OECD Territorial Reviews Mexico City



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Mexico City



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Foreword

The globalisation of trade and economic activity is increasingly testing the ability of regional economies to adapt and exploit or maintain their competitive edge. There is a tendency for performance gaps to widen between regions, and the cost of maintaining cohesion is increasing. On the other hand, rapid technological change, extended markets and greater use of knowledge are offering new opportunities for local and regional development but demand further investment from enterprises, reorganisation of labour and production, skills upgrading and improvements in the local environment.

All these trends are leading public authorities to rethink their policies and strategies. The role of policies aimed at improving the competitiveness of regions by promoting the valorisation and use of endogenous resources and at capturing trade and additional economic activities has been strengthened. At the same time central governments are no longer the sole provider of territorial policy (development policies). The vertical distribution of power between the different tiers of government needs to be reassessed as well as the decentralisation of fiscal resources in order to better respond to the expectations of the public and improve policy efficiency.

The Territorial Development Policy Committee (TDPC) was created at the beginning of 1999 to provide governments with a forum for discussing the above issues. Within this framework, the TDPC has adopted a programme of work that puts its main focus on reviewing (assessing) Member countries' territorial policies and on evaluating their impact at regional level. The objectives of Territorial reviews are: a) identify the nature and scale of territorial challenges using a common analytical framework; b) assist governments in the assessment and improvement of their territorial policy, using comparative policy analysis; c) assess the distribution of competencies and resources among the different levels of governments; and d) identify and disseminate information on best practices regarding territorial policy.

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Assessment and Recommendations

Mexico City's spectacular growth into one of the world's largest metropolitan regions is giving way to new development dynamics.

> Mexico City has experienced an extraordinary demographic expansion during the period 1950-1980. In 1950, the city's population was 2.9 million; by 1970 it had grown to 9.3 million, expanding rapidly into the State of Mexico. During the 1970s, and despite several programmes to promote urban de-concentration, the population increased by more than 50%, and the outward sprawl of the city intensified. The Metropolitan Area of Mexico City (MAMC) now has a population of approximately 18.4 million people; it comprises 16 delegaciones belonging to the Federal District (FD), 58 municipalities from the State of Mexico and one from Hidalgo. The period of uninterrupted growth and expansion is now giving way to significant shifts in the dynamics shaping the structure of the city. While the population is still increasing, the rate has slowed and is now below that of the nation as a whole. Birth rates, particularly in the Federal District, are falling steadily, and significant processes of ageing are now being observed. Within the metropolitan areas, old industrial core centres are re-structuring and parts of the population are re-locating to the peripheral municipalities of the State of Mexico that continue to grow at an average of 1.6% per year between 1990-2000. The share of the FD in the GDP of the MAMC decreased from 80% in 1970 down to 71% in 2000. As a result of these trends, Mexico City has developed into a metropolitan region with a complex structure and not simply a wealthy, serviced core and poor, under-serviced periphery. There is increasing differentiation between accessible, safe, middle class municipalities and poorer, but often geographically close, municipalities, and suburbs may evolve from residential zones serving urban cores to multifunctional industrial and commercial zones housing the majority of enterprises and workers.

Population growth and urban expansion have been driven by the process of industrialisation which is now in turn affected by decreasing location advantages.

> The processes of concentration that have driven the MAMC's expansion for over half a century were supported by its location and by agglomeration economies. This meant that the larger the regional market, the more profitable it was for enterprises to locate there, creating jobs that in turn attracted in migrants and increased further the regional market relative to smaller and poorer markets in the rest of the country. Using local inputs, firms tended to locate close to both national suppliers and consumers in order to exploit backward and forward linkages. The same process took place in other large cities across the OECD where restrictions on trade and relatively high transport costs protected domestic producers from foreign competition and encouraged a focus on domestic market dynamics as the determinants of the location of production and, in turn, of urban growth. The gradual opening of the Mexican economy as well as the economic effects of the 1982 and 1995 financial crises modified the factors determining competitiveness. Imports exposed manufacturing firms to new competition and up-graded infrastructures near the US borders increased the advantages to be located in the North. In 1980, the MAMC accounted for 48% of total employment in manufacturing. By June 2000, this figure had fallen to 20.5% and has since decreased to only 18% of the total labour force in March 2003.

While the focus of the regional economy is switching from the manufacturing to the tertiary sector, low average productivity remains an issue...

> Overall, the MAMC, compared with the other metropolitan regions across OECD countries, has a low GDP per capita, mainly due to low average productivity, which is 48% below the OECD average for metro areas, to the weaknesses of the labour market and to overall difficult framework conditions linked with poverty and low levels of infrastructure and basic services. Only а limited number of industrial branches (pharmaceutical. automotive. printing and publishing). characterized by high capital intensity, higher inflows of foreign direct investment, and trans-national operations have been responsible for some sector-specific growth and productivity gains. However, these examples of good performance do not appear to be spreading across the metropolitan

area where significantly weak levels of productivity prevail due to low educational attainment and investment in human capital development as well as to insufficient links between research and industry to facilitate and diffuse innovation. Overall, the most defining characteristics of the metropolitan economy are the consolidation of the tertiary sector as the driving force of the regional economy (in 2003, it was estimated that 75% of the workforce was in the service sector), a decline of manufacturing, a reduced capacity of large firms to generate employment and to compete successfully in international markets, and the increasing reliance on micro and small firms in both the formal and informal sectors. During the past three years, the percentage of the active population employed in micro-firms passed from 38.8% to 42%, of which only half are firms with an established workshop (the rest being home- or street-based). Additional analysis serves to support the points expressed herein that these are firms frequently associated with lower productivity and lower levels of investment. Furthermore, they capture the smallest share of financial credit and invest the least in formal training and technology.

...and the labour market is confronted with the persistence of a large informal sector.

> The transformation of the economy has had important consequences in the local labour market. Although the decline in manufacturing has been accompanied by an increase in service sector employment, the ability of the formal labour market to absorb former factory workers is limited. The gap between labour supply and demand has led to the development of informal activities, rather than open unemployment. It is estimated that around one-third of all employment is informal. And if informal labour is considered in a wider sense, to include also people employed by enterprises or households, but having no work contract and no payment, the figure rises to almost half of total employment. The large size of the informal labour market has a high social cost for the Mexico City region. Although informal employment is not the prime explanatory factor in poverty it is closely linked with low levels of education and implies little access to adult education, on-the-job training, and other human capital development mechanisms.

The economic hardship in the metropolitan region is developing an increasingly strong spatial concentration, with the emergence of areas of relative deprivation...

Overall, the changes in the economy, exacerbated by shocks at the national level, have reduced significantly the spending power of residents of the metropolitan region with respect to national averages, aggravating the extent of relative urban deprivation. Although the MAMC is relatively wealthy in aggregate terms, the region includes a large number of poor individuals, about 60% of the metropolitan population. The cost burden for all levels of government is immense. Particularly worrying is the trend towards spatial concentration of increasingly impoverished segments of the population. Regardless of the methods used to measure the extent of poverty in the MAMC, all estimates support the idea that most of the people living in poverty are located outside the Federal District generally in settlements of recent construction situated in the municipalities of the States of Mexico and Hidalgo. For example, poverty is some 20% higher outside of the Federal District, however at an incredible 50% in the Federal District.

...where the concentration of low and very-low income residents coupled by poor access to key services and infrastructure raises serious policy challenges...

The level of spatial concentration of deprivation is a serious issue for the metropolitan region and is likely to become more pronounced, at least in the short term. Immigration from the FD to the State of Mexico is characterized by movements of the middle-low, low and very low income population, mainly as a result of differences in the cost of living between the FD and the State of Mexico, and, in particular, recent sharp increases in property prices in the FD compared with the relative abundance of dwellings in Mexico. Problems relating to the ongoing concentration of low income residents in particular parts of the metropolitan region are intimately linked to issues of access to services and inadequate infrastructure. Overall, as with other indicators, the MAMC is endowed with the highest levels of access to basic services (water supply, electricity and drainage) of all Mexican cities, with a very high proportion of households having access to these services. However, while for some *delegaciones* of the FD problems in basic infrastructure are non-existent, several municipalities in the State of Mexico

face levels of access to basic infrastructure below the national average. The inadequate transport infrastructure is representative of the problems that urban development without systematic integration of spatial planning and transportation system development can generate. Around 83% of the over 4 million intra-metropolitan trips per day are undertaken in low capacity vehicles and commuting distances and travel times have increased significantly in the last decade further excluding the most disadvantaged areas.

...as it is the case for health care, education services, as well as for security levels.

> With respect to health care, despite the growth of hospital and health-services in peripheral areas over the past two decades, there is still insufficient capacity in many settlements, leading to poor health outcomes and saturation of the FD facilities. Similarly, while education levels in the MAMC have considerably improved over the last two decades, important differences exist within the MAMC region, with disparities increasing at higher educational levels. While all *delegaciones* in the FD possess schools from primary to high school, several municipalities in the State of Mexico lack the sufficient number of secondary and high schools. Nonetheless, data for 2000 suggests that there has been some positive evolution in the stock and distribution of "human capital" in the MAMC. Within an overall positive trend in the numbers of people with high levels of education and in addition to strong improvements in the most favoured *delegaciones* of the FD, several of the best performers have been municipalities of the State of Mexico, many of them belonging to the low-income group. A main trend of poverty in the MAMC is the concentration in informal settlements characterized by low security levels. The problem of security is not limited to such places but affects many other parts of the metropolitan area. This represents a major policy challenge because of its impact on the quality of life of the MAMC's inhabitants and also on the image of the area affecting its capacity to attract and retain investment and tourism.

Despite such weaknesses the metropolitan area possesses relevant competitive advantages and unused potentials. The large flow of FDI and the concentration of corporate headquarters are some of the strengths of the MAMC...

> If on the one hand, important pillars of Mexico City's economy have been eroded and are unlikely to be rebuilt, on the other hand, there are sectors and activities in which competitive advantages can be exploited and resources on which development can be built. Since 1994, the MAMC has concentrated an average of 60% of the total FDI flowing into Mexico. Although it is difficult to assess the exact proportion of this capital that is actually invested in the MAMC, it is clear that the region retains a strong headquarter function for productive sites established in the region and in other parts of the country. The MAMC, or at least nine of its delegaciones and Municipalities, have consolidated as the major economic decision centre in Mexico. This agglomerative trend has not been uniform during the past decades representing more rupture than continuity with the former model of industrial concentration characteristic of the period of import-substitution. In 1982, more than half of the 500 major companies' corporate headquarters operated within the MAMC. The crisis of the local economy during the 1980s drove away many leading enterprises. However, by 1998 there was a resurgence and the latest figures available show that during 2002, 340 of the major 500 firms operated in the MAMC.

...together with the high level of producer services, the concentration of education and research facilities...

> Mexico City is frequently included in the "World City" category and is considered the only Latin American city with a "major global services centre". Producer services, in particular those defined as advanced services (accounting, legal, finance, advertising, distribution, communications), have experienced dynamic growth over the past few years. In terms of output, these sectors have consolidated as the drivers of the MAMC economy. The high specificity of advanced services, the availability of skilled work force coming from the local notable universities, and the concentration of their main costumers provides these industries with strong incentives to agglomerate in Mexico City rather than elsewhere in Mexico. During the 1990s, advanced services in the MAMC expanded in

comparison to US-bordering states, despite the latter's rapid industrialisation and increasing rates of FDI. In 2000, the MAMC accounted for close to 36% of the national total in "finance, insurance, and real estate" services. In a similar trend, employment in the sub-sector has increased to 47.8% of the national share. Overall, the financial sector, which represented only 10% of the MAMC's GDP in 1970; presently accounts for 23% of the MAMC economy.

... and the richness of the local historical and cultural heritage.

The potential for growth of the metropolitan tourism industry should not be overlooked. The Historical Downtown of Mexico City (created by Presidential Decree in 1980) and other more peripheral historical districts include around 1 500 sites registered in the catalogue of the INAH and the area is recognized in UNESCO's World Cultural Heritage list. Tourism plays a role in the MAMC's economy in terms of employment and economic output, but there is concern that the cultural and historical assets of the city are not being sufficiently exploited. Visitors stay for short periods in the metropolitan region and it is assumed that they do not make the most of the region's range of amenities. The obstacles facing tourism are the widely-held perception of insecurity, especially in the central delegations where the principal attractions are located; the poor state of preservation of several important monuments, worsened by the continuing presence of informal vendors; the poor integration of the public transport systems and the perception, despite relevant improvements, of high pollution levels.

Three areas stand out as priorities for improving the competitiveness of the region as a whole.

> On the basis of the assessment of the economic and social challenges facing the region, three areas can be identified for which policy action could improve competitiveness and have a positive impact on productivity and employment, with benefits for the region as a whole.

- Business development, focusing on bridging the technology and information gaps affecting small and medium-sized enterprises;
- Human capital development, focusing on bridging the skills gap, in particular ensuring access to training and re-training to improve the functioning of the labour market;

• Urban development, focusing on co-ordinating the different actions currently underway to re-vitalise the historical district of Mexico City, enhancing its potential as a tourist destination and triggering processes of wider urban regeneration.

1) business development focusing on bridging the technology and information gaps affecting small and medium-sized enterprises...

> Close to 98% of all firms in the MAMC are micro, small and medium sized enterprises, a large proportion with obsolete equipment, a weak culture of innovation, and poor access to new technologies. There is a wide technology gap between these firms and the relatively small segment of internationally competitive, export oriented firms in the region. While lack of access to modern equipment is a clear problem, lack of information about production methods and processes also appears to undermine the productivity of individual firms and whole sectors. Strong co-operative production chains, including links between SMEs and larger more competitive firms are hampered by weaknesses in areas such as standardization and quality control. Addressing the technology and information gaps is critical to enabling small industries to achieve higher levels of productivity and reduce polarization of the economy. The challenge for public policy is to reach these firms through a cost-effective enterprise development strategy. The difficulty is that the enterprise base is large and geographically diffused and the firms can be informal or semi-formal and, as such, hard to influence through public policy. Mexico City includes many sectoral concentrations, but few are marked by strong processes of co-operation. Improving the capacity of small businesses to work together to seize common opportunities requires a more focused approach to business development. One such approach that provides effective tools to organise and deliver collective services is the use of cluster policies.

... 2) skills development responding to the new needs of emerging sectors...

As with the enterprise base of the region, the region's stock of human capital is adversely affected by under-investment and low efficiency of current education expenditures. Imperfect matching of labour demand and supply needs to be addressed to ensure that the transition that the region's economy is currently undergoing is not also accompanied by processes of exclusion and further reinforcement of the, already large, informal sector.

Yet, as a result of several related factors - relatively poor coverage and limited access to upper secondary level education and little training options. and labour market structures that do not favour in-service training – the pace of adaptation to new skills demands is low. The challenge for the federal government is how to increase flexibility and reduce rigidities in the labour market while also strengthening the relative attractiveness of the formal sector and avoiding downward pressure on wages. These rigidities effectively reduce the incentives for enterprises to hire and train new employees. In the specific case of Mexico City, the uneven territorial distribution of adult education provision, combined with the sheer size of the metropolitan area, pose additional problems of access to training outside the firm. Over the past few years, workforce development, combining training with decentralised active labour market policies has become a common focus for human capital development in a regional context. The concept is based principally on providing geographically targeted services that address imbalances across a regional labour market. This approach, particularly common in the US, would be an interesting one in the case of Mexico City, as a way of providing more flexibility despite rigidities in the national labour market framework. Evidence from several OECD countries suggests that private or semi-private not-for-profit organisations may have a major impact on labour force skills development activities. Such structures can make the link between strategic economic development planning and more sector or locality specific needs, ensuring that funds from different public and private sources are pooled, or at least co-ordinated, and that an array of mostly bottom up specialised programmes are implemented in target fields and target areas. As this is difficult to do through existing institutions in the Mexico City region, where resources are effectively separated according to administrative boundaries, there is a case for some functions to be undertaken through a cross-jurisdictional body such as the proposed Metropolitan Development Agency. An important innovation would also be greater leverage of private sources of funding for human capital development activities of different kinds.

... and 3) urban regeneration and valorisation of cultural and historical resources.

In spite of many programmes of reconstruction and rehabilitation (especially after the 1985 earthquake that damaged a large part of the city), the Historical Downtown of Mexico City still presents a socio-spatial dynamic characterized by depopulation, physical deterioration and the loss of many of its central functions. The Historical Downtown is of great importance since it is the symbolic centre not only of the metropolis

but also of the country and has an immensely rich cultural, historical and architectonical heritage. At present, there is a project to extend its perimeter to create the "Historical City of Mexico" declaring it as an "area of protected heritage" in the context of the General Law of Urban Development for the Federal District. Given the enormous symbolic and political meaning of this new territorial unity, its constitution could have a significant impact on the recovery of a cultural heritage that belongs to all Mexicans, thus improving the image of Mexico City, including its potential as a tourist location. In this respect the MAMC could draw interesting experience from other historic city centres at the heart of dynamic metropolitan regions across OECD countries where major efforts at the metropolitan level have been channelled to renew and enhance the accessibility of historic patrimony. The common denominator in such experiences is the recognition that physical renovation is not sufficient but that economic and social dynamics have to be "invented" for these areas. The pre-requisites for the regeneration of Mexico City's historical centre, other more peripheral historical districts and archaeological zones are a long-term commitment on the part of the public authorities, the involvement of civil society and the private sector, and a mechanism by which different actors can work together in a dynamic environment. The strategic plan for the area must provide sufficient assurances to the private sector that current legal and regulatory frameworks, as well as levels of public investment, will be respected. At the same time, civil society expects that the public authorities will supervise participation by the private sector and ensure that development follows agreed plans and that decision-making processes are transparent and not bogged down by red tape. All this explains why in most cases a quasi-governmental or not-for-profit agency is given that task of managing the project. In this scenario, the civil society guides the public sector with respect to the desires and aspirations of citizens, the public authorities put in place a regulatory framework and provide incentives, and the private sector reacts to changes in the local market for investment.

Policies to enhance the competitiveness of MAMC should be co-ordinated with poverty alleviation programmes as elements of the same strategy.

> It is apparent from other major cities across the OECD that metro-wide economic growth depends not only on economic interdependencies but also on social cohesion. In other words, areas that are detached from the economy and labour market of the metropolitan region constitute a drag factor that reduces the competitiveness of the region as a whole. For these reasons, economic and social development policies for the MAMC should

be devised and implemented as elements of a single coherent strategy. However, social policies in the Mexico City region face the same challenges found in many other domains; *i.e.*, that the problems are metropolitan-wide, but the solutions are often top-down and organised according to political jurisdictions. Recognizing the need to foster the fight against urban poverty, the Habitat programme, started in 2003 and now working in 60 cities, represents an important positive step towards more co-ordinated social policy in urban areas. Building on the past experiences focusing on the development of poverty alleviation projects, SEDESOL's Habitat introduces an innovative approach in that it seeks to articulate the objectives of social policies with those of territorial and urban development in a framework that includes all regional and local government actors and joint funding responsibilities between federal, state and municipal governments, as well as private investors.

The increasing interdependence of metropolitan challenges compels consideration of alternatives to the current modest co-ordination...

> In such a complex institutional system, and given the regional scale of most policy issues, effective co-ordination among the governments of the Federal District and the States of Mexico and Hidalgo is critical. Individually the different government entities have little power to effect radical change, so the key question is how the national and regional governments can work together according to their different competencies and legal powers. As such, solving the problems of the metropolitan region largely depends on more and better co-operation. The co-ordinating bodies and planning instruments described in the report indicate that both the central government and governments within the MAMC are well aware of the need for co-ordinated policy action in the metropolitan region, and over time the instruments used to encourage co-ordination within the region have evolved significantly. Nevertheless, there is still a sense that this has not translated into a metropolitan approach overall, and that effective collaboration is still a difficult and time consuming process. The problem is not the lack of institutional mechanisms, but that the strongest policy implementation frameworks are organized along administrative-political lines and that, in comparison, "metropolitan" instruments are relatively weak. The many institutions in charge of metropolitan co-ordination are not working under one common and widely shared metropolitan 'vision'. This generates confusion in what their respective objectives should be and in how their actions should be implemented, co-ordinated and monitored. Moreover, the impossibility of municipal government leaders' re-election

presents an obstacle to the implementation of long term development objectives and co-operative agreements.

...and highlight the need for reforms to address the asymmetries of the fiscal and regulatory regimes.

> One of the main obstacles to effective co-ordination is the complexity of the fiscal system in the region. The Federal District and its delegaciones have a completely different fiscal regime from that operating in the states and their municipalities, generating varied levels of revenue, and with different expenditure responsibilities. The Federal District receives transfers (participaciones and aportaciones) from the federal government, but unlike the states it also has substantial own-tax revenue sources. As far as expenditures are concerned, the disparity between the Federal District and the states becomes even starker, particularly given that a large proportion of federal government expenditures in the region are concentrated in the Federal District where it retains some statutory functions. At the local level, there is little difference in spending between *delegaciones* or between municipalities in the MAMC. However, there is a substantial difference in spending between the Federal District as a whole and the State of Mexico as The Federal District spends almost twice as much per a whole. capita (MXN 8097 on average) as compared to MAMC municipal plus state spending in the State of Mexico (MXN 4435 on average). The combination of asymmetries in revenues and expenditures between the Federal District and the rest of the MAMC, coupled with different administrative and regulatory regimes, makes co-ordination of policies and investments extremely difficult, imposing significant costs to the metropolitan economy.

There are three fundamental steps that can be identified to address the weaknesses of Mexico City's governance system. The first is about building political commitment around a common metropolitan vision.

The analysis has highlighted that the current system of metropolitan governance suffers from **three main weaknesses**: 1) the lack of a clear and widely shared metropolitan "vision", 2) the presence of important fiscal and regulatory asymmetries and 3) the urgent need for a new dynamic body capable of co-ordinating action in the field of economic competitiveness. In response to these three weaknesses, there are three important areas that can be identified to give more practical reality to the currently weak concept of

metropolitan policymaking. The first is to build political commitment and consensus behind the notion of metropolitan co-operation. An important first step would be to establish an initial clear statement of the shared interests of each entity and of the commitment to work towards a common vision of the role of the metropolitan region. Before the development of a strategy and of mechanisms to implement it, the nature of the metropolitan regional "project" needs to be clearly defined with the expression of why the Federal District, the States of Mexico and Hidalgo and the individual delegaciones and municipalities depend on each other. This regional "vision" is essentially a statement of common interest and a commitment to co-operate towards common, agreed objectives. As with most other similar city-regions, this vision needs to understand the different identities that it encompasses promoting complementarities and interdependencies, but also recognising differences and distinctive characteristics. As a political charter, this statement should be patronised by the heads of government of the FD and the states, but elaboration of the vision on which it rests could be a more consultative process involving different public and private stakeholders.

Secondly, metropolitan resource sharing or reallocation mechanisms should be developed to encourage co-operation.

> The second important element of a new metropolitan governance framework would involve the development of metropolitan resource sharing or reallocation mechanisms to foster co-operation and a more efficient and accountable use of resources. Fiscal incentives to encourage co-operation, such as incentives in voluntary co-operation mechanisms, may be particularly useful in the MAMC. These mechanisms are being experimented with in many countries in the OECD. The idea behind them is to encourage co-operation by attaching certain conditions to transfers stipulating, for instance, that funds for projects can only be obtained when more than one government participates. These incentives and other contract mechanisms may assume different forms, but should possess three main characteristics. First, an upper-level government (such as the central government) is involved in setting the rules of the game. In the case of the MAMC, the rules would presumably attempt to elicit co-operation among municipalities, between states and municipalities, or between states, and might be limited to infrastructure improvements in primary areas such as water or transportation. A second characteristic is competition for funds. Project proposals are evaluated in terms of quality and not all projects are funded. The third characteristic is co-financing. In order to obtain funding, applicant governments may be required to commit resources themselves

and/or have some commitment of resources from other public or private parties.

Finally, in the area of economic competitiveness, a dynamic Metropolitan Development Agency could be created to co-ordinate actions in different fields relating to improving firms productivity, the quality of the workforce, and the levels of investment.

With respect to building competitiveness, there is a need for a more flexible and dynamic means by which to implement policies effectively. The priorities for competitiveness described above imply both a cross-sectoral approach and a strong business environment focus. A Metropolitan Development Agency, acting as the principal implementing agency for a competitiveness strategy for the region, would co-ordinate actions in different fields relating to improving the productivity of firms in the region, increasing investment (*e.g.*, in the historic centre) and skills development. Overall, it would possess the following characteristics common to most regional development agencies in OECD Countries:

- The mission and general objectives are defined by the sponsoring public agencies involved to whom the agency is accountable;
- It is responsible for translating overall objectives into operational projects and programmes;
- It has a strong labour market and enterprise focus, including responsibility for organising, or at least co-ordinating, regional business support and workforce development programmes;
- It is responsible for, or closely involved in, inward investment promotion and processing, and more generally is responsible for contributing to the marketing of the region.
- It works with local development agencies or sectoral agencies that are delivering outputs that contribute to achieving the general objectives (e.g., it doesn't replace specialised bodies)

Such a body would be constituted so as to maintain close links with the different government entities of the entire region, while being institutionally separate from them. The principal concern is to ensure that it can implement an approach to policy delivery that provides what the public authorities cannot in terms of flexibility, business-linkages and sensitivity to local needs.

Summing up

The metropolitan region is in transition from high population growth to relative demographic stability and spatial redistribution and from a declining manufacturing economy focused on national markets to one based on services competing internationally. At the same time, the MAMC possesses relevant potentials linked with the concentration of headquarters and of education and research facilities, as well as rich cultural resources and high flows of FDI. However, potential growth is constrained by low levels of human capital, while additional resources are needed to improve and expand inadequate infrastructure and combat widespread acute poverty and insecurity. Furthermore, there are poor incentives for labour to work in the formal sector and for companies to invest and innovate. In order to enhance metropolitan competitiveness, action is needed in the fields of business development, skills development and urban regeneration. The current governance framework, characterised by modest co-operation, represents an obstacle to the development of the region. The new pressures on Mexico City are metropolitan in scale and need to be addressed via a strategy that is more inclusive and that assumes logics of mutual interest and shared solutions across administrative jurisdictions. In the short-medium term, a strong political commitment should be built around a new metropolitan 'vision'. This should be accompanied by the introduction of incentive mechanisms to favour a climate of co-operation in the design and implementation of a metropolitan development strategy capable of addressing the urgent challenges and exploiting the relevant potentials of Mexico City.

Chapter 1

Profile of the metropolitan region

The aim of this chapter is to give a comprehensive overview of the main socio-economic dynamics characterising the metropolitan area of Mexico City and provide the foundation for the discussions of the substantive themes treated in the following chapters (governance and competitiveness). The chapter is divided into four sections. Section 1 illustrates the main demographic and spatial trends that have shaped the metropolitan area. This part discusses in particular the processes of high population growth and urban expansion that are now giving way to demographic stability and spatial redistribution, and explains the definition of the metropolitan region showing how the delineation used in this report has evolved over time. In order to place Mexico City in an international context, Section 2 compares Mexico City's productivity, competitiveness and economic performance with the largest OECD metropolitan areas, highlighting the region's low productivity and labour utilisation, and illustrates some strong similarities but also some striking differences between Mexico City's economy and that of other OECD metropolitan areas. Section 3 examines the major issues behind Mexico City's economic performance by analysing the important shift in the economic structure of the region, characterised by the decline of the manufacturing sector and the consolidation of the tertiary sector as the driving force of the regional economy, accompanied by changes in the labour market. Section 4 looks at processes of exclusion and inequality. highlighting the magnitude of the social and economic challenges posed by high poverty rates and an increasing polarisation of low income residents in areas with poor services and infrastructure, linking these processes of concentration of deprivation with the demographic, spatial and economic processes described in the previous three sections.

Demographic and spatial expansion

The expansion of Mexico City into a metropolitan region has been spectacular by any standard. In 1950, the city's population was 2.9 million and it covered a land area of around 26 000 hectares. By 1970, the population had grown to 9.3 million and included not only the *delegaciones* of the Federal District (FD), but also 11 municipalities of the State of Mexico into which the city was rapidly expanding. The population increased

by more than 50% over the following ten years and the outward sprawl of the city intensified. The Metropolitan Area of Mexico City (MAMC) as defined in this report now comprises 16 *delegaciones* belonging to the Federal District, 58 municipalities from the State of Mexico and 1 from Hidalgo (See Box 1.1)¹. Currently, the population of the MAMC is approximately 18.4 million people – more than 18% of the national population living in a region equivalent to 0.37% of the total land area of the country.

This period of uninterrupted growth and expansion is now giving way to processes of development that reflects significant shifts in the demographic, economic and spatial structure of the city. As shown in Table 1.1, while the population of the metropolitan area is still increasing, the rate of increase has slowed dramatically, falling to below that of the nation as a whole. As a result, the population of the MAMC as a proportion of the national population has started to fall and is likely to continue to fall. Birth rates in the region, particularly in the Federal District, are falling steadily, and, as in other OECD countries, significant processes of ageing are now being observed.

MAMC				National		
Year	Population	Rate of Growth	Population	Rate of Growth	Share of National Population	
1950	3.5		25.8		13.7	
1960	5.7	4.9	34.9	3.1	16.3	
1970	9.3	5.2	48.2	3.4	19.2	
1980	13.0	3.4	66.8	3.2	19.4	
1990	15.6	1.9	81.2	2.0	19.2	
1995	17.3	1.9	91.2	2.1	19.0	
2000	18.4	1.4	97.4	1.6	18.9	

Table1.1. MAMC and national population and rate of growth

Source: Data: National Population Council; quoted in Pradilla Cobos (2000)

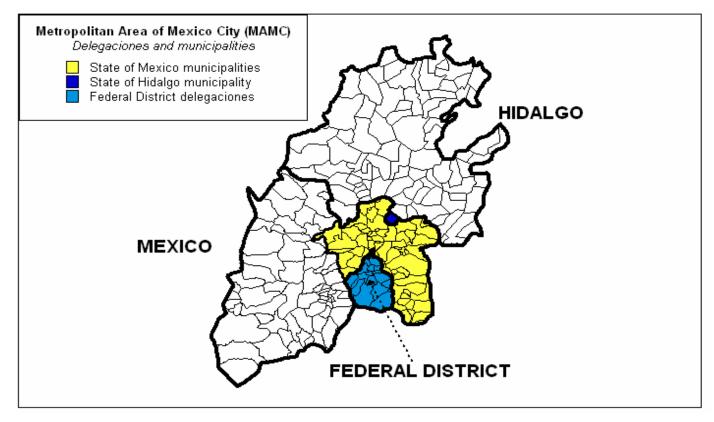
Box 1.1. Methodological note: defining the Metropolitan Area of Mexico City

The metropolitan region cuts across normal administrative boundaries, giving prominence to a conception of the metropolitan area that reflects the current functional urban area and that anticipates further growth and expansion. As a result, the analysis of the metropolitan region emphasises the heterogeneity of the region, and tries to avoid the use of aggregated statistics that tend to overestimate the wealth and cohesion of the region as a whole. The definition of the MAMC reflects the immediate area of influence of the Urban Area of Mexico City (UAMC) and is based on a number of key criteria: contiguity, intense and direct socio-economic interaction, commuting between workplace and habitation and urban characteristics. The technical variables used to define the municipalities/delegaciones of the UAMC were: (1) density of population as recorded in 1995; (2) percentage of the economically active population not working in the primary sector as recorded in the 1990 general census; (3) urbanization level as recorded in the census of 1990; aggregate output in manufactures, commerce and other non financial services according to the economic census of 1994; and (4) distance to the centre of Mexico City. The resulting Urbanization Index divided municipalities/delegaciones into five categories ranging from very high to very low levels of urbanization

Only very high and highly urbanized municipalities were considered to establish the UAMC, with contiguity used as a final ex-post criterion to ensure a homogenous unit. The UAMC created by this process (formally valid until 2002) consisted of 49 municipalities/delegaciones.

The MAMC includes the UAMC plus municipalities that currently present low urban characteristics (a total of 75 *delegaciones* and municipalities), extending further into the State of Mexico and including one municipality in Hidalgo. The advantage of the MAMC as a unit of analysis is that it anticipates future demographic and urban development pressures and offers planners and policymakers a better framework by which to orient future urban growth.

Figure 1.1. Map of the MAMC



Country	Metropolitan region	Population 2000	Percentage growth 1990- 2000
Mexico	Mexico City	18 400 000	17.4
Japan	Tokyo	12 064 101	1.8
France	Ile de France	11 001 900	3.2
Korea	Seoul	10 264 000	-3.4
USA	Los Angeles	9 344 086	5.4
USA	New York	9 098 339	6.5
Japan	Osaka	8 805 081	0.8
Japan	Kanagawa	8 489 974	6.4
USA	Chicago	8 177 052	9.5
GBR	Greater London	7 172 036	-7.0
Japan	Aichi	7 043 300	5.3
Japan	Saitama	6 938 006	8.3
Germany	Ruhrgebiet	6 766 749	-0.2
Germany	Rheinland	6 606 248	4.9
Japan	Chiba	5 926 285	6.7
Spain	Comunidad de Madrid	5 150 500	5.8
Germany	Region Berlin	5 085 171	1.1
Japan	Fukuoka	5 015 699	4.3

Table 1.2. Population growth from 1990 in OECD metropolitan regions

Source : OECD Territorial Database, US Census Bureau, Statistics Canada.

Although growth rates over the last decade have still far exceeded those experienced in most large OECD metropolitan areas (see Table 1.2), population forecasts predict that the MAMC will have a total population of 21.4 million by the year 2010 and 22.4 million by 2020 – a relatively modest increase of around 3.6 million for a twenty year period. Over this twenty year period, the average growth rate is expected to drop from 1.88% in 2000-2005 to 0.40% in 2015-2020; in other words, most of the projected population growth will take place in the earlier part of the period 2000-2020. Thus, by 2020 the ten-year growth rate of the metropolitan area will be around 5%, similar to the current average for the OECD urban areas included in Table 1.2.

As in most other large cities around the world, the fact that the population is growing more slowly than before does not remove demographics as a crucial policy issue and a source of systemic pressure. Extreme population growth, which has been for decades a principal characteristic of Mexico City and a central part of its global "image", is undoubtedly a thing of the past. The total population of the metropolitan area is stabilising and will continue to do so over time. While in aggregate terms lower in-migration and reduced numbers of births mean more manageable growth rates, the pattern of population growth is likely to be very uneven within the region. In broad terms, the Federal District will record very slow population growth, while the municipalities of the State of Mexico will continue to expand relatively rapidly. Estimates predict that the population of the 58 municipalities of the State of Mexico will reach 11.8 million in 2010 and 12.7 million in 2020. In addition, urbanisation trends in Hidalgo are likely to intensify over the coming decades, with areas of Hidalgo becoming more clearly integrated into the functional metropolitan area. This differential growth will have important political consequences for the region as the non-Federal District component of the MAMC municipalities increases its share of the regional population from 51.9% in 2000 to 55.3 in 2010 and 56.5 in 2020, with the weight of the Federal District falling to barely 40% by 2020.

Table 1.3. Urban	population	in the	MAMC,	1990-2000
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	1990	2000	Difference	Difference (%)
Federal District	8 235 744	8 605 239	369 495	4.49
State of Mexico	7 297 758	9 745 094	2 447 336	33.54
State of Hidalgo	30 293	46 344	16 051	52.99

Source : INEGI. Figures for the States of Mexico and Hidalgo only include those municipalities that are part of the MAMC.

Within this large shift in the overall balance of the population of the metropolitan area from the Federal District to the State of Mexico, there are also important reorganisations among municipalities. Some municipalities in the Federal District are even losing population in absolute terms. As with many capital cities, the Federal District has a highly transitory population. While it is a primary destination for in-migration, it is at the same time the main contributor of migrants to the States of Mexico and Hidalgo. In fact, new arrivals from the Federal District make up almost half of the non-native population of the State of Mexico, which serves to underline the clear process of transfer of population from the Federal District to the State of Mexico and to a lesser extent (at the moment) Hidalgo. Meanwhile, in the State of Mexico there is a growing trend of intra-state relocation causing relative population losses in some municipalities but population gains in others.

This territorial reorganisation is accompanied by a still rising demand for land. As shown in Table 1.4, population density reached a peak around 1980 and is now falling significantly. Thus from 1980 to 1990, a 21% increase in population was accompanied by a 44% increase in land area. Between 1990 and 2000, an 18% increase in population was accompanied by a 31% increase in land area. While appearing extreme, this type of ratio is fairly common in OECD cities. A 1992 OECD-ECMT survey based on responses by cities themselves found that on average the land area of OECD cities grows five times as fast as the population. As the structure of Mexican families evolves, with family size reducing and people moving into their own accommodation at an earlier age, the number of housing units demanded will continue to grow. Moreover, evidence from other OECD cities demonstrates that as the population becomes wealthier, demand for more living space will also increase. All this means that the rate of outward expansion of the metropolitan area is unlikely to slow despite changing demographics.

Year	Federal District Delegaciones	State of Mexico Municipalities	State of Hidalgo Municipalities	Urban Area	Density (inh/ha)
1950	11	2	0	26 275	113.5
1960	15	4	0	41 690	123.7
1970	16	11	0	72 245	119.8
1980	16	17	0	89 112	138.4
1990	16	27	0	129 502	116.2
2000	16	58	1	170 000	+/-100

Table 1.4.Evolution of the MAMC, 1950-2000

Source : Data: National Population Council, Quoted in Pradilla Cobos (2001).

Estimates of the demand for land to respond to housing and infrastructure development needs vary greatly according to the plot size that is used in the calculations. Thus, the estimates for the growth in land area of the MAMC range from around 20% to around 40% over the period 2000-2020, demonstrating that even in situations where population growth is relatively modest, the expansion of the urban area can be rapid, posing significant challenges for provision of public services, infrastructure development, etc. Existing high intensity infrastructures in the Federal District will have to be maintained in order to cope with the estimated 3.6 million that come into the centre to work each day.² Moreover, whereas in the past the process of changing residential patterns was characterised by increasing pressure in central areas and a spilling out into adjacent peripheral areas, the pattern is now complicated by movements among suburban areas. Thus the strains on infrastructure and public service provision are not just felt by the central areas, since each additional development on the periphery requires the infrastructure and service links necessary to maintain its viability.

The principal feature of expansion of the MAMC is not so much the rate of growth in settlement areas as the level of organisation and control exerted by the public authorities over the growth process. Controls on urban development had always been relatively weak in Mexico, but these weak structures came under significant pressure over the past two decades. On the one hand, land for development within the Federal District became saturated, and on the other, the legal framework for urban development in other areas was reformed, making it somewhat easier for land to pass from non-urban to urban usage. Reforms of articles 27 and 115 of the Political Constitution of Mexico and of the General Law on Human Settlements, in particular, promoted a more decentralised system whereby municipalities exercised greater controls over land use and authorisation of new real estate developments. In addition, simplification of the process of the sale of *ejido* (communally-owned) lands opened up large tracts of land on the urban periphery for development that had hitherto been difficult to commercialise because of problems of contested title or extremely complicated multiple ownership structures. Overall, these reforms promoted a more fluid land market, but also created a very fragmented system favouring a patchwork rather than co-ordinated pattern of sub-urbanisation.

Transport infrastructure is representative of the problems that urban development without systematic integration of spatial planning and transportation system development can generate. The fact that around 83% of the total number of trips are undertaken in low capacity vehicles (cars, minibuses) is significant, particularly when combined with the sheer number of trips (over 4 million intra-metropolitan trips per day). The relative level of private car use is rather low for a major city, but this is somewhat offset by having 58.6% of the total number of single trips carried out in public transport vehicles with very low capacity, such as "minibuses" and "combis".³ The metro system is well-used but it is mostly based in the Federal District. While there are metro lines that extend out to heavily populated municipalities in the State of Mexico, other MAMC residents living outside of the Federal District must first take minibuses to terminus metro stations and then take the metro into the centre. Perhaps the most significant statistic in Figure 1.2 showing travel by each mode is the almost complete absence of train travel as a major form of transport, indicating a very under-developed commuter train system.

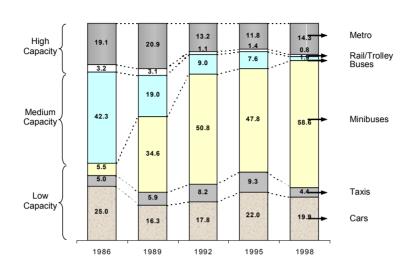


Figure 1.2. Evolution of modal participation

(%)

Source: 1986, CGT y COVITUR, DDF; 1989 - 1998 Poder Ejecutivo Federal, 3er Informe de Gobierno.

Given the increasingly long distances involved as the region expands, the lack of effective train links and the reliance on relatively inefficient low capacity buses will continue to be significant handicaps for commuters. As shown in Table 1.5, commuting distances and travel times have increased significantly since 1987 as a result of both expansion of the urban economic area and, probably, slower traffic flows as a result of congestion.

		1987			2000	
Mode of Transport	Distance per trip (Km)	Speed (Km/h)	Average Time per trip (min)	Length of trip (Km)	Speed (Km/h)	Average time per trip (min)
Buses	3.5	16.8	12.5	5.6	16.7	20.1
Trolleybus	2.4	14.0	10.3	4.1	14.6	16.8
Minibus	Nd	21.0	-	4.9	15.7	18.7
Metro	7.1	39.0	10.9	9.0	36.0	15.0

Table 1.5.	Commuting distances and times by public transportation

Source: Adapted from Molinero Ángel, Taller de Expertos, Revisión del Programa de Ordenación de la Zona Metropolitana del Valle de México, Programa Universitario de Estudios de la Ciudad, UNAM, Noviembre 2002.

Significant differences in the quality of transport services across the metropolitan area will tend to produce disparities in terms of access to employment, levels of investment and so on, which are self-reinforcing. These changes in urban form and function that the MAMC are experiencing imply the need for significant new investment in metro-wide infrastructure. As will be discussed in Chapter 2, the ability of the region to meet these infrastructure demands will depend crucially on the ability of the public authorities to co-ordinate effective provision of strategic infrastructures in a context of extreme fiscal constraint.

Mexico City's competitiveness in an international context

Assessing the place of Mexico City metropolitan region in the world economy highlights the challenges linked with its economic performance.

On the one hand, the region is frequently classified as a global city, offering high level services and attracting in significant amounts of foreign direct investment. The World Cities Study Group and Network (GaWC) ranked it 21st among all world cities in 2000 providing 12% relative to the level of service provision in the top-scoring city (close to Brussels, Madrid and São Paulo). Mexico City is considered the only Latin American city with a "major global services centre" in the four categories of advanced services, again closely followed by São Paulo. On the other hand, the level of productivity of the economy as a whole is relatively low by OECD standards and the functioning of the labour market shows major divergence from OECD averages. The region remains the dominant economic force in the country and retains significant competitive advantages in high value, mainly tertiary sector, activities with respect to other cities. However, in a context of globalisation it is important to situate Mexico City in a global rather than simply national or Latin American context.

A cross country comparison of the productivity and the competitiveness of metropolitan regions was presented in a recent OECD survey of Montreal, a city coping with a new competitive environment vis-à-vis other North American cities.⁴ The section below repeats a similar exercise for Mexico City using the same set of cities – a sample of 66 city-regions with a population of over 2 million. These cities – 27 in Europe, 12 in Asia, 23 in the US, 3 in Canada and 1 in Mexico – were assessed on the basis of data from the OECD's Territorial Database. Despite the important caveats⁵ in comparing Mexico City with such a diverse set of metropolitan areas, the result is significant. In a comparison of real GDP per capita⁶, a basic and relatively robust international measure of productivity, the MAMC is found near the bottom of the ranking, positioning 63 out of 66 (see Table 1.6).

How then should these figures be interpreted? The recent OECD project on growth, which attempted to identify the root causes of the observation that growth trends in the OECD area have been diverging, gives some indications. The report noted that over the past decade the United States. Australia, Canada and Ireland have experienced much higher growth than continental Europe or Japan. The final report, the OECD Policy Agenda for Growth, cited two principal reasons for this. First, low labour utilisation, since too many people are left out of labour markets, which in large part explains why GDP per capita in the European Union is 25% lower than that in the United States (Figure 1.3). The reasons for the low levels of labour utilisation vary from country to country but include early retirement lowering participation rates for the over 50s, pension schemes that penalise work beyond retirement age, unemployment and social insurance schemes that reduce incentives to work and shorter working hours, among other things. And, second, low relative productivity; which explains part of the present shortfall in GDP per capita in the EU relative to the United States and almost all of the difference between, among others, Japan and the US. Looking at the data for Mexico in Figure 1.3, it is apparent that both factors play a role, but that low relative productivity is the main contributory factor in the difference between Mexican and US output. Other countries that show similar patterns include Japan, Hungary, Korea, Portugal, Greece and the Czech Republic. The general conclusion with respect to low productivity is that it is linked to low levels of human capital and of research, innovation and technology. An additional contributing factor to low productivity is the lack of competition in the economy, particularly in untraded sectors and where competition is controlled and entry by foreign companies restricted. Lack of competition is seen as creating an environment in which enterprises have reduced incentives to restructure and to adopt new working methods and technologies. The discussion of enterprise development and of skills development in Chapter 3 tends to confirm the importance of these different factors in the Mexico City region.

Country	Metropolitan Region	Real GDP Per capita	Index MAMC = 100	Rank
USA	Boston	73 470	545	1
USA	San Francisco	64 836	481	2
USA	Seattle	50 241	373	3
USA	New York	48 562	361	4
USA	Dallas	46 584	346	5
USA	Washington	44 750	332	6
USA	Denver	44 113	328	7
Germany	Regnion München-Ingolstadt	43 197	321	8
USA	Houston	42 838	318	9
Japan	Tokyo	42 694	317	10
USA	Atlanta	41 478	308	11
USA	Chicago	41 285	307	12
Italy	Milan	40 081	298	13
USA	Los Angeles	40 031	297	14
USA	San Diego	39 318	292	15
France	Ile de France	38 951	289	16
USA	Minneapolis Saint Paul	38 587	289	10
USA	Portland-Vancouver	38 279	280	18
USA	Baltimore	38 242	284	18
USA USA	Cleveland	38 242	284 278	20
USA USA			278	20
0.011	Philadelphia	36 837	- / -	
GBR	London	36 719	273	22
Germany	Darmstadt	36 629	272	23
USA	Detroit	36 376	270	24
USA	Phoenix	35 400	263	25
USA	Pittsburgh	35 378	263	26
USA	St. Louis	35 318	262	27
USA	Tampa-Saint-Petersburg	35 198	261	28
Germany	Region Hamburg	34 449	256	29
Canada	Toronto	33 581	249	30
Germany	Stuttgart	33 044	245	31
USA	Miami	32 695	243	32
Netherlands	Noord-Holland	31 830	236	33
Germany	Rheinland	31 227	232	34
Italy	Turin	31 125	231	35
Germany	Karlsruhe	30 921	230	36
Italy	Rome	30 477	226	37
Canada	Vancouver	28 545	212	38
Netherlands	Zuid-Holland	28 284	210	39
Japan	Aichi	28 007	208	40
Japan	Osaka	27 134	201	41
Netherlands	Noord-Brabant	26 895	200	42
Spain	Comunidad de Madrid	26 858	199	43
Canada	Montreal	26 629	198	44
Germany	Detmold	25 997	193	45
Germany	Rheinhessen-Pfalz	25 903	192	46
Germany	Freiburg	25 890	192	47
Spain	Barcelona	24 146	172	48
Germany	Ruhrgebiet	23 591	175	49
	1 Cull Soulot	45 571	115	- 77
GBR	Greater Manchester	22 140	164	50

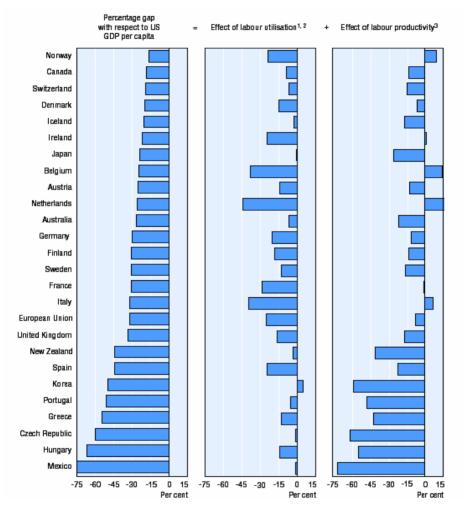
Table 1.6. Ranking of OECD metropolitan regions based on real GDP per capita, 2000

Japan	Kanagawa	21 227	158	52
France	Region Nord	21 077	156	53
Japan	Fukuoka	20 308	151	54
Spain	Valencia	20 188	150	55
Hungary	Budapest	19 288	143	56
Japan	Chiaba	18 614	138	57
Greece	Attiki	17 444	130	58
Japan	Saitama	17 272	128	59
Korea	Gyeonggi	16 365	121	60
Italy	Naples	15 860	118	61
Korea	Seoul	14 460	107	62
Mexico	Mexico City (MAMC)	13 470	100	63
Korea	Incheon	12 146	90	64
Korea	Busan	10 854	81	65
Korea	Daegu	9 343	69	66

 Table 1.6. Ranking of OECD metropolitan regions based on real GDP per capita,

 2000 (continued)

Source: OECD Territorial Database.





Percentage point differences in trend, PPP-based, GDP per capita with respect to the United States, 2000

Notes:

1. Demographic effects due to changes in the ratio of the working-age population to the total population are not shown in the figure. The effects are relatively small, less than 5% for all countries.

- 2. Based on employment rates and average hours worked.
- 3. GDP per hour worked.

Source: OECD.

Turning to the competitiveness situation of the metropolitan region of Mexico City in comparison to other large city-regions, we find that the general national pattern is confirmed (the same is true for other countries the national-regional patterns for Korea, for example, which were similar to Mexico at the national level are also similar at the regional level). Decomposing GDP into its main constituent elements, three factors can be identified to explain the observed difference in GDP per capita between different places. These are productivity per worker, efficiency of the local labour market expressed in terms of employment/unemployment and the relative size of the labour force with respect to the population, *i.e.*, the activity rate. Greater productivity per worker translates to a higher level of GDP per worker, an efficient labour market results in better labour utilisation (more employment, less unemployment), while a larger labour force relative to population implies that more of the region's human resources are being used in production. On average, 72.3% of the difference in GDP per capita between the MAMC and the other metropolitan regions is explained by lower average labour productivity, 22.3% by a lower activity rate and the remaining 5.4% by a higher employment rate (see Table 1.7). As in the national comparison, low average labour productivity explains the lion's share of the difference between MAMC GDP and that in other OECD metro regions (the MAMC's low level of labour productivity compared to the other metro regions can be seen in Table 2a). At the same time, the contribution of low labour utilisation is a relatively significant factor as well.

Percentage difference in :						difference	ion of the ce in GDP ta due to :
Country	Metropolitan Region	Average product- ivity (%)	Employ- ment rate (%)	Activity rate (%)	Average product- ivity (%)	Employ- ment rate (%)	Activity rate (%)
Canada	Montreal	-22	-1	10	67	4	30
Canada	Toronto	-8	1	18	31	2	67
Canada	Vancouver	-22	-1	17	56	2	42
France	Ile de France	24	-2	3	80	8	11
France	Nord	-17	-8	-11	48	21	31
Germany	Region Berlin	-2	-15	-17	7	44	50
Germany	Region Hamburg	35	-5	-18	61	8	31
Germany	Ruhrgebiet	16	-10	-32	28	17	55
Germany	Rheinland	29	-5	-21	53	9	38
Germany	Detmold	12	-5	-23	31	12	57
Germany	Darmstadt	35	-2	-14	68	4	28
Germany	Rheinhessen-Pfalz	24	-6	-34	38	9	54
Germany	Stuttgart	26	-1	-17	60	2	39
Germany	Karlsruhe	25	-2	-21	52	5	44

Table 1.7. Explanatory factors of regional differences in GDP per capita, 2000

		(conti	nued)				
Germany	Freiburg	16	-2	-30	33	5	62
Germany	Region Müchen-Ingolstadt	44	1	-9	82	1	17
Greece	Attiki	-47	-6	-2	85	12	4
Hungary	Budapest	-38	1	-9	79	2	18
Italy	Turin	12	-2	-7	56	11	33
Italy	Milan	34	1	-7	80	3	17
Italy	Rome	20	-6	-14	50	15	34
Italy	Naples	-7	-26	-32	10	40	50
Japan	Saitama	-69	2	11	85	2	13
Japan	Chiba	-60	2	9	84	3	13
Japan	Tokyo	21	2	11	63	5	32
Japan	Kanagawa	-46	2	9	81	3	16
Japan	Aichi	-23	2	13	61	6	33
Japan	Osaka	-16	-1	5	73	3	23
Japan	Fukuoka	-43	-1	2	94	1	5
Korea	Seoul	-43	1	-8	88	2	10
Korea	Busan	-08	-1	-11	89	1	10
Korea		-92	-1 2	-11	89 89	1	9
Korea	Daegu		1	-11		1	10
	Incheon	-83	-		88	1	- •
Korea	Gyeonggi	-60	3		89	5	22
Mexico Netherlands	Mexico City (MAMC)	-66	5 4	-20	72		42
	Noord-Holland	-6		7	35	23	
Netherlands	Zuid Holland	-17	4	6	63	14	23
Netherlands	Noord-Brabant	-23	4	6	68	13	18
Spain	Comunidad de Madrid	2	-4	-11	13	22	65
Spain	Barcelona	-7	-3	-13	30	14	55
Spain	Valencia	-26	-7	-8	64	16	20
GBR	London	16	-1	4	78	3	18
GBR	Greater Manchester	-33	0	1	95	1	4
USA	Atlanta	12	2	16	40	7	53
USA	Baltimore	10	2	11	44	8	48
USA	Boston	72	3	14	81	3	16
USA	Chicago	22	1	8	72	2	26
USA	Cleveland	13	1	7	62	5	33
USA	Dallas	23	1	20	53	1	46
USA	Denver	22	1	14	58	4	38
USA	Detroit	7	1	10	41	6	53
USA	Houston	21	2	11	61	6	33
USA	Los Angeles	18	1	9	65	2	34
USA	Miami	6	-2	3	54	16	30
USA	Minneapolis Saint Paul	6	3	15	25	13	62
USA	New York	53	0	-5	90	0	9
USA	Philadelphia	10	2	7	52	12	35
USA	Phoenix	7	1	7	44	7	49
USA	Pittsburgh	7	2	6	47	15	38
USA	Portland-Vancouver	6	-1	18	23	4	73
USA	San Diego	13	3	10	50	13	38
USA	San Francisco	55	2	18	73	3	24
USA	Seattle	32	0	18	64	0	36
USA	St. Louis	3	2	10	21	10	69
USA	Tampa-Saint-Petersburg	1	2	10	6	14	80
USA	Washington	19	3	16	50	8	42
0.071	uomington	1)	5	10	20	0	14

 Table 1.7. Explanatory factors of regional differences in GDP per capita, 2000 (continued)

Source: OECD Territorial Database.

The causes of the MAMC's low labour productivity⁷ can be divided into two categories: (1) concentration or specialization in low-productivity industries and (2) low levels of complementary factors of production (skills, physical capital, human capital, etc.). The results of the analysis suggest that compared to the average labour productivity rate of the metropolitan areas, the MAMC's low productivity is principally a result of poor factors of production and less so concentration in low productivity activities.

Overall the productivity of the MAMC is 48% below the average for the metro areas and, of this, -49% is explained by low capital stock and +1% by sectoral structure (see Table 1a). Explanation of these results, with respect to research of the sources of growth in OECD counties, would tend to focus on levels of educational attainment, investment in human capital development, levels of R&D and linkages between research and industry, and capacity for innovation and assimilation of new technology and organisational methods. As is discussed elsewhere in this report, the MAMC's level of educational attainment is relatively low by OECD standards, while the provision for adult education and skills training is hampered by the fact that the economy is largely composed of very small, often informal, enterprises, which tend to be, on the one hand, less likely to engage in on-the-job training, and, on the other, difficult to reach through public policy programmes to upgrade skills. The quality of the labour force is further affected by the growing informal sector, which appears to be at least somewhat segmented from the formal sector. The informal sector offers significantly reduced opportunities to improve skills, and, arguably, as a segmented labour market, the barriers or disincentives to transfer from the informal to formal sectors reduces future chances of accessing training. Human capital is probably the principal factor, but other issues - discussed in Chapter 3 - undoubtedly play an important role. For example, the systematic under-investment of sections of the enterprise base - resulting at least in part from practices developed during the period when large parts of the economy were protected from external competition - has left many medium and smaller enterprises uncompetitive and unproductive. Similarly, despite having the country's densest research and university networks, there is concern that the output from these institutions is not effectively translated into commercial innovations for local enterprises. Finally, in spite of large absolute amounts of FDI into the region, much of this investment is channelled to production in other locations. Thus, the positive linkages between local and foreign firms that are supposed to be the multiplier effects of FDI in a regional setting are not as significant as the basic FDI statistics might suggest.

When comparing employment and activity rates across the 66 metropolitan regions, the MAMC ranks at the top in terms of employment rate but near the bottom in activity rate (see Table 3a and Table 4a

respectively). These results can be explained by factors that are crucial to understanding the functioning of the labour market, the most important of which is the presence of the large informal sector. The formal sector appears to be unable to absorb workers displaced from declining sectors; in the absence of unemployment insurance, these workers move into the informal sector which acts as a buffer. In other words when workers in the formal sector are out of work, the tendency is for them to immediately seek work in the informal sector rather than enter the unemployment ranks. In other areas of Mexico a similar function is performed by out-migration. This leads to a very high employment rate - almost 100% - but masks inefficiencies in the functioning of the formal labour market. The principal issue is that for many workers the incentives for work in the formal sector are insufficient to offset the various constraints associated with it. From the perspective of employers, particularly small businesses, the rigidities of labour market legislation relating to hiring and labour contracts, as well as associated red tape, provide a disincentive to hire workers on formal contracts. As a result, people working in formal businesses are often working without formal contracts. For both workers and employers, the tax wedge creates a differential between formal and informal take home pay/wage costs that creates a general disincentive.⁸ The large informal sector also partly explains the MAMC's relatively low activity rate, since the high volume of workers in that sector do not factor into the active labour force used to calculate the activity rate. Relatively low, though rising, female employment rates are another important contributor to the low activity rate, as is implied by the presence of German and Italian regions alongside Mexico City at the low end of the activity rate table. Unlike most OECD city-regions where natural increase is very low and population stability depends on in-migration, the factor that strongly offsets the lack of fluidity in the Mexico City labour market is the growth in the overall employment base as a result of continuing expansion of the urban population. Although this is an important asset for the metropolitan region, it does not appear to be sufficient alone to counteract the other factors that inhibit growth in productivity.

Transition in the economy

In order to understand the policy challenges raised by the economic performance of the metropolitan area, it is useful to examine the important shifts that have characterised and continue to drive the region's evolution.

The urbanisation of the Mexico City region was driven by economic processes that saw increasing concentration of economic activity and jobs in the area. The period 1950-1980 witnessed extraordinary economic as well as demographic expansion in Mexico City. By 1970, Mexico City accounted for 48.6% of the nation's total manufacturing output, with the MAMC's

industrial GDP growing at 11.2%, and the major component of the MAMC at the time, the Federal District, was a leading contributor to the nation's GDP (27.6% in 1970). During the 1970s, and despite several programmes to promote industrial de-concentration, the rate of manufacturing output concentration in the MAMC decreased only slightly to 47.0%. In the process, the MAMC region became the wealthiest area of Mexico and developed the country's densest and most advanced infrastructure.

The process of Mexican industrial development, and as a corollary its urban growth, was based on the logics of concentration/agglomeration. During the ISI (Import Substitution Industrialisation) period, Mexico City became both the centre of manufacturing (over 40% of all production) and the dominant consumer market. During this era, import tariffs on manufactured products reached a peak of 36.25%, and import license requirements tolled about 92% (1984) of the price of products. Economies of agglomeration were generated through processes similar to cumulative causation, with the result that increasing concentration of economic activities in the region went hand in hand with increasing concentration of both the labour supply and the principal markets in the region as well. When most Mexican firms produced for the domestic market using local inputs, it was logical for them to be located close to both the suppliers and the consumers. The concept of forward and backward linkages creating external economies is implied in the situation of Mexico City during this period. At the end of the ISI period almost half of Mexican manufacturing was located in the region.

During the subsequent period (1980-1988), the participation rate in the Mexican industrial output shrank in absolute terms for the MAMC at an annual rate of -5.8%, falling from 47.3% to 34.4%; while tariffs decreased to an average of 14.7% and most import licenses were scrapped. Although the ISI model fostered the country's industrialisation and resulted in high GDP growth rates for several years, this was achieved at the cost of disparity in productivity levels and a weak correlation with the needs of the population, as well as highly regulated and concentrated markets. The model also impacted the competitiveness of Mexican industry and altered the relative prices of productive factors in favour of physical capital, to the detriment of human resources and technology development. The limitations of this model had become apparent by the beginning of the 1980s – with the start of the 1982 debt crisis – and led authorities to implement a policy shift towards macroeconomic stabilisation, government deregulation and economic liberalisation.

Industrial con	ncentration in the MAMC
Year	% of industrial GDP in the MAMC
1930	26.95
1940	33.07
1950	39.14
1960	44.36
1970	48.16
1980	47.05
1988	34.74
1993	32.59
1996	30.75
1998	29.02

Table 1.8.	Growth and decline of manufacturing in the MAMC

Source: Garza, 2001.

One aspect of the policy shift and Mexico's economic liberalisation was the gradual opening of the economy to international trade, which influenced the logic of increasing concentration and has played a role in the decline of the MAMC industrial output. First, penetration of the Mexican market by imports has exposed Mexican manufacturing firms to competition for which they have been ill-equipped to respond. Years of relative under-investment and limited market competition left many firms poorly prepared in terms of both technology and management practices. It should be stressed that international trade means that competitors are no longer solely located elsewhere in Mexico but can be around the world. This is significant for Mexico City because it is still well-positioned relative to other parts of Mexico in terms of technology, infrastructure, human capital and other measures; the problem is that it is relatively poorly ranked internationally. The need to respond to increased competition has also highlighted the inadequacies of the local labour force. On average, educational attainment is higher in Mexico City than elsewhere, but relatively weak when compared to other OECD metropolitan regions.

Second, added to problems of viability in the manufacturing sector, the new trading context encouraged processes of localisation that were not based on the need to be close to Mexico's main concentrations of productive factor inputs. The Mexican domestic market in 2001 was estimated to be only 8% of that of the United States, based on final household consumption figures and using national Purchasing Power Parities (PPP), which accounts for the price differences between the countries (OECD National Accounts

Database). As such, assuming that producers will tend to locate close to customers and given that many inputs for Mexican manufacturing now come from the US, locating on or near the US-Mexican border has clear advantages. The upgrading of transport infrastructure at and near the US border has further increased the attractiveness of these areas for investment. This logic, at least in the current trading context, appears ineluctable. An important indication of the condition of the MAMC manufacturing sector is provided in Figure 1.4, which presents manufacturing output trends. During a period of strong export growth at a national level, with many of the exports being manufactured goods, these figures on manufacturing output seem to confirm a major divergence between the MAMC and the country as a whole (of which a large share, over 30%, is accounted for by *maquila* production).

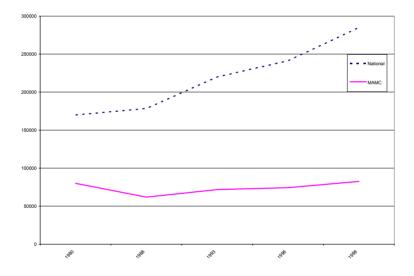


Figure 1.4. Evolution of manufacturing output: Mexico and the MAMC

Source: INEGI, OECD calculations (1980-1998 in millions of constant MXN).

Old industrial centres have been almost completely transformed under the pressure of a more competitive international environment. Changes in the territorial balance of the region's economy can be seen in regional GDP shares. For instance, the Federal District's share of national GDP decreased from 27.6% in 1970 down to 21.2% in 2000 and from 80.2% to 71.1% of

the GDP of the MAMC. Despite this fairly gloomy general scenario, there are a number of more positive developments in some manufacturing subsectors. In particular, a limited number of industrial branches, specifically those characterised by high capital intensity, higher inflows of foreign direct investment, and trans-national operations have been responsible for some sector-specific growth and productivity gains. Foremost among these industries, and distinctive for its spatial concentration in the MAMC, is the pharmaceutical industry. This industry is composed of 177 firms (INEGI, 1998) and is responsible for 5.1% of the Federal District's employment in manufacturing but generates over 12% of the total manufacturing output. Other industrial branches that have resisted the general malaise include automotive parts and the printing and publishing industry. Concerning the latter, close to 67% of the total value of the industry is concentrated in the MAMC. In contrast to the pharmaceutical industry, the publishing industry is characterized by medium and small units (3,575 units) and, particularly unusual in the current climate, has managed to expand employment over the past few years. In these sub-sectors the MAMC demonstrates high levels of productivity. However, these examples of good performance are not typical of the region – labour productivity is still significantly lower than most other OECD regions (see Table 2a) – and productivity gains do not appear to be spreading across the economic base of the entire metropolitan area.

The clearest trend in the economy – in common with that affecting other OECD cities – is the shift to a service-based economy. Contrary to the current forecasts for manufacturing in the region, Mexico City has considerable comparative advantages in service sectors. The most productive of these industries are linked to the dominant position that Mexico City plays as the country's main decision-making centre.

The MAMC, or at least nine of its *delegaciones* and municipalities, have consolidated as the major economic decision centre in Mexico. This agglomerative trend has not been uniform during the past decades, representing more rupture than continuity with the former model of industrial concentration characteristic of the period of import-substitution. In 1982, 287 out of the 500 major companies' corporate headquarters operated within the MAMC. The crisis of the local economy during the 1980s drove away many leading enterprises; by 1989, only 145 of the Top 500 carried out operations from the MAMC. However, by 1998 the figure rose to 250 firms. The latest figures available show that during 2002, 340 of the major 500 firms operated in the MAMC. Table 1.9 shows that corporate agglomeration during the past 5 years was mainly limited to the Federal District. Other cities, such as Monterrey, capital of the State of Nuevo León, have lost ground in their number of corporate headquarters, even concerning major exporting firms where one would expect that relative proximity to the

US would represent an advantage. Figures show also that the decision to base a firm in the MAMC increases with the amount of its international operations.⁹ This helps explain why several firms, mainly medium and small ones, are unable to cope with the high diseconomies of scale that characterise Mexico City and decide to establish in relative proximity within the centre-country region, leading to a decline in the total number of firms during the past 5 years.

Table 1.9. Location patterns of major firms registered in Mexico

	MAMC 1998	MAMC 2002	Nuevo León 1998	Nuevo León 2002	State of Mexico 1998	State of Mexico 2002
Top 500 in sales	50.0	68.8	11.8	10.7	9.4	6.8
Top 100 in sales	61.0	69.0	23.0	21.0	2.0	4.0
Top 10 in sales	70.0	60.0	20.0	30.0		
Top 100 in exports	56.0	65.0	24.0	20.0	2.0	8.0
Top 100 in imports	52.0	64.0	10.0	9.0	1.0	7.0

1998 and 2002 (percentages)

Source: Expansion, 1999 and 2003. Calculations for 1998 from C. Parnreiter (2000). Calculations for 2002: OECD. Results for 1998 and 2002 have been adjusted in order to exclude the state-owned oil monopoly (PEMEX) among the top 10 and 100 (sales, exports, and imports). MAMC is considered as the sum of State of Mexico, the Federal District, and Hidalgo.

The location of headquarters, and also political institutions, are closely linked with high value services. Producer services, in particular those defined as advanced services (accounting, finance, advertising, distribution, communications), have experienced dynamic growth over the past few years. In terms of output, these sectors have consolidated as the drivers of the MAMC economy. The fact that among those firms with global operations in the advanced producer services based in London (during 1999) there was 93% probability that the firm had a branch in Mexico City is an illustration of the strong and relatively diverse organisational links between Mexico City and other major metropolitan centres. The MAMC is also the only Latin American city with a significant presence of US Law firms, ranking eleventh in their location strategies during 1999 (Parnreiter 2000).

The high specificity of advanced services, the relatively better education of the work force, and the concentration of their main costumers provides these industries with strong incentives to agglomerate in Mexico City rather than elsewhere in Mexico. During the 1990s, advanced services in the MAMC expanded in comparison to US-bordering states, despite the latter's rapid industrialisation and increasing rates of FDI. In 2000, the MAMC accounted for close to 36% of the national total in "finance, insurance, and real estate" services. In a similar trend, employment in the sub-sector has increased to 47.8% of the national total. Overall, the financial sector, which represented only 10% of the MAMC's GDP in 1970, presently accounts for 23% of the MAMC economy. It can be assumed that this process of concentration will generate strong productivity gains and induce a continuing process of agglomeration of activities within sectors where Mexico City's role as a control centre or headquarter centre is a crucial factor.

The level of foreign direct investment that comes to the region is also closely tied to the location of companies' head offices in the region. Since 1994, the MAMC has concentrated an average of 60% of the total FDI flowing into Mexico. It is, however, difficult to assess the exact proportion of this capital that is actually invested in the MAMC because a significant proportion is then re-invested in production facilities elsewhere in the region or in other parts of Mexico. Nonetheless, the numbers are significant and demonstrate that Mexico City remains the point of entry for the activities of foreign-owned enterprises, even those with factories located in border areas. Table 1.10 shows the extent of the disparity between inflows to the Federal District and those to other regions, but also suggests that the State of Mexico attracts an increasing share of FDI over the period accounting for the fourth largest share.

States	1994	1995	1996	1997	1998	1999	2000	Total
Aguascalientes	28.5	27.1	28.8	17.7	62.9	76.2	57.0	298.2
Baja California	227.2	538.0	425.3	666.8	702.7	1 099.6	941.4	4 601.0
Baja California Sur	8.1	20.8	33.8	40.6	38.1	78.1	30.2	249.7
Campeche	2.1	0.5	0.0	1.8	0.0	3.0	11.3	18.7
Coahuila	102.3	98.0	144.4	113.6	122.0	157.0	184.2	921.5
Colima	102.9	3.0	4.0	3.4	4.0	4.0	5.5	126.8
Chiapas	0.4	0.4	1.0	0.4	0.4	3.3	1.2	7.1
Chihuahua	305.2	528.4	532.9	508.2	570.5	570.2	869.5	3 884.9
D. Federal	7 582.7	4 466.4	4 775.8	6 525.0	3 786.9	5 464.7	6 177.0	38 778.5
Durango	21.5	40.5	-5.6	10.3	15.8	7.0	5.2	94.7
Guanajuato	14.9	6.3	5.7	1.7	30.9	131.6	64.6	255.7
Guerrero	6.7	45.1	9.6	2.1	3.3	34.2	9.4	110.4
Hidalgo	0.1	1.4	60.2	2.4	0.7	0.7	0.4	65.9
Jalisco	64.0	113.6	182.4	194.3	351.1	501.2	862.6	2 269.2
México	325.8	590.4	399.0	277.1	720.4	1 390.0	419.9	4 122.6
Michoacán	8.5	48.8	1.2	3.5	4.1	5.2	28.0	99.3
Morelos	19.4	67.6	51.2	27.3	60.6	146.1	44.9	417.1
Nayarit	5.6	2.0	3.6	5.4	5.4	14.1	18.6	54.7
Nuevo León	930.7	678.4	330.2	2 350.3	405.9	1 190.0	1 567.3	7 452.8

Table 1.10.Foreign direct investment by state	ite
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In millions USD

Tal	ble 1.10. F	Foreign d	irect inv	estment l	by state	(continue	d)	
Oaxaca	0.1	-2.1	0.3	6.1	0.3	-0.8	-1.8	2.1
Puebla	29.6	25.3	39.2	376.3	36.5	150.7	443.0	1 100.6
Querétaro	119.5	36.8	67.3	71.8	121.5	101.5	151.3	669.7
Quintana Roo	38.8	18.3	25.2	99.2	16.3	35.7	7.4	241.2
San. Luis Potosí	14.7	131.5	17.8	9.2	6.1	209.7	158.3	547.3
Sinaloa	46.2	94.1	28.5	32.5	6.3	40.0	11.3	258.9
Sonora	107.1	155.4	106.0	159.6	165.0	182.8	384.1	1 260.0
Tabasco	0.5	1.2	0.0	6.6	0.4	52.7	28.1	89.5
Tamaulipas	361.7	393.4	334.3	281.9	344.1	473.1	481.1	2 669.6
Tlaxcala	19.3	11.2	7.3	3.9	8.8	43.9	4.1	98.5
Veracruz	10.2	28.9	10.4	3.4	32.9	-75.1	20.7	31.4
Yucatán	48.1	19.5	46.2	14.0	29.3	27.7	45.8	230.6
Zacatecas	13.8	12.2	11.1	13.6	13.6	11.1	10.7	86.1
Total	10 566.2	8 202.4	7 677.1	11 830.0	7 666.8	12 129.2	13 042.3	1114.0

Source: INEGI, SE, quoted in OECD, Territorial Review of Mexico (2001).

In addition to a shift to the tertiary sector, a spatial re-composition of the economic structure of the metropolis has taken place, and continues to occur, in which some municipalities on the periphery of the city have developed a higher manufacturing output than some of the traditionally strong manufacturing *delegaciones* of the Federal District. There are new employment centres – mainly in the west of the city, such as in Santa Fe – which combine the development of more modern economic activities and tertiary industries with new housing developments and the provision of modern services. The ongoing revision of the emerging metropolitan area, as zones that were once the core of industrial employment in the region re-structure. Some evidence is also emerging that the populations of residential areas close to these older employment centres are likely to decline over time as people move closer to areas of stronger employment growth within the wider region.

The transformation of the economy has had important consequences for the labour market. Relative stabilization in the MAMC's manufacturing sector in terms of enterprises and output – *i.e.*, concentration in a limited number of competitive sub-sectors – has not been matched by a similar trend in employment. In 1980, the MAMC accounted for 48% of total employment in manufacturing. By June 2000, this figure had fallen to 20.5% and has since decreased to only 18.23% of the total labour force in March 2003. According to the National Survey of Urban Employment for the Urban Area of Mexico City (UAMC) for the period 2001-2003, 75% of the workforce is currently concentrated in the services sector (of which 28.7% work in the commerce sub-sector, 11% in professional and financial services, while the public sector accounts for 10% (*i.e.*, around 6.8% of the total occupied population)). Table 1.11's comparison of the distribution of employment by sector between 1990 and 2000 clearly demonstrates the transformation of the MAMC economy and the rise of the service sector.

	1990 (%)	2000 (%)	Percentage Change (%)
Primary	5.56	1.34	-4.22
Secondary	32.09	25.92	-6.17
Tertiary	62.35	72.74	10.39

1990 and 2000 (In percentage)	1990 and	2000 (In	percentage)
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Table 1.11. Distribution of employment by sector in the MAMC

Source: INEGI.

Although the decline in manufacturing has been accompanied by an increase in service sector employment, it is clear that the ability of the formal service sector to absorb former factory workers is limited. While labour supply increased rapidly during the 1990s, it coincided with the decline in manufacturing employment described above, and accompanying shifts in employment across sectors, a slump in agricultural employment nationwide, and a decline in real wages. According to the 1996 Survey on micro-enterprises, many of which are commonly characterized by a high incidence of informal work, 25% of the workers starting to work on their own account had left their previous wage-earning position because wages were too low, 27% because of dismissal or enterprise closure.¹⁰

In the absence of income support for the unemployed, the gap between labour supply and demand has led to the development of informal activities, rather than open unemployment. It is estimated that around one-third of all employment is informal. And if informal labour is considered in a wider sense, to include also people employed by enterprises or households, but having no work contract and no payment, the figure rises to almost half of total employment (and 54% of non-farm employment). According to a report of the World Bank, about a third of the informal workers declare that they have entered the sector involuntarily.¹¹

The large size of the informal labour market has a high economic and social cost for the Mexico City region, as will be discussed in Chapter 3. Although informal employment is not the prime explanatory factor in poverty (educational attainment and occupation both account for over 30% of the explanation of income inequality, while job status *per se* accounts for less than 10%), it is closely linked with low levels of education, and implies

little access to adult education, on-the-job training, and other human capital development mechanisms. The large informal sector causes workers in the region to lose certain skill sets, prevents them from accumulating new skills and lowers the overall stock of human capital. As a result, as the informal labour market continues to grow, the labour productivity rate will continue to drop. *The question of how to bring skills development to people who are effectively isolated from usual continuing education provision and who have low formal educational qualifications is a key element of Chapter 3.*

Finally, large firms (defined as those with more than 101 employees) have been particularly affected by economic transformation. These firms, which are usually associated with the higher levels of investment, credit access and salaries, appear to have lost, in relative and absolute terms, their capacity to generate employment. In March 2002, large firms employed 29.2% of the total labour force while only a year later this had fallen to 27% – over 30 000 jobs or 1.5% of their average employment share. While the economic upturn expected for 2004 will undoubtedly permit some large firms to rehire, there is a long-term downward trend that suggests that overall large firms in the region are not competing successfully in their international markets (with the exception of the sub-sectors where export shares remain relatively robust – pharmaceuticals, auto parts, etc.).

This highlights one of the principal challenges for the MAMC economy – the increasing reliance on micro and small firms, whose productivity is generally low, in both the formal and informal sectors. Micro and small firms (1-15 employees) are generally associated with lower productivity and lower levels of national and foreign investment; they also capture the smallest share of financial credit and invest the least in formation and technology. Recurrent problems in the banking sector until the very late 1990s, including the 1994-95 financial crisis, meant that there was limited market-based financing available for start-ups and SMEs. The credit crunch impeded investment by SMEs to enhance product quality, modernize, update technology and expand. As a result, the micro and small firms' ability to make up for the decreasing labour demand in the industrial sector has been limited.

Since the 1995 peso crisis, Mexico has focused on strengthening its macroeconomic policies and financial system. Despite these wide-ranging structural reforms, some of which date back to the 1982 crisis and include the opening of the economy, Mexico has yet to see a significant rise in labour or total factor productivity growth. Tackling these problems in Mexico City requires paying special attention to micro, small and medium sized enterprises, which make up close to 98% of all firms in the MAMC. During the past three years, the percentage of the active population employed in micro-firms passed from 38.8% to 42%, of which only around

half are firms with an established workshop (the rest are home- or streetbased). As such, these firms have difficulties incorporating new technology, building new capacities etc., with the result that they systematically underinvest. Therefore, there is a need to encourage greater investment in innovation and technology to support these important economic players. The issue of how to address the needs of the small manufacturers in the MAMC region, providing them with business support and advice will be addressed in more detail in Chapter 3.

Processes of exclusion and inequality

Metropolitan economic growth depends not only on economic interdependencies but also on social cohesion. Poverty is a general problem in Mexico, and Mexico City despite being, taken in aggregate, the wealthiest area of Mexico, makes no exception. As Table 1.12 shows, even in the Federal District, which is the wealthiest part of the metropolitan region, the level of extreme poverty is over 25%, with a further 25% moderately poor.

Table 1.12. Poverty in the main MAMC components, 2000

	Federal District (%)	State of Mexico (%)
Extreme Poor	25.2	51.8
Moderately Poor	25.2	19.1
Total Poor	50.4	70.9
Total Non Poor	49.6	29.1
Total Population	100.0	100.0

Percentage of the Population

Source: Boltvinik (2002). Secretaría de Desarrollo Social (2002), Derechos Sociales y Estado Igualitario. Principios de la Politica Social del Distrito Federal Seminal Mimeo.

Several recent studies have confirmed that real wages have declined in the MAMC region more than they have elsewhere. Estimations of the earning power of residents of the metropolitan area show the impact that economic changes have had on real incomes, both in the Federal District and in the two states. Table 1.13 illustrates the decline in real wages for MAMC households. In the case of the Federal District, average earnings recovered during the year 2000 close to the 1994 levels (MXN 11,952). Unfortunately, earnings in the States of Mexico and Hidalgo have not been able to retrieve the 1994 levels.¹²

Year	Current MXN	Constant (1994) MXN	Yearly Change
1986	1.8	25.9	
1987	3.8	22.8	-13.6
1988	7.2	18.2	-25.4
1989	8.1	17.1	-6.7
1990	11.9	19.8	3.8
1991	13.3	18.0	-9.8
1992	13.3	15.6	-15.5
1993	14.3	15.3	-2.1
1994	15.3	15.3	0.0
1995	20.1	14.9	-2.8
1996	26.4	14.6	-2.3
1997	26.4	12.1	-20.6
1998	30.2	11.9	-1.3
1999	34.4	11.6	-2.3
2000	37.9	11.4	-2.2

Source: PAOT, quoted in Pradilla_Cobos (2001).

Overall, the changes in the economy, exacerbated by shocks at the national level, have reduced the spending power of residents of the metropolitan region. Real wages have declined significantly with respect to national averages and an increasing number of people have had recourse to informal employment. *This section looks at how the economic hardship in the metropolitan region is developing an increasingly strong spatial concentration, with poor people – those one assumes worst affected by the economic changes described above – tending to be located in areas that offer less opportunities to access the services (education, health, transport, etc.) that enable them to access new opportunities.*

Particularly worrying is the trend towards spatial concentration of increasingly impoverished segments of the population. One result of the ongoing process of metropolitan expansion and reorganisation is a relative polarisation of the city in terms of income levels and access to services. Again, it is not simply a case of a wealthy, serviced core and poor, underserviced periphery (though that is certainly one element). There is also increasing differentiation between accessible, safe. middle class municipalities and poorer, but often geographically close, municipalities. As Figure 1.5 shows, most of the basic geo-statistical areas (AGEBs) with high exclusion indices are located beyond the political limits of the Federal District. The exclusion index¹³, which attempts to identify socio-economic deprivation within Mexican cities on the basis of health-care coverage, education access, housing conditions, monetary income and gender disparities (Solis, 2002) identifies two clear patterns of urban exclusion in the MAMC. A first pattern indicates an important proportion of AGEBs

with a high index of exclusion situated in the periphery of the city, generally in settlements of recent construction and incorporation that lack adequate infrastructure. A second pattern is of high-exclusion AGEBs concentrated in the southeast of the MAMC, particularly the Valley of Chalco and adjacent municipalities. Overall, 75% of the 1,426 AGEBs that exhibit high and very high levels of exclusion are located in the municipalities of the State of Mexico.

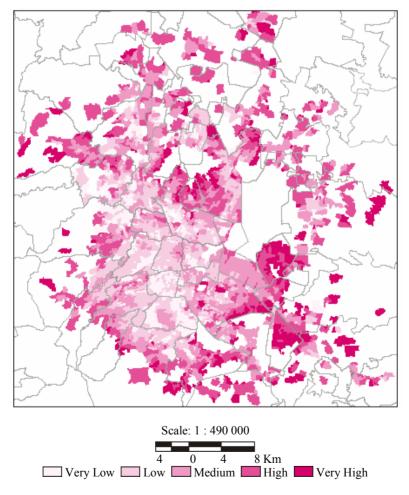


Figure 1.5. Marginalisation levels in the MAMC and surrounding areas

Source: National Population Council based on INEGI (2000)

The level of spatial concentration of deprivation is already a serious issue for the metropolitan region, and the process of polarisation is likely to become more pronounced, at least in the short term. Immigration from Federal District to the State of Mexico is characterized by movements of the middle-low, low and very low income population (as a result of differences in the cost of living between the FD and the State of Mexico, and, in particular, recent sharp increases in property prices in the FD compared with the relative abundance of dwellings in the State of Mexico).

Problems relating to the ongoing concentration of low and very-low income residents in particular parts of the metropolitan region are intimately linked to issues of access to services, with inadequate access to services representing an important contributory factor in determining likely income level. Overall, as with other indicators, the MAMC is statistically endowed with the highest levels of access to basic services (water supply, drainage and electricity) of all Mexican cities, with a very high proportion of all households having access to these services (see Table 1.14). However, while some *delegaciones* of the Federal District face no problems with basic infrastructure, several municipalities in the State of Mexico - such as Atlautla, Axapusco, Ayapango, Tepotzotlan and Villa del Carbon - face levels of access to basic infrastructure below the national averages (84% for water supply, 78% for drainage and 95% for electricity, from INEGI, 2000).

The inability of public authorities to keep up with the service and collective good needs of the new residents is likely to intensify cycles of exclusion over time unless disparities are addressed. This is especially a concern in the State of Mexico, where the population is increasing while infrastructure problems already exist. Strengthening urban infrastructure is important not only because it can improve the MAMC's economic productivity, but also because it can increase the economic contributions of the region's impoverished residents, in turn helping to improve their income levels and soften the cycles of exclusion.¹⁴

With respect to health care, despite the growth of hospital and healthservices in peripheral areas over the past two decades, there is still insufficient capacity in many areas, leading to poor health outcomes in those areas and saturation of the Federal District facilities. For example, 70% of the 879 medical units considered "first level", as well as 75% and 96% of those considered of second and third levels are located in the Federal District, with those in the State of Mexico heavily concentrated in a few municipalities.

Table 1.14. Access to basic services in the MAMC, 2000

	Water Supply (%)	Drainage (%)	Electricity (%)
Federal District	94.74	96.00	97.33
State of Mexico	86.51	85.95	91.48
State of Hidalgo	86.72	83.85	89.69
Total MAMC	90.36	90.64	94.21

Percentage of the Population

Source: INEGI. Figures for the States of Mexico and Hidalgo only include those municipalities that are part of the MAMC.

Similarly, while education levels in the MAMC have considerably improved over the last two decades, important differences exist within the MAMC region, with disparities increasing at higher educational levels. For instance, in 1990 the area with the highest percentage of its population possessing basic education (primary school) was in the delegation Benito Juarez with 91%, while in municipalities such as Chalco this level was around 60%. At the secondary/ high school level, the proportions were 42% and 10% respectively. A principal reason for this is probably the level of access to secondary education in some of the municipalities of the State of Mexico. While all *delegaciones* in the Federal District possess schools from primary to high school, municipalities in the State of Mexico have at least one primary school but several lack the sufficient number of secondary and high schools.

Nonetheless, data for 2000 suggests that there has been some evolution in the stock and distribution of "human capital" in the MAMC. In addition to strong improvements in the numbers of people with high levels of education, the more favoured *delegaciones* of the Federal District have increased substantially their stock of highly qualified human capital, but the lesser disadvantaged municipalities and *delegaciones* have done so as well. Moreover, ranked by their proportional increase of human capital stock, 11 out of the 20 best performers are municipalities of the State of Mexico, many of them belonging to the low-income group.

Annex 1

Table 1a. Explanatory factors of regional differences in average labour productivity, 2000

		due	n productivity e to :	Percentage difference in productivity due to :			
Country	Metropolitan Region	Special- isation	Capital stock	Special- isation (%)	Capital stock (%)		
Canada	Montreal	2 687	-15 870	4	-23		
Canada	Toronto	3 941	-9 105	6	-13		
Canada	Vancouver	3 901	-17 431	6	-26		
France	Ile de France	11 291	6 987	17	10		
France	Nord	-5 303	-5 507	-8	-8		
Germany	Region Berlin	-1 445	-84	-2	0		
Germany	Region Hamburg	4 4 2 0	24 320	7	36		
Germany	Ruhrgebiet	7 288	4 480	11	7		
Germany	Rheinland	8 198	14 365	12	21		
Germany	Detmold	5 973	3 006	9	4		
Germany	Darmstadt	9 322	18 827	14	28		
Germany	Rheinhessen-Pfalz	2 804	15 651	4	23		
Germany	Stuttgart	7 636	12 473	11	18		
Germany	Karlsruhe	9 391	9 723	14	14		
Germany	Freiburg	7 103	4 582	11	7		
Germany	Region Müchen-Ingolstadt	8 4 2 6	28 812	12	43		
Greece	Attiki	1 1 2 6	-26 468	2	-39		
Hungary	Budapest	4 020	-25 310	6	-37		
Italy	Turin	-106	8 4 4 4	0	13		
Italy	Milan	12 999	14 432	19	21		
Italy	Rome	3 939	11 193	6	17		
Italy	Naples	-13 516	9 2 1 7	-20	14		
Japan	Saitama	-14 894	-18 678	-22	-28		
Japan	Chiba	-38 635	8 1 7 2	-57	12		
Japan	Tokyo	9 051	7 052	13	10		
Japan	Kanagawa	4 228	-29 312	6	-43		
Japan	Aichi	-21 114	7 079	-31	10		
Japan	Osaka	6 984	-16 728	10	-25		
Japan	Fukuoka	-28 931	5 241	-43	8		
Korea	Seoul	11 337	-44 602	17	-66		
Korea	Busan	-10 040	-30 452	-15	-45		
Korea	Daegu	-18 201	-26 490	-27	-39		
Korea	Incheon	2 709	-40 800	4	-60		
Korea	Gyeonggi	-51 769	21 409	-77	32		
Mexico	Mexico City (MAMC)	571	-33 164	1	-49		
Netherlands	Noord-Holland	2 618	-6 252	4	-9		
Netherlands	Zuid Holland	-6 621	-4 051	-10	-6		
Netherlands	Noord-Brabant	665	-14 360	1	-21		
Spain	Comunidad de Madrid	7 187	-5 715	11	-8		

productivity, 2000 (continued)											
Spain	Barcelona	4 942	-9 464	7	-14						
Spain	Valencia	-29 071	13 507	-43	20						
GBR	London	13 905	-2 278	21	-3						
GBR	Greater Manchester	11 805	-31 000	17	-46						
USA	Atlanta	10 163	-1 231	15	-2						
USA	Baltimore	10 079	-2 842	15	-4						
USA	Boston	10 543	60 384	16	89						
USA	Chicago	12 502	4 185	19	6						
USA	Cleveland	10 720	-1 403	16	-2						
USA	Dallas	8 404	8 807	12	13						
USA	Denver	10 710	5 552	16	8						
USA	Detroit	10 887	-5 636	16	-8						
USA	Houston	11 153	4 693	17	7						
USA	Los Angeles	8 429	4 759	12	7						
USA	Miami	8 539	-4 454	13	-7						
USA	Minneapolis Saint Paul	5 922	-1 732	9	-3						
USA	New York	12 992	33 646	19	50						
USA	Philadelphia	9 952	-2 778	15	-4						
USA	Phoenix	7 382	-2 720	11	-4						
USA	Pittsburgh	9 271	-4 257	14	-6						
USA	Portland-Vancouver	-1 057	5 067	-2	8						
USA	San Diego	6 300	2 912	9	4						
USA	San Francisco	7 830	42 276	12	63						
USA	Seattle	1 645	23 907	2	35						
USA	St. Louis	6 162	-4 004	9	-6						
USA	Tampa-Saint-Petersburg	7 664	-7 082	11	-10						
USA	Washington	8 361	6 098	12	9						

Table 1a.	Explanatory factors of regional differences in average labour
	productivity 2000 (continued)

Source : OECD Territorial Database.

ISO Code	Metropolitan region	Average Labour P.tivity	Index MA MC = 100	Rank	ISO Code	Metropolitan region	Average Labour P.tivity	Index MA MC = 100	Rank	ISO Code	Metropolitan region	Average Labour P.tivity	Inde x MA MC = 100	Rank
USA	Boston	138 462	396	1	GBR	London	79 162	227	24	NLD	Zuid-Holland	56 862	163	47
USA	San Francisco	117 641	337	2	USA	Cleveland	76 852	220	25	FRA	Nord	56 724	162	48
USA	New York	114 172	327	3	USA	San Diego	76 746	220	26	CAN	Montreal	54 351	156	49
DEU	Müchen-Ingolstadt	104 772	300	4	DEU	Detmold	76 514	219	27	CAN	Vancouver	54 005	155	50
DEU	Region Hamburg	96 275	276	5	USA	Atlanta	76 466	219	28	NLD	Noord-Brabant	53 840	154	51
DEU	Darmstadt	95 684	274	6	ITA	Turin	75 873	217	29	JPN	Aichi	53 499	153	52
ITA	Milan	94 966	272	7	USA	Baltimore	74 771	214	30	ESP	Valencia	51 971	149	53
USA	Seattle	93 087	266	8	USA	Philadelphia	74 709	214	31	GBR	Greater Manchester	48 339	138	54
DEU	Rheinland	90 097	258	9	USA	Detroit	72 785	208	32	HUN	Budapest	46 244	132	55
DEU	Stuttgart	87 643	251	10	USA	Pittsburgh	72 548	208	33	JPN	Fukuoka	43 845	125	56
DEU	Karlsruhe	86 649	248	11	USA	Phoenix	72 196	207	34	JPN	Kanagawa	42 451	121	57
DEU	Rheinhessen-Pfalz	85 989	246	12	USA	Minneapolis-St Paul	71 724	205	35	GRC	Attiki	42 193	121	58
FRA	Ile de France	85 812	246	13	USA	Miami	71 620	205	36	KOR	Gyeonggi	37 174	106	59
USA	Dallas	84 746	243	14	USA	Portland-Vancouver	71 544	205	37	JPN	Chiba	37 071	106	60
USA	Chicago	84 221	241	15	USA	St. Louis	69 692	199	38	MEX	Mexico City (MAMC)	34 942	100	61
USA	Denver	83 797	240	16	ESP	Comunidad de Madrid	69 006	197	39	KOR	Seoul	34 269	98	62
JPN	Tokyo	83 637	239	17	USA	Tampa – St Petersburg	68 116	195	40	JPN	Saitama	33 962	97	63
USA	Houston	83 381	239	18	DEU	Region Berlin	66 006	189	41	KOR	Incheon	29 444	84	64
ITA	Rome	82 666	237	19	NLD	Noord – Holland	63 900	183	42	KOR	Busan	27 042	77	65
USA	Washington	81 994	235	20	ITA	Naples	63 235	181	43	KOR	Daegu	22 843	65	66
USA	Los Angeles	80 722	231	21	ESP	Barcelona	63 012	180	44					
DEU	Ruhrgebiet	79 302	227	22	CAN	Toronto	62 371	178	45					
DEU	Freiburg	79 220	227	23	JPN	Osaka	57 791	165	46					

Table 2a. Ranking of OECD metropolitan regions based on average labour productivity, 2000

Source: OECD Territorial Database.

ISO code	Metropolitan region	Empl oy- ment rate %	Index MA MC = 100	Rank	ISO code	Metropolitan region	Emplo y-ment rate %	Index MAM C = 100	Rank	ISO code	Metropolitan region	Empl oy- ment rate %	Index MA MC = 100	Rank
MEX	Mexico City (MAMC)	98.3	100	1	KOR	Seoul	95.0	97	25	DEU	Darmstadt	91.8	93	49
NLD	Noord-Brabant	97.8	99	2	KOR	Incheon	94.8	96	26	DEU	Karlsruche	91.6	93	50
NLD	Zuid-Holland	97.3	99	3	HUN	Budapest	94.7	96	27	ITA	Turin	91.5	93	51
NLD	Noord-Holland	97.1	99	4	USA	Cleveland	94.7	96	28	DEU	Freiburg	91.5	93	52
USA	San Diego	96.7	98	5	USA	Phoenix	94.7	96	29	FRA	Ile de France	91.3	93	53
USA	Minneapolis-St Paul	96.5	98	6	ITA	Milan	94.6	96	30	ESP	Barcelona	90.6	92	54
USA	Washington	96.5	98	7	USA	Detroit	94.6	96	31	ESP	Comunidad de Madrid	90.2	92	55
USA	Boston	96.3	98	8	JPN	Fukuoka	94.1	96	32	DEU	Region Hamburg	89.4	91	56
KOR	Gyeonggi	96.2	98	9	USA	Chicago	94.1	96	33	DEU	Detmold	89.2	91	57
JPN	Aichi	96.0	98	10	USA	Dallas	94.1	96	34	DEU	Rheinland	89.0	91	58
USA	Philadelphia	95.9	98	11	USA	Los Angeles	94.1	96	35	DEU	Rheinhessen-Pflaz	88.5	90	59
USA	Atlanta	95.8	97	12	CAN	Toronto	94.1	96	36	ITA	Rome	88.1	90	60
USA	Pittsburgh	95.8	97	13	DEU	München-Ingolstadt	94.1	96	37	GRC	Attiki	87.8	89	61
USA	Tampa-St-Petersburg	95.6	97	14	GBR	Greater Manchester	94.0	96	38	ESP	Valencia	87.7	89	62
USA	Houston	95.5	97	15	USA	Seattle	93.8	95	39	FRA	Nord	86.6	88	63
USA	San Francisco	95.5	97	16	USA	New York	93.5	95	40	DEU	Ruhrgebiet	85.0	86	64
USA	Baltimore	95.4	97	17	KOR	Busan	93.1	95	41	DEU	Region Berlin	80.4	82	65
JPN	Chiba	95.3	97	18	GBR	London	93.0	95	42	ITA	Naples	72.1	73	66
JPN	Saitama	95.3	97	19	JPN	Osaka	93.0	95	43		-			
JPN	Kanagawa	95.2	97	20	DEU	Stuttgart	93.0	95	44					
JPN	Tokyo	95.2	97	21	CAN	Vancouver	92.8	94	45					
KOR	Daegu	95.2	97	22	USA	Portland-Vancouver	92.7	94	46					
USA	St Louis	95.1	97	23	CAN	Montreal	92.5	94	47					
USA	Denver	95.0	97	24	USA	Miami	92.0	94	48					

 Table 3a.
 Ranking of OECD metropolitan regions based on average employment rate, 2000

Source: OECD Territorial Database.

ISO code	Metropolitan region	Activ ity rate %	Index MA MC = 100	Rank	ISO code	Metropolitan region	Activity rate %	Index MAM C = 100	Rank	ISO code	Metropolitan region	Acti vity rate %	Index MAM C = 100	Rank
USA	Dallas	58.4	149	1	USA	Chicago	52.1	133	25	ESP	Comunidad de Madrid	43.1	110	49
USA	San Francisco	57.7	147	2	USA	Phoenix	51.8	132	26	KOR	Busan	43.1	110	50
USA	Portland-Vancouver	57.7	147	3	USA	Cleveland	51.5	131	27	KOR	Daegu	43.0	110	51
USA	Seattle	57.6	147	4	USA	Philadelphia	51.4	131	28	FRA	Nord	42.9	109	52
CAN	Toronto	57.2	146	5	NLD	Noord-Holland	51.3	131	29	ESP	Barelona	42.3	108	53
CAN	Vancouver	56.9	145	6	NLD	Zuid-Holland	51.1	130	30	ITA	Rome	41.9	107	54
USA	Atlanta	56.6	144	7	NLD	Noord-Brabant	51.1	130	31	DEU	Darmstadt	41.7	106	55
USA	Washington	56.6	144	8	USA	Pittsburgh	50.9	130	32	DEU	Stuttgart	40.5	103	56
USA	Minneapolis-St Paul	55.7	142	9	JPN	Osaka	50.5	129	33	DEU	Region Berlin	40.4	103	57
USA	Denver	55.4	141	10	GBR	London	49.9	127	34	DEU	Region Hamburg	40.0	102	58
USA	Boston	55.1	141	11	FRA	Ile de France	49.7	127	35	MEX	Mexico City (MAMC)	39.2	100	59
JPN	Aichi	54.5	139	12	USA	Miami	49.7	127	36	DEU	Karlsruhe	39.0	99	60
USA	Tampa-St-Petersburg	54.1	138	13	JPN	Fukuoka	49.2	126	37	DEU	Rheinland	38.9	99	61
USA	Houston	53.8	137	14	GBR	Greater Manchester	48.7	124	38	DEU	Detmold	38.1	97	62
JPN	Tokyo	53.6	137	15	GRC	Attiki	47.1	120	39	DEU	Freiburg	35.7	91	63
USA	Baltimore	53.6	137	16	KOR	Gyeonggi	45.8	117	40	DEU	Ruhrgebiet	35.0	89	64
JPN	Saitama	53.4	136	17	USA	New York	45.5	116	41	ITA	Naples	34.8	89	65
USA	St. Louis	53.3	136	18	ITA	Turin	44.8	114	42	DEU	Rheinhessen-Pfalz	34.0	87	66
USA	San Diego	53.0	135	19	ITA	Milan	44.6	114	43					
CAN	Montreal	52.9	135	20	KOR	Seoul	44.4	113	44					
USA	Detroit	52.8	135	21	ESP	Valencia	44.3	113	45					
USA	Los Angeles	52.7	134	22	HUN	Budapest	44.0	112	46					
JPN	Chiba	52.7	134	23	DEU	München-Ingolstadt	43.844.0	112	47					
JPN	Kanagawa	52.5	134	24	KOR	Incheon	43.5	111	48					

Table 4a. Ranking of OECD metropolitan regions based on average activity rate, 2000

Source: OECD Territorial Database

Notes

1. This Review adopts the definition of the MAMC as it is defined by SEDESOL (see *Territorial Analysis of Mexico City Metropolitan Area: Background Report* (2003)).

- 2. Quoted from Sandoval, 1999 in PRADILLA COBOS, E., coord. (2001).
- 3. NAVARRO, B. and RODRÍGUEZ, J. (2000).
- 4. There is a vast array of literature on global urban rankings that aim to classify and position metropolitan regions in the global hierarchy. These rankings serve to highlight major strengths and weaknesses to determine the regions' present positioning, underdeveloped aspects and future objectives (INRS, 1999). The OECD ranking of metropolitan regions does not focus on historical trends but on positioning. It intends to provide a useful international positioning of the different regions' levels of competitiveness. Moreover, despite the existence of numerous competitiveness rankings, a uniform way to measure metropolitan competitiveness does not exist, but this is not to say that such rankings are irrelevant or inconsistent. Indeed, the contrary is true, but a proper interpretation of such ranking should recognize that regions are positioned comparatively according to pre-established indicators.
- 5. A preliminary question could be whether it is useful to compare Mexico City with such a diverse set of metropolitan areas. The GDP per capita of Boston and San Francisco are, after all, around five times higher than that of Mexico City. Another objection could be that many of the cities are relatively small in comparison to Mexico City. There are certainly important caveats in reading these tables. At the same time, as has been stressed above, the economic environment of Mexico City is no longer simply national, but international -- the decline of many of its traditional economic activities attests to this. As such, the benchmarks for the region are not simply Monterrey and Nuevo Leon, though comparison with these and other Mexican cities also has significance, but also the North American cities within the NAFTA area and other cities against which it can measure performance. Another important issue with cross-country analysis is the quality and comparability of data. In the case of Mexico City, the data appear robust, but

the data cannot be compared directly without some interpretation. For example, data relating to employment and activity rates is influenced by the size of the informal economy, which means that a share of workers employed in productive activities do not appear in the statistics. Moreover, the contributions of the activities in which they are employed are only partially taken into account in GDP calculations (to the extent that many informal workers are employed in formal enterprises). Data for other cities where the informal economy is smaller are not affected in the same way, though the dysfunction of the labour market, which is at the root of the growth of the informal sector in Mexico City, will be expressed in other ways in other places.

- 6. Real GDP is valued at national Purchasing Power Parities (PPP), which accounts for price differences between countries. The lack of regional PPP indexes makes it impossible to further control for price differences within the same country. The real GDP per capita figures used for the MAMC in the rankings are OECD estimates.
- 7. By definition, average productivity is a weighted average of sectoral productivity, where weights are given by the employment share of each sector. Therefore, differences in average productivity due to differences in employment shares can be regarded as the effect of specialisation and differences in average productivity due to sectoral productivity can be interpreted as the result of differences in capital and technology.
- 8. See OECD (2003), *Economic Surveys: Mexico*.
- 9. *Expansión* (2003), "Las 500 empresas más importantes de México", Mexico.
- 10. Computed by SAMANIEGO, N., A. HERNÁNDEZ, R. GUTIÉRREZ (2000).
- 11. WORLD BANK (2001), Marcelo Giugale, Olivier Lafourcade, Vinh H. Nguyen, editors, *Mexico, a Comprehensive Development Agenda for the New Era*, p. 107.
- 12. Derived from Table 4; tri-monthly earnings of the State of Mexico in constant (1994) MXN amount to MXN 3,267 and for the state of Hidalgo the figure is even lower, at MXN 2.042. Source of data: INEGI.
- 13. The concept of exclusion has not been widely used in Latin America and it has been related to cultural and political aspects (Schteingart and Rubalcava, 2000). Nonetheless, in this context, the author measures exclusion in a rather economic context, as it is strongly related to the UBN indicator.
- 14. SEDESOL (2004), La Pobreza Urbana y la Segregación Socio-espacial.

Chapter 2

Governance: managing the metropolitan region

This chapter is divided into four sections and provides analysis and suggestions for improvement of the MAMC's governing and managing institutions. Section 1 provides an introduction to the concept of functional economic areas. Section 2 examines the institutional mechanisms that exist to co-ordinate and implement policy in the metropolitan area, highlighting their limited efficacy and the lack of a coherent and politically supported metropolitan 'vision'. Section 3 is devoted to the analysis of the fiscal relations within the region, particularly the important asymmetries in expenditure and revenue responsibilities as well as in regulatory regimes. On the basis of the two previous sections' findings, Section 4 discusses the possible changes that could lead to better co-ordination and to the development and implementation of a coherent and widely shared metropolitan development strategy. This part touches upon three main steps to be considered: the first concerns building political commitment around a new 'vision', the second is linked with the introduction of resource sharing and incentives for co-operation and the third relates to the proposed creation of a new Metropolitan Development Agency to enhance metropolitan coordination in the key field of competitiveness.

Functional economic areas

An important assumption is that the region covered by this review approximates to a functional economic area – *i.e.*, the different spatial units together form a relatively unified economic system and reflect the pattern of a commuting zone. This implies, in theory, that all parts of the region can share some common objectives. Furthermore, notwithstanding inequalities and rivalries, the interdependencies among the different municipalities imply stronger logics of co-operation than of competition. In other words, there is added value to a common strategy/vision that explicitly recognises interdependencies. In a functional area the interests of employers and residents are in the aggregate best served by maximising the productivity growth and labour demand of the region as a whole. There might be instances where specific local interests appear to contradict this, but in the long-term there should be a clear collective premium for a region that maximises its "functional" complementarities. At the same time, it is also apparent from other major cities across the OECD that metro-wide economic growth depends not only on economic interdependencies but also on social cohesion. In other words, areas that are detached from the economy and labour market of the metropolitan region constitute a drag factor that reduces the competitiveness of the region as a whole and thereby jeopardises the achievement of collective goals.

The second and related assumption is that the functional region around Mexico City is in a state of rapid evolution, as indeed are most large cityregions. Traditional centre-periphery models trace the outward expansion of cities to encompass previously unconnected regional centres leading to a small economic core surrounded by a large suburban and peri-urban hinterland. This model no longer conforms to the reality of most major OECD cities and is becoming out-dated as a basis for policymaking in the MAMC. The Federal District still retains most of the capital/world city functions, but other key functions/attributes are increasingly distributed around the region.

Recent OECD reports emphasised that the turn-around in the fortunes of the Glasgow metropolitan area was aided by a strategic blending of competitiveness and social inclusion agendas into a "vision" for a regionwide rather than patchwork pattern of growth and regeneration. Similarly, Helsinki's economic development was spurred by forward-looking, integrated infrastructure, technology and education investment policies involving both regional and national actors. The Core Cities project tested the performance of urban regions against expected-outcomes models. The project was able to speculate that the strong growth of Barcelona, Rotterdam and Paris in the 1980s can be ascribed at least partially to strong leadership and a clear strategy. Unified, well-led metropolitan government seems to have an impact. Yet most metropolitan areas are characterised by fragmented administrative structures. Cities have outgrown their administrative structures and their functional areas are now often a mosaic of different jurisdictions. They span not only local government boundaries but often two or more administrative regions as well. This poses major coordination problems, for example:

- poor quality of public services where administrative boundaries inhibit efficient use of resources and investment;
- duplication and waste where sectoral policies, often managed by different levels of government, are poorly integrated and have different, even contradictory, objectives;

- disincentives for resource and information-sharing among subnational authorities;
- dispersal of limited funds to a multiplicity of agencies that have overlapping jurisdictions and similar mandates.

Fundamentally, a functional economic area works best when investment and public service delivery are organised in a manner coherent with spatial organisation. Judging from cases in other major cities, the main problem seems to be that where there is no region-wide framework for the sharing of responsibilities and pooling of resources, nor any system of common asset creation, individual policy actors weigh immediate outlays against diffused benefits. As a result, they tend to opt for inaction, avoiding this type of collective investment in favour of projects that are more locally targeted with clearer local outcomes and based on a clearer legal framework. In this respect, lack of co-ordination appears to undermine efforts to mobilise national and international investment in major projects. Instead it promotes, or at least creates, an institutional structure that is unable to prevent patterns of growth that are extremely costly in terms of infrastructure needs and puts strains on scarce resources such as water and electricity.

Institutional framework and existing co-ordination mechanisms

Mexico has been moving towards a more decentralized governmental system for the last 20 years. This process of decentralization and increasing political and economic autonomy for state and local governments has important implications for governance in the MAMC. As one important example, the administration of the Federal District was until 1993 a federal government agency and it was not until recently, through a Constitutional Amendment, that for the first time the head of the Federal District government was elected instead of being federally appointed. During the long period of strong central government and one-party rule, issues of coordination between the different governmental entities of the MAMC were more of an internal debate within the PRI (*Partido Revolucionario Institucional*) party. Today the situation has changed dramatically. The political and economic changes currently underway in the region suggest that co-ordination between governments will be a central issue in the future.

Box 2.1. Institutional background

Mexico is a federal republic with a representative and democratic system of government. Power is divided across the national territory in three levels: the central (federal) government; 32 federal entities (31 states and one Federal District), and close to 2 500 municipalities. During most of its modern history and particularly since the creation of the *Partido Nacional Revolucionario* (PNR) in 1929 – which would later become the *Partido Revolucionario Institucional* (PRI), the political grouping that controlled virtually all levels of government for 71 years – Mexico was characterised as having an authoritarian and highly centralised political system. Notwithstanding formal legal stipulations, most of the political authorities at the federal, state and local levels were under the direct control of the Federal Presidency. State governors were highly influenced by the wishes of the Presidency, and for the most part lacked the formal autonomy granted to them by the Constitution. Governors were subjects of the President due to political and partisan loyalty to him, with conflicts among Governors also being arbitrated by the President himself or by the party mechanism.

The autonomy of municipal government has been and still is severely limited, rendering it the weakest tier of the Mexican government. However, some modifications made in 1983 of Article 115 of the Constitution, as well as greater political competition, have somewhat strengthened them. In this respect, some recent steps to consolidate their functions include the redistribution of decision-making in social, economic and cultural areas. Legally, municipalities have no legislative function and can only make regulations within the framework of state and federal laws. They are responsible for the provision of many public services such as drinking water and sewerage, retail and wholesale markets, and public security. Tax rates have to be approved by the state legislature and the state comptroller who then reports on audits of municipal accounts to the legislature; moreover, municipalities are heavily dependent on federal and state transfers. Nevertheless, as a result of the 1983 reform, their legal authority was reinforced, conferring them some regulatory powers without requiring prior agreement from the state legislature. In effect, it is only in this framework of democratic transition that new actors at the sub-national level have acquired central importance in the development process. Additionally, greater participation on governmental issues can be perceived on the part of civil society. These new realities have increased the need to strengthen co-operation mechanisms, within and among different levels of government.

The Metropolitan Area of Mexico City as it currently stands is not a territorial administrative level of government but rather a geographical statistical unit. It has grown into a complex administrative organism consisting of five governmental units: the Federal District and its 16 *delegaciones*; the States of Mexico and Hidalgo with their 59 municipalities; and the federal government, which for historical reasons plays a much stronger role in the day-to-day functioning of the MAMC than it does in other cities. The main obstacle to effective management of the metropolitan region is that these different units are governed by very different legal statutes. The Federal District is a distinct entity. It is perhaps most comparable in legal terms to Washington, D.C. – *i.e.* although much like a geographically small state in its spending responsibilities, it is not legally a

state, but neither is it a municipality. As will be discussed later in this chapter, despite having a legal status that ties it more closely to the federal government than the states are, it has far greater revenue raising power than the states. Paradoxically, some key functions that are the usual responsibility of the states (albeit through unconditional grants from the centre) – such as education – are administered directly by the federal government within the Federal District. Moreover, as the capital of the country, it has certain additional responsibilities that do not apply, or that are less important for states. As was mentioned above, the Federal District's governmental leader was appointed by the federal government until very recently, and as such, the Federal District can be seen as a new political entity characterised by fledgling democratic processes.

It is clear from this overview that direct co-operation between the Federal District and the states is not as straightforward as it might be between two states where legal and fiscal frameworks are compatible. Cross jurisdictional co-operation is further complicated by the fact that the assignment of responsibilities between the Federal District and its *delegaciones* and between the states and their municipalities are very different, with municipalities being generally more autonomous and having more financial power than the *delegaciones*.

The different governmental entities of the MAMC and the central government of Mexico have clearly recognized the need for co-ordination at the metropolitan level. This is evident in (i) the plethora of co-ordinating and planning bodies, commissions, committees and councils that currently exist – between the State of Mexico and the Federal District, as well as between the State of Mexico, the FD, and the federal government; (ii) regional trusts and other mechanisms created within the Centre Meso-Region (an intermediate level created in 2002 by the central government to improve co-ordination between states); and (iii) central government programmes. However, the existing bodies, co-ordinating mechanisms and federal programmes do not seem to have created much co-ordination thus far.

Regional co-ordinating and planning institutions

The first initiative to build cross-jurisdictional co-operation was a response to the rapid expansion of the urban area of Mexico City, which started to grow closer and closer to the so-called "crown cities" located around it – namely Toluca, Pachuca, Puebla, Tlaxcala and Cuernavaca. These cities were also increasing in size and population and the interrelationships between them and the other sub-national jurisdictions within the MAMC became more intense. This held up the strong possibility that municipalities lying between the crown cities and the MAMC would be

swallowed up in one sprawling conurbation. The reaction of the federal government was to set up the *Conurbation Commission of the Centre of the Country (Comision de Conurbacion del Centro del Pais or CCCC)*. This was an important step forward because at the time there was no legal means by which municipalities could engage in joint activities formally; as such, there was no legal basis for horizontal co-ordination and there were strong disincentives to enter into relationships that were potentially *ultra vires*. Around the same time, the Congress approved the General Law on Human Settlements (*Ley General de Asentamientos Humanos*) which has been the principal regulation governing the management of metropolitan areas since the mid-1970s, providing the legal basis for the establishment of institutions of inter-municipal and inter-regional co-operation. The Human Settlements General Law established that:

"...when two or more urban centers situated within municipal territories of two or more states, form or tempt to form a physical or demographic continuity; the Federation, the States and the respective municipalities will conjunctly and coordinately plan and regulate the conurbation phenomenon of reference ..."

Moreover, government added fractions III and IV to the 115 Constitutional Article establishing the same principles as the General Law on Human Settlements.¹ Despite this new framework, the results in terms of control of urban growth and reinforced co-ordination were limited. Municipal and state governments continued to develop urban and regional plans for their specific constituencies as they had previously, without significant co-ordination. This is perhaps not surprising: in other OECD countries, the provision of a legal framework for joint planning and policy action by itself has not led to substantial patterns of collaboration across jurisdictions. Furthermore, it is clear that other obstacles, relating to fiscal regimes and the lack of a "culture" of institutional co-operation also need to be addressed. The lack of a co-operative culture can be partially linked to the effects of the existing re-election laws on the municipalities' governance capacity. Municipal presidents are limited to a single three year term which may prevent a long-term commitment to accountable policy making and public spending. Along the same lines, the system might not create proper incentives for the municipal leaders to increase co-operation or have a longterm local or inter-municipal policy focus.

The activities of the CCCC practically ceased in the 1980s and have been replaced by a number of **sector-specific metropolitan commissions** created through agreements between the Federal District, the State of Mexico and the federal government to work in fields such as transport, environment and security.² These bodies have had mixed results. Their positive contribution has been to mobilize key stakeholders in specific

sectors and to focus their attention on key issues using a relatively lightweight institutional instrument. As an example, the Environmental Metropolitan Commission has been successful in achieving agreements among the different government entities to orchestrate programmes such us "Hoy no Circula" (One day without Car) and "Verificacion Vehicular" (Vehicular Technical Control), as well as several programmes dealing with the pollution in the Valley of Mexico (which is the geographical region in which the MAMC rests, marked by valleys, mountains and plateaus). The principal drawback of the sectoral Commissions, somewhat paradoxically, is that they are single-sector bodies and tend to be 'reactive' to specific issues or problems without being able to address the range of possible causes or contributing factors. The main concern that prompted the establishment of the CCCC ten years before, *i.e.* uncontrolled urban development, is difficult to tackle via a sectoral approach and remains a key underlying problem that influences outcomes in many different sectors. There is general agreement among experts³ and policymakers that the results in terms of improvement of metropolitan co-ordination in the MAMC through these Commissions have been below expectations.

In a new effort to develop a more cross-sectoral co-ordination institution to control urban sprawl in the Valley of Mexico, the Federal District and the State of Mexico signed an agreement with the Federal Social Development Ministry (Secretaria de Desarrollo Social, SEDESOL) to create the Human Settlements Metropolitan Commission (Comision Metropolitana de Asentamientos Humanos, COMETAH)⁴ in 1995. It is within this framework that the Metropolitan Area of the Valley of Mexico Planning Programme (Programa de Ordenacion de la Zona Metropolitana del Valle de Mexico, POZMVM) was produced in 1998. This Programme constitutes the intermediate ordinance between the urban development regulations contained in the National Programme of Urban Development and Territorial Planning (PNDU-OT) and the range of urban programmes established in the Federal District and State of Mexico. The objective of this Programme is to become an instrument for the co-ordination of all actors involved in the spatial and economic development of the MAMC. While its objectives are ambitious, the legal status, conceptualization and structure of the POZMVM are currently under review. The goal of the revision is to ensure that the instrument is practical, legally appropriate and able to be implemented in the different institutional settings of the MAMC.

Continuing the effort towards more comprehensive co-ordination bodies, in March 1998 a bilateral agreement on co-ordination was signed between the Federal District and the State of Mexico to create the **Executive Commission of Metropolitan Co-ordination**⁵. This body is ultimately under the direction of the Governor of the State of Mexico and his counterpart, the Chief of Government of the Federal District. Its aim is to co-ordinate, evaluate, and monitor plans, programmes, and actions undertaken in the metropolitan territory of the Valley of Mexico.⁶ The Commission has a joint Secretariat headed by the State of Mexico's Minister of Metropolitan Urban Development and the Federal District's Metropolitan Programmes Coordinator. It includes representatives from the Federal District, the State of Mexico and municipalities (with the FD *delegaciones* being included as full members in 2000). The Executive Commission is an important metropolitan institution as it co-ordinates the different sectoral metropolitan commissions that were mentioned above, in theory providing them with precisely the kind of cross-sectoral view and reach that they lack when they operate as unconnected, single sector bodies (see Figure 2.1).

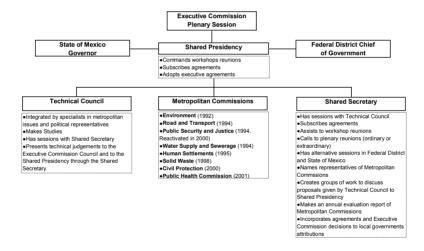


Figure 2.1. Executive Commission of Metropolitan Co-ordination

There have also been efforts to improve co-operation between states at a larger regional level. In 2002, Mexico created five Meso-Regions to improve co-ordination among states. The 'Centre Region' is the relevant body for the MAMC, as it consists of the Federal District, the States of Mexico and Hidalgo, in addition to the States of Querétaro, Tlaxcala, Puebla and Morelos. **The Executive Council of the Centre Region** consists of the governors of the two states with municipalities in the MAMC, Mexico and Hidalgo, the governors of Tlaxcala and Morelos, the chief of government of the Federal District, and a representative of the federal government from the Presidential Office for Strategic Planning and Regional Development. The

Centre Region's objectives, projects, and financing are of central importance to the MAMC. The Executive Council of the Centre Region has established an Intergovernmental Co-ordination Agreement and launched a Centre Country Programme for Strategic Planning and Regional Development. This programme has established seven technical committees in charge of certain sub-programmes, each being co-ordinated by one of the member states.⁷

Trusts and other co-ordinating mechanisms

Aside from the necessary institutions, there are different mechanisms that can help generate municipal co-ordination. Within the Center Region, a regional trust fund (FIDECENTRO) has been created to promote investments in infrastructure, public services, public transportation systems, water, education, health, industry, and agrarian sanitation, with around MXN 14,000 million in project support available. Currently, there are five priority projects: a regional train network for the Federal District; development of industrial and technological parks to aide the creation of clusters; road construction including an outer beltway around the FD and connected to the States of Tlaxcala, Mexico, and Puebla; construction of a multi-modal transportation system; and water management in the MAMC. The priorities of the Centre Region are thus intimately connected with the MAMC. What is not clear yet is how quickly and effectively the committees that co-ordinate the preparation of these projects still remain.

Authorities are also developing co-ordination across administrative boundaries for joint investments through the creation of other types of metropolitan funds. Recently the governor of the State of Mexico announced the creation of "Metropolitan Funds" for certain conurbations within the state, such as Toluca, the state's capital city, where 55 municipalities will participate and contribute according to their financial possibilities.⁸ In parallel, "Metropolitan Zones" have been created in the State of Mexico to encourage co-operation between municipalities on public works of regional impact and to facilitate the financing of such projects. In addition, these legal reforms allow municipalities to sign agreements with the federal government, the Federal District and even *delegaciones*. Other instruments for financing investments in the metropolitan area are trusts. The Trust for Historical Centre in the Federal District for instance has been created to promote, manage and co-ordinate the recovery, protection and conservation of the historical centre. The "Environmental Trust" (Fideicomiso Ambiental) aims at enhancing and protecting air quality. Another example is the recently created "Trust 1928". Its aim is to administer several metropolitan projects regarding potable water, drainage, and residual water treatment, agreeing credits with international organisations (Inter-American Development Bank and Japanese Bank of International Co-operation), the Commission of Water (*Comision Nacional del Agua*) and the governments of the State of Mexico and the Federal District.

Federal planning mechanisms and sectoral programmes

The basic framework for sub-national planning in Mexico is provided in the National Development Plan, which is the basic instrument for allocating resources and assigning responsibilities. The Federal Secretariat for Finance and Public Credit (Secretaria de Hacienda y Credito Publico) is responsible for co-ordinating the implementation of the Plan and following through on a regional planning mechanism with the states and municipalities by means of a range of co-ordination agreements between the central and regional level. The main responsibility of the states is to prepare the State Development Plan, an articulation of the principles of the National Development Plan at state level. This plan is prepared by a state planning committee, the Comite de Planeacion para el Desarollo (COPLADE), and generally includes a proposal for investments at state and municipal levels and supervises coordination of actions across levels of government. At the municipal level, the municipal counterpart of the state planning committee, the COPLADEM, is responsible for formulating a municipal development plan that includes more specific expenditure proposals. On the basis of these municipal plans, the state government concludes municipal development agreements with each municipality (Convenio de Desarollo Municipal (CUDEM)), which set out the transfer of resources and define shared responsibilities for project implementation and financing in the case of joint activities. This is the principal framework for policy planning across levels of government, and given the nature of the Mexican fiscal regime, which is heavily centralised, this system also governs fiscal relations to a large extent.

In addition to this overall mechanism, there are also a relatively large number of sectoral plans impacting on metropolitan development, and in the case of the MAMC, there have been several metropolitan or urban planning initiatives. In the past, most bodies charged with co-ordination have used planning documents as a principal tool by which to give coherent spatial articulation to their development strategies. As a result, in Mexico City, as in most major cities, there are an impressive number of plans of different kinds, at different geographical scales, following different timelines and sponsored by different bodies. From an outside perspective, and again as is often the case elsewhere, most seem to be poorly linked to the political/decision-making channels through which public investment choices and budget allocations are made. Moreover, even when the plans themselves are articulated in a horizontal, integrated manner their implementation still depends on often un-coordinated sectoral departments. The plans, generated by planning departments of sectoral ministries, have tended to be weighted mainly towards land use and infrastructure development issues. They have been useful in a context where the philosophy for public services was essentially "predict and provide": trying to keep up with an exploding population and rapidly expanding demand for land and housing. With an increasingly strong emphasis on what can be called "predict and prevent", where public authorities take a more strategic look at how to create sustainable and controlled spatial development dynamics, there is a need for a new type of more strategic and co-ordinated approach to spatial planning with a stronger focus on co-ordination between land use, transport, housing, and economic development policies.

Summing up: the need for a comprehensive metropolitan approach

The long list of co-ordinating bodies and planning attempts indicate that both the central government and sub-national governments within the MAMC are well aware of the need for co-ordinated policy action and more effective public service delivery in the metropolitan region. The issue of water management in the region provides a clear example of a policy area where challenges that are crucial and metropolitan in scale call for a new integrated approach (see Box 2.2).

As the preceding sections show, the instruments used to encourage coordination within the region have evolved significantly over time. However and despite the comprehensive nature of the institutions that are currently in place, there is still a sense that this has not translated into a metropolitan approach overall, and that effective collaboration is still a difficult and time consuming process. There are many reasons why institutional co-ordination does not translate easily into more effective policy implementation. The discussion above highlights the fact that it is not a lack of institutional mechanisms, but that the many institutions in charge of metropolitan coordination are not working as they should and this is mainly for two reasons. First, they do not act under one common and widely shared metropolitan 'vision'. This generates confusion in what their respective objectives should be and in how their actions should be implemented, co-ordinated and monitored. Conducting a clear evaluation of all existing institutions would improve the co-ordination between the different development mechanisms and would help to minimize the duplication of objectives and tasks, as well as the wasting of resources. Second, one of the principal obstacles to institutional co-ordination across the metropolitan area is certainly the financial disequilibrium - and related legal frameworks and regulations -

between the different actors in the region. The following section examines the main characteristics of fiscal relations within the metropolitan region.

Box 2.2. Metropolitan co-ordination: the example of water management

The case of water management provides an example of where significant reform has been introduced in recent years, with some positive results, but where better coordination would bring even more benefits. Situated at over 2000 meters of altitude and encircled by mountains that in certain cases reach over 5000 meters, the metropolitan area was originally built over a lagoon, part of a vast and complex hydraulic system regulating the waters of numerous lakes that have disappeared today. Present conditions of the Mexico City Basin result from a continuous degradation of the natural environment because of the implementation of inappropriate hydraulic policies which have started to be modified only in recent years following the creation of the Mexican Ministry for the Environment. The water provided to the several millions of Mexico City inhabitants is largely extracted from various well fields thus contributing to the subsidence of the city's ground. The aquifer is being progressively emptied and about a fourth of the water consumed in the area is imported from the nearby Cutzamala and Lerma basins. Distribution losses are estimated at 40% of the resource, while current practice considers a 15% loss as being reasonable. Furthermore, wastewater collection and disposal do not offer an easier perspective: although 82% of the residents are connected to the sewer system, only 10% of wastewaters are treated.

Dealing with these problems has triggered a number of reforms. The drive to change the collective mind frame towards water consumption was initiated in 1988 when Mexico adopted a series of laws that have promoted the establishment of private rights over the use of water and favoured the privatisation of water distribution and the management of water treatment and industrial effluents. The establishment of a Federal Attorney for the Environment and the transfer of responsibilities over the *Comision Nacional del Agua* (CNA), the institution that is responsible for the overall management of water in Mexico to the Ministry of the Environment (SEMARNAP) in 1994, also resulted from the acknowledgement of the growing importance to move towards a different cultural perspective on water usage and management.

In the Federal District both water distribution and infrastructure are within the purview of the Federal District Water Commission (*Comisión de Aguas del Distrito Federal.*) The Commission was established in 1992 and was given the faculty to privatise the administration and operation of water treatment and distribution. Unlike state water management authorities, Federal District authorities receive considerable direct financial aid in addition to the tariffs they collect. In the portion of the Mexico Valley that lies under the jurisdiction of the State of Mexico, CNA delivers bulk water to the Mexico State Water Commission (*Comision del Aguas del Estado de Mexico*) which distributes it to municipalities. Institutional arrangements for water management in the States of Hidalgo, Puebla and Tlaxcala are similar to those existing in the State of Mexico. The result of this complex set of institutions is that the Federal District and the states belonging to or adjacent to the MAMC manage water autonomously from one another, which implies that the infrastructure is separated to the point that in some cases the respective pipelines run parallel to each other beneath the same road (NAS, 1995).

Box 2.2. Metropolitan co-ordination: the example of water management (continued)

On the legislative side, the National Water Legislation (1992) and its regulation (1994) established a framework to ensure that the private sector can operate and/or build hydraulic infrastructure. In particular they established the obligation for all users to pay for the right of use and set up a National Register for Water Rights which tracks all concessions and their transfer (which could lead to a water market). The law leaves considerable discretionary leeway to the federal government to deliver rights and concessions. CNA is entirely responsible for the management and attribution of bulk water rights. However by consolidating within one authority the administration of water quantity and quality the law provides a framework that ensures greater legal stability thus fostering responsibility in the use of water and providing greater certainty to private investors. Legislation on water taxation has evolved considerably over the last few years. In 2003 for the first time MXN 200M from water concessions were earmarked to support the Mexican Forestry Fund, thus adopting a preventative approach to water management. The most impressive innovation lays in the adoption of progressive bulk water tariffs for drinking water. The intention is to trigger a domino effect and create incentives with the water utilities to reduce water consumption.⁹ The new law also introduces a charge for the usage of water in excess of the volumes established by each concession. Until then water for agricultural and animal stock was supplied by CNA entirely free of charge.

Despite such advances, the proper management of water is still impeded by the lack of effective co-operation at the metropolitan level. This may be improved by reviewing and reinforcing the role of co-ordinating institutions such as the **Mexico Valley Water Commission** (*Comisión de Aguas de Valle de Mexico*), which, also due to the very different attributions of responsibilities and resources between the FD and the surrounding states, is not yet providing the needed co-ordination.

Fiscal relations across levels of government

Generally speaking, the fiscal system operating in the MAMC is as complex and heterogeneous as the political-administrative system. Five different fiscal regimes operate simultaneously across the region, corresponding to the different types of government entities present at the federal, state and municipal/*delegacion* levels. As was noted above with respect to statutes and functions, the Federal District has a very different fiscal regime from that of ordinary states. Moreover, the *delegaciones* are different again from normal municipalities. Thus, overall the situation presents significantly more complexity than already complex multilevel fiscal structures in other countries.

The most obvious point about the fiscal system in Mexico is that despite being a federal country, the federal government collects the lion's share of taxes and is responsible for the bulk of expenditures (and three quarters of public employees are employed by the federal government). Overall, local and state tax revenues account for only 0.5% of GDP, whereas for other federal countries the figures range from 6.4% (Australia) up to 17.4 percent of GDP (Canada). Combined together all sub-national revenues barely account for 5% of GDP. Table 2.2 also shows that the states have very little taxing power and depend on different kinds of transfers from the federal government. In fact, the states gave up their own taxing power under the Fiscal Co-ordination Law of 1980 which effectively reserves for the federal government the right to levy most taxes. The increase in transfers between 1980 and 1998 reflects the replacement of own resources with various types of transfers (see Table 2.2). As part of the system that was introduced at the time, the states transfer on a minimum of 20 percent of these transfers to the municipalities to supplement their income. Table 2.2 further shows that municipalities have, in percentage terms, more significant own resources. certainly with respect to the state governments (over 40% own resources for the municipalities versus around 10% for the states). This has to be put in the context of very low shares of total own revenues for both levels of government, which means that despite this revenue raising capacity the municipalities are also heavily dependent on transfers. Municipal revenues are thought to be under-exploited partly because of poor tax administration systems, e.g., old cadastral registers, disputed tenure or joint ownership, which make collection rates relatively low. Whatever the reason, it is clear that the small absolute amount of municipal revenue and the heavy reliance on grants creates certain problems in financing infrastructure and public service delivery above the prescribed minimum levels. And even if they were able to afford it, the heavy reliance on transfers gives municipalities an incentive to refrain from financing infrastructure in the hope that the higher levels of government will foot the bill.

The federal government's dominance with respect to the tax system is apparent in the MAMC revenue collection figures (see Table 2.1). In 2000, the federal government collected around 75% of all tax revenue in the MAMC, mainly from Income Tax (*Impuesto sobre la Renta*), Value Added Tax (*Impuesto al Valor Agregado*) and Special Tax on Products and Services (*Impuesto Especial sobre Productos y Servicios*).¹⁰

Government level	Percentage of Total Tax Revenue in MAMC (%)
Federal government	74.1
Federal District	12.3
Delegaciones	9.1
State of Mexico and Hidalgo	2.6
Metropolitan Municipalities	1.9
Total Tax Revenue in MAMC	100.0

 Table 2.1.
 Share of tax revenue in the MAMC by level of government, 2000

Source: INEGI

Another important feature of Mexico's revenue raising structure is the disparity between the fiscal capacity of the Federal District on the one hand, and of the states and municipalities on the other. Figure 2.2 clearly shows at a glance the unique fiscal breakdown of the Federal District with respect to every other Mexican state. The Federal District receives transfers (*participaciones* and *aportaciones*) from the federal government,¹¹ but unlike the states it also has substantial own-tax revenue sources. The main tax revenue source of the Federal District is a payroll tax and it also levies a tax on property and real estate purchases, and taxes on vehicle property, use and purchase. Other minor sources of revenue include public service rights (water supply) and fines collected by the police.

		% of GDP							% of tot	al revenue		
Federal countries	Tax revenue		Non-tax revenue		Grants		Tax revenue		Non-tax revenue		Grants	
	1980	1998	1980	1998	1980	1998	1980	1998	1980	1998	1980	1998
Australia												
State	4.0	5.4	1.9	4.6	7.3	6.1	13.2	33.5	14.5	28.7	55.6	37.8
Local	1.0	1.0	0.4	0.8	0.4	0.3	1.9	45.2	22.8	38.5	23.0	16.3
Austria												
State	4.0	4.1	1.1	1.4	3.4	4.8	8.5	39.9	13.1	13.6	39.6	46.5
Local	4.4	4.5	2.6	2.3	1.3	1.6	8.3	53.7	30.6	27.1	16.1	19.2
Belgium												
State		10.6						100.0		0.0		0.0
Local	1.6	2.2	0.6	0.5	4.2	3.0	6.4	38.0	8.7	9.1	65.3	52.9
Canada*												
State	11.8	14.0	2.7	4.1	4.2	3.1	18.7	66.1	14.5	19.3	22.4	14.6
Local	3.2	3.4	1.3	1.4	4.2	3.2	8.8	42.4	15.1	17.5	48.4	40.0
Germany												
State	7.5	8.1	1.2	1.2	1.9	2.3	10.6	69.8	11.7	10.6	18.1	19.6
Local	3.0	2.9	2.8	1.9	2.5	2.5	8.4	39.9	33.9	25.5	30.1	34.6
Mexico*												
State	0.3	0.4	0.5	0.7	0.3	2.3	1.0	10.5	44.9	20.9	24.5	68.6
Local	0.1	0.1	0.2	0.2	0.0	0.0	0.3	42.3	61.5	57.7	7.7	0.0
Switzerland												
State	6.6	6.8	2.2	2.9	3.3	4.7	12.1	47.4	18.1	20.3	27.1	32.3
Local	5.2	4.8	3.1	3.6	1.5	1.7	9.8	47.7	31.6	35.3	15.6	17.0
United States												
State	5.1	5.5	1.8	3.8	2.3	2.6	9.2	46.2	19.4	32.0	25.4	21.8
Local	3.2	3.5	1.5	2.1	3.7	3.3	8.4	39.1	18.0	23.8	44.1	37.2
Unweighted average												
State	5.6	5.8	1.6	2.7	3.2	3.7	10.5	47.7	15.6	22.0	30.9	30.3
Local	2.7	2.8	1.6	1.6	2.2	2.0	6.5	44.0	23.9	25.1	34.4	31.0

 Table 2.2. State and local government revenues, 1980 and 1998

Note: * Year 1995 for non-tax revenues and grants.

Source : Revenue Statistics 1965-1999, OECD, 2000.

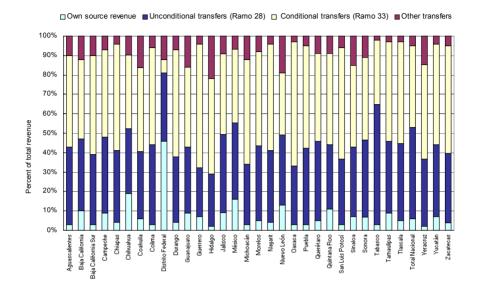


Figure 2.2. Revenue sources, by state

Source: INEGI, Sistema de Cuentas Nacionales de México.

Like all states in Mexico, the two states in the MAMC, Mexico and Hidalgo, are funded mainly through transfers from the central government. Differences in the own revenue amounts of all states result from different retained taxing powers, which were negotiated bilaterally with the federal government during the period of fiscal reform. At the same time, even though the State of Mexico has significantly higher own revenues than does Hidalgo, the general pattern is nonetheless one of dependence on the two main federal transfers. These two main transfer programmes are Ramo 28 (general funds or unconditional transfers) and Ramo 33 (conditional transfers for specific purposes). Financing of the Federal District is similar to but slightly different from the financing of the states. Of the two main transfer programmes from the central government, the Federal District receives only Ramo 28 funds. As somewhat of a substitute for Ramo 33, the Federal District receives conditional transfers through Ramo 25. Conditional transfers in the form of *aportaciones* from the federal government accounted for 22.4% of expenditures in the MAMC in 2000 as a whole. This was made up of 45.8% of the States of Mexico and Hidalgo's expenditures and 27.1% of metropolitan municipality expenditures. Only 7.8% of Federal District resources came from conditional transfers from the central government.¹²

Some municipalities are developing financial schemes where they issue bonds and use an institution as a credit enhancer. Given the municipalities' heavy reliance on transfers, there is a tendency for municipalities to borrow now and try to obtain an increase in transfers in the future to pay off the debt obligation. Since the cost of the higher transfer is paid for primarily by others, the municipality does not bear the full cost of its borrowing and tends to engage in excessive bond issuance. The use of a credit enhancer would tend to exacerbate this problem since it would further reduce the cost of borrowing for a municipality. A credit enhancer could play a positive role if it is an effective monitor of the use made of borrowed funds.

While state governments in Mexico are heavily reliant on transfers, they also have limited access to certain taxes. Most prominent among these are a payroll tax, an income tax and a property tax. With respect to the payroll tax, the Federal District is in a much stronger position than the State of Mexico, since much economic activity takes place there. In 1999, the GDP of the Federal District was MXN 951 billion while for the State of Mexico it was MXN 426 billion in spite of the fact that the State of Mexico is more populous with 13 million residents in 2000 as opposed to 8.6 million for the Federal District (INEGI). Hence GDP per capita was about MXN 32,000 in the State of Mexico and MXN 110,500 in the FD. Thus, the payroll tax base is larger in the FD, the tax rate necessary to generate a given amount of revenues is lower in the FD, and total payroll tax revenues are higher in the FD. In 1996, payroll tax revenues were MXN 1.9 billion in the FD and MXN 488 million in the State of Mexico.

Levying payroll taxes in a metropolitan area is a delicate issue since they are typically collected by the state in which an individual is employed. This can lead to two sorts of distortions. First, differential payroll tax rates distort business location decisions. Second, the fact that much of the employment and economic activity in the metropolitan area takes place in the Federal District means that some of the FD payroll tax is paid by residents of the State of Mexico. Hence, the FD may have an incentive to rely too heavily on the payroll tax since it can provide more in services to its residents than they pay in taxes, while the opposite may be the case for the State of Mexico. One possible way to avoid this second distortion is to use an income tax. Since 2002, states have had the option to impose an income tax of up to 5%. A possible advantage of an income tax is that it could be imposed where people live rather than where they work.

Property taxes, or more properly taxes on land, are normally favoured for local governments. While Mexico follows this standard tax assignment to some extent, it also does so in a way that partially defeats the purpose of

own source taxation. As noted in OECD Territorial Review of Mexico (2002), "... Article 115 of Mexican Constitution allows municipalities to administer ... property taxes but assigns to state Congresses the contributions that municipalities will receive." It is effectively the state Congresses that determine both the tax rate and tax base for each municipality, thus removing part of the advantage of local taxation. However, since the state does not obtain property tax revenue for itself, it may have little incentive to maintain updated property value records. Moreover, many municipalities may lack the staff necessary to adequately assess and collect the tax, and hence may fail to properly collect the tax. This is all the more likely when transfers are the major source of municipal revenue and property taxes comprise a small proportion of total municipal revenue, as is the case in Mexico. Nevertheless, some states, such as Nuevo Leon, have constructed their municipal transfers in such a way as to encourage the collection of property taxes by municipalities. These states essentially offer municipalities a transfer "bonus" if they collect sufficient revenue. If the State of Mexico were to enact such a scheme, it would encourage municipalities in the state to collect more property tax revenue.

It is interesting to contrast the situation in the states where there is a separation between the government that sets rates and bases and the government that collects the tax with that of the Federal District. Since the Federal District does not have any municipalities, it is responsible for both collecting the property tax and spending the revenues. The FD thus has greater incentive to insure proper assessment of property values and property tax collection.

The overall trend in local finance in the MAMC is towards more 'centralization by deconcentration'. As a result, expenditures in public services are locally exercised but continue to be centrally defined and funded. This tendency runs somewhat contrary to trends in other OECD countries – as has been observed by experts13 and international organisations14 – where decentralization of policy responsibility is more often accompanied by decentralization of taxing power. As a result, many of the key programmes of the government have the character of strongly decentralized programmes – e.g., Oportunidades and Habitat – with municipalities involved in policy formulation and targeting, but funding for these programmes remains within the purview of the central government and allocations are based on different types of formulae.

From the perspective of this report, the main question is not really whether the fiscal system is appropriate or not. Instead the focus is on the impact that these different adjacent fiscal regimes have on the equity of expenditures across the metropolitan area, and whether indeed equity is an issue and/or what the consequences of disparities might be for economic and social development. Table 2.3 illustrates the disparity in expenditures between the Federal District and the states. If we assume that the large majority of the spending attributed to the federal government in the region is concentrated in the Federal District where it retains some statutory functions, then the percentages are around 63 percent–37% in favour of the Federal District. Given the relative shares of population this suggests at least some imbalance.

Table 2.3. Share of total public expenditures in the MAMC by level of government, 2000

Government Level	Percentage of total spending in the MAMC (%)	
Federal government	17.7	
Federal District	36.6	
Delegaciones	8.9	
State of Mexico and Hidalgo	29.9	
Metropolitan Municipalities	6.9	
Total	100.0	

Source: INEGI

There are a number of reasons for differences in aggregate expenditures. However, even considering the additional spending needs of the Federal District due to its position as the capital city, these differences seem particularly high. As mentioned previously, the Federal District has capital city functions that involve significant additional expenditures, such as for security. To investigate whether spending is unevenly distributed in the MAMC, Table 2.4 compares a measure of local area income (the percentage of the working population earning more than five times the minimum wage) against per-capita state plus municipal spending. The difference in spending between delegaciones (with the exception of Milpa Alta) or between municipalities in the State of Mexico is quite limited. However, there is a substantial difference in spending per capita between the Federal District as a whole and the State of Mexico as a whole. The Federal District spends almost twice as much per capita in comparison to MAMC municipal plus state spending in the State of Mexico (MXN 8097 against MXN 4435 on average).

Table 2.4. Wage income and sub-national public spending, 2001

Percentage of working population earning more than five times the minimum wage (MW), and per capita municipal/delegación plus state/FD average public spending

	% earning >5 times MW	Per capita spending by municipalities or delegaciones	State average plus municipal or delegación per capita spending		% earning >5 times MW	Per capita spending by municipalities or delegaciones	State average plus municipal or delegación per capita spending
Distrito Federal	18.1	1 886.2	8 097.5	Paz, La	8.8	1 087.1	4 198.0
Benito Juárez	41.6	1 887.2	8 097.9	Zumpango	8.4	1 059.7	4 170.6
Coyoacán	27.5	1 274.4	7 485.1	Cocotitlán	8.1		
Miguel Hidalgo	25.9	2 351.5	8 562.2	Melchor Ocampo	8.1		
Cuauhtémoc	22.0	2 618.3	8 829.0	Teotihuacán	8.0	1 822.1	4 933.0
Tlalpan	21.8	1 364.1	7 574.8	Chiautla	8.0		
Azcapotzalco	18.5	1 561.8	7 772.5	Nicolás Romero	7.9	881.7	3 992.6
Alvaro Obregón	17.4	1 356.2	7 566.9	Huehuetoca	7.5	1 538.0	4 648.9
Cuajimalpa de Morelos	16.7	2 584.9	8 795.6	Teoloyucán	7.4	1 071.0	4 181.9
Iztacalco	15.7	1 553.6	7 764.3	Amecameca	7.0	1 208.7	4 319.5
Magdalena Contreras, La	15.6	1 850.9	8 061.6	Tezoyuca	7.0	1 406.5	4 517.4
Venustiano Carranza	15.5	2 043.8	8 254.5	Chicoloapan	6.9	1 025.5	4 136.4
Gustavo A. Madero	15.0	1 301.9	7 512.6	San Martín de las Pirámides	6.7	1 283.4	4 394.3
Xochimilco	14.4	1 638.9	7 849.6	Apaxco	6.6	1 419.2	4 530.1
Iztapalapa	11.1	1 031.8	7 242.5	Tequixquiac	6.6	1 092.2	4 203.1
Tláhuac	9.9	1 761.3	7 972.0	Temamatla	6.5	1 873.6	4 984.5
Milpa Alta	6.1	4 008.0	10 218.7	Chalco	6.1	773.0	3 883.8
Hidalgo	7.2	1 059.1	5 728.0	Chiconcuac	6.0		
Tizayuca	9.6	876.8	5 728.0	Coyotepec	5.9	789.8	3 900.7
México	11.1	1 324.0	4 435.0	Jilotzingo	5.9	1 450.3	4 561.2
Atizapán de Zaragoza	18.4	1 233.1	4 344.0	Atenco	5.4	961.6	4 072.5
Cuautitlán Izcalli	18.1	1 063.1	4 173.9	Ozumba	5.4	1 338.9	4 449.8
Coacalco de Berriozábal	17.7	779.5	3 890.4	Nopaltepec	5.4	2 373.2	5 484.1
Huixquilucan	16.5	2 475.2	5 586.1	Nextlalpan	5.2	1 256.3	4 367.2
Naucalpan de Juárez	16.0	1 401.4	4 512.3	Tenango del Aire	5.2	1 737.1	4 847.9
Tlalnepantla de Baz	15.9	1 898.6	5 009.5	Otumba	5.2	1 298.2	4 409.1
Cuautitlán	13.9	2 277.6	5 388.5	Tepetlaoxtoc	4.8	1 179.7	4 290.6
Tultepec	12.7	955.7	4 066.6	Isidro Fabela	4.7	2 553.4	5 664.2

Table 2.4. wage income and sub-national public spending, 2001 (continued)								
Texcoco	12.4	1 097.7	4 208.5	Ayapango	4.4	2 463.4	5 574.3	
Jaltenco	12.0			Valle de Chalco Solidaridad	4.4	673.4	3 784.3	
Nezahualcóyotl	11.3	651.3	3 762.2	Chimalhuacán	4.3	586.4	3 697.3	
Ixtapaluca	11.3	621.8	3 732.7	Temascalapa	4.0	1 138.0	4 248.9	
Tecámac	11.0	892.6	4 003.5	Hueypoxtla	3.9	1 089.4	4 200.3	
Tepotzotlán	11.0	1 353.2	4 464.1	Tepetlixpa	3.7	1 317.6	4 428.5	
Tultitlán	10.6	1 000.6	4 111.5	Axapusco	3.7			
Papalotla	10.4	3 024.2	6 135.1	Villa del Carbón	3.6	1 325.1	4 436.0	
Acolman	9.7	1 030.0	4 140.9	Juchitepec	3.6	1 335.1	4 446.0	
Tlalmanalco	9.7	905.8	4 016.7	Atlautla	3.3			
Ecatepec de Morelos	9.1	781.0	3 891.9	Ecatzingo	2.1	1 682.4	4 793.3	

Table 2.4.	Wage income ar	id sub-national	public spen	nding, 2001	(continued)	

Source: INEGI, Censo Nacional de Población y Vivienda (2000), Gobierno del Distrito Federal, Cuenta Pública (2001), INEGI, Ingresos Brutos Estatales por Entidad Federativa (2001), SIMBAD (2001). Figures at State level (Per capita spending by municipalities or delegaciones and State average plus municipal or delegación per capita spending) are averages based on municipalities and delegaciones.

The differences in per capita spending between the Federal District and the State of Mexico can be traced to several facts. First, one has to realise that the financing of state budgets lies primarily in the hands of the central government, while the Federal District alone among states has a large ownrevenue source, a payroll tax. Second, because states were induced to voluntarily give up their own taxes in return for the initial Ramo 28 unconditional grant allocation, states ended up with about the same amount they had collected in taxes at that point in time. However, as the State of Mexico has grown since that time, and some areas that used to be rural are now urban, its allocation does not reflect the fact that it is now part of a larger metropolitan area. Funds are not allocated for major infrastructure investments needed in a metropolitan area. Third, until recently the central government has been controlled by a single party with a tendency to spend in its seat of power. Fourth, the breakdown by expenditure item of the Federal District and the states shows that they spend vastly different amounts on different expenditure items (security is the number one expenditure item in the Federal District, whereas it is a minor item in the states), which makes comparison very difficult. Moreover, there are some Federal programmes for which the Federal District and the *delegaciones* were only recently made eligible or are still ineligible. Finally, there is little cross-jurisdictional oversight of relative levels of public spending: just as there are five fiscal regimes in MAMC, there are also different public organisations to control and regulate public action.¹⁵

In conclusion, the difference in expenditures between municipalities might be extremely significant or it might be at least partly explainable through the extremely complex and diverse fiscal structures in the region. Nonetheless, the disparity does appear very large, particularly given the strains in terms of population growth and infrastructure development that the MAMC municipalities are confronting. If the expenditure disparity is exacerbating the perception of polarisation, then this should be addressed. Leaving the absolute disparity aside, from an institutional perspective, *the combination of asymmetries in revenues and expenditures between the Federal District and the rest of the MAMC, coupled with different administrative and regulatory regimes, makes co-ordination of policies and investments more difficult. Together these factors undermine the metropolitan area's capacity to confront present and future challenges.*

Towards a stronger metropolitan focus: options and limitations

Discussion of how to manage metropolitan areas better revolves principally around a spectrum of institutional models that range from relatively "heavy" to relatively "light" in terms of the scope of the reform they imply. At the relatively heavy end are the functional models whereby governance structures are re-shaped to fit or to approximate to the functional economic area of the metropolitan region. At the light end are formal and informal co-ordination instruments, some being similar to those already in place in the MAMC. There is agreement that the metropolitan region of Mexico City needs to be managed better – or at least that aspects or sectors of metropolitan policy – need to be better managed. There is also agreement that a more unified approach to policymaking would be beneficial and would help move the region towards a more unified rather than potentially polarised sense of a shared identity. At the same time, achieving these objectives is far from straightforward.

The functional model of metropolitan governance has some basic characteristics. First, it is based on governance at a functional economic area level. Second, it assumes that some decision-making power at the regional level is distinct and autonomous from either central, large regional or local government. Third, it is built around cross-sectoral competencies (*i.e.*, not restricted to a specific sector or service) and competence in areas that have a metropolitan logic, such as transport, investment promotion, water supply, etc. The metropolitan governance model assumes some logical predominance of functional area provision of goods and services over provision according to administrative boundaries. This assumption is based on arguments about the economies of scale (in terms of procurement, maintenance, operation, etc.) generated by larger, unified service delivery areas, better equalisation of costs across the entire metropolitan region (thereby reducing polarisation pressures), and more effective strategic planning and integration of sectoral policies. The metropolitan model also holds out the promise of increasing the political power of the metropolitan region, vis-à-vis the central government and internationally.

The counter-argument is that the metropolitan model effectively dampens competition and public choice, does not produce any significant gains in terms of expenditures or service quality and undermines principles of local democracy. With respect to public choice, the argument is that local governments compete to provide the mix of services demanded by residents at an appropriate price, and that if they fail to do this residents will, and should, move to other jurisdictions. The notion of legitimate competition among municipalities depends on there being alternatives, which metropolitan government effectively removes. Another argument against the metropolitan model is that there is no such thing as a completely functional region; rather there are numerous functional regions within any given area depending on the activity. As such, defining a specific area as the functional region of a city is somewhat arbitrary because economic functionality, or partial economic functionality, will be dysfunctional from other perspectives. A related argument is that metropolitan governance is unnecessary from the perspective of public service provision because there are many other means by which to achieve economies of scale (many of them involving production and provision of public services by the private sector). The final argument against metropolitan governance is that it further widens the gap between the government and the citizen, at a time when countries should be trying to do the opposite.

This debate has been going on for forty years or more. In that time, a number of metropolitan governments have been introduced. Box 2.3 describes one of the more well-known examples, that of London.

Box 2.3. Metropolitan reform: the creation of the Greater London Authority

London is an unusual and perhaps atypical example to use in an analysis of metropolitan governance. Its metropolitan tier was abolished by central government *fiat* and then re-created – in radically different form – fourteen years later.

After abolition in 1986 of the Greater London Council, the metropolitan area was governed by a combination of the 33 lower-tier authorities (32 London boroughs plus the City of London); a variety of joint boards and appointed committees; and through direct governance and administration by the central state. The resulting pattern of governance has often been described as 'messy' or 'fragmented' (Newman and Thornley 1997, Thornley 1998). However – and contradicting many critics at the time who predicted breakdown – the system of governing without a centre worked to some degree, and indeed generated certain benefits. As John Hall, a key insider and acute observer of the 'London industry' put it "the new arrangements for administering pan-London services by joint committees and other methods worked tolerably well in most cases. Despite the inevitable warnings that London would simply fail to function from 1 April 1986 onwards this was not the case." (Hall 1995).

Nevertheless, there were clear issues of fragmentation, duplication and especially a lack of democratic accountability. In its 1997 election manifesto, Labour promised to restore citywide government to London with a directly elected mayor and an assembly. Later that year, the government issued a consultation paper, 'New Leadership for London'. This was followed in March 1998 by a White Paper 'A Mayor and Assembly for London'. On May 7th 1998 Londoners voted in a referendum on the government's proposals. By a margin of 72% to 28% on a low turnout (35%), they voted in favour. On a borough-by-borough basis, no borough voted against the proposal, although support was generally higher in Inner than in Outer London. In 1999, the Greater London Authority Act was passed, and the GLA was set up in 2000. London has thus had four forms of governance in the past 40 years.

The GLA consists of a directly elected Mayor and a separately elected Assembly, each elected for a term of four years. The GLA represents a new form of governance in Britain, with clear separation of powers between the directly elected Mayor and a small London Assembly of 25 members. The London Assembly must be consulted by the Mayor during the preparation of each of the GLA's strategies.

Box 2.3. Metropolitan reform: the creation of the Greater London Authority (continued)

The Assembly considers the budget for the GLA and for each of the four functional bodies and can over-rule the Mayor with a two-thirds majority. The Assembly scrutinises the exercise of the Mayor's functions and conducts investigations into London issues.

The GLA has limited fiscal powers. It has no general revenue-raising powers: it cannot levy taxes nor issue bonds. It can raise income through an identifiable precept on the local authorities within the London area, but this is subject to the same powerful centralised control on taxing and spending that apply to all other British local authorities. As well as the precept, the other main sources of the GLA's income are government grants and the 'congestion charge' on drivers in the central area, instituted in 2003. The GLA and its functional bodies spend around £5billion per annum out of a total public sector spend of £45billion. The 33 lower-tier authorities retain many powers and are responsible for most service delivery. The Mayor devises strategies, but he needs the boroughs, and other agencies, to implement them.

Source: Dr. Mark Kleinman, Greater London Authority, Sevilla 2003.

The full metropolitan integration model appears, however, politically impossible in most cases, and where a single authority is introduced often does not reflect the functional area anyway, thereby reducing the fragmentation problem but not completely resolving it. The structure of the MAMC is particularly difficult to reform because the administrative divisions are defined by the Constitution.

Another possible solution to overcome problems related to administrative fragmentation and lack of metropolitan co-ordination is 'amalgamation' or the combining of the central city and surrounding municipalities in a given metropolitan area into a new single governmental body. This option is very close to the metropolitan government model, but it differs in that it implies the abolishment of municipalities while the metropolitan government model only calls for the creation of a new tier of government. Amalgamation is often promoted on the grounds that: (i) it reduces the per capita cost of municipal services through economies of scale: (ii) a unitary tax system allows a more efficient and equitable sharing of costs within the amalgamated city and; (iii) it allows for better policy coordination across the territory. As the most significant amalgamations took place relatively recently in Canada (Halifax in 1996, Toronto in 1998, and Montreal in 2002), it is premature to assess thoroughly their real impact. Still, the results obtained so far appear mixed. Cost reduction or quality increases cannot, as vet, be detected, a task made more difficult by persistent transitional cost increases. Moreover, while the amalgamation process could

probably lead to reduced fiscal competition and less social segregation along geographical boundaries, groups strongly hostile to amalgamation argue that the process may have a democratic cost. Finally, in most countries, few merged cities actually cover the entire metropolitan region. In fact, it is difficult to achieve a perfect match between functional and administrative boundaries simply because functional areas evolve constantly in time and space. In the case of the metropolitan region of Mexico City, the sheer size of most municipalities reduces the weight of the amalgamation argument – most have a population of more than 200,000 people.

Between what might be considered as extreme or radical options, on the one hand amalgamation or the creation of a new regional tier, and on the other institutional fragmentation and competition hand between municipalities, there exists a spectrum of other options. For instance, agencies devoted to a single public service can constitute a mechanism to increase co-ordination and take advantage of scale economies in public service delivery without necessarily adding a new tier of government or dismantling current administrative boundaries. Public transport and urban planning for example are likely to be under the domain of authorities due to their metropolitan scope. In the case of transport, three main organisation models can be found in OECD metropolitan regions. The metropolitan authority can be a service operator only (Philadelphia), both service operator and manager (Athens and Madrid) or a co-ordinating body with several operators (London and Copenhagen). In terms of revenue resources, farebox receipts generally account for a substantial part of the revenues of transport management authorities. They can also receive contributions from member municipalities, either on a voluntary or compulsory basis. Some transport authorities rely on commercial development opportunities as а complementary source of revenues, such as advertisement on trams, metros and buses, as is the case for the South Eastern Pennsylvania Transportation Authority (SEPTA) of Philadelphia which operates public transportation networks through its three branches.¹⁶ Others are funded by passenger revenue, Deed of Assumption receipts and a Special Rail Grant, like the Strathclyde Passenger Transport Executive that operates the Glasgow subway network. The main disadvantages of a single-purpose agency are that it raises the problem of co-ordination between the several sectoral agencies and increases the risk of the emergence of constituencies that will defend sectoral interests

Going beyond a single-purpose sectoral agency, the advantages of metropolitan co-ordinating and planning bodies are that they take into account the overall metropolitan area, can result in economies of scale in specific policy areas, equalise the sharing of service costs across the metropolitan region and allow a more harmonious distribution of resources. Metropolitan bodies perform a wide range of functions such as planning and co-ordination, and sometimes delivery of public services (see Box 2.4). Some authorities are composed of directly elected officials while others are appointed. In addition to grants from upper-level government, some can levy their own taxes. A main issue for the multi-sectoral metropolitan agency is their popular legitimacy, especially when the institution has increasing responsibilities and fiscal revenues.

Box 2.4. Examples of metropolitan co-ordinating and planning bodies in OECD countries

An example of a metropolitan co-ordinating body is the *Montreal Metropolitan Community* (CMM) that the government of Quebec created in 2000 in Canada. The CMM board is composed of representatives of member municipalities. The CMM is in charge of metropolitan planning, funding and co-ordination mainly in the fields of public transport, waste management, economic development and social housing. Its budget (around CAD 70 million) is essentially funded by contributions from member municipalities (roughly 75%) and grants from the provincial government (roughly 25%).

Other examples include the *Metro Council of Portland* (Oregon, US) that gets 14% of its USD 200 million budget from levying a property tax. But more than 50% of its budget comes from fees and charges of metropolitan-wide operated firms (solid waste disposal plan, the zoo, the Convention Center, the Expo Center and the Portland Center for the Performing Arts)¹⁷. The *Stuttgart Regional Association* (Germany) is also a type of metropolitan institution but is not entitled to levy taxes nor user fees. Its funds are mainly composed of contributions from the 179 member municipalities (54%) and intergovernmental grants from the Land of Baden-Würtemberg (46%).

Most metropolitan regions, as will probably be the case of Mexico City, will arrive at some compromise between functional and political institutional arrangements. This being the case, many cities have placed greater emphasis on informal instruments for co-ordination and co-operation. In Mexico, the city of Guadalajara is often cited as an example of a large city that has successfully developed a system of inter-municipal co-ordination including a metropolitan investment fund. What is certain is that the metropolitan region of Mexico City is confronting problems that are by no means unique to it, nor are they necessarily insurmountable. As seen in the next paragraph, different cities have demonstrated that a combination of pragmatic solutions supported by strong political will toward a clear vision can generate processes of change.

There are many examples around the world of cities that have successfully combined stakeholders around a "vision" in order to strengthen development dynamics. Some cities, in partnership with a wide range of actors, are developing strategic plans and visions for their urban regions, with the goal of enhancing their potential for development and improving their image as a good place to live and work. For instance, the new amalgamated city of Toronto has adopted a multi-year strategic plan for economic development that has been integrated within a wider multi-sectoral plan and that has been accompanied by inter-municipal co-operation initiatives at the wider metropolitan level (see Box 2.5). Johannesburg also stands out as particularly pertinent to the debate on Mexico City. The similarities include a decline in traditional manufacturing industries, wide income disparities in the population, inadequate access to basic services for sections of the population and problems of service delivery, particularly in regards to water and sanitation. The response of the city has been to develop a long term vision for the city, termed the iGoli 2010 (iGoli being a traditional name of the city). This vision has been strongly backed by a political consortium including all of the different territorial governments and designed around an inclusive vision for the region, which without strong unifying action risked disintegrating into areas of relative poverty functionally and spatially segregated from areas of job growth and economic development. Glasgow, similarly, faced a profound crisis as many of its key industries declined and the city gained a reputation for decline, typified by neighbourhoods of multiple deprivations. The response of the city was to adopt a region-wide approach to economic development that placed social cohesion at the centre of a strategy that was driven forward by cross-party and cross-jurisdiction political consensus.

The analysis carried out in this chapter has highlighted that the current system of metropolitan governance suffers from **three main weaknesses**: 1) the lack of a clear and widely shared metropolitan 'vision', 2) the presence of important fiscal and regulatory asymmetries between the different administrative governments and 3) given the challenges that the MAMC is facing in terms of competitiveness (see Chapter 1), the urgent need for a new dynamic body capable of co-ordinating action in this field.

Therefore, **three important areas** can be identified to give more practical reality to the currently weak concept of metropolitan policymaking. (1) The first is to build *political commitment and consensus* behind the notion of a metropolitan approach to policy. An important first step would be stating clearly that each entity has shared interests and that where possible they should work towards a common vision of the role of the metropolitan region. (2) Secondly, some form of *metropolitan resource sharing or reallocation mechanism* should be developed that encourages and

facilitates co-operation. This includes the use of incentives to bring different entities together to work on joint projects. Being unlikely that local authorities will agree to give up their already limited resources, it is a question principally for the federal government to assess how current transfer programmes can be managed in such a way that co-operation and resource sharing are encouraged. (3) Finally, the ability of public authorities to implement policies effectively in the field of competitiveness needs to be strengthened, which implies both a cross-sectoral approach and a strong business environment focus. The public authorities in Mexico City, as elsewhere, are poor at providing relevant support for businesses, so a body that has a better, more dynamic approach should be created. This *metropolitan development agency* would co-ordinate actions in different fields relating to improving the productivity of firms in the region and increasing investment.

Box 2.5. The Toronto Economic Development Strategy

When the new city of Toronto was created through the amalgamation of a number of municipalities in 1998, it launched a multi-year strategic economic plan that resulted in adoption of the Toronto Economic Development Strategy.

Several actions have been concretely taken since the Strategy was adopted. For instance, the city produced the most comprehensive business directory available anywhere in North America. Meanwhile, the city has secured funding from the federal government to prepare a Labour Force Readiness Plan for the period 2001-2010 in partnership with the business community, labour representatives, educators, and all levels of government. The Plan will provide an overview of labour market issues in the city-region and detailed action plans for three industry clusters – construction, information technology/telecommunications, and tourism/hospitality. After the first three years of the five-year Toronto Economic Development Strategy, it appeared that the programme had benefited from the active involvement of all the participants. All the programme's components were designed to be replicated, so as to allow for on-going performance monitoring. The same approach was used in a number of different Canadian jurisdictions.

This long-term outlook and broad consultative approach has had a major impact on the community, creating an "alignment of strategic intent" among all levels of government and formerly competing municipal jurisdictions. The example of Toronto is particularly interesting in that the city has managed to build a consensus around a common vision for the economic development of the city among business, labour, education and community leaders. In addition, the Economic Development Strategy is not an independent programme but is firmly integrated in the city's entire strategic plan, including the Environmental, Cultural and Official Plans and the Social Development Strategy. They have all been developed under the umbrella of the City Council's Corporate Strategic Plan. By developing partnerships focusing on a common vision, City Economic Development staff have increased a municipal out-of-pocket investment from less than CAD 100 000 over three years to almost CAD 1 million, and significantly advanced Toronto's interests.

Box 2.5. The Toronto Economic Development Strategy (continued)

Moreover, Toronto's suburban municipalities, having frequently engaged in heated competition with the city and with each other over economic growth in the past, now recognize the importance of a strong inner city and are advocating a policy of close co-operation. This recognition came about after the Plan acknowledged that:

- the city and the 905 surrounding municipalities comprise a single economic region;
- Toronto has the critical mass of people and activity necessary for internationally competitive financial services, leading edge research and development, and top quality education and training programmes; and that
- the surrounding regions have the land necessary to accommodate largescale production and distribution facilities.

A concrete example of co-operation with suburban municipalities is the creation of the Greater Toronto Marketing Alliance, a single marketing agency for the great metropolitan region of Toronto. The Greater Toronto Marketing Alliance is a publicprivate partnership between the 29 GTA municipalities and regions, together with the provincial and federal government, other non-profit organisations and a broad crosssection of private sector partners. The objective is to provide a single point of contact for prospective international investors and business inquiries in the GTA. Among other activities it has undertaken trade missions abroad, mainly in the United States. It aims to have a less fragmented approach to international tourism and investment marketing.

Source: Economic Research and Business Information Unit, Economic Development Office, City of Toronto, Canada quoted in OECD Territorial Review of Canada, (2002).

1. Elaborating a politically agreed commitment to the metropolitan concept

The first area of metropolitan policymaking where more attention could be paid is in galvanising political support for the metropolitan region's development challenges. At the moment, the incentives for local politicians to promote the metropolitan agenda are limited. And without strong and unified political backing, the benefits from co-ordination are lost because implementation in the end depends on delivery through elected political entities.

The ultimate objective for the MAMC should be to develop a clear strategy for the future development of the metropolitan region as a whole,

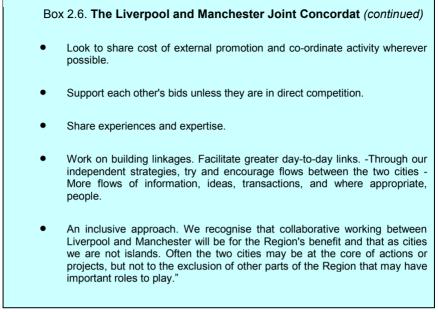
supported by appropriate institutional mechanisms to ensure that the plan is implemented. Before that, however, the nature of the metropolitan regional "project" needs to be clearly defined at a political level. A clear expression of why the Federal District, the States of Mexico and Hidalgo and the individual *delegaciones* and municipalities depend on each other for the agglomeration economies that drive the MAMC economy (and how they suffer from competitive disadvantages) is needed. This regional "vision" is essentially a statement of common interest and a commitment to co-operate towards shared objectives. As with most other similar city-regions, this vision needs to understand the different identities that it encompasses: promoting complementarities and interdependencies, but also recognising differences and distinctive characteristics. This is a significant issue in the context of the MAMC, where decentralisation only recently reduced the dependence of local actors on the centre and gave them some margin to develop local approaches. An example of this type of regional "charter" is provided by the recent Concordat between the neighbouring urban centres of Liverpool and Manchester which was signed following an in-depth review of the competitiveness and potential of the two urban regions undertaken by the EU (see Box 2.6).

Box 2.6. The Liverpool and Manchester Joint Concordat

The Concordat, signed between the city governments in September 2001, is a political statement of shared interests that focuses on developing a joint approach in key fields such as sector development, higher education provision, lobbying and image building, and infrastructure development. The Concordat was based on a "Vision" developed by a working group led by a prominent academic that investigated the concept of common action by distinct administrative bodies and identified the areas where co-operation might be beneficial and where competition should be avoided. The Concordat was launched by the Deputy Prime Minister and is being evaluated as a model for other city-pairs across the EU. The following is an extract from the political statement:

"We recognise that healthy competition between the two cities is at times appropriate and that competition will lead to benefits in its own right. We recognise our distinctiveness. We focus on our distinctive strengths and specialisations and always attempt to develop the individual identities of the two cities. We concentrate on areas of mutual benefit. But agree that there are many areas where the two cities can and should work together more actively for our mutual benefit and for the wider Northwest. In practical terms what does this mean?

 When outside the region will act as one in selling each other's positive points and those of the region.



Source: NorthWest Development Agency (www.nwda.co.uk)

Developing a new "deal" for MAMC on the basis of such a political statement of common interest should include reflection on two main perspectives: an internal vision and an external vision.

(1) Internal vision: A competitive but socially balanced metropolitan area

The internal vision would be based on an explicit assertion that all parts of the region are valuable to the economic success of the economy, and that problems and imbalances are not social policy but are integral elements of a long-term strategy to ensure the productivity and employment base of the region. The transformation of the metropolitan region from a strong manufacturing centre to a service economy will also be a transformation from a radial centre-periphery urban area to a modern poly-centric urban area. The vision for the city will ensure that areas and populations are not left behind in this process.

(2) External vision: A world city for Central America

The external vision concerns the place of the metropolitan region in the world economy. The prominence of the city on the world stage is due to its historical development and role. However, as the world economy changes, the competitive advantages that a conurbation such as Mexico City can offer, relative to those on offer in other similar cities, has to be continually reassessed. In this reassessment, the assets refer not only to those found in the city centre but also to how new assets can be developed across the wider region.

In the case of the Manchester-Liverpool Concordat, the political statement was supported by a range of flagship projects designed to illustrate positive outcomes from collaboration in key areas of the regional vision.

2. Creating fiscal mechanisms to promote co-operation

The next important area of effective metropolitan policymaking involves finding the resources necessary to realise a co-operative vision for the MAMC. An extreme solution in this regard is a single metropolitan tax system, usually associated with amalgamation and a single governmental entity for the metropolitan area. It is sometimes argued that incorporating all separate jurisdictions in a metropolitan area into one large city administrative structure will insure a sharing of the costs of public services whose benefit extends to the whole metropolitan area. The difficulty with this solution is that amalgamation is extremely difficult to implement politically, as few jurisdictions are willing to give up their sovereignty, and there is the risk of the creation of a large, overly bureaucratic administrative structure that responds to special interests rather than citizen needs.

A less extreme approach implemented in some OECD countries is to try to equalize public resources among municipalities. These equalisation mechanisms are often justified by arguing that they stem inefficient location choices motivated by differing tax rates (higher rates being required in low tax base jurisdictions), and contribute to an equal ability of municipalities to fund basic public services. For example, the national government of Sweden implemented an equalisation programme that includes three different elements: transfers by programme area, equalisation payments between municipalities, and governmental subsidies to municipalities with high expenditure responsibilities but low revenue capacities (such as municipalities with a high rate of poverty).¹⁸ Another similar example comes from the United States. In Minnesota, a portion of the property tax in the twin cities area of Minneapolis-St. Paul is allocated to a special fund from which distributions are made based on relative fiscal capacity.¹⁹ Minnesota municipalities are also partially funded by transfers from the state level based on need (using measures such as the age of infrastructure and population decline).

General disadvantages of tax-base equalization grants are that they, like all grants, might be allocated based more on political than economic reasons, may give municipalities less of an incentive to develop since the wealthier they get the less they receive in grants, and may separate the costs and benefits of local public services making it difficult for citizens to make informed public decisions. More importantly, grants to equalize tax bases do not address the particular problems that the MAMC faces. Mexican municipalities do not have responsibility for programmes such as poverty alleviation, nor do they rely much on own taxes for their revenues. Consequently, the expenditure needs of wealthier and poorer municipalities are not very different, differing tax rates are not the major reason for locating in one municipality or another, and revenue capacity is primarily a function of the grants a jurisdiction receives. Moreover, to the extent that tax-base equalization grants simply take money from one jurisdiction and give it to another, they do not necessarily provide any additional aggregate revenue needed for infrastructure projects, nor do they promote cooperation.

Nevertheless, one way that the central government might effectively use a type of equalizing grant in the MAMC is in education finance. As mentioned earlier, productivity growth and labour demand in the MAMC as a whole will depend on improving the human capital of people from the entire region. Schools in the poorer municipalities may need proportionately more funds per pupil to adequately educate the children in those municipalities. Yet, education funds, which are currently highly centralized, are not proportionately higher for poorer municipalities.²⁰ Adjusting the national distribution of education grants could provide additional education resources for the poorer municipalities in the MAMC and enhance the productivity of the region as a whole.

If the central government was to undertake a major tax reform to simplify the tax system, broaden the tax base, and increase enforcement and revenue collection, this could have an impact on improving the revenue collection ratios at different government levels. Areas of reform could include simplifying the tax administration and moving to a multi-year framework for public expenditure to make public investment more strategic in nature. Such measures are strongly supported in the most recent *OECD Economic Survey of Mexico* and could free up additional resources.

Fiscal incentives to encourage co-operation, such as incentives in voluntary co-operation mechanisms, may be particularly useful in the MAMC. These mechanisms are being experimented with in many OECD countries. The idea behind these mechanisms is to encourage co-operation by attaching certain conditions to transfers. Such conditions might stipulate that funds for projects can only be obtained when more than one government participates, for instance, and might also be limited to certain types of expenditures. These incentives and other contract mechanisms can encourage more co-operation and a more efficient and accountable use of resources. This kind of transfers come in variety of forms, but they have three main characteristics. First, an upper-level government (such as the central government) is involved in setting the rules of the game. In the case of the MAMC the rules would presumably attempt to elicit co-operation among municipalities, between states and municipalities, or between states, and might be limited to infrastructure improvements in primary areas such as water or transportation. A second characteristic often used in voluntary co-operation mechanisms is competition for funds. Project proposals are evaluated in terms of quality (sometimes with adjustments for municipalities that are known to be deficient in some particular area) and not all projects are funded. This forces a serious effort on the part of applicant governments. The third characteristic often applied is co-financing. That is, in order to obtain funding, applicant governments may be required to commit resources themselves and/or have some commitment of resources from other parties. The other parties may include private partners, NGOs, international organisations, or simply other governments. Such co-financing encourages monitoring by those who have committed funds.

Some examples of transfers designed to elicit co-operation in OECD countries are described in Box 2.7. While few countries have used this type of incentive in a purely urban environment (indeed some have been implemented in rural areas), the examples are very pertinent to the MAMC. They indicate that fiscal incentives can be used to foster co-operation in a cost-effective way.

Box 2.7. Examples of effective mechanisms to promote co-operation

EU Policies. Since 1992, the European Union has been implementing an innovative approach for rural development: the LEADER programme. LEADER I (1992-1994), LEADER II (1995-2000) and LEADER+ (2001-2007) represent a total budget over more than ten years of EUR 10 billion. Based on the principle of local initiative, LEADER has refined and detailed its profile over the three different programmes. LEADER+ reinforces the notion of "territorial strategies for integrated development" featuring the following key elements:

- Functional areas. LEADER territories have four main characteristics: rural character; a limited dimension; a critical mass in terms of human, financial and economic resources; ability to conceive a development strategy over several years.
- Local initiative. An active engagement by local actors (individuals, local firms, associations and local authorities) within a Local Action Group (LAG). The LAG is responsible for the development strategy and the administration of funds.
- 3. Strategic planning. A capacity to carry on strategic plans of integrated development (conceiving human and social capital development as well as cross-sectoral approaches) over several years.
- 4. Knowledge pooling. Compulsory participation of all LAGS in the European Network to share experience and knowledge, following organised methods.
- 5. Strategic division of responsibilities and multi-annual grants. The role of the supra-national authorities in LEADER involves setting broad strategic objectives by publishing guidelines for member countries and approving a conditional multi-annual grant to national authorities based on their action programme. Central government responsibility consists in choosing the territories that will benefit from the LEADER initiative. National authorities or regions (depending on the constitutional profile of the country) match EU and central resources with resources at the local level, following percentages varying according to the regional and individual equalisation objectives of the European Union.
- Evaluation. There are three forms of evaluation present in the LEADER programme: an intermediate and final evaluation by the central government and the European Union; a continual administrative, technical and financial control during the period of activity; the incentive to develop internal autoevaluation mechanisms at the interior of LAG's.

Italy. One country in the forefront of new grant mechanisms is Italy. In 1998 the government allocated about EUR 1.5 billion to complete public infrastructure projects in the south. Several aspects of this grant programme are worth noting. First, competition was introduced in several ways. For instance, project proposals were ranked and a portion of the funds were allocated for the best projects regardless of geographical location. The competition was real: of 815 proposal submissions, only 231 projects were approved. Second, a large portion of the funds required prior agreement between state and regional levels of government, and the amount of money was substantial:

Box 2.7. Examples of effective mechanisms to promote co-operation (continued)

Sicily increased its budget by 90 percent. The required agreement and amount of funds involved created an incentive for a new spirit of co-operation between governments. Third, a central project financing unit was set up which included members of the private sector to provide legal, financial, and technical assistance to local governments. Fourth, a monitoring system was implemented, and an evaluation of the impact of the public investment on the region's economy was undertaken. In addition, performance reserves totalling 10 percent of aggregate funds were set up to encourage and reward – based on pre-determined criteria - good management practices.

France. France has a long-standing tradition of co-operation between its more than 36 000 municipalities. After the Second World War, general purpose groupings, the SIVOM ("Syndicats à Vocation Multiple") were authorized to facilitate co-operation in several areas. Reforms in the 1990s, seeking to regroup small towns and areas ("Communautés de Communes", "Communautés de Villes") with new mechanisms based on the principle of transfer of competencies to a supra-municipal body disposing of own fiscal powers, have led to the creation of more than 2000 such entities known as EPCIs ("Etablissements Publics de Coopération Intercommunale"). With an average membership of 12 municipalities, these bodies exercise spatial planning, economic development and infrastructure investment competencies. In 1995, an innovative approach to municipal co-operation was taken on an experimental basis, by opening up this possibility to voluntary groupings of municipalities not necessarily belonging to the same "département" or "canton", thus transcending the traditional administrative boundaries around which co-operation was hitherto organised and encouraged. The law of 4 February 1995 legally recognised the notion of "Pays", small area characterised by "geographical, economic, cultural or social cohesion". One hundred such groupings were created over five years, with most of these receiving national funding on a competitive basis considering the coherence and merits of their local development strategy and projects. The financing of the operational expenses of the "Pays" is ensured by the member municipalities, with investment for projects receiving multiannual support within the framework of the CPER ("Contrat de Plan Etat-Région"). Around 300 "Pays" exist today or are in the course of creation.

3. Establishing a metropolitan co-ordination and development agency

The third step to improve co-ordination and metropolitan policymaking in the region could be the creation of a *Metropolitan Development Agency* to act as the principal implementing body for a competitiveness strategy for the MAMC. Such agencies are common in OECD countries and despite great diversity in details of organisation and objectives they generally share some principal features and functions on which a new body established in Mexico City could be modelled. Overall, they can be described as agencies that coordinate and drive forward economic development actions in a given geographical area, with the following characteristics:

- Their mission and general objectives are defined by the sponsoring public agencies involved to whom the agency is accountable;
- They are responsible for translating overall objectives into operational projects and programmes;
- They have a strong labour market and enterprise focus, including responsibility for organising, or at least co-ordinating, regional business support and workforce development programmes;
- They are responsible for, or closely involved in inward investment promotion and processing, and more generally are responsible for contributing to the marketing of the region.
- They work with local development agencies or sectoral agencies that are delivering outputs that contribute to achieving the general objectives (*e.g.*, they do not necessarily replace specialised bodies)

A survey of US agencies revealed the following principal areas of activity for the 100 or so agencies surveyed (in order of priority): business attraction, retention and expansion (80%), commercial revitalisation (56%), small business development (68%) and strategic planning (51%). Other important areas of activity included education and training, real estate and construction projects and trade/export promotion. This is similar to the statutory purposes of the UK regional development agencies which include promoting business efficiency, investment and competitiveness and skills development. The most common instruments used by such agencies include: infrastructure improvements, revolving loan funds, marketing campaigns, special improvement districts, tax rebates/relief for businesses, and training or special assistance for entrepreneurs.

A key element of the functioning of these agencies in the US, in particular, is the relationship that has developed between the agency at a regional or metropolitan level and other more geographically focused local development agencies and more task specific or sector specific agencies, such as those focusing on historic area regeneration, workforce development or inward investment promotion. The Michigan Development Corporation, mentioned later in Chapter 3, is one example of this type of broad-based regional agency that funds and facilitates the activities of other bodies. Another example is the San Diego Regional Development Corporation, which fulfils a similar function in its metropolitan region.

Most development agencies in Europe are structured as public or quasipublic bodies. In the US, by contrast, they are generally private sector bodies. Even in the publicly funded agencies, an emphasis is often placed on their private sector attributes (such as private sector style management and approach, self-financing via user fees, joint ventures/public private partnerships with private companies, etc.). This emphasis is important in underlining that these agencies are not simply off-shoots of line ministries but that their function and approach are more akin to that of the private sector. As such, the governance structure of regional development agencies (RDAs) generally involves significant representation of the private sector, and other non-government actors, and in general they are expected to play a role in improving relations between enterprises of all sizes and the public sector.

In order to reflect their nature as cross-jurisdictional agencies, the governing boards of RDAs also tend to include representatives of different levels of government, as well as different sectoral departments. A plausible breakdown for a 15-member governing board would be five representatives of central government ministries, five representatives of regional and local governments and five representatives of non-governmental bodies (probably using some form of rotation to ensure that specific interests are not give undue voice).

Generally, the financing of regional development agencies is mainly from public sources, with an expectation that a successful agency will raise some revenue through user fees and that some funding from the private sector will come in either as general support or through co-financing of specific projects or programmes. Some have a share-structure, though with government bodies as majority shareholders, while others operate through direct grants from one or a combination of government sources. A review of development agencies across Europe shows such a diversity of funding arrangements (though the EU stands out as a principal funder in many, particularly in central and eastern Europe) that it is difficult to make any judgement on the systems used. One important point made by the European Commission in its study of the functioning of such agencies is that the medium to long-term nature of the objectives set for these agencies implies that the funding must be predictable over a relatively long period. In the case of the development agencies recently launched by the UK government, the funds were initially pooled from among the government departments concerned (enterprise, trade and industry, employment, etc.) but funding is now provided through a single programme budget from the Treasury. Agencies in the US have some "traditional" sources of funding, such as HUD Community Development Block Grants, Economic Development Administration (EDA/Department of Commerce) programme funds and loan funds from the Small Business Administration. But, as they become more established as major drivers of economic development in their areas, they

are also plugging into new sources of "regular" funding such as gas, aviation and gaming taxes, utility fees, parking fees and fines, etc. Expenditures are almost impossible to gauge because of the varying functions and roles of agencies in different places. However, a recent survey calculated that metropolitan economic development agencies in the US spend on average around \$15 per capita per annum, while the county agencies which serve somewhat larger areas spend around \$5.

In the case of Mexico City, the options appear to be confined to federal government sources, with the principal funding stream coming through the central government departments represented on its board (or in the case of an agency under the statutory responsibility of the Centre-Country programme funding through that programme's investment fund).

On the basis of the general characteristics and the specific situation of the metropolitan region of Mexico City, it is possible to sketch out the main lines of the development agency:

- *Purpose*: to improve the effectiveness of economic development actions for the benefit of the whole metropolitan region through co-ordinated planning and implementation; the work of the Agency should be co-ordinated with the development strategies of the other states bordering the MAMC;
- *Structure:* a quasi public body reporting directly to a board composed of representatives of the federal government, the FD and the states and including representation from outside the public sector (private enterprises, social partners, etc.);
- *Financing:* centrally funded, either through resources pooled from relevant departments or from a single budget or fund; this would not exclude the possibility of some direct revenue raising power;
- *Objectives:* 1) to devise and gain political approval for a metropolitan strategy for the MAMC based on the general principles of improving competitiveness in line with the overall vision; and 2) to help translate the strategy into specific projects within its main areas of work;
- *Main areas of focus:* business development, attraction of investment, urban regeneration and revitalisation, skills development (see Chapter 3).

Notes

- 1. "...when two or more urban centers situated within municipal territories of two or more states, form or tempt to form a demographic continuity; the Federation, the States and the respective municipalities, within its respective competency on the subject, will conjunctly and coordinately plan and regulate development of those urban centers, in agreement with federal law on the subject..."
- 2. In 1992, the Environmental Metropolitan Commission (Comision Ambiental Metropolitana) was created; and two years later the Road and Transport Metropolitan Commission (Comision Metropolitana de Transporte y Vialidad), Public Security and Justice Metropolitan Commission (Comision Metropolitana de Seguridad Publica y Procuracion de Justicia) and the Water Supply and Sewerage Metropolitan Commission (Comision de Agua y Drenaje) were established. In August 1998, the Solid Waste Metropolitan Commission (Comision Metropolitana de Desechos Solidos) was created.
- 3. Among them we can mention Pradilla Cobos (2001), Eibenschutz (2000), Iracheta (2001a, 2001b), Bedolla and Moya (2002)
- 4. Since its creation in 1995, Metropolitan Commission of Human Settlements has been particularly active in urban planning. It has elaborated the Programme of Urban Development in the Valley of Mexico's Metropolitan Area, the Programme of Priority Actions in the Huixquilucan - Cuajimalpa Metropolitan Integration Strip, the Programme of Priority Actions in the Azcapotzalco - Tlalnepantla Metropolitan Integration Strip, the Bases to Evaluate the Programme of Urban Development in the Valley of Mexico's Metropolitan Area, the Technical Reaches for Actualization of Programme of Urban Development in the Valley of Mexico's Metropolitan Area, the Metropolitan Programme of Land Supply and Regularization of Land Property, finally the Study for the Formulation of Programmes Advantage of See for the Empty Lots. www.sedesol.gob.mx/subsecretarias/desarrollourbano/cometah/documentos.htm.
- 5. See www.asambleadf.gob.mx/princip/informac/legisla/reglamen/r216/r216p.htm.

- 6. According to its Internal Procedures, it is in charge of programmes of research and technological development; education and capacity building on metropolitan issues; integration of work groups, organisations and metropolitan institutions designed by both states; proposition of reforms and additions to legal frameworks concerning metropolitan co-ordination; definition of mechanisms to finance together policies, plans, projects, programmes and actions accordingly to Executive Commission Plenary Session; and accomplishment of agreements taken by the Executive Commission Plenary Session.
- 7. Territorial Planning and Urban Development (Co-ordinated by Morelos); Transport and Infrastructure Economic Development (Co-ordinated by FD); Agrarian Development and Food Supply (Co-ordinated by Tlaxcala); Social Development (Co-ordinated by Hidalgo); Public Security (Co-ordinated by Mexico); Environment (Co-ordinated by Mexico)
- 8. See Journal *Reforma*. Section Estado de México. The 4th august 2003. There have been others states in Mexico that have implemented this kind of policy in order to finance metropolitan infrastructure in terms of water supply, urban transport and roads, etc. In Guadalajara Metropolitan Area, at the State of Jalisco, intermunicipal organs have been created as well as a metropolitan council to overcome conflicts and achieve agreements, but they have not been effective according to Vazquez (2001) "*Guadalajara Metropolitana*" in Garcia Ortega, Roberto (Comp.) *Planeacion Y Gestion Urbana y Metropolitana en México. Una Revision a la Luz de la Globalizacion*. Colef Colegio Mexiquense.
- 9. This system is similar to that adopted by many OECD countries and developing nations that experience serious water shortages (Belgium, Greece, Italy, Spain, Japan and the United States) and generally applied to end-users. Hence privately or publicly owned water utilities are charged \$279,50/1000m3 for an average consumption of 300 litres per person per day of drinking water. Above that level of consumption the cost of bulk drinking water doubles to \$559,00/1000m3. Population is based on census data corrected through the projections of the National Council on Population (*Consejo Nacional de Poblacion*).
- INEGI SIMBAD, 2002; Instituto Hacendario del Estado de Mexico, 2002; Cuenta Publica del Distrito Federal, 1989 to 2001. Mentioned by Morales Schechinger, Carlos and Garcia Jimenez, Sara (2003) "Finanzas Publicas en la Zona Metropolitana del Valle de México". In SEDESOL. Direccion General de Desarrollo Urbano y Regional and Programa Universitario de Estudios sobre la Ciudad. Actualizacion del Programa de Ordenacion de la Zona Metropolitana del Valle de Mexico. 1ra Etapa. SEDESOL. PUEC-UNAM. Mexico. (Preliminary Version)
- 11. The term "*participaciones*" refers to certain volume of publics resources whose expenditure is decided by the own beneficiary (State or municipality), whereas

"*aportaciones*" refers to certain volume of publics resources whose expenditure is decided by federal government so that the beneficiary do not have any control on them. Usually the first is referred as "unconditional transfers" as the second is referred as "conditionals transfers".

- 12. MORALES SCHECHINGER, C., GARCIA JIMÉNEZ, S. (2003). Loc. Cit.
- 13. GIUGALE, M. and WEBB, S. (2000), Loc. Cit.
- 14. OECD (2001), Cities for Citizens.
- 15. Each state has its own Secretary of Control (Secretaría de la Contraloria), which is basically in charge of controling and evaluating public actions and watching for good behavior of public servants. As Metropolitan Commissions are not attached to any state government, they do not report directly to any of them. The Federal Secretary of Control and Administrative Development (Secretaría de la Contraloría y Desarrollo Administrativo, SFP has developed strategies to control public interventions made only by federal institutions and has no faculties to intervene on local affairs nor to oversee the work of metropolitan commissions.
- 16. For further details, see *www.septa.org*.
- 17. See *www.metro-region.org*.
- 18. First, income is equalised through a system in which municipalities and counties with a tax base higher than the national average pay, and those with lower tax bases receive. Meanwhile, equalisation payments even out costs that are due to differences in needs and in production conditions, and compensate municipalities with heavy service demands for the additional costs that they face in providing public services. Finally, municipalities with budgetary problems receive governmental subsidies on a per-capita basis.
- 19. The relative fiscal capacity index is the ratio of average fiscal capacity in the region and the community's fiscal capacity.
- 20. See OECD (2003), Territorial *Reviews: Mexico*.

Chapter 3

Fostering competitiveness: priorities for the metropolitan region

The aim of this Chapter is to identify and discuss priorities for action to foster the metropolitan area's competitiveness. It argues that if a key element of a sound policy for Mexico City is advancing the range of structural reforms to create a national environment that encourages instead of inhibits business activity, then an equally important element is recognising under-used regional potential that can be tapped into by targeted policies. This chapter is divided into two main sections. **Section 1** outlines three areas of work for a new Metropolitan Development Agency. The first relates to business development and the need to bridge the information and technology gap affecting small and medium sized enterprises. The second is about skills development. The third area of action regards urban regeneration and the valorisation of the historical and cultural heritage of the metropolitan area. **Section 2** discusses the links between competitiveness and poverty and the need to co-ordinate competitiveness policies with poverty alleviation programmes.

Mexico City's competitiveness in a global framework

The metropolitan region is entering a new phase. Its competitive advantages with respect to other areas in Mexico led to the dominance of the national economy. Today, while Mexico City continues to play a leading role for some urban functions, there is nonetheless concern that its position is being eroded. Its assets as a decision and production centre must now be compared not only with other Mexican regions but also against the capacities and resources of regions in other countries. Mexico City competes with Miami, São Paolo and other would-be "global" cities for macroregional prominence, as a logistical gateway to South America and as the site for regional headquarters of multinationals with the associated advanced services development that this can bring. It also competes with other cities in Mexico to maintain its position as the main economic and decisionmaking centre in the country. In this competition it can draw on significant comparative advantages stemming from its historical development, but must nonetheless react to changes in preferences for business location resulting from the opening of the economy to international trade (especially the growth of export-driven manufacturing in the maquila border area). There is also an ongoing redistribution of economic activities within the central states of Mexico that implies competition to retain enterprises and skilled labour between Mexico City and the cities that surround it.

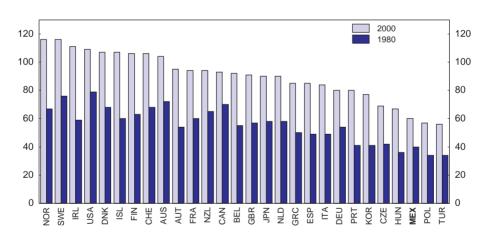
The issue is whether the region is capable, by means of a deliberate strategy, to attract and maintain successful firms while sustaining or raising standards of living for the region's inhabitants.

Of course, its capacity to compete depends on an extremely wide range of factors, including exogenous national and international factors that are well out of the reach of a metropolitan development strategy. Macroeconomic trends can have a significant impact on the competitiveness of the region. For example, rising demand in the US through 2004 is expected to back an export-led recovery in the Mexican economy and affect the development of the region. Structural changes in trade and technologies can also significantly act on the regional competitiveness, making local economic activities more or less profitable. The same is true for national policies affecting interest rates, tax levels and wage inflation and, most of all, for specific sectoral policies such as those addressing the low levels of human capital and infrastructures. In aggregate terms, Mexico ranks poorly internationally in infrastructure (Figure 3.1). Although the city has a relatively advanced infrastructure as opposed to the rest of the country, it also has potentially the greatest demand to bring those assets up to international standards. Inadequate regional accessibility not only limits effective use of local land and labour – the periphery is now home to several million people - it also hinders market extension and international integration maintaining high logistic costs for foreign suppliers and customers. Furthermore, in the country as a whole there are poor incentives for labour to work in the formal sector, where productivity is higher, but where there are blunted incentives for the private sector to invest and innovate.

Addressing at least some of the exogenous factors affecting the regional capacity to compete depends on advances at the national level and highlights the importance of national fiscal issues as well as questions related to regulatory reform. In fact, together with finding additional resources to combat widespread acute poverty, a key challenge for the federal government is how to finance higher and consistent levels of public investment in infrastructure and human capital development, both of which are credited with strong multiplier effects across the economy. Making

significant long term investments in these fields will impose a major burden on public finances and require tax reform to broaden the tax base. At present, education already accounts for 20 percent of total public expenditure, yet spending per student in Mexico is not only below that of all other OECD countries (Figure 3.2), but is also lower than that of Argentina and Chile. The OECD estimates that an increase of around 2 percent of GDP is needed just to move enrolment levels towards the OECD average. Furthermore, the OECD's *PISA 2000* report showed that in Mexico's case there is room for improvement in the areas of main education performance indicators. Therefore, since it is not known if further spending will be made, in the short run it is important to determine how best to allocate the existing funds to target those areas needing the most improvement and to implement more cost-efficient spending.

Figure 3.1. Aggregate infrastructure indicators in OECD countries



USA 1995 = 100

Source: Nicoletti et al. (2003), "Policies and international integration: Influences on trade and foreign direct investment", OECD Economics Department Working Paper, No 359; OECD Economic Survey of Mexico.

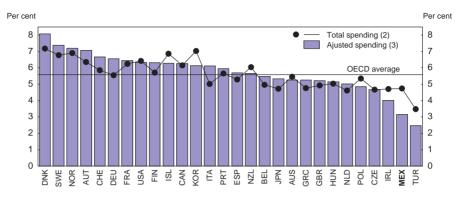


Figure 3.2 Expenditure on education in OECD countries

Per cent of GDP

Notes:

1. In 1999 or nearest year available. Countries are ranked according to adjusted spending in that year.

2. Public and private spending.

3. Adjustment to take into account the difference in the proportion of population aged 5 to 29 of each country relative to the OECD average.

Source: OECD, Education at a Glance, 2001.

Reducing complexities and special regimes through tax reform is one means by which to free up resources for strategic investment without affecting spending targets. Mexico ranks well below most OECD countries regarding the quality of the business environment, placing 47 out of 102 countries in the World Economic Forum's Growth Competitiveness Index 2003 (see Table 3.1) and 48 out of 101 countries surveyed in the Business Competitiveness Index (previously titled the Microeconomic Competitiveness Index, which measures the sophistication of company organisation and strategy). Although the GCI 2003-2004 showed significant improvements in both the public institutions and the technology indexes from the previous year (see Table 3.2), the principal problems identified by businesses surveyed continue to relate to the quality of the public administration, particularly with respect to red tape, the quality and transparency of regulation and the rule of law.¹

Table 3.1. Growth Competitiveness Index (GCI) rankings, 2003-2004

Country	Growth Competitiveness Ranking 2003				
Finland	1				
United States	2 3				
Sweden	3				
Denmark	4				
Switzerland	5				
Iceland	8				
Norway	9				
Australia	10				
Japan	11				
Netherlands	12				
Germany	13				
New Zealand	14				
United Kingdom	15				
Canada	16				
Austria	17				
Korea	18				
Luxembourg	21				
Spain	23				
Portugal	25				
France	26				
Belgium	27				
Ireland	30				
Hungary	33				
Greece	35				
Czech republic	39				
Italy	41				
Slovak Republic	43				
Poland	45				
Mexico	47				
Turkey	65				
Uruguay	50				
Brazil	54				
Peru	57				
Argentina	78				

OECD countries and selected countries of Latin America

Source: World Economic Forum, Global Competitiveness Report, 2002-2003 and 2003-2004.

	Ranking (out of 102 countries)	Change from 2002	
Overall GCI ranking 2003	47	+8	
Components:	47	10	
- Macroeconomic environment index	54	+2	
- Public institutions index	50	+12	
- Technology index	43	+6	
Sub-components			
Macroeconomic environment index			
- macroeconomic stability	73		
- government waste	55		
- country credit rating	37		
Public institutions index			
- contracts and law	63		
- corruption	46		
Technology index			
- innovation	59		
- ICT	48		
- technology transfer	6		

Table 3.2.	GCI component indexes rankings for Mexico, 2003-2004
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Source: World Economic Forum, Global Competitiveness Report, 2003-2004.

Metropolitan priorities for action

While progress at the national level would undoubtedly have important consequences for the region and for the country as a whole, a series of actions can be successfully conducted at the regional and local levels. As discussed in Chapter 2, good relationship building on the part of local leaders with stakeholders in the region and with the central government and neighbouring regions is a necessary pre-condition² to carry through a coordinated strategy. Resources are currently allocated in a sub-optimal manner and steps towards a more concerted vision for the region as a whole – through stronger political commitment, more dynamic metro-wide implementation and co-ordination systems, and resource sharing – could improve policy outcomes significantly. Together with the benefits from closer policy co-ordination at the metropolitan level, three key areas stand out for concerted efforts to improve regional productivity and employment growth:

- Business development, focusing on bridging the technology gap affecting small and medium-sized enterprises;
- Skills development, focusing on ensuring access to training and retraining of people engaged in the informal sector;
- Urban development, focusing on co-ordinating the different actions currently underway to valorising the historical endowment, in the district of Mexico City as well as in other more peripheral historical districts, enhancing its potential as a tourist destination and triggering processes of wider urban regeneration.

Addressing these issues involves a flexible and cross-sectoral approach that goes beyond normal functional responsibilities and administrative boundaries. In particular, the involvement of the private sector both in guiding public policy and in co-financing interventions is crucial

1. Business development: bridging the technology gap

What are main challenges for business development in the MAMC? In some regions, the performance of the local economy is driven by a few extremely dynamic firms. In other regions, collective characteristics pertaining to groups of firms or sectors provide a source of productivity gain. These collective advantages often stem from the historical development of local sectors and links with the region, firm size and structure, level of specialisation (agglomeration effects related to specialisation of industrial production, and spillovers such as high innovation capacity and concentration of specialised workers), use of advanced technologies, and the use of networking as a business practice. These are areas in which the Mexico City region is particularly weak. As noted in Chapter 1 and discussed in more detail below, a significant "technology gap" exists between the large majority of formal and informal manufacturing enterprises and the small segment of competitive, exporting enterprises in the region. Furthermore, there are few indications of networking or other strategies on the part of local businesses to generate external economies through co-operation, clustering, etc.

The enterprise base of Mexico City has a strong tradition of manufacturing and, particularly during the period of Mexico's industrial expansion, the region was the motor of the national economy. At the time, competition from abroad was strongly controlled, and, as a result, domestic enterprises had reduced incentives to expand and capture new markets outside Mexico. As a result, returns on capital investment were relatively unattractive and the banking sector did not develop a culture of lending to smaller enterprises. In the new economic climate, the productivity of these small and medium sized enterprises is a crucial concern since they still represent a large segment of the employment base. Close to 98% of all firms are micro, small and medium sized enterprises, and, with relatively few exceptions, the main common characteristic of these firms is obsolete equipment, low application of quality standards, poor innovative culture, and difficulties to incorporate new technologies. As such, and given their very low levels of capital, these firms face enormous problems in incorporating new technology, building new capacities etc., with the result that they systematically under-invest.

This is recognised as a national problem, and the government is confronting the need to encourage much greater investment in innovation and technology in the domestic private sector. For example, the NAFIN (*Nacional Financiera*) development bank provides grants for training to SMEs, and there are initiatives under the umbrella e-Mexico programme that specifically target small firms. New bankruptcy legislation is also intended to help ease unviable businesses out of the market, while the *Sistema de Apertura Rapida de Empresas* (SARE) is intended to make starting a business quicker and easier. The government's Enterprise Development Programme includes measures to improve access to finance and technology for smaller firms. For example, the government is planning to strengthen supervision of small lending institutions, such as credit unions, in order to stabilise and formalise small business credit. Moreover, reform of labour legislation is intended to help formal sector firms allocate human resources more efficiently.

These legislative reforms will undoubtedly have a positive impact, but legal and regulatory obstacles and burdens are clearly only part of the problem. Research in the MAMC region suggests that many firms find it difficult to make the necessary investments in equipment, both because machinery costs are high and because they perceive credit to be too expensive and the risks associated with formal loans to be too constraining. At the same time, survey research also suggests that under-investment in technology and other production inputs is related to a very low level of awareness among entrepreneurs of the type of capital investments that they should be considering, of the technology and of the production process innovations that could be beneficial. This implies that legislation and regulatory initiatives alone are not likely to transform the behaviour of SMEs in the region, at least not in the short term.

	Characteristics	Micro	Small	Medium	Average
Need to re	novate equipment in a period of				
six months		48.1	60.5	62.4	57.0
-	Difficulty to renovate or				
	improve equipment	81.0	73.0	68.0	74.0
-	Lack of training or technical				
	assistance	3.4	6.8	7.9	6.0
Time the m	achinery is unused	54.6	40.6	36.9	44.0
-	Carries procedures of quality				
	control	48.0	49.8	55.1	51.0
-	Quality control is made				
	manually	67.1	55.6	48.4	57.0
Declares to	need technical assistance:	31.1	73.3	75.2	60.0
-	In the productive process and				
	quality control	16.0	30.0	44.1	30.0
-	In marketing	6.8	8.4	6.9	7.4
-	In the human resources area	3.2	5.9	5.9	5.0
Share of ex	penses invested in capital goods	30.0	54.0	58.9	
	sidered important in the				
relationship	with the suppliers				
- 1	Quality of the product	54.2	66.0	69.8	63.3
-	Time of delivery	14.5	21.8	27.4	21.2
-	Price	64.1	74.0	66.0	68.0
Problems a	ssociated with the labour force				
-	Absenteeism	57.1	58.6	51.1	55.6
-	High turnover	28.6	44.4	50.0	41.0
-	Wage increases	26.2	26.3	36.4	29.6
Firms that l	have received some type of				
technical as	ssistance or training				
(capacitacio	ón)				
-	From accounting services	31.6	29.5	23.8	28.3
-	By chambers or associations	24.8	17.9	22.5	21.7

 Table 3.3.
 Principal characteristics of micro, small, and medium-sized firms (Percentages)

Source : PAOT La Ciudad de México Hoy, Bases para un diagnóstico, Mexico, Gobierno del Distrito Federal, 2001.

From the perspective of public policy, addressing the information gap, which appears to be a root cause or at least a major component of the technology gap, is a difficult proposition. Influencing enterprise behaviour effectively is always problematic for policy makers and influencing small and medium sized firms is particularly difficult. In the case of Mexico City, the situation is probably more challenging because many small firms are more or less informal, and therefore less accessible to public policy, and because business associations are relatively weak with respect to providing direct enterprise supports. The issue for the government is how to access these firms in a manner that is both cost-effective and coherent. In this regard, cluster policies hold significant appeal.

The economic structure of Mexico City includes numerous strong concentrations of firms that work in the same or related sectors. But at the same time these "clusters" are not marked by strong processes of cooperation and networking among firms, nor are there strong links with supporting institutions. For example, although the capacity to associate with other producers in a similar production *filière* exists in several industries in the MAMC (finished metal parts, textiles, and pharmaceuticals, notably), entrepreneurs seem relatively unwilling or unprepared to standardize their processes and to control quality in order to make joint production possible. As Table 3.3 shows, quality controls are characterized by being manual and rarely supported by a pre-established procedure. Both standardization of process and quality of output are crucial in order to form cluster-like combinations that avoid duplication and permit economies of scale and scope. This is a particular obstacle in the present context in which even smaller firms in the MAMC are obliged to look to export markets. The textiles industry of the MAMC, for example, is relatively large and has a long tradition in the region, yet producers rarely organize themselves to export. In addition, in spite of the relative concentration of research facilities and scientists in the region, innovative activities have had only a limited impact in commercialising innovation and diffusing to local firms. There is no disaggregated data to quantify the impact of innovative activities of firms in the MAMC; however, the limited extent of linkages between enterprises and research centres is suggested by the small participation of research centres and large enterprises in the total number of patents requested.³ Nonetheless, despite the weaknesses in the system, the concentration of universities and research institutions is a genuine asset for the region as a whole.

Many large regions have undertaken audits of their economic structure in order to specifically identify groupings of firms that could be the target for collective support. The example in Box 3.1 describes an ongoing process in Montreal, a city with strong industrial specialisations in aeronautics and pharmaceuticals that is looking to establish a more comprehensive cluster development strategy that takes into account not only different categories of existing clusters but also identifies new opportunities.

Box 3.1. Cluster audit in Montreal

The first task for policy makers is to identify the key characteristics of clusters and understand their different dynamics and potentials. This work is being undertaken in Montreal through the Strategie metropolitaine de développement économique par creneaux d'excellence. Montreal's economy is based on strong specialisation in a number of sectors. The preliminary research phase identified 15 possible clusters to focus on in Greater Montreal: agriculture/bio-food, professional and business services, tourism/leisure, aerospace, information technology, life sciences, nanotechnology, metals and metal products, fashion/textiles, transportation/distribution, plastics, composite materials, printing/publishing, chemicals, and environmental industries. As this list suggests, there is no shortage of possible employment sectors in the Montreal economy on which to build. The problem is weaving the multiple strengths of the regional economy into a cohesive whole.

The point of departure in the case of Montreal is that the strategy should take a metropolitan-region perspective. Unless cluster initiatives are specifically structured to engage actors throughout the Metropolitan region, they run the risk of heightening the tensions that exist between smaller municipalities in the region and the new mega-city of Montreal itself. A second principle of the cluster strategy is that it should address problems of duplication among institutions, streamlining interventions according to an agreed set of priorities. Given the potential for conflict between proponents of specific locations or specific institutions, it is important that the process of identifying priority clusters and priority measures is both transparent and focused. In this respect, the initiative of the MAM. SGF and CMM to engage a working group to elaborate a development strategy based on clusters "of excellence," appears to be an important step forward. While there is a great deal of activity around the different clusters various cluster-based associations and committees - there has not been until now an overview of the range of clusters in the metropolitan region that both diagnosed strengths and weaknesses and proposed concerted policy action. The ultimate aim of the group is to follow an open methodology by which the diagnostic is verified and leads to agreed conclusions of the policy actions that the diagnosis implies in the context of the level and type of public investment available.

The common denominator in current thinking about clusters, networks and innovation systems is the emphasis on place-specific externalities based on positive feedbacks, relational assets, interlinkages, etc. These appear to be underdeveloped or absent in the case of Mexico City. There is little evidence of a strong emphasis on clusters and the generation of agglomeration economies in the metropolitan region of Mexico City. In order to capture the benefits of clustering, and help firms specialise, policies should encourage inter-firm relations and technological spillovers from private and public laboratories, and promote producer services. Through targeted, collective measures, instead of direct aids to individual firms, policies can promote investment in both physical and also in the soft infrastructures (networking, forums for exchange, cluster animation) that build local social capital. The process of developing collective action among firms where there is little or no tradition of co-operation, as is the case for Mexico City, has a strong social aspect. As such, it is difficult to develop collective action through public policy based on regulation or legal frameworks. It depends crucially on persuading groups of firms that they can benefit from the provision of collective services or from the outcomes of joint action. With respect to inter-firm co-operation, four basic ground rules for policy are proposed (Meyer-Stamer, 1998):

- They should address the immediate problems of firms;
- They do not touch what firms perceive as their core activities;
- They open no or little latitude for predatory behaviour, and
- They offer the potential of cost savings.

Policies to induce co-operation where it does not otherwise exist often fail because they cannot avoid breaking these rules. According to Meyer-Stamer, policies designed to address technology transfer and development will often generate pressure for non-co-operation because technological advances are seen as central to each firm's production cost equation. There are three main areas where joint working can be effective and help to open channels of co-operation that otherwise would remain closed:

- Training: there are clear economies of scale, few opportunities for predatory behaviour, and don't relate to core technical expertise;
- Environment: meeting environmental standards and conforming to regulations is an area where inter-firm co-operation can be fruitful, again opening up channels of communication and information exchange that otherwise don't exist; and
- Testing: small firms have similar needs for basic testing technology, which can typically be provided on a cluster basis and used as a collective resource.

These are illustrative and do not necessarily lead to more profound processes of networking, but they demonstrate the value of joint working and provide places to start. The pre-condition for sound policies is to understand that co-operation will tend to start small. The other principal observation is that the policy will be built on intensive facilitation, both labour intensive and time-consuming, and hence be relatively expensive.

Another important aspect concerns the relations between firms and institutions. Most small firms in and around Mexico City have limited

relations with the public sector and do not necessarily see the public authorities as helpful. Indeed they probably see government regulations and tax requirements as the principal obstacle to their ability to compete. In order to change this perception, it is essential to present a public sector that is more responsive and more clearly geared to providing useful services. The cluster approach provides a relatively cost-effective way to provide local services on a collective basis, but it depends crucially on having a body responsible for business development that has a private sector slant. This has been the rationale for most economic development agencies around the world to work on business development, providing the close, proximate support that ministries have trouble providing.

The two principal requirements would seem to be (1) being credible to the small business community, and (2) providing useful services.

The concrete steps that public policy can take to improve the dynamism of clusters and to improve delivery of collective services to them include:

- Public procurement policies that encourage groups of SMEs or associations representing SMEs to participate;
- Technology demonstration centres, sector-specific or technology specific incubators;
- Subsidizing networking initiatives to cover transaction costs incurred;
- Involving associations of SMEs in regional/local development policy formulation;
- Providing credit guarantees for firms with projects formulated in the context of cluster development strategies;
- Training for groups of SMEs;
- Dissemination of information on new technology;
- Training for groups of SMEs seeking to access external markets or to work with large firms;
- Establish channels through which mediation and facilitation activities can be pursued with a view to increasing contacts and building trust among local firms

The Scottish case provides a good example of a very flexible approach to cluster policy, one that developed in different ways in different places, and which was not successful in all areas (see Box 3.2). The process was a learning experience for all, and involved adaptation as the programme evolved. On the cautionary side, the programme also showed that to be effective, the support had to be close and intensive.

Box 3.2. Cluster development policy: the case of Scotland

The use of cluster approaches is recognised as a useful way of co-ordinating and tailoring local policies for entrepreneurship around the need of existing or emerging clusters, when there are genuine local cluster strengths. Scottish Enterprise was one of the first economic development agencies to consider the potential of the cluster approach, with research undertaken in 1993 to identify Scotland's clusters and to assess which could benefit from specifically targeted support. Clusters were identified as priorities for action where they had significant prospects for the future, significant Scottish capability or potential to build on, willingness or demand from public and private sector partners to get involved and where Scottish Enterprise could add something as an economic development agency. Critically, Scottish Enterprise has not sought to create entirely new clusters of firms. Instead it has worked with clusters that demonstrate strong existing capacity, willingness from industry players to work together and with the public sector and where there is the potential for policy to make a Scotland has several existing and emerging enterprise clusters, difference characterized by strong linkages and networks between firms, the presence of specialized supporting institutions and infrastructure and well-developed sector labour markets.

This is an example of a successful regional cluster-based policy managed through a development agency. At the same time, it should be noted that this approach was supported with significant funding and has been resource intensive from the beginning. The process of working out how public policy can help to generate linkages among firms and between firms and other actors was long and painstaking. The results obtained have justified the investment, but they also suggest that the cluster audit, such as the one described below represents a crucial first step before this strategy is taken forward.

In sum, the MAMC faces a challenge to integrate and facilitate the restructuring of industrial branches. In particular, the focus should be on those branches that have the capacity to generate important shares of employment and those that currently address mainly domestic markets but which must be re-oriented, at least partially, towards export. Without such changes, these industries, which make up the backbone of the MAMC enterprise base, will be permanently in crisis and at risk from foreign competition. This will involve a more focused programme of business development designed to improve the awareness and capacity of small businessmen to seize opportunities. Currently this function is poorly managed and funded. A metropolitan approach might be a means by which to better prioritise and target funds. A development agency, either wholly private or functioning with a stronger private sector perspective than is

possible through sectoral ministries, could also improve the quality of service provided to enterprises.

2. Upgrading skills and matching new labour demand

The second key priority for policy action regards skills development. As with the enterprise base of the region, the region's stock of human capital is adversely affected by under-investment. Overall, the region is characterised by relatively low levels of educational attainment, exacerbated by relatively low levels of skills training and adult education. There are clear incentives for achieving higher levels of education, but the incentives for completing secondary levels are less apparent and seem to provide disincentives for low-income families to invest in their own education. In a context where the activity rate is low, due both to moderate female employment rates and the large informal sector, the level of labour utilisation in the formal economy represents a significant brake on growth prospects. Regulation of labour markets is a national issue and the MAMC's labour market does not differ greatly from that of other Mexican cities. As such, the authorities within the metropolitan area have only limited competence to improve the situation. At the same time, a greater emphasis on workforce development and targeted supports to ensure that education and training are not a simply a function of residential location could have a positive influence on some of the geographical market failures that affect the current system.

While there remains potential to revive the manufacturing sector, the region is in transition towards a service-based economy. An important issue is the extent to which the service sector can adequately absorb the large numbers of workers displaced from manufacturing industries (and from agriculture). Over recent years, the persistent share of informal employment in the labour market is a strong indicator that there are some disparities between labour supply and demand in growing employment sectors. While supply and demand imbalances might be an underlying problem, the apparent mismatch between the skills of large segments in the work force and the demands, in terms of qualifications and new skills, of the tertiary sector might be another important element. The economy is evolving and creating new opportunities with new skills and education demands. Yet, as a result of several related factors – relatively poor coverage and limited access to upper secondary level education and limited training options, and labour market structures that do not favour in-service training – the pace of adaptation to new skills demands is low. Imperfect matching of labour demand and supply needs to be addressed in order to ensure that the transition that the region's economy is currently undergoing is not also accompanied by processes of exclusion and further reinforcement of the, already large, informal sector.

As was shown in the OECD's PISA report and other education research, the general level of educational attainment in Mexico is among the lowest in OECD countries (see Figure 3.3).

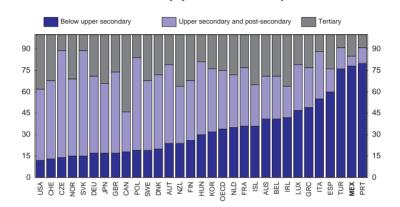


Figure 3.3. Educational attainment of the population in OECD countries

Distribution of the population of 25 to 64-year-olds

In the Mexico City region, human capital assets are very unequally distributed. An average of 22.4% of the population of the FD had successfully attained at least one year of schooling at university level, while the States of Mexico and Hidalgo with an average of 11.5% and 8.0% respectively are both below the national average of 12.0% for 2000.⁴ Strong disparities are also apparent across local political-administrative entities of the FD, the State of Mexico, and Hidalgo. Figure 3.4 shows that practically all local units are characterized by the fact that more than 50% of their population has not attained at least a year of university-level education. The negative relationship regarding high incomes and low education is also apparent.⁵

One positive sign from the municipal-level data is that over the period 1990-2000, all municipalities showed an increase in the number of individuals with higher education and the positive correlation between educational level and higher income population was much clearer than it was in 1990.

Source: OECD, Education at a Glance

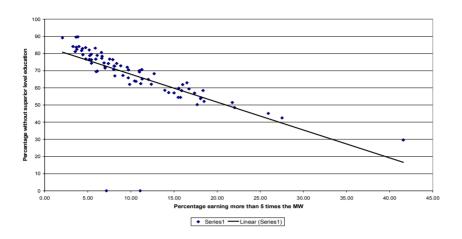


Figure 3.4. University attainment and incomes, 2000

Source: INEGI, General Population Census (2000).

To achieve a satisfactory outcome several structural obstacles need to be overcome. These obstacles include a more efficient and equitable (in spatial terms) delivery of educational services, initiatives that help the most disadvantaged households finance investments in better education for their children, and some investigation of how the positive returns on tertiary and upper secondary education, and presumably also on skill development, can be broadened to create more incentives for completing at least lower secondary education. Improvements have been made and the government is introducing a range of measures to enhance the quality of schooling, for example:

- Scholarships for low-income families have been increased via PROGRESA/Oportunidades which now also concerns uppersecondary students;
- *Escuelas de Calidad* provides government grants for schools that are committed to, and succeed in, increasing quality;
- Modernised curricula, better integrated from one level to the other and more in line with students' and future employers' needs, and programmes to retrain teachers, especially in upper-secondary, are under preparation and pilot implementation is projected for 2004-2005;

- In August 2002, an institute to evaluate all institutions (except in superior education) was created (INEE, *Instituto Nacional de Evaluación de la Educación*). The recent law on transparency will ensure that these evaluations are made accessible to the general public.
- The education administration is under review to identify areas for improvement and make concrete proposals for its restructuring (regarding especially further decentralisation) by 2005.
- Several initiatives have been also launched to promote use of ICT in education programmes within the e-Mexico initiative.⁶

The weaknesses in the general education system place even greater emphasis on the importance of on-the-job training and adult education. However, there are strong imperfections in the labour market that discourage both employers and workers from investing in training.

Employee turnover is very high in Mexico and suggests the low rate of human capital development inside firms. For example, during the 1990s between 15% and 20% of workers in the formal sector moved out to another job status within one quarter. Turnover rates were notably higher for salaried workers with informal status, 50% of which were not in the same category three months afterwards.⁷ As is true across the OECD, human capital investments tend to have a significant impact on the probability of remaining for longer periods in the same job or in the formal labour market. Similarly, intra-firm training tends to lower the probability of job switching, at least in the short term.⁸ Given that such training is relatively underdeveloped in Mexico, the rate of turnover is consequently increased. The lack of in-service training and other adult education options is closely linked to the structure of the economy and the predominance of micro and small firms, categories that statistically tend to under-invest in human capital development, have less access to capital for technology or training, provide less stable contracts, etc. It is also linked to the size of the informal sector which offers very limited training options.

The informal sector tends to concentrate people with low educational attainment and lower skills, but does not provide them with any training and skills development options. In other words, formal workers tend to be employed in manufacturing firms in higher proportions, while informal workers concentrate in services and construction. This result is more dramatic once we disaggregate industrial sub-sectors into branches. In 12 out of 68 industrial branches, more than 30% of the employees are informal, whereas the average for the economy is 22%. In 28 industrial branches, more than 95% of their workforce is formal. Sixteen out of those branches employ no informal workers (these are generally high-skill industries,

including the petrochemical, chemical, pharmaceutical, electronics and electronic machinery industries).⁹ Industries with high concentration of informal labour are, within the manufacturing sector, corn processing for tortillas, construction, transportation and commerce, precisely the same industries that have concentrated the highest rate of labour force participation during the past three years in the MAMC. For the latter part of the 1990s, the average schooling level of a formal employee was 9.3 years, and 9.7 years in the case of those industries that employ no informal employees, while it was 8.9 years for those industries in which more than 30% of the labour force are informal workers.¹⁰

From another perspective, there are undoubtedly concerns expressed about the quality of the jobs that are appearing in the service sector. This suggests a paradox since average years of schooling have consistently increased in urban (and rural) areas of Mexico. This micro-contradiction – higher educational levels and lower skilled employment options reflects, according to Araceli Damián, the imbalance between economic stagnation and continued educational improvement. Inter-generational comparisons carried at the micro-social level in the MAMC revealed that in the case for female labour, daughters had a better educational level, skill qualification and position at work than their mothers. In contrast, young male workers had a worse position at work compared with their fathers and sisters despite their much higher levels of education.

The challenge for the government is how to increase flexibility and reduce rigidities in the labour market while also strengthening the relative attractiveness of the formal sector and avoiding downward pressure on wages. At the moment, there are some disincentives for enterprises to hire new employees because labour laws make it relatively difficult and expensive to release workers at a later date. Wages need to be sufficiently high to attract people out of informal employment, making taxes and other contributions a serious barrier to flexibility in the labour market. These rigidities effectively reduce the incentives for enterprises to train employees. In the specific case of Mexico City, the uneven distribution of adult education provision, combined with the sheer size of the metropolitan area pose additional problems of access to training outside the firm

The result of the scenario described is that only around a quarter of the labour force nationally has ever received some form of training from their employers and, among these, qualified workers are the main beneficiaries, while unskilled people received only 10% of total training provided by firms. In this context, public intervention is needed to improve access of the under-educated workers to training. The National Institute for Adult Education (*Instituto Nacional para la Educación de los Adultos, INEA*), and the newly created National Council of Education for Life and Work

(*Consejo Nacional de Educación para la Vida y el Trabajo, CONEVyT*) are devoted to articulating and improving adult learning coverage. The Education Ministry also provides basic education to adults. Moreover, several public programmes have been launched in the last decade in Mexico such as PROBECAT (renamed SICAT), a training programme for workers who lose their jobs, and CIMO (renamed PAC), that subsidises on-the-job training in small firms; both are managed by the Labour Ministry (See Table 3.4).¹¹ Despite these new initiatives, and even though training represents a large share of overall active labour market policies, the level of support for training is again far below that of other OECD countries.

Table 3.4. Training provision

	1990	1995	2000	2001	2002*
Training support for SMEs (CIMO) ¹					
Supported workers	11.4	104.6	733.9	333.5	233.2
Enterprises supported	33.1	368.1	329.5	98.2	51.8
Enterprises receiving other services Total expenditure (millions of pesos)	1.8	74.4	201.5	172.2	134.9
Training scholarships (PROBECAT) ²					
Scholarships for the unemployed	64.1	412.3	593.2	397.0	230.2
Trainee courses	2.1	23.0	27.1	18.8	12.2
Total expenditure (millions of pesos)	50.6	476.6	1 249.9	1 184.8	740.9

In thousands

*Preliminary data. 1. In 2002, the CIMO programme became PAC. 2. In 2002, PROBECAT became SICAT.

Source: Ministry of Labour and Social Welfare (STPS); OECD, Employment Outlook.

What more can be done in the context of a metropolitan approach? First, the issue of access to education and training resources needs to be addressed. As this is difficult to do in a context where resources are effectively separated according to administrative boundaries, there is a case for some functions to be undertaken through a cross-jurisdictional body, such as the agency mentioned in Chapter 2. A second important innovation would be greater leverage of private sources of funding for human capital development activities of different kinds. While this is not an obvious strength of the public sector, evidence from the United States and Europe suggests that private or semi-private not-for-profit organisations working on what has become known as "workforce development" have had a major impact in increasing the funds available for labour force skills development activities and developing new approaches. The Michigan Economic

Development Corporation (MEDC) is a good example of a broad-based, semi-public but private sector directed agency for economic development that has successfully fostered the growth of more task-specific and more locally targeted bodies working in the area of skills or workforce development. The MEDC works at a state level, but mobilises funds for more targeted agencies whose objectives follow the strategic aims of the MEDC itself. Most US states and large cities have similar structures, though with differing funding and organigrams, to make the link between strategic economic development planning and more sector or locality specific needs. A broad partnerships body at the regional level ensures that funds from different public and private sources are pooled or at least coordinated and an array of, mostly bottom up specialised programme implementation organisations take care of programme design and management in target fields and target areas. Over the past few years, workforce development and combining training with decentralised active labour market policies has become a common focus for these agencies.

The analysis above points to the need for a close link between skills development and business development. In the former, to continue to equip people with skills in demand, and in the latter to ensure that businesses prosper and can provide better employment opportunities. Even if the kind of supple institutional arrangements mentioned above are difficult to achieve in the short term, they do suggest that closer co-ordination among sectoral departments at all government levels is imperative.

3. Urban regeneration: the historical district and tourism

A third key priority for joint policy action in the MAMC concerns urban regeneration and the valorisation of cultural assets. When assessing the under-used potential of Mexico City, cultural heritage stands out as a domain in which there appears to be significant potential for policy action that would have important multiplier effects for the economy and social development of the region as a whole. The Historical Centre of Mexico City, other more peripheral historical districts and archaeological zones are of great importance as symbolic centres not only of the metropolis but also of the country. All together, the MAMC has an immensely rich cultural, historical and architectonical heritage which remains largely un-exploited or under exploited.

The Historical Downtown of Mexico City is an area created by Presidential Decree the 9th of April of 1980. This area has a territorial extension of 9.1 km², includes around 1,500 sites registered in the catalogue of the National Institute of Anthropology and History (INAH) and was included in the list of World Cultural Heritage of the UNESCO in 1987. The 1985 earthquake that damaged a large part of the city encouraged the launch of an innovative reconstruction and rehabilitation programme in the area. As a result. 13,562 houses in the city centre were rebuilt. Another important programme that benefited the centre was the programme "Échame una manita" ("lend me a hand") between 1991 and 1994. Through the use of a series of technical financial fiscal and administrative instruments, this program achieved the reconstruction of 867 buildings, most of them considered as a part of the historical heritage. However, in spite of the programmes mentioned above, the city centre still presents a socio-spatial dynamic characterized by depopulation (between 1990 and 2000, the population of the area fell from 202 000 to 172 000, a drop of almost 15%). physical deterioration and the loss of many of its central functions. All of this occurred in a context of disarticulated urban development.

At present, there is a project to extend the perimeter of the Historical Downtown and create the "Historical City of Mexico" which would include the National Park of Chapultepec and the Official Residence of *Los Pinos*, the presidential residence. The proposal consists of declaring the city as an "area of protected heritage" in the context of the General Law of Urban Development for the Federal District. The "Historical City of Mexico" should be recognized by the federal agencies in charge of conserving the cultural heritage through a modification to the Presidential Decree of 1980. The proposal considers a total extension of 25.2km², which would represent 59% of the total territory of the *Cuauhtémoc delegación*, 9% of the *Venustiano Carranza delegación* and 5% of the *Miguel Hidalgo delegación*.

The problems affecting the central district are common to many historical centres in Latin America and elsewhere. Namely, the streets are not conducive to traffic flows and tend to be congested and polluted, infrastructure is old and difficult to modernise, public spaces are crowded with street vendors and there are perceptions that these areas are targeted by pickpockets. This, combined with problems relating to the small size of land holdings and the difficulty of consolidating ownership in parcels for redevelopment, has led to the most dynamic sectors of the economy moving to other parts of the city. The process of abandonment of both individual buildings and whole neighbourhoods seriously undermines the task of preserving the areas, and also leads to their deterioration as assets for attracting investment and new residents, a typical downward spiral of decline found in many OECD cities.

Urban regeneration is a major concern across the OECD. It raises a number of important issues about how investment is made in urban areas and by whom. The motivation for regenerating historical districts is, in part, a social question. Residents must appreciate the value of their cultural heritage in order to give a mandate for public authorities to make the necessary investments to preserve and restore the historical district. This has not always been apparent, with the extent of the loss of patrimony only becoming a matter of wide public concern when it is almost too late to reverse the process. In many cases, private national and international foundations have been responsible for preserving specific buildings and lobbying for more active intervention from governments. Once there has been a more general recognition of the need to safeguard the cultural heritage and once the pressures and threats to the areas concerned have been accepted, then governments have acted with a range of regulatory instruments and grants to redevelop neighbourhoods, rather than simply individual buildings. The expense of such programmes and the limited ability of public authorities to go beyond addressing physical decline to address functional obsolescence have tended to undermine the outcomes from these programmes. The result has been a shift to a stronger emphasis on the economic motivation for regeneration.

Tourism is the most obvious way by which a society can recover the costs of renovating a historic area. Another economic target can be the grouping of retail outlets in or around historical areas, which effectively provide a "backdrop" for fashionable bars and restaurants. In many US cities, historical buildings have been renovated for use by creative arts – as dance studios, artists' studios, etc. In these cases, public authorities and private developers gamble on a strong link between different forms of culture (architecture, arts, etc.) and new patterns of consumption, particularly involving middle and higher income groups. The common denominator in most urban regeneration projects in Europe and the US is the recognition that physical renovation is not sufficient but that economic and social dynamics have to be "invented" for these areas. The idealised "chain" is: people increasingly value living in or visiting historical areas, the number of residents and visitors increases, the commercial value of these locations increases, which then draws in investment to create commercial and residential spaces. In this scenario, civil society guides the public sector with respect to the desires and aspirations of citizens, the public authorities put in place a regulatory framework and provide incentives, and the private sector reacts to changes in the local market for investment.

Utilizing heritage and culture as catalysts for urban regeneration and economic growth is an increasingly favoured option for European cities. The regeneration and economic development trajectory for the city of Glasgow was built on several important events beginning in 1988 with the UK National Garden Festival, a river based regeneration initiative. The Festival was an important event for the city. At a cost of £20 million to the public purse the event drew in some four million visitors to the city and marked the beginning of a new approach to urban regeneration in Glasgow. Earlier, in 1983, the Burrell Collection, a local and national cultural asset. was opened. Cultural events became an integral part of the regeneration process as was seen elsewhere in Europe throughout the decade. In 1990, Glasgow was a European City of Culture, an event which captured the imagination of politicians and regeneration agencies alike. Nine million admissions were recorded, over a half million from outside the city, adding £80 million to the local economy. New landmark buildings such as the Glasgow Royal Concerts Hall, a £28.5 million investment by Glasgow City Council, had a considerable impact. In 1996, the Glasgow Festival of Visual Arts generated £25 million of visitor expenditure with a net economic benefit of £5.5 million for the city economy. In 1999 Glasgow was a City of Architecture and Design, which generated £20 million and resulted in the creation of 500 jobs. Investment in culture has continued as Glasgow has developed a science museum, a strong cultural industries base and significant urban design improvements throughout the city.

The MAMC could draw interesting lessons from other historic city centres at the heart of dynamic metropolitan regions, such as Rome and Athens, where major efforts at the metropolitan level have been channelled to renew and enhance the accessibility of historic patrimony (See Box 3.3). Athens is at the beginning of a similar process to the one carried out in Glasgow. The Unification of the Archaeological Sites project, hotel upgrading, improved transport and the Athens 2004 Culture Programme, which coincides with the Athens 2004 Olympic Games, all enhance the city's capacity for future economic, environmental and social gains.

Box 3.3. Urban regeneration based on cultural assets: the case of Athens

Whilst there is insufficient knowledge on the real economic value of the historic environment, there is broad recognition that it is playing an increasingly important role in the economic regeneration of urban areas. Athens, as a capital city with an important cultural heritage, can capitalise in the same way that other cities do. For example, it is estimated that 45% of overseas tourists to the UK in 1995 cited historic sites as the main reason for going to London. Athens has a strong asset base which it is seeking to ameliorate in order to capture its real potential. It has long been realised that Athens was a means to getting to other places in Greece and not a destination itself. Various interventions have created a new opportunity but the process is in its infancy and will require sustained efforts to fully establish the city as an international tourist destination in and of itself.

Box 3.3. Urban regeneration based on cultural assets: the case of Athens (continued)

Progress is being made in Athens, as the Programme of Unification of the Archaeological Sites shows. All the main archaeological sites and monuments of the capital will be presented as an extended archaeological park which, united by a broad network of pedestrian routes, will be incorporated into the historic centre of the city (Plaka, Psirri, Theseio) and the downtown commercial area. The Programme as a whole involves some 60 major or minor interventions across a geographical area which more or less coincides with the traditional centre of Athens. The archaeological sites and the monuments of Athens are of great value and importance for visitors and residents contributing to the historical and contemporary local identity. Several benefits can be identified from historical preservation and more specifically from the implementation of the Unification of the Archaeological Sites project with respect to the development potential of the area and to the upgrading of the quality of life. Positive impacts for the environment will result from direct (i.e. construction of pavements. increase of open/green spaces) and indirect interventions (improvement of road network, increase of average speed, decrease in the emission of air pollutants and noise pollution). The intention is to create a network of public spaces, cultural venues. open spaces, amenities and recreational areas which will link the major cultural landmarks of the capital and integrate them into the everyday life of the city.

The current experience in Athens demonstrates how very significant investments can be achieved by a national government focussing public finance and regulatory powers on key locations in the capital to achieve a step change in a short period. This is not unlike the recent experience in Berlin, and bears some resemblance to the regeneration of the London Docklands, and the revitalisation of Time Square/42nd Street in New York (though not a capital city). In each of these cases, an authoritative approach to regeneration has been taken, and national or state government has used its powers in a dominant manner to achieve change against local lobbies in key locations.

In terms of the general approach, the conclusion of the Inter-American Development Bank (IADB) with respect to Latin American cities is that the public sector still bears most of the burden, and that this reduces the impact of the range of historic area preservation initiatives. The main constraints when the public sector is the principal or sole actor is that the bundle of incentives, subsidies and grants induce dependence and might impede other more market-oriented and more sustainable redevelopment paths. The main public sector instruments relate to the physical environment and generally limit the ability of property owners to change the physical appearance of designated buildings and/or provide subsidies or tax credits for improvements that respect the architectural heritage. This strategy can resist moderate pressures for real estate development, but it is not adequate when stronger pressures for alternative development exist. More importantly this approach alone does not solve the problem of functional obsolescence and the need to generate economic and social dynamics alongside physical renovation.

The economics of urban preservation are more evident in cases where there is a clear strategy for regeneration of the wider area, and particularly. where regeneration is a flagship for the wider city or metropolitan area. The pre-requisites for broader strategies are a long-term commitment on the part of the public authorities, the involvement of civil society and the private sector, and a mechanism by which different actors can work together in a dynamic environment. The strategic plan for the area must provide sufficient assurances to the private sector that current legal and regulatory frameworks, as well as levels of public investment, will be respected. At the same time, civil society expects that the public authorities will supervise participation by the private sector and ensure that development follows agreed plans. Finally, each partner will expect that decision-making processes are transparent and not bogged down by red tape. All this explains why in most cases a quasi-governmental or not-for-profit agency is given the task of managing the project. In the case of Mexico City, a development agency would be able to provide a co-ordinated, cross-sectoral approach that is otherwise extremely difficult. A mixed capital company was used successfully in the rehabilitation of Barcelona's run-down old town. This structure enabled Barcelona to use public investment in public spaces and renovations to leverage private sector participation, and to provide a boost to rejuvenate the old town by locating numerous public services in historic buildings that they had long since abandoned.

In terms of instruments used, the Business Improvement District model, used primarily in the US but also in Europe, could be a good example of how a rolling process involving public and private financing of regeneration has been used in practice (See Box 3.4).

Box 3.4. Business Improvement Districts

Business Improvement Districts (BIDs) were invented in Ontario, Canada, in the 1960s. They have been widely copied across the world and there are now nearly 60 000 worldwide. These districts offer a mechanism for financing and managing improvements to commercial and industrial locations through the agreement by a majority of businesses (either land owners or tenants) to support an additional levy to produce revenues for special services. The BID resources often begin by supporting additional safety and sanitation services to improve the commercial environment and aid marketing, but they can also develop into much more sophisticated investments and initiatives (such as infrastructure improvements and promotional initiatives).

The boundaries of such districts are usually a contiguous commercial or industrial area within a central city location, but they can also be effectively used in suburban and ex-urban industrial locations. In the cases where a number of residential or public service locations are included within the boundaries, some additional consideration is required due to the charging and benefits geography involved.

Box 3.4. Business Improvement Districts (continued)

Once a district is established it then has the revenue at its disposal and can capitalise through long-term debt instruments for capital investment, or use it to finance additional services.

Business improvement districts have, for the most part, worked well in the context where they were started. In Canada and the USA, a multiplicity of fragmented jurisdictions at the local level, coupled with multiple property-based and other local taxes and charges, make BIDs an acceptable new addition to local fiscal and management instruments. However, they are now being introduced into widely varying localities with different fiscal regimes, and with variable business partnership mechanisms. BIDs are not workable without a critical mass of businesses that are willing to pay and are used to being charged a wide range of fees for particular services.

Equally, BIDs are good tools for reasonably healthy commercial and industrial centres that are tightly boundaried and densely populated by the owner/users. They are less effective for more spread out situations or for areas with a high degree of "mixed land use", where it is harder to capture the benefits of targeted improvements in services, and more controversial to have public and civic institutions (and residences) that do not pay, but do benefit.

In some countries where BIDs are being introduced, their role and scope is being overplayed, and as elsewhere, failure could be a major set back. Progress with BIDs in South Africa and the UK (both more centralized financial regimes than either Canada or USA where BIDs have mushroomed) is being considered carefully and a process of testing voluntary models is working well.

A principal concern in the case of Mexico City is whether the private sector can be induced to take a more active role. Given the history of strong central government involvement, the natural incentives for businesses to participate have been limited. However, it is clear from other cities around the world that under the right conditions, private investors will see a number of inter-linked benefits from urban renewal. For example, large firms need to attract and retain their best employees, something that is difficult in a context where the urban environment is poor. Similarly, headquarter functions are closely linked to location, and the prestige associated with that location. While new developments can be attractive, there is also significant value in "tradition", as exemplified by location in areas of historic or architectural importance. Businesses also want to be located in areas that give the impression of industry and commerce – with places for employees to eat and socialise. Ripple effects on real estate values can also provide strong incentives to invest in the wider urban environment.

Source: Greg Clark, Private Finance and Economic Development, City and Regional Investment, OECD, 2002, Integrating social policies into a metropolitan approach.

Overall, as noted by the IADB for the region as a whole, it is time for the efforts of the public authorities to be supported by new initiatives that involve a broader range of actors and that are more closely aligned with a market-oriented vision of how a sustainable central city can be developed. This will involve all levels of government, civil society and the private sector. In the same way that a new approach to business and workforce development implies the need for a body that can co-ordinate people and resources, the urban regeneration task might also suggest the need for coordination and implementation mechanisms that are linked to but slightly apart from the public authorities.

Integrating social policies into a metropolitan approach

This report argues that social exclusion has become geographically concentrated with people living in certain parts of the metropolitan region at risk of becoming isolated from the structure of opportunities provided by institutions and markets. It further argues that policymakers in the metropolitan region should be trying to reduce disparities and avoid polarisation, not only for social reasons but also for sound economic reasons.

The OECD Territorial Reviews: Mexico (2002) and the OECD *Economic Surveys: Mexico* (2004) recognize that poverty alleviation is one of the greatest policy challenges for Mexico. According to the World Bank, the share of Mexico's population living in extreme poverty (defined as earning less than US\$1 per day) declined from 16.2% in 1989 to 13.2% in 2000. Malnutrition among children under age 5 also decreased from 14.4% in 1988 to 8% in 2000; the under five-year-old mortality rate decreased from 46 per 1 000 in 1990 to 36 in 2000. The reduction in poverty can be attributed to several factors: net job creation in the formal sector, the slight increase in real wages, the increase in migrant remittances, and the expansion of social programmes in recent years. Despite this progress, poverty levels in Mexico are still high. Over 45 million Mexicans live on less than US\$2 a day, while 10 million of them "survive" under extreme poverty, having limited access to basic services. In 2000, 27.8% of the population over 15 had not completed primary education, almost 15% lived in homes with dirt floors, and about 12% did not have access to water supply or drainage. In 2002, one in five Mexicans was living in acute poverty, defined as having income insufficient to cover basic food needs. While aggregate levels of poverty in the MAMC are moderate in comparison with some Mexican cities, in absolute terms it includes the highest number of poor individuals.

The principal assumption of regional competitiveness is that competitiveness depends on mobilising under-used resources. The poor in Mexico City are probably the single most important potential asset, and better utilisation of labour represents the key potential for the region as a whole. This is implied by the activity rate of 39.2%. The close link between poverty and low education and health outcomes, and low access to education and health services, suggests that addressing poverty through improving outcomes from public services in parts of the region will have an important impact on improving the quality of the labour force.

A theory underlying a metropolitan approach, and also implicit in the concept of regional competitiveness, is that social cohesion and inclusion are competitiveness factors, and that neglecting social problems creates strains that undermine the functioning of the economy. These links are difficult to assess empirically. The average income of a population is a factor in investment decisions where the investment is aimed at obtaining access to a specific market. Disparities and segmentation suggest a fragmented market. Social problems associated with poverty might be a disincentive to invest, for example because security issues increase costs through high insurance premiums. There is also a possibility that workers, particularly those with portable skills, are less likely to want to work in areas that have a poor reputation and expect a premium on wages in order to do so. Out-migration and brain drain are often linked to issues of quality of life, and in the case of Mexico the growth of intermediate cities has been attributed in part at least to the better lifestyle that they offer in comparison to more congested cities like Mexico City.¹² Work in the OECD on urban deprivation highlighted the cycles of outward migration that can very quickly take hold of urban neighbourhoods when there is perception that middle class homeowners are moving out of the area. The snowball effect on housing prices can rapidly transform an urban area, with depopulation and out-migration leading to neglect of the built environment and further depressing land values. On the other hand, many of these assumptions are challenged in US cities where many metropolitan areas have fast growing and economically dynamic suburbs that are functionally cut off from poor and economically stagnant central cities.

Although the links between spatial concentration of poverty and overall levels of competitiveness are difficult to quantify, there is a general consensus in Mexico that poverty remains the principal challenge to more dynamic economic growth, and there is increasing concern about concentrated poverty in cities. As stated in the national Urban Programme 2001-06:

"Cities are the main space for interaction between the country and the world. From the welfare conditions and competitiveness generated in cities depend, in great measure, the attainment of economic growth and social, scientific and cultural development of the country."¹³

The importance of urban poverty to national objectives has not always been reflected in policy. In the past, social policies in Mexico were mainly oriented towards rural poverty. In 1999, for example, 75% of total expenditures targeted to the extreme poor were for rural areas,¹⁴ and in 2001, of the 12 human capital development programmes, only three included urban locations and represented less than 10% of the total budget for human development. This is also the case for social infrastructure (2.15%) and productivity and employment (13.5%). This pattern is changing, as the urban poverty issue becomes more prominent. Another evolution has been the progressive decentralisation of social policies, with state and local governments taking responsibility for some policy implementation.

The process of strengthening the role of sub-national government in fighting concentrated poverty began in the late 1980s with the establishment of the National programme for Solidarity (PRONASOL), which specifically tried to co-ordinate the actions of government bodies at different levels and across sectors resulting in consolidated "single development agreements" (Convenio Unico de Desarollo (CUD)). The Secretariat for Social Development (SEDESOL) was created in 1992 and took over PRONASOL. broadening the single development agreements into "social development agreements" (Convenio de Desarollo Social (CDS)) which were designed to increase the role of municipal and state actors in defining priorities and target areas. During this period the concept of local targeting was firmly established and has remained a guiding principle for policy programmes like PROGRESA/Oportunidades and Habitat. The current administration organises the strategy for poverty alleviation along several lines of action, including both programmes targeted to the poorest categories (the PROGRESA/Oportunidades programme essentially) and actions seeking to ensure wider access to basic education and health services and an increase in public housing provision. Spending on poverty alleviation programmes has increased from 0.7% of GDP to 1.3% in 2002. Spending in 2002 amounted to MXN 77.6 billion (over US\$7 billion) of which: MXN 18.4 billion was for PROGRESA/Oportunidades, MXN 3.9 billion for the Temporary Employment Programme, MXN 8.6 billion for the education effort, MXN 5.7 billion for the health component and MXN 5.3 billion for nutritional programmes.

In general, social policies in the Mexico City region suffer from the same problems as many other domains; *i.e.*, that the problems are metropolitan-wide, but the solutions are organised according to political jurisdictions. Both the Federal District and the State of Mexico operate poorest programmes targeted on the or "most marginalised" neighbourhoods. The main programme of the Federal District is the Integrated Territorial Programme for Social Development, which includes economic assistance to vulnerable social groups (older adults, disabled persons, children, and unemployed), school meals, household maintenance and construction of school and public markets, credits to micro enterprises and improving housing conditions. That of the State of Mexico is the Programa Social Mexiquense, consisting of food aid, health, social integration and employment policies. As with other policy areas, the potential for co-ordination has been hampered by the different legal and fiscal regimes present in the metropolitan region. There is no metropolitan commission, for example, dealing specifically with poverty issues, as is the case with water, environmental protection, etc. Nonetheless, a recent agreement under the Central Country Region programme created a Regional Trust, FIDECENTRO,¹⁵ which includes a sub-programme creating an institutional system "for the capture and exchange of information on the design and implementation of social programmes".¹⁶ This could pave the way for closer co-ordination of programmes, but there are still significant obstacles to integration of policies.

A principal problem is that from the perspective of the federal government, administrative divisions are an important organising schema for the transfer of funds. For example, the federal government allocates resources through "fondos de aportacion etiquetados" - labelled funds with a specific allocation. These transfer programmes fund education, health, urban infrastructure security and other major expenditure items of lower tiers of government and do not give specific incentives to undertake joint action with other administrative bodies.¹⁷ Moreover, because of its specific status, the Federal District is not involved in some transfer programmes, and, as a result, has established its own programmes to address poverty. These operate under different legal frameworks, with different objectives and according to different timeframes than similar programmes in the States of Mexico or Hidalgo, which makes joint action particularly difficult to organise. In fact it is only very recently that the PROGRESA/Oportunidades programme was extended to the Federal District and funding for the programme there is still very limited.

Overall, however, it is clear that the Federal District has at its disposal significantly higher levels of funding for social programmes than does the State of Mexico and can target them better. The funds of the State of Mexico

are dispersed across the whole of the state and its hundreds of poor, nonurban municipalities. Approximately 25% of the expenditures of the Federal District go towards social policy, while the corresponding figure for the State of Mexico is only around 10% and has to be shared between the MAMC and its state capital, Toluca and some five thousand communities. As such, there is a clear bias in the availability of funding that appears to put municipalities in the State of Mexico at a relative disadvantage. Connolly (1999) estimates that total local expenditure in the State of Mexico (state and municipal) is only half that of the Federal District, which accords with other estimates of around 800 US dollars per capita in the Federal District and 400 US dollars in the State of Mexico.¹⁸ An additional factor is that funds for development in the Federal District are distributed among the delegaciones according to population, whereas in the States of Mexico and Hidalgo, the fiscal base of each municipality has an important influence on their expenditure. As such, municipalities that have seen significant growth in their population have not necessarily seen a large increase in revenues because such a large proportion of the influx is poor households moving out to colonias populares.

Given the complex institutional structures of the metropolitan area and the inter-dependencies between economic, social and environmental factors, the role of the central government in promoting cross-sectoral co-operation is crucial. In this respect, the Habitat programme is an important new initiative. Recognizing the need to foster the fight against urban poverty, the Habitat programme, which started in 2003, seeks to articulate the objectives of social policies with those of territorial and urban development through a local or micro-regional approach. The programme works in 60 cities throughout Mexico with more than 100,000 habitants. Financing for the programme is to be shared between federal, state, and municipal governments, as well as private investors. This kind of joint action programme demonstrates the evolution of social policymaking and its integration into other policy fields from which it has been hitherto somewhat isolated.

Notes

- 1. The OECD Economic Survey of Mexico notes that there has been progressive improvement in these areas, with a number of initiatives introduced by the government to improve the efficiency of legal and regulatory frameworks for business. A new approach to administrative simplification has emerged in the framework of the 2001-2006 "Good Government Initiative", which integrates administrative simplification into a management-for-quality programme. The electronic system of government procurement introduced several years ago, called Compranet, has been important to improve transparency and efficiency. The new and broader e-Mexico network should contribute substantially to these improvements. (This is discussed in an Annex to the Economic Survey).
- 2. OECD (2003f), Regional Competitiveness Policies.
- 3. According the Mexican Institute of Intellectual Property, less than 42% of all patent requests between 1996 and 1998 were presented by large enterprises or research centres (27 and 15% respectively) most were presented by individuals, which is relatively unusual.
- 4. INEGI (2000).
- 5. The returns on education have increased during the 1990s much faster with respect to university and upper secondary education than for primary and lower secondary. Several studies (see López Acevedo 2001) have argued that during the 1990s, the percentage change in the marginal value of education increased substantially for those completing university education, and to a lesser extent completing upper-secondary education, but that the marginal increase in the value of completing lower secondary and primary education has not increased.
- 6. OECD (2003e), *Economic Surveys: Mexico*.
- 7. Ángel Calderón Madrid (2002), "Transition of Workers In and Out of the Formal Sector and other Job Statuses in Mexico", *Journal of Economic* Literature, classification: J23,J63,C41.

- 8. The notion of segmentation or duality has been used to explain the persistence of large urban informal sector in many developing mega-cities. According to the theory all workers aspire to access the formal sector, but limited availability of jobs leaves them no choice but to engage in labour intensive activities without job security, social benefits, and fringing illegality. The definition for a segmented labour market provided by theory asserts that a segmented (or dual) labour market is characterised by a limited (or restricted) amount of jobs with high wages, high benefits and high returns to human capital, and a second sector where many individuals qualified to work in the high pay sector are forced to work because of the rationing of works. See: Salvador Navarro Lozano (2002), "The Importance of Being Formal: Testing for Segmentation in the Mexican Labor Market", Preliminary version.
- 9. While the case of strongly regulated or unionized industries where informal work is not allowed could be an exception.
- 10. See DAMIÁN, A. (2000).
- 11. These programmes were renamed in 2002 by the new administration. Evaluations, mainly by the World Bank, have shown mixed success, which are partly due to the use of these schemes as income support in periods of high unemployment (1995-96).
- 12. See DE LA TORRE, R., C. VELÁSQUEZ (2001).
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