methodology of the new metropolitan growth strategy

Strategic planning has taken into consideration the inequalities in both spatial and individual terms in the region. Its main purpose is to foster companies' competitiveness in order to promote the manufacturing and construction industries and the service sector. This objective necessarily requires market expansion.

The strategic planning includes the following basic items:

- Seeking mechanisms to solve institutional difficulties and forging agreements among different players and governmental levels (federal, state, metropolitan and local governments).
- Considering the revenues from the private sector (people or companies) that could be generated from permits to operate in the area.

- Considering the autonomy of the different districts - especially regarding investments and tax revenues, which should be approved by the corresponding municipal authorities (mayor, municipal congress).
- An important agreement was reached by the state, the city and the federal government to share the construction costs of an important transportation corridor. Ultimately, the city's government ended up being the "free rider".
- Alternatives stem from restructuring the agreements between local administrations and the private sector, civil society and civil organisations.
- The most effective negotiations result from more participative projects. Attempts should be made to avoid contradictions like the one that occurred in the transportation sector between Rodovia Castelo Branco and Consórcio Grande ABC.
- Finally, public benefits and services need to extend to broader areas, increasing investments to meet the minimum standards in the least developed areas.

4. Outcomes and evaluation of the strategic planning

Results reveal that today the SPMA is less competitive in the manufacturing and construction sectors. The tertiary sector has remained more dynamic, and this trend is expected to increase in the future. Spatial inequality among the SPMA cities is closely related to the population's location. People with higher income levels access better urban services and political power. The government plays a central role in this. There is limited negotiation capacity between the different players and institutions; individual agents should pay higher taxes than the ones they already pay in order to improve the budgetary crisis of the public sector. Given this scenario, the state can participate in different ways. The city administrations have their own budgets and can decide on the best way to manage them, since there is a metropolitan authority in charge of coordinating different actions. However, no positive results have been obtained so far, due to serious coordination difficulties and conflicts of interests.

The challenge remains in institutional arena. Success will come if the private sector is appropriately involved as part of the solution to the area's problems.

This can come through the traditional political system, with tax increases at all levels, or through a participatory arrangement, in which high income people will get involved and increase their contributions to the solution. Both alternatives have good features as well as severe limitations. Increasing government size seems out of the question nowadays, but it would probably be the fastest and easiest way of getting things done. Increasing public awareness would take more time and would probably lead to more modest results, but seems to be the only way possible in the present cultural, institutional and political situation. In the meantime, the region is left to live with its contrasts and inefficiencies.

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