

Stronger Municipalities for Stronger Cities in Argentina¹

Rémy Prud'homme, Hervé Huntzinger, Pierre Kopp²

1.2.2004

"No hay cosas tan deseadas en aquel puerto (Buenos Aires) que quebrantar las ordenes y cédulas reales"

Gobernador Davila, 1638

EXECUTIVE SUMMARY

In recent years a number of studies have been devoted to the twin issues of economic development and of decentralization in Argentina. Many papers have tried to understand the complex system of intergovernmental relations. Most of them, however, have focussed on the role of provinces, and neglected the problems raised by municipalities. This paper tries to bridge this gap, and to suggest that stronger municipalities could contribute to produce stronger cities that would in turn foster economic development.

The *first section* of the paper is devoted to municipalities. Although Argentina is one of the most urbanized countries in the world (the urbanization rate is

¹ This paper has been prepared for the Inter American Development Bank. It has benefited from financial assistance of the French Trust Fund. The authors want to thank Santiago Bedinski, Nelida Raynal and Mabel Martin, for their help, as well as Claudine Desrieux and Laure Atlas. The views expressed are those of the authors, and not necessarily those of the IADB.

² The authors are respectively Professor emeritus, University Paris XII prudhomme@univ-paris12.fr, Professor, University Paris I pkopp@univ-paris1.fr, partner, TETRA, Paris <herve.huntzinger@tetra-france.com>.

reported to be 89%), municipalities do not play a key role in the operation of cities. The flows of funds they control are small (about 2% of GDP). Their autonomy is limited. Their political representation is weak. In fact, Argentina is at the same time highly decentralized to the provincial level, and highly centralized at that level.

Municipalities are often not responsible for many of the tasks allocated in most countries to municipal governments (water and sanitation, inter-municipal transport, education, health, security, etc.). The links between adjacent municipalities are very loose. When a problem involves two (or more municipalities), it becomes a provincial problem; and when it involves two provinces, it becomes a federal problem.

Municipalities do not have access to good local tax bases, and therefore do not have much own tax resources. The disparities between tax-rich and tax-poor municipalities are enormous. Resources of municipalities are limited and the fixed cost of municipalities is high. Wages represents nearly 60% of total expenditures –more in certain cases– thereby reducing the share of expenditure for direct services to the population.

The share of transfers in total resources of municipalities is, on average, close to 50%, but it is higher in smaller municipalities and lower in larger municipalities. The bulk of transfers takes the form of a block grant (*coparticipacion*), which may be used by municipalities as they please, with no strings attached. For a given province, the total of this block grant seems not to be discretionary. It is defined as the sum of a pre-determined share of each of the provincial resources. The allocation of this total amount to the various municipalities is formula driven. It is likely that transfers kill local tax effort; when transfers go beyond a certain threshold, local tax effort tends to disappear, which means that in many cases increasing transfers would not increase much total resources and expenditures.

The *second section* is focused on the role of Argentineans cities. In 2001, the population of the ten largest cities amounted to exactly half the total population of the country. The urban hierarchy is obviously dominated by the weight of the capital city, which is nearly ten times as great as the weight of the second largest agglomeration. The ratio of the first city to the four largest cities, another index of primacy, is close to 8. The growth of the capital city is lower than that of

other cities, and indeed lower than that of the nation. It means that the degree of primacy is presently declining.

The ten major Argentinean cities account for more than 60% of the economic activity of the country. 60% of the jobs are concentrated in these cities, and so is an estimated 63% of the wage bill—a representative proxy of the GDP. Buenos Aires agglomeration alone accounts for a sizable 39% of employment and an estimated 45% of the wage bill.

Employment ratios are much higher in cities than in the rest of the country, since 50% of the population account for 60% of employment. This is not a surprising finding, and similar differences are found in most countries.

Wages per worker, and presumably output per worker, are not much higher in the main cities than in the rest of the country. This finding is very surprising. In all countries, income is higher in large cities than in the rest of the country. Income is a function of city size because productivity is a function of city size. In larger cities both labor productivity and capital productivity are greater. This empirically and theoretically well established relationship between productivity and city size is not verified in Argentinian cities. There is no positive correlation between the size of a city, or rather the size of its labor market, and its productivity. If anything, there would be a negative correlation. Some of the most productive cities are amongst the smallest agglomerations of the country. Buenos Aires agglomeration, which should be expected to have a much higher productivity than other agglomerations is only 12% more productive than the unweighted average, and is surpassed by rather small cities like Comodoro Rivadavia, Neuquen, Rio Gallegos or Ushaiiaia. The second tier of cities, Cordoba, Mendoza, Rosario—agglomerations of about one million people—exhibit a productivity lower than the weighted or unweighted average of all agglomerations. This a-typical pattern of productivity distribution deserves an explanation.

The explanation suggested is the following. The benefits associated with city size are only potential or conditional. For a given size, a city can have different productivity levels. This merely reflects the fact that a city can be more or less well managed. It seems plausible to conclude that Argentinean cities are not as productive as they could be because they are not very efficiently managed. The weakness of municipalities combined with the

balkanization of agglomerations is probably the cause of their relatively poor performances.

There are reasons to believe that urban management is weak in Argentinean agglomerations. First, municipalities, which are normally key players in the provision of such services, are too poor to be efficient at it. Second, the lack of horizontal cooperation at the agglomeration level – often the only meaningful level– further weakens the quality of urban management. The provinces capture the money, the people, and in many cases the formal right, required to deliver efficient agglomeration-wide services like transportation and urban planning, but they often do not deliver. Urban development and efficiency is usually not their prime economic and political concern. This analysis suggests that there is an untapped source of increased efficiency in the Argentinean economy. Better managed cities would have a higher productivity. Improving Argentinean cities by strengthening municipalities and encouraging them to cooperate at the agglomeration level would improve their productivity, ad their output, and therefore the output of the country.

These problems are particularly apparent –and important– in the case of Buenos Aires, which is examined in the *third main section* of the paper. Buenos Aires agglomeration or Greater Buenos Aires (11.8 million inhabitants = 2.7 million inhabitants in the city of Buenos Aires + 9.1 million inhabitants in the 25 municipalities of the province of Buenos Aires) accounts for about a third of the population of Argentina, and nearly half of its output.

It is easy to show that there is nobody really in charge of operating and developing Greater Buenos Aires.

The 25 municipalities of the province that are part of GBA, and account for the bulk of it in population terms, are financially much too weak to be able to play a leading role. In addition, they are legally and intellectually not empowered to get together to decide jointly on issues of a metropolitan interest.

The city of Buenos Aires, which is financially better off because it has access to the resources of a province, cannot do much either. It accounts for only one fourth of the total population. It can, in principle, talk to adjacent municipalities and cooperate with them, but politically and legally, it needs approval if not authorization from the Buenos Aires province to do so, and in practice does not do it much.

The province of Buenos Aires would seem to be in a better position to help develop metropolitan policies. The province has the legal power to coerce or induce the municipalities to develop joint policies. However, it seems that the province –the capital of which is located outside GBA, in La Plata– is not very active or even very interested.

The Federal government has traditionally been involved, when it was in charge of what is now the city of Buenos Aires, and was directly managing water, railroads, roads, in the GBA area. It feels much less concerned now that many of these services have been privatized and that direct management of the city has been decentralized. In addition, the Federal government has been cash-strapped and has been trying, with a measure of success, to reduce public expenditures. In such a Federal country as Argentina, the political weight of GBA is not commensurate with its economic weight.

This absence of metropolitan leadership, and of metropolitan policies, leads to inefficiencies. GBA is far from being as efficient an urban area as it should and could be. A number of basic urban public services seem to be inadequately provided in the area for lack of metropolitan planning and policies.

Water and sanitation is a case in point. Substantial progress has been made in the past decade the framework of a 1993 contract between the Federal government and a private concessionaire, for an area covering 17 municipalities plus the city of Buenos Aires. Nevertheless, much remains to be done, and it proves very difficult to extend the benefits of this improved system to the remaining 8 municipalities of the Greater Buenos Aires, and their 2 million inhabitants –even when it would be highly desirable and cheap.

Spatial development, be it residential or industrial and commercial, is very much left to developers and market forces. Land use constraints, when they exist and are implemented, exist at the level of each municipality. They are unable to impose or even promote a efficient use of the land at the metropolitan level. As a result, GBA, which was already a fairly spread over city, has been spreading or sprawling even more in recent years.

The transportation system is also rather weak, which reduces the effective size of the labor market. The latter can be defined from the viewpoint of workers as the average number of jobs that a worker can access in less than n

minutes. In general, the larger this effective size of the labor market, the greater the productivity of the area. The policy implication is that the efficiency of the transport system contributes to the productivity of a city. The productive city (for a given size) is a compact city in which transportation is fast. In Argentina, one should add : and cheap. What restricts the labor market is not merely the time of the journey to work, but also its cost. For many poor potential workers, particularly for long journeys, transport costs might represent a substantial share of their salary, and be too high to make it worthwhile to consider certain jobs.

In GBA, the motorization rate is low (about 270 vehicles per 1000 inhabitants). A large number of people therefore are dependent upon public transportation. It is reported that about half the trips undertaken in GBA are by private car and another half by public transportation. For journey to work trips, the share of public transportation would certainly be significantly higher.

Bus transportation dominates the public transport picture. Buses are private, and operate on licensed routes. There is no single authority to deliver these licenses. The allocation of route is done without any coordinating authority, is a safe recipe for inefficiency. Rail transportation, which used to be public, highly subsidized, and not very efficient, has been privatized. In the process, many rail lines have disappeared. Some of the remaining private lines seem to be well managed, but on the whole the supply of suburban rail transport has probably declined. Subway transportation is not very large: only about 50 km. It is practically limited to the city of Buenos Aires.

For private automobile transportation, the picture is much better. In the recent past, a network of tolled expressways has been created, that greatly facilitates center-suburbs and (some) suburbs-suburbs trips. This is good in itself. It nevertheless has two serious limitations. First, it constitutes an incentive to yet more sprawl. Second, it does not do much for non car-users, and might even harm them because of the sprawl effect it induces.

In consequence, the effective size of the labor market for public transport users is much smaller than for car users. This is not surprising in itself: in most countries, car transportation is on average much faster (twice as fast is a reasonable order of magnitude) than public transportation. What is surprising is the great difference

observed in Buenos Aires. At 45 minutes, the relative effective size of the labor market (the number of jobs accessible in 45 minutes as a percentage of the total number of jobs in the area) is very small for public transportation (23%) and rather large for car transportation (87%). This reflects the inefficient provision of public transport on the one hand, and the benefits of the good expressway system created, on the other hand. For greater transport times, such as 50 or 60 minutes, implying nearly two hours per day of journey to work, the effective size of the labor market is about two-thirds of the total or potential size. On average, a given worker has access to around 2.5 million jobs, not 4 million jobs. An increase in average public transport speed of 20% would produce a 17% increase in the effective size of the labor market; this would imply an increase in productivity and output of about 3%, or about 1% of the Argentinean GDP.

This analysis leads to obvious policy suggestions. Changes could be considered in two distinct although related directions : the strengthening of municipalities, and the development of agglomeration wide institutions.

Strengthening municipalities is another name for decentralization. In most countries, decentralization means shifting power, responsibilities and money *from the central government* to municipal governments. In Argentina, it should mean shifting power, responsibilities and money *from provincial governments* to municipal governments.

First, municipal resources should be increased. Municipal taxes could be increased by allocating property taxation, and perhaps also business activity taxation, to municipalities only.

The amount of transfers from provincial governments to municipal governments (about 1% of GDP) is probably about adequate. What could be improved are the allocation formulae. A greater role should be given to the correction of disparities in municipal tax bases. Whatever the tax bases, there will always be municipalities that have smaller than average tax bases, that are "poor" in terms of tax bases. They should in part be compensated by greater (per capita) transfers. In some provinces at least, this is presently done. But it should be more systematic and more important.

There are great disparities in Federal transfers to provincial governments. On a per capita basis, some provinces get much more than other. Local governments in

much aided provinces get much more in provincial transfers than municipal governments in less aided provinces. Part of the large inter-provincial disparities in municipal governments resources has its source there. One solution to this very serious problem lies in developing a system of transfers from the Federal government to the municipalities. Such systems exist in most countries, including Federal countries. Transfers to municipalities have an equalizing objective. But the goal is to equalize (or to contribute to equalize) over all the country as much as over each province; and this goal is best achieved by Federal to municipality transfers, rather than by province to municipality transfers. The possibility of establishing Federal to municipalities transfers, probably at the expense of Federal to provinces transfers, should therefore be seriously considered.

The other policy direction relates to the creation of institutional changes or incentives for agglomeration-wide urban management. It is quite clear that the provision of many, if not most, urban public services in multi-jurisdictional agglomerations require some form of horizontal cooperation between the various municipalities that constitute an urban area.

The least that could be done would be to create permanent and independent bodies to prepare *area-wide* studies, analysis, information, forecasts, and proposals. In decision-making, the final word should remain with elected politicians. But decisions must be prepared, choices must be specified, and the range of feasible options must be narrowed.

The Federal, or the provincial, government might provide incentives to encourage horizontal cooperation between municipalities. The initiative of the creation of area-wide specific entities should come from participating municipalities. Upper level governments should refrain from deciding in their place.

In the difficult present situation, even though macroeconomics issues dominate the debate, all that can contribute to economic efficiency, such as strengthening municipalities and improving urban management, should be welcome. And the very seriousness of the present situation might help overcome reluctance and resistance to much needed changes.

I – Introduction

In recent years a number of studies have been devoted to the twin issues of economic development and of decentralization in Argentina. Many papers have tried to understand the complex system of intergovernmental relations, and many more to understand what Cline (2003) calls the 3-D crisis (default, devaluation, depression). The relative and interrelated roles of the Federal government, the provinces, the currency board, the privatization of public enterprises, the 1999 devaluation of the Brazilian real, the lowering of trade barriers, the change in the funding of pensions, the Russian financial crisis, the political shocks, and many other items, have been discussed at length. Two agents or issues, however, have received much less attention: municipalities and cities. This paper tries to bridge this gap, and to suggest that stronger municipalities could contribute to produce stronger cities that would in turn foster economic development.

Argentina is one of the most urbanized countries in the world. The urbanization rate is reported to be 89%, only surpassed by the rates for Belgium and Uruguay. Argentina is also one of the most decentralized countries in the world. There is no single and simple measure of decentralization, but if one considers the share of sub-national government in total public expenditure, Argentina, with about 45%, is also very high on the list. Everywhere, municipalities play a key role in the operation of cities. One would therefore expect Argentinian municipalities to be key players in the country.

In reality, they are not. In financial, economic and political terms, they do not weight much. The flows of funds they control are small (about 2% of the GDP). Their autonomy is limited. Their political representation is weak. To take an extreme example, a 300,000 people province like Neuquen has a budget nine times larger than a 1,300,000 people large municipality like La Matanza; and Neuquen has 3 senators in the Federal Senate and 2 congressman in the National Assembly, whereas La Matanza has no senator and only one congressman.

This Argentinian paradox can easily be explained by history. Provinces pre-dated the nation, and Argentina was born as a federal country. The various constitutions

adopted in Argentina always gave provinces a key role. In addition, Argentina was for long a predominantly rural and agricultural economy : what mattered for economic development and prosperity was land, not cities. It was also –and still is to a large extent– a low density country, that could hardly afford and perhaps did not really need two sub-national levels of government. It has also been a nation of lawyers, very attached to the letter of constitutions and laws, and reluctant to adapt them, or to interpret them –and to change them– under the pressure of economic realities.

However, an explanation is not always a justification. Policies must certainly take the past into consideration, but they must also consider the present, and aim at the future.

Institutional Context

Argentina is divided into 24 provinces. In all countries, there are great differences in size, population or output of the various intermediate level jurisdictions. California is much bigger than Maryland, and Ile-de-France than Limousin. Nevertheless, such differences are probably greater in Argentina than in other countries. The largest province (in population terms) is 70 times as large as the smallest. Until 1996, the three million people city of Buenos Aires was directly administered by the Federal Government, who appointed its mayor. Since 1996, it has gained its autonomy, and it is at the same time a province and a municipality¹.

Each province has two chambers², an executive, and a judiciary system. Provinces have their own constitutions.

There are 2,157 municipalities³. Provinces are free to create and to control municipalities as they wish. The number and status and power of municipalities vary therefore from province to province. In some provinces, such as Buenos Aires, the entire territory is divided into municipalities (134). In other provinces, such as Cordoba, this is not the case, and part of the territory is “unincorporated”. The taxes and responsibilities allocated to municipalities can differ –and do differ– from one province to another. A number of municipalities are very

¹ This is also the case of Paris, which is at the same time a *département* and a municipality.

² The city of Buenos Aires has only one.

³ Technically, about 1,000 of them are not called *municipios*, but *comunas*, *comisiones vecinales*, or *juntas de gobierno*.

small, but about 800 of them have more than 10,000 inhabitants.

Each municipality elects a council and a mayor (*intendente*). Mayors are elected for four years, and – unlike what happens in many other Latin American countries– can usually be reelected several times¹. Councilmen (or women) are also elected for four years, but every two years, half of the council seats are up for election. Like mayors, council members can be reelected for an undefined number of times. There is no mechanism to avoid conflict between the mayor and the council.

The spoils system is generalized at the provincial and local level. Every new provincial governor or municipal mayor changes practically all top provincial or municipal employees when he/she comes to office. It is not rare to see 10 or 15 % of all employees changed. This implies that there is no protected civil service, with security of tenure, and continuity in municipal administration and policies. It cannot but favor some form of short-termism. It also contributes to a high degree of politicization. The fight for political power is everywhere intense and heated; it is even more so when people are not only fighting for their ideas but also for their jobs.

Economic Context

The present economic context, as is well known, is that of a crisis. In output terms, Argentina enjoyed a significant growth from 1993 to 1998. In this period, GDP increased by 22%. In subsequent years, GDP declined, and at the end of 2001, the Argentinian government was unable to pay interests to its mostly foreign creditors (default), the peso-dollar parity was abandoned and the value of peso went down to 3 pesos for one dollar (devaluation), and GDP declined by about 10% (depression). The many causes of this 3-D economic crisis have been discussed at length, and need not be elaborated upon here. What matters here is the magnitude of this crisis. By 2002, the Argentinian GDP was back to its 1993 level, unemployment was massive, and poverty was rampant.

The year 2003 was somewhat more encouraging. The massive devaluation did not trigger a massive inflation (contrary to many pessimistic forecasts). Exports increased significantly (as predicted). GDP rebounded, by an estimated 7%. Taxes collected also increased.

¹ In Santa Fe province, mayors can only be re-elected once, ie can serve only two terms ; the same is tue for the mayor of Buenos Aires.

In spite of these good news, the situation remains critical. Present levels of activity remain low. The banking sector is in shambles. Indebtedness remains very high, and the international financial credibility of the country is jeopardized. The public finance position is critical. Even a primary surplus of 4 or 4.5% —which would be a remarkable achievement, difficult to achieve socially and politically— would not be enough for the Argentinian government to fully honor its foreign debt. It is widely agreed that a serious reform of the fiscal relationship between the State and the provinces is a necessary, although not sufficient, condition of a return to a sustainable growth path.

In this context, all that can contribute to increase the efficiency and the output of the country deserves serious attention. This paper argues that better municipalities and better cities could play such a role.

Report Outline

This paper is organized as follows. Section II discusses the present role, function, finances of municipalities in Argentina. Section III presents Argentinian cities, and explores the central hypothesis of the paper, namely that Argentinian cities do not harness the potential benefits of urbanization, and do not do so because of the weakness of municipalities and of the lack of cooperation between municipalities at the agglomeration level. Section IV illustrates and develops this thesis on the case of Buenos Aires, which is particularly relevant because of its sheer economic importance, and also because it is reasonably well documented. Section V, entitled conclusions and recommendations, summarizes our findings and explores some of the policy conclusions that emerge from the analysis.

II — Municipalities in Argentina

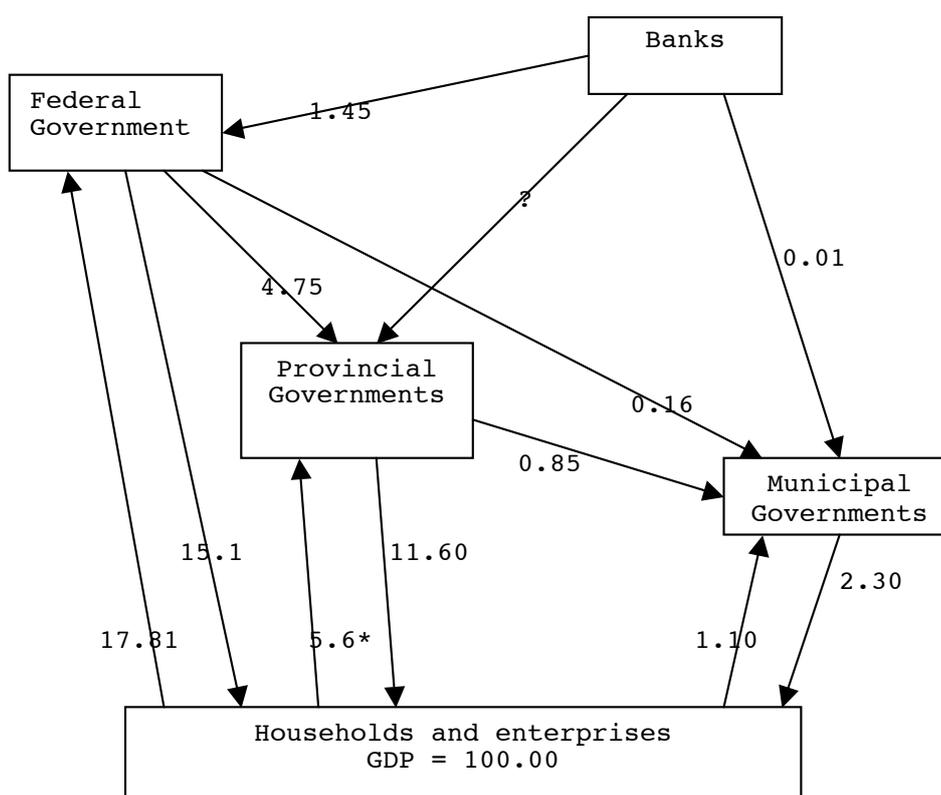
Argentinian municipalities are diverse. First, they are very different from each other in terms of size, location, history, wealth, structure, —as are municipalities everywhere. Second, they differ from province to province. As mentioned, they are creatures of the provinces, and each province treats its municipalities in a different fashion. Third, in certain provinces at least, municipalities enjoy a certain degree of freedom, for instance in tax matters, and produce systems that differ to a certain extent. As a result, it is always

dangerous to generalize about Argentinian municipalities. They nevertheless have several points in common.

Financial Weakness of Municipalities

Argentinian municipalities do not weight much in public finance terms. Fig 1 shows the major flows of funds that describe the intergovernmental relations system. Local (that is municipal) taxes represent about 1%, and local expenditure slightly more than 2%, of the Argentinian GDP. This is about five times less than provinces for both taxes and expenditures.

Figure 1 – Argentinian System of Decentralization: Main Flows of Funds, 2002



Sources and notes : All numbers are in % of GDP. They are preliminary estimates. *The number for the flow of taxes and fees from households and enterprises to provincial government is for year 2,000. In these numbers the city of Buenos Aires is considered as a provincial government.

A similar picture is given by numbers relative to public employment, as shown in Table 1. Municipal employment represents one fifth of provincial public employment. Over the course of time, total public employment per 100 inhabitants increased, even in the 1980ies (contrary to what is often claimed), but it declined at the national level, stagnated at the municipal

level, and increased significantly at the provincial level –by nearly 30% in the 1990ies. The numbers for municipal employment are low by international standards. The numbers for provincial employment, accounting for about three-fifth of total public employment, are high by international standards.

Table 1 – Public Employment by Level of Government, 1970-1999

	National	Provincial	(per 100 inhabitants)	
			Municipal	Total
1980	1.97	2.29	0.70	4.96
1986	1.80	2.60	0.74	5.14
1999A	1.46	3.30	0.74	5.80
1999B	1.16	3.60	0.74	5.80
1999C	1.16	3.30	1.04	5.80
2002A	0.83	3.47	na	na
2002B	0.73	3.78	na	na

Note : In 1999A and 2002A, employment in the city of Buenos Aires is classified as national, as in preceding years. In 1999B and 2002B, it is classified as provincial. In 1999C, as municipal.

Source : Porto 2003 p. 13

In short, Argentina is at the same time highly decentralized to the provincial level, and highly centralized at that level.

Box n° 1 – Santa Fe: Province v. Main Municipalities

The province of Santa Fe comprises two important municipalities : Rosario and Santa Fe. Together these two municipalities account for nearly half (46%) of the entire provincial population. Yet, the public resources (mostly taxes and subsidies) of these two municipal governments represent only 12% of the public resources of the provincial government. In terms of public employment, the discrepancy is even greater. The municipal employment of these two municipalities is only 9% of provincial government employment.

Most discussions on decentralization and fiscal federalism tend to ignore distinctions between levels of sub-national governments. They consider “sub-national governments” as a whole. Yet, most of the arguments in favor of decentralization refer implicitly to the lower level of government. The key Tiebout-type argument that tastes differ over space and that only a decentralized system can offer each jurisdiction the bundle of public goods (and taxes) that will best match its wants, thus increasing allocation efficiency, this argument makes much more sense for municipalities than for provinces.

Resources of Municipalities

It is often claimed that Argentinian municipalities do not levy taxes (*impuestos*), but only fees (*tasas*). For an economist, a fee is a price, a payment made for a specific

good or service benefiting the fee-payer, whereas a tax is transfer, a compulsory payment to a public body that does not benefit (at least directly) the tax-payer. This is a legal fiction. The two most important levies are indeed described as fees, and identified by their supposed usage : one is called the "municipal urban services fee" (*tasa por servicios urbanos municipales*) and the other the "safety and hygiene inspection fee" (*tasa por inspeccion seguridad e higiene*). In reality, these levies have all the characteristics of taxes. The first one is a property tax, the second one is a business activity tax. The fact that they are in official documents called "non-tax resources" (*recursos no tributarios*) should not mislead us (see Box 2)

Box n° 2 – Misnomers

The language utilized in Argentinian public finance reports can be misleading. It distinguishes between tax resources (*recursos tributarios*) and non tax resources (*recursos no tributarios*), which sounds quite straightforward and familiar.

A closer look, however, shows that "non-tax resources" refer mostly to the so-called fees (*tasas*) originally collected for public services or inspections, but which have become compulsory, based on property or business activity not directly related to services provided, and are not even ear-marked for that purpose –which are in reality taxes, and should be called as such.

The opposite happens with the resources described as "tax resources". They consist mostly of "co-participation", of a share of taxes decided and collected by the upper government level (the Federal government in the case of provincial resources, the provincial government in the case of municipal governments). For the recipient level of government, these resources do not have any of the characteristics that define a tax. They are in reality transfers or subsidies, and should be called as such.

In short, when we read "non-tax resources" in many public Argentinian documents, we should understand "tax resources", and when we read "tax resources", we should understand "transfers".

As shown in Figure 1, Argentinian municipalities derive about half their resources from taxes and fees and the other half from subsidies. Bank loans do not constitute an important source of income. However, the relative importance of taxes and transfers, as well as the per capita amounts of both, vary greatly from one municipality to the other. This is illustrated in Table 2.

Table 2 – Municipal Income by Source, Recent Years, Selected Municipalities

	Taxes & fees	Transfers	Other
In % of total:			
Florencia Varela (2003)	34	62	4
La Matanza (2002)	54	46	-
Tigre (2003)	71	28	1
La Plata (2002)	68	32	-
Villa Constitucion, (2002)	53	42	5
Rosario, (2001)	53	39	8
Santa Fé, (2002)	47	49	4
Santo Tome, (2002)	59	38	3
Corrientes, (2001)	38	58	4
In pesos/capita:			
Florencia Varela (2003)	60	108	7
La Matanza (2002)	70	60	-
Tigre (2003)	198	76	4
La Plata (2002)	160	74	-
Villa Constitucion, (2002)	129	102	11
Rosario, (2001)	162	118	23
Santa Fé, (2002)	103	109	9
Santo Tome, (2002)	117	77	6
Corrientes, (2001)	53	73	-

Source: Field visits

Consolidated data for all Argentinian municipalities seems available only for 2000, and is given in Table 3.

Table 3 – Municipal Income by Source, All Argentinian Municipalities, 2000

	(G pesos)	(%)	(pesos/head)
Taxes and fees	3655	47.4	110
Transfers	3771	49.1	113
Other ^b	268	3.4	8
Total	7702	100.0	232

Source : Direccion Nacional de Coordinacion Fiscal con las Provincias
Notes : aExcluding the city of Buenos Aires (per capita numbers are calculated excluding the population of the city of Buenos Aires ;
bIncluding royalties for 140 and capital income for 84 Gpesos ; G = giga = billion.

Although the data in Table 3 is three years old, it remains meaningful, not only in relative terms, but also in absolute terms. Absolute numbers are low. In 2000, they represented a similar amount of US dollars. Now, they represent three times less.

More systematic data provided by the ongoing National Survey of Municipalities¹ (See Annex B) available for seven provinces confirm these orders of magnitude. The share of transfers in current resources (but current

¹ Undertaken as part of the Programa de Informacion Estadistica y Apoyo a los Municipios (PRINEM) sponsored by the European Union.

resources account for most of total resources) range from 31% in Buenos Aires to 65% in Mendoza. It is higher in smaller municipalities, and smaller in larger municipalities, but inter-provincial disparities seem to be more important than intra-provincial disparities.

Municipal Taxes

As mentioned above, the set of municipal taxes vary from province to province, in design and even in name. Nevertheless, it seems that the two most important municipal taxes are a property tax and a business activity tax, but there are other taxes as well. Table 4 indicates, for a sample of municipalities the relative importance of these taxes.

Table 3 – Municipal Taxes and Fees by Type, Recent Years, Selected Municipalities

	Property tax	Business tax	Other taxes & fees
In % of total :			
Florencio Varela, BA (2003)	48	24	29
La Matanza, BA (2002)	43	30	27
Tigre, BA (2003)	54	18	28
La Plata, BA (2002)	43	22	35
Villa Constitucion, (2002)	47	33	20
Rosario, (2001)	46	30	23
Santa Fé, (2002)	37	27	36
Santo Tome, (2002)	46	21	33
Corrientes, (2001)			

Source : Field visits

The property tax (*tasa por servicios urbanos municipales*) is in most or all municipalities the most important tax. The definition of the tax base varies from municipality to municipality, even within a given province. It is either the value of land and building, expressed in pesos, or the frontage of the property, measured in meters; or a combination of both. Municipalities are free to decide on tax rates. Tax rates, or rather tax schedules, are complicated. Industrial and commercial properties, which are also subject to the tax, are usually charged at higher rates than residential properties. Provinces also have a property tax, which has practically the same tax base as the municipal property tax. Property taxes are "good" local taxes, but they are difficult and costly to administer. Since each level of government has its own tax administration, its own cadaster (in principle), its own assessment and tax collection systems, it implies a waste of scarce resources. Some municipalities seem to be much more efficient than other at assessing and collecting this property tax. In some, the rate of taxes collected to taxes due is below 30%. Indeed, the differential efficiency of

tax collection is akin to differential tax rates: increasing tax collection effort (for a given tax rate) has the same effect as increasing tax rates (for a given collection effort).

The business tax (called *tasa por inspeccion de seguridad e higiene* in certain provinces, such as Buenos aires, but) is a complicated and cumbersome tax on business activity. The tax structure varies from municipality to municipality, but seems to include one or several of the following: a given amount per employee, a minimum for enterprise (that varies with the type of enterprise), and amount per square meter of area allocated to the business, a given amount per \$ of sales. Here again, it can be noted that this tax doubles, so to say, a provincial tax, which is assessed on business sales. Box 3 describes this tax in th case of Rosario.

Box n° 3: Business Activity Tax in Rosario

In Rosario, the third largest Argentinian municipality, the municipal business tax is called *Derecho de Registro y Inspeccion (DRI)*. It produces around 50 m. pesos (about 17 M. US\$) annually. It may be considered that the *DRI* is a duplication of the provincial sales tax (*Ingresos Brutos*)

In Rosario the tax base is nearly entirely based upon the amount of sales (or turnover) which in fact makes *DRI* a sales tax. The tax rate is 6.5^{0/00} but there are countless exceptions to this general rule, making municipal business tax administration a hard task and also providing interesting insights into the City of Rosario policitical views and priorities.

The range of the rates is very large –it varies from 1 to 12– from the low levels of 4.2^{0/00} (not for-profit organisations), 4.3^{0/00} (food shops) and 5.3^{0/00} (a wide range of activities including food-processing, housing and transport businesses) to the high levels of 13^{0/00} (financial) 15^{0/00} (entertainment), 33^{0/00} (tertiary) and 55^{0/00} (night clubs).

There are several other local taxes of less importance (see Annex B for the example of La Plata municipality). In the municipalities of Buenos Aires province, there is a tax on electricity consumption, which is usually recorded as a transfer, not as tax, and which is often the third local tax by yield. There are in principle "betterment taxes" (*contribuciones de mejoras*) charged from the beneficiaries in case of infrastructure investment that increase the value of the property. In most cases, however, the yield of this desirable form of local taxation seems to be low or very low. There are also more traditional fees on cemeteries, or on advertisement billboards, as well as stamp duties. There are also some inspection fees, for checking the safety of engines in industrial

establishments, and for checking the safety of food imported into the municipality. Such inspection fees probably have a high nuisance cost for the enterprises concerned, and are likely to be a source of petty corruption. These compulsory levies on something which is not perceived as a service rendered are more in the nature of taxes than of fees.

Subsidies and Transfers

Transfers from provinces to municipalities, representing about 1% of GDP, are an essential part of municipalities resources. They vary from province to province, but they seem to have several points in common. First, the bulk of transfers takes the form of a block grant, bearing the name of co-participation (*coparticipacion*). It is a block grant in the sense that the money given may be used by municipalities as they please, with no strings attached. Second, for a given the total amount of this block grant seems not to be discretionary. It is defined as the sum of a pre-determined share of each of the provincial resources¹. Third, the allocation of this total amount to the various municipalities is formula driven. Understanding the system is understanding how the total amount is calculated and how it is distributed.

Calculating the total – The total to be transferred, the so-called "co-participation mass" (*masa coparticipable*) represents between 10% and 15% of provincial resources. In Buenos Aires, it is 16% of federal government transfers, plus 16% of the major provincial taxes. In Mendoza, 14% of federal transfers, 14% of the provincial sales tax and property taxes, 70% of the automobile tax, but 0% of other taxes. In Santa Fe, 13% of federal transfers, 13% of the sales tax, 50% of the property taxes, 90% of the automobile tax². Of particular importance is the ratio of federal government transfers that is allocated to the co-participation mass. In many provinces, the bulk of provincial resources comes from federal transfers, and the co-participation mass is largely determined by this transfer multiplied by this ratio. This means, amongst other things, that per capita differences between provinces in federal transfers received are in part "translated" into per capita differences in provincial transfers to municipalities.

¹ This principle is not applied everywhere : in Santa Fe province, for instance, the percentage of the provincial sales tax that is co-participated decreased in recent years.

² For a complete presentation, see Porto, p. 47, quoting World Bank 2002

Allocating the total – The allocation formula varies from province to province. Let us consider, as an example, the case of Buenos Aires province. The total is divided into three parts: a general part (58%), a health part (37%) and a social action part (5%).

The general part (58%) is allocated as a function of three criteria: population (62%), area (15%), and the inverse of tax base (23%). The tax base, or tax capacity (*capacidad contributiva*) is a measure of the aggregate tax base of each municipality computed by the province. It includes the tax base of the provincial property tax (a proxy for the municipal property tax base), the number of employees in industry and commerce (a proxy for the municipal business tax), and the number of cattle head (a proxy of the municipal business tax in rural area).

The health part (37%) is allocated as a function of six health-related criteria : the number of primary health centers in the municipality (10%), the number of visits in these centers (25%), the number of beds in the hospitals of the municipality and the degree of complexity of these hospitals (35%), the number of patient-days in hospitals (20%), and expenditures (10%).

The social action part (5%) is allocated as a function of the social needs of each municipality, and may include a measure of discretionality.

In addition to this block grant, there are occasionally other, less important transfers, or municipal resources classified as transfers. The contribution of power companies, assessed on electricity consumption, is presented as a "transfer" from these companies; in reality, it should rather be treated as a municipal tax, as mentioned above.

The province of Buenos Aires has also partially "decentralized" three of its own taxes to municipalities : its rural land tax, its automobile tax, and its sales tax. The rural land tax is decentralized to municipalities, which are supposed to collect it on behalf of the province, and to keep 50% of the proceeds. This is a transfer because the tax rate remains decided by the province, and it is partially a specific transfer because 50% of it must be spent by the municipality on rural roads. The provincial tax on automobiles is also decentralized to municipalities for old automobiles only, i.e. for automobiles put on the roads before 1986. The provincial sales tax is decentralized for small taxpayers, that is for taxpayers with a tax base (a turnover) lower than 144,000 \$.

Municipalities can keep 25% of the tax proceeds, give 50% to the province, and 25% to provincial school districts. These three "decentralized" provincial taxes, or the parts thereof which have been decentralized, have one thing in common : they are difficult and costly to administer and to collect. For some municipalities, these transfers may well turn out to be poisonous gifts.

Finally, there are transfers associated with the benefits of provincial casinos and chance games. A certain share of these benefits is allocated to the municipalities that have casinos, *prorata* the benefits made in the casinos of their jurisdiction. Another share is allocated to all other municipalities, *prorata* their share of the block grant. Some municipalities complain that they have no way of finding out what provincial casino benefits actually are, and suspect the province of under-reporting¹.

Box n° 4: Interest Rates Wedge for Municipal Borrowing

The interest rates paid by municipalities on IADB or World Bank loans are quite different from the interest rates charged by these institutions. Let us consider PRODISM (Programa de Desarrollo Institucional e Inversiones Sociales Municipales), a 1996 US\$ 210 million IADB loan to Argentinian municipalities. The money was lent by the Bank to the Federal government at 5.7%, for a 25 years period. It was then sub-lent by the Federal Government to provinces at 8.0%, for a period of 15 years, with Federal government guarantee. It was then sub-sub-lent by provinces to municipalities at 9.5%, with provincial guarantee. Even if one ignores the difference in maturity, this is a 3.8% wedge –a 67% increase in interest rate. The justification given for it is that it is an insurance premium needed because both municipalities and provinces might default. If feasible, short-circuiting the Federal government and provinces, or just provinces, would significantly reduce borrowing costs for municipalities.

Source: Based on contributions by Nelida Reynal

Municipal Responsibilities and Expenditures

The functions of municipalities are nowhere clearly defined. What is clearer is what they are not responsible for: water, inter-municipal transport, education, health, security, welfare, are in many cases the responsibility of the provinces, and even in some cases, of the federation. As one representative of a municipality put it, with a degree of exaggeration : "we are responsible for street cleaning". There are two major constraints that limit

¹ About the allocation of casino benefits, there is an interesting ongoing debate on whether the tax on benefits of casinos housed on boats anchored in Buenos Aires harbor should go to the Federal government (because Rio de la Plata waters are Federal) or to the city (because the boats are attached to city land).

municipal involvement in the provision of urban public services.

One such constraint is a legal rule which seems to be applied rigorously. When the provision of a service involves two or more municipalities, service provision becomes the responsibility of the province, or at least joint provision requires a provincial authorization¹. When this provision involves two or more provinces, it becomes the responsibility of the Federal government. Suppose a bus line goes from one municipality to another one –a very common occurrence in multi-municipal agglomerations– then it has to be regulated by the province. The costs and inefficiencies of such practices are particularly apparent in the case of cities involving municipalities from two distinct provinces (see Box n° 5)

Box N° 5 : Inter-provincial Cities

For centuries the Parana river has been a natural border between provinces. Cities like Corrientes (Corrientes) and Resistencia (Chaco) or Santa-Fe (Santa-Fe) and Parana (Entre-Rios) were established on opposite sides of the river, in different provinces, and were developed independently. In recent decades, however, the geography has changed dramatically as a complex set of bridges and tunnel have been constructed to allow easy connections between these previously separated cities. As a result Corrientes (Corrientes) and Resistencia (Chaco) or Santa-Fe (Santa-Fe) and Parana (Entre-Rios) have become, in social and economic terms, twin-cities quite alike St Paul/Minneapolis or St Louis/East St Louis in the USA.

Politically and administratively, however, no changes have been made. These cities belong to different provinces, and cannot easily cooperate without the approval or intervention of their respective provincial governments. In practice, they do not cooperate much, and these potential agglomerations remain divided. The costs of this lack of cooperation are high.

They are, for instance, unable to develop area-wide urban transport systems that would encompass the size and diversity of the more than doubled twin-cities labor markets. In these agglomerations, each city fights to keep and expand its harbor and its airport, which leads to an unnecessary and costly duplication of infrastructure expenditures.

The other constraint is obviously the financial weakness of municipalities. Their very limited resources prevent them from doing much. A substantial share of their resources is allocated to "administration", to the mere functioning of the municipal bureaucracy (3% of their total

¹ Some provinces, such as Santa Fe, have passed legislation to facilitate such arrangements : a December 1992 law stipulates that municipalities fin Rosario, Santa Fe and Villa Constitucion agglomerations can create ad hoc institutions for the joint provision of metropolitan public services.

budget, for instance, goes to the municipal council operation and wages), to the upkeep of public building, to tax collection (the ratio of collection costs to taxes collected must be very high). The "fixed costs" of municipalities are high (in relative terms), thereby reducing the share of expenditures on direct services to the population.

Under the pressure of their electorate, and in some cases with the support of provinces, many municipalities are extending their functions beyond traditional street lighting, street cleaning, and garbage collection. They are increasingly involved in health, in welfare, in education. Nevertheless, it seems fair to say that municipalities do much less in Argentina than in many or most other countries.

Water is typically in most countries the responsibility of municipal governments. Not so in Argentina. It is in general the responsibility of provinces, who either provide it directly or contract it out¹. In the case of Buenos Aires, it is the Federal government that is involved. It used to provide it directly at the time when Buenos Aires City was under Federal control, not only for the city itself, but also for 17 adjacent municipalities. It contracted it out to Aguas Argentinas, a private company, for the same area. It is true that a regulation agency involving the Federal Government, the province, and the city of Buenos Aires has been created, but its function is to oversee the concession contract, not to plan for water and sanitation. Presently, although Buenos Aires City has had the status of province for six years, it is the Federal government which is renegotiating the contract with Aguas Argentinas, without consulting with Buenos Aires City or with Buenos Aires province, and even less with the other municipalities of the agglomeration interested. In Cordoba, to take another example, it is the province—not the city—that has negotiated and signed a concession contract (also with Aguas Argentinas) for the provision of water in an area which is precisely that of the city of Cordoba.

In principle, data on municipal expenditures could throw additional light on these issues. Municipalities are supposed to present their budgets and accounts by function,

¹ Until the 1970ies, water and sanitation was even in the hands of a national enterprise, Obras Sanitarias de la Nacion, at least in the major Argentinian cities.

with a distinction between five main functions (administration, health, municipal services, public works, and social development). In practice, however, the allocation of expenditures to these functions does not seem to follow a constant pattern, and it is not clear that available data is comparable and meaningful. More reliable is information on expenditures by nature, which is given in Table 4. It shows the great importance of wages in total expenditures (nearly 60%), and the relatively small importance of investments (about 10%).

Table 4 – Municipal Expenditures, by Nature, All Municipalities^a, 2000

	(G pesos)	(%)	(Peos/cap.)
Wages	4476	56.3	135
Purchases	2228	28.0	71
Transfers	312	3.9	9
Investments	930	11.7	28
Total	7946	100.0	239

Source : Direccion Nacional de Coordinacion Fiscal con las Provincias

Notes : ^aExcluding the city of Buenos Aires (per capita numbers are calculated excluding the population of the city of Buenos Aires ; G = giga = billion.

This helps explain the rather low level of provision of many public services, relative to the Argentinian level of development, and the great magnitude of inter and intra provincial differences in it. Consider the percentage of houses with current water by municipalities, for instance. In 1991, it ranged from 0.1% to 100% in the country. But provincial averages range from a low 19% in Misiones to a high 97% in Santa Cruz, with only 56% in Buenos Aires. For most provinces, the range was also very large. In Buenos Aires, for instance, it ranged from 0.2% to 96%. (Porto 1991, p.21). Great improvements have been achieved in the last decade, relative to these numbers, but there is no doubt that differences remain very large. Or consider the percentage of blocks (*cuadras* or *manzanas*) connected to a sewer system. In 2001, according to the National Survey of Municipalities, that only gives figures for five provinces, it ranged from 19% (in Chaco) to 62% (in Neuquen), with significant variations by size class of municipalities.

Conclusions

On the present status of municipalities in Argentina, several conclusions can be drawn. First, municipalities do not have access to good local tax bases, and therefore do not have much own tax resources. Second, there are great disparities, both within provinces and between provinces, in tax bases and tax resources: differences between tax-rich and tax-poor municipalities are enormous. Third, transfers received by municipalities from the provinces are overwhelmingly formula-driven block grants. Fourth, there

are also great disparities (on a per capita basis) in transfers received, both within provinces and even more so between provinces, and these transfers do not contribute much to reduce initial tax base and tax resources disparities. Fifth, it seems that transfers kill local tax efforts; when transfers go beyond a certain threshold, local tax effort tends to disappear, which means that in many cases increasing transfers would not increase much total resources and expenditures. Sixth, municipalities do not contribute much to the provision of many urban public services, such as water, transportation, health, education, safety, or sanitation. This is in part because they do not have the money to do so, but also because they do not have the right to do so. Provinces, or even the central government, control, regulate and/or supply these services—in a centralized and not always very efficient manner. Finally, municipalities borrowing is strictly controlled by the provinces, with the result that municipalities are generally not much indebted; most of the few that have ratings have much better ratings than the provinces or the federal government.

III – Cities in Argentina

Although Argentina has for long been a country with an agricultural economic base, it is a country of cities. This is probably explained by the abundance of land and the resulting specialization in low land intensity activities such as cattle raising or wheat. What is meant by "cities" are economic and social agglomerations that may or may not coincide with municipal borders. There are two definitions of cities. One is geographical and morphological and focuses on the continuity of the built-up area. The other is socio-economic, and based on the intensity of links, particularly labor market links, with the city center. In this paper, we shall follow the practice of INDEC, the statistical institute, that identifies urban areas, or agglomerations consisting of one or several municipalities, and often called, in the case of multi-municipalities cities, "greater X" (*gran X*), such as Greater Buenos Aires or Greater Rosario. Greater Rosario, for instance, consists of the municipality of Rosario, plus 9 adjacent municipalities. Greater Buenos Aires consists of the City of Buenos Aires plus 24 adjacent municipalities of the Buenos Aires province. Most of the data is collected at the municipality level, and can be aggregated at the "city" level, and some data—in particular the precious and updated data from the urban households survey (*encuesta*

permanente de hogares, subsequently called EPH)— is collected at this relevant city level.

Table 5 indicates the importance of cities in population terms. It identifies the ten largest agglomerations. In 2001, their total population amounted to exactly half the total population of the country. The urban hierarchy is obviously dominated by the weight of the capital city, which is nearly ten times as great as the weight of the second largest agglomeration. The ratio of the first city to the next four largest cities, another index of primacy, is close to 3. No great demographic changes are expected in the coming years. Argentina is demographically a mature country, with no in-migration (an possibly some out-migration) and with a low natural growth rate. Table 1 shows that the growth of the capital city has been, during the last decade, lower than that of other cities, and indeed lower than that of the nation. The degree of primacy has been declining, and might continue to do so, but at a very moderate rate. By and large, the relative importance of cities in Argentina is not expected to change much in the coming decades.

	Table 5 – Population of Major Cities, 1991-			2001
	1991 (1,000)	2001 (1,000)	Growth rate (% per year)	2001 Cumulated (% of total)
Buenos Aires	10918	11453	0.5	31.6
Cordoba	1208	1368	1.2	35.4
Rosario	1119	1159	0.4	38.6
Mendoza	773	847	0.9	40.9
Tucuman	622	736	1.7	42.9
La Plata	643	682	0.6	46.3
Mar del Plata	513	542	0.6	46.3
Salta	371	469	2.3	47.6
San Juan	254	421	1.8	50.0
<i>Ten Largest agglo</i>	<i>16928</i>	<i>18129</i>	<i>0.7</i>	<i>50.0</i>
Rest of the country	15687	18430	1.5	
Argentina	32616	36260	1.1	100

Source : 2001 Census

It is more difficult to assess the economic importance of cities. INDEC used to publish estimates of GDP per province (and in some cases per municipality), but it has discontinued doing so since 1993. The Permanent Households Survey has data on employment, income and wages for the major agglomerations, but not for the country as a whole, and it is always difficult to find a comparable figure for the country as a whole. Table 6 provides estimates for employment and the wage bill.

Table 6 – Macro-economic Data for Major Agglomerations, Recent Dates

	Employment 2001 (1000)	Wage bill 2003 (M. pesos/month)
Buenos Aires	4343	2697
Cordoba	435	208
Rosario	440	193
Mendoza	326	149
Tucuman	254	101
La Plata	268	153
Mar del Plata	222	124
Salta	160	56
Santa Fe	150	68
San Juan	134	57
Ten largest cities	6732	3806
Rest of the country	4482	2199
Argentina	11214	6005
10 cities/Argentina (%)	60	63

Sources : For employment, defined as accupied working population, EPH for the ten major cities, and SIEMPRO (Encuesta de Condiciones de Vida 2001) for Argentina. For the wage bill : EPH for the ten major cities, and a calculation based on the ratio of wages in Buenos Aires agglomeration to wages in Argentina in 1996/97 found in the INDEC produced *Encuesta Nacional de Gastos de los Hogares 1996/97* for Argentina at large.

Table 6 suggests that the ten major Argentinian cities account for more than 60% of the economic activity of the country. 60% of the jobs are concentrated in these cities, and so is an estimated 63% of the wage bill –a representative proxy of the GDP. Buenos Aires agglomeration alone accounts for a sizable 39% of employment and an estimated 45% of the wage bill. What happens in these cities, and in particular in Buenos Aires is therefore a major component of what happens in Argentina.

Two other important conclusions can also be drawn from Table 6. One is that employment ratios are much higher in cities than in the rest of the country, since 50% of the population account for 60% of employment. This is not a surprising finding, and similar differences are found in most countries. The other conclusion is that wages per worker, and presumably output per worker, are not much higher in the main cities than in the rest of the country. In the ten main cities, monthly wages are on average 556 pesos per month. In the rest of the country, they are 490 pesos. Indeed, they are lower in many of the main cities than in the rest of the country. This finding, by contrast, is very surprising, and tells us something important about Argentinian cities.

Productivity as a Function of city Size

In all countries for which data is available, income is higher in cities, particularly in large cities, than in the rest of the country. This is not because cities "exploit" the rest of the country. In public finance terms, it is even the opposite: everywhere, larger cities contribute to national (or regional) budgets more than they get from these budgets. They lose at the budget game. There is nothing objectionable, much to the contrary, in this redistributive impact of national (or regional) budgets. The reason why income is a function of city size is that productivity is a function of city size. In larger cities both labor productivity and capital productivity are greater. This, by the way, is one of the reasons why rapidly urbanizing countries tend to have higher economic growth rates : when people move from a low productivity area (the countryside) to a high productivity area (cities), average automatically productivity increases – even if the productivity of the countryside and of cities remains constant. All this is by now rather well known.

What is not so clear is *why* productivity is a function of city size. A common explanation is that cities, particularly large cities, tend to specialize in high productivity activities, such as management, banking, insurance, consulting, specialized trade, surgery, communication, etc. This is obviously true, although one must note that this specialization does not occur by chance, but that it is itself intimately associated with city size. A sophisticated trader, for instance, certainly commands a high salary (and by definition has a high productivity), but he/she can only practice his/her job in a large or very large city. Then, it appears that even when one discounts for industry-mix (or skill-mix for that matter), productivity remains higher in larger city. A given professional will have a higher salary (reflecting a higher productivity) in a large city. Other explanations must therefore be found.

The theory of labor market matching provides such an explanation. People and jobs are very diverse. The probability that a given worker will find exactly the job that best suits his/her qualifications increases with the size of the labor market. It is low in a 10,000 people city, particularly if he/she has some specialized skills, and in such a city our worker may well have to accept a second or third choice job, one in which he/she will be under-utilized. In a 10 million people city, the probability that the same worker will find a first choice job, one in which he/she will perform at his/her "highest

possible productivity" is much higher. This better matching of labor supply and demand can also be looked at from the viewpoint of enterprises. The probability that an enterprise will find, for a given job, exactly the kind of worker it wants, is, for exactly the same reasons, a function of labor market size.

Can this empirically and theoretically well established relationship between productivity and city size be observed in Argentinian cities ? The answer, already suggested by Table 6, is : no. The *Encuesta Permanente de Hogares* presents, for 2003, estimates of the average income per employed person for 29 agglomerations, as well as the number of employed persons. This average income is a good proxy of productivity. This data is presented in Annex C,

Figure 2 - Income as a Function of City Size, 2003



and synthesized in Figure 2.

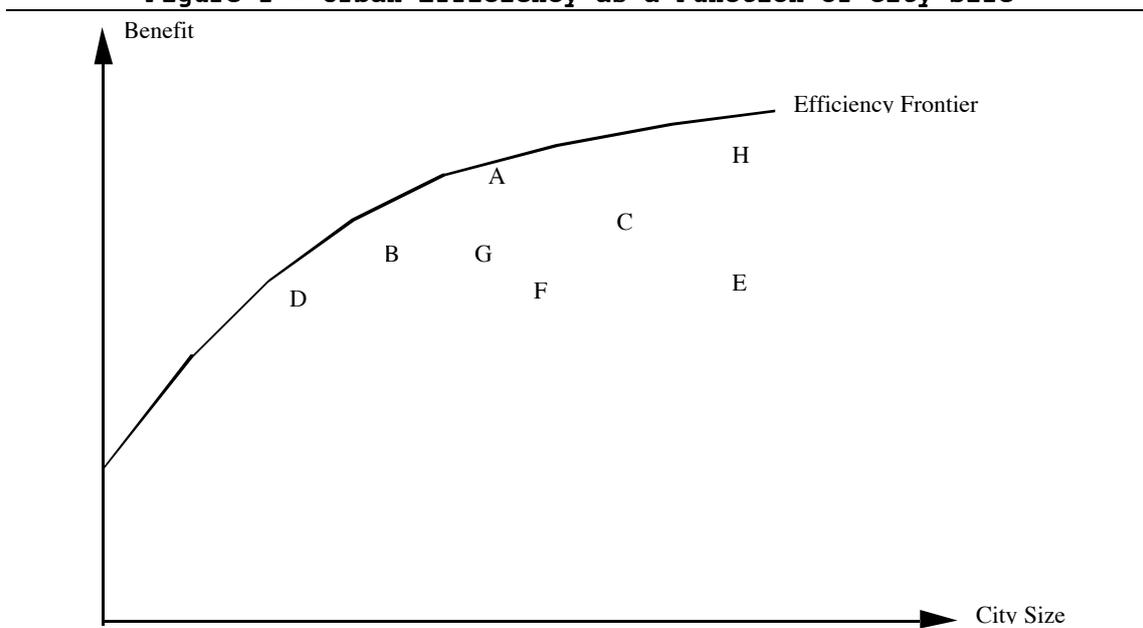
There is no positive correlation between the size of a city, or rather the size of its labor market, and its productivity. If anything, there would be a negative correlation. Some of the most productive cities are amongst the smallest agglomerations of the country. Buenos Aires agglomeration, which should be expected to have a much higher productivity than other agglomerations is only 12% more productive than the unweighted average, and is surpassed by rather small cities like Comodoro Rivadavia, Neuquen, Rio Gallegos or Ushaiiaia. The second tier of cities, Cordoba, Mendoza, Rosario –agglomerations of about one million people– exhibit a productivity lower than the

weighted or unweighted average of all agglomerations. This a-typical pattern of productivity distribution deserves an explanation.

Actual Benefits v. Potential Benefits

The explanation can be that the benefits associated with city size are only potential or conditional. This is illustrated by Figure 1 that plots the efficiency (which can be measured as the productivity) of cities as a function of their size. As size increases, productivity increases. But the correlation is far from perfect. For a given size, a city can have different productivity levels. This merely reflects the fact that a city can be more or less well managed.

Figure 1 – Urban Efficiency as a Function of City Size



A well managed city is a city that reaps all or most of the potential benefits of city size. In the language of figure 1, it is a city that is on or close to the "efficiency frontier" line. H is a well managed city; E is not. The notion of management quality, that varies with cities, explains why efforts undertaken to define an "optimal city size" have been fruitless. There are, in some countries, cities of 100,000 people which are "too big" for their management capabilities. At the other extreme, Tokyo agglomeration, with about 30 million people is not "too big", because it is well managed, and it is one of the most productive (perhaps the most productive) areas in the entire world. In a more formal fashion, it can be said that urban productivity is a function not merely of urban size but also of urban management:

productivity = f (size, management)

It seems plausible to conclude that Argentinian cities are not as productive as they could be because they are not very efficiently managed. The weakness of municipalities combined with the balkanization of agglomerations is probably the cause of their relatively poor performances.

The importance of urban management increases with city size. A very small city cannot really be very badly, nor very well, managed, because agglomeration externalities are relatively modest. The actual and potential benefits cannot possibly diverge much. Not so in the case of a very large city. Poor management means that the potential agglomeration economies will not be captured, that the agglomeration diseconomies (congestion, pollution) will not be controlled, and that net benefits will remain small.

The Notion of Effective Size of Labor Market

A more concrete meaning can be given to "good management" with the help of the notion of "effective size of the labor market". Why is a large city more efficient than a small one ? The reason (or one of the reasons) is that it offers a large labor market and the externalities attached to it. In a large labor market, a given individual is more likely to find exactly the kind of job that best suits his or her skills. Similarly, an enterprise is more likely to find exactly the kind of worker that best fits its needs. In a small town, a highly specialized individual is unlikely to find the highly specialized –and well paid– job he could take, and will probably settle for a more common –and less paid– job. Similarly, in a small town, an enterprise looking for a highly specialized worker may have difficulty finding him/her, and make do with a less qualified worker. In both cases, there will be an efficiency loss. In short, a large labor market ensures a *better match* of labor demand and labor supply. This in turn is reflected in a higher productivity.

What matters, however, is not the *total* labor market size of a city, but its *effective* labor market size. The latter can be defined from the viewpoint of workers as the average number of jobs that a worker can access in less than n minutes (with n = 50 minutes for instance). It can also be defined from the viewpoint of enterprises as the average number of workers that can come to an enterprise in less than n minutes. In a large city, not all the jobs are open for all workers : some are too far away in time or money costs from some workers.

Let W_i be the number of workers in zone i , J_i the numbers of jobs in zone i , and T_{ij} , the time distance from i to j . L_i , the effective size of the labor market for the workers of zone i is:

$$L_i = \sum J_j \text{ for } j \text{ such that } T_{ij} > n$$

L , the effective labor market for the entire agglomeration is the weighted average of all L_i :

$$L = \sum L_i * W_i / \sum W_i$$

A similar calculation can be made to estimate E , the effective labor market size from the viewpoint of enterprises.

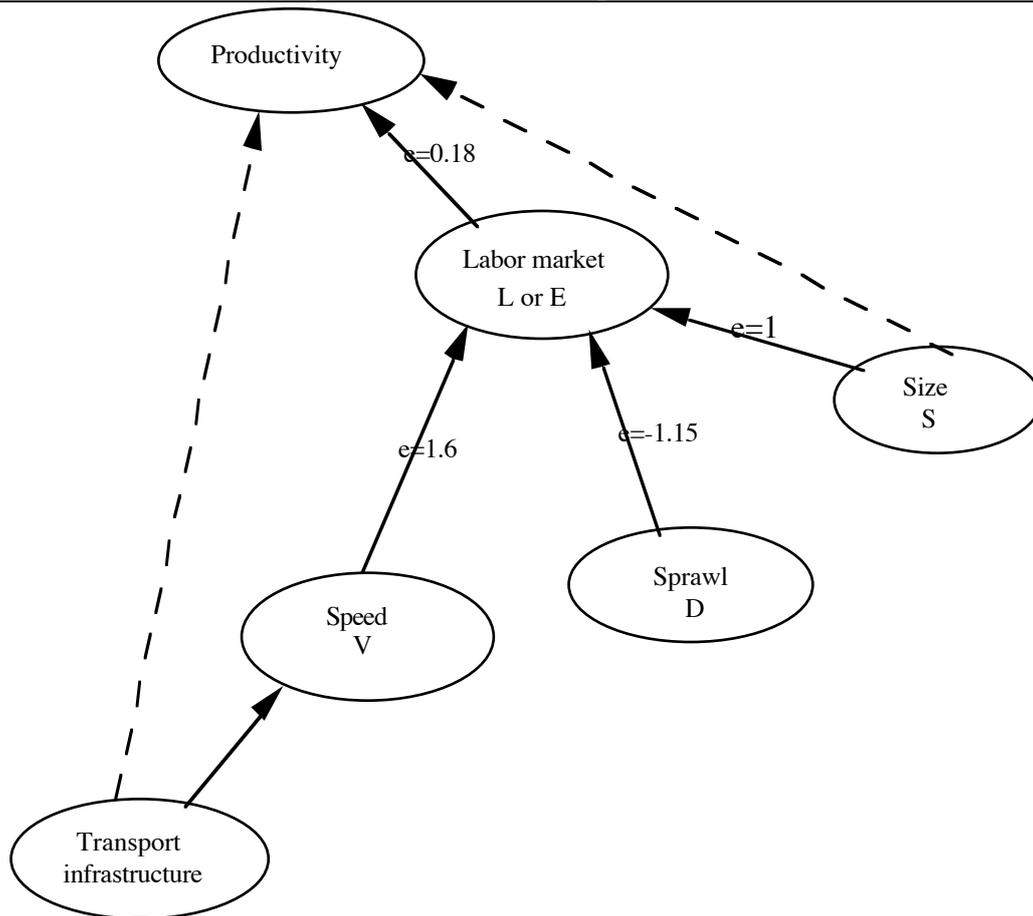
We can therefore reasonably assume that labor productivity (output divided by the labor force) is a function of the effective size of the labor market:

$$Y/W = f(L)$$

An empirical analysis conducted on 23 French agglomerations fully supported this hypothesis. The effective size of the labor market turned out to be an excellent predictor of labor productivity (Prud'homme and Lee 2000). It yielded an elasticity of about 0.18. A 10% increase in the effective size of the labor market was associated with a 1.8% increase in productivity. Similar studies on (only three) Korean cities, and on nine Brazilian metropolitan areas, also confirmed this hypothesis, and yielded elasticities not very different.

What explains the effective size of the labor market ? The answer is quite straightforward, and nearly axiomatic : the total labor market size, the average distance of all jobs to all workers, and the speed at which workers travel to jobs. In short : size, sprawl and speed. All other things equal, the more sprawled a city, the lower the effective size of the labor market. All other things equal, the higher transport speed in a city, the higher the effective size of the labor market. A regression analysis on the 23 French cities fully confirmed this commonsense hypothesis, and yielded elasticities of the effective size of the labor market to size, to sprawl and to speed. Figure 2 summarizes this analysis.

Figure 2 – Efficiency of Cities



Note : The numbers are elasticities

The policy implication of this analysis is that, in addition to city size or total labor force, two management-related factors contribute to the productivity of a city : the efficiency of the planning system, and the efficiency of the transport system. The productive city (for a given size) is a compact city in which transportation is fast. In Argentina, one should add : and cheap. What restricts the labor market in a country like Argentina is not merely the time of the journey to work, but also its cost. For many poor potential workers, particularly for long journeys, transport costs might represent a substantial share of their salary, and be too high to make it worthwhile to consider certain jobs. Land use policies and transport policies are the basic pillars of "good urban management".

There are reasons to believe that these two pillars – as well as the many other dimensions of urban management – are weak in Argentinian agglomerations. First, municipalities, which are normally key players in the provision of such services, are too poor to be efficient at it. Second, the lack of horizontal cooperation at the agglomeration level –often the only meaningful level–

further weakens the quality of urban management. The provinces capture the money, the people, and in many cases the formal right, required to deliver efficient agglomeration-wide transportation, urban planning, and other services. But the provinces do not always deliver. Urban development and efficiency is usually not their prime economic and political concern.

If this analysis is correct, it is encouraging. It means that there is an untapped source of increased efficiency in the Argentinian economy. Better managed cities would have a higher productivity. Improving Argentinian cities by strengthening municipalities and encouraging them to cooperate at the agglomeration level would improve their productivity, ad their output, and therefore the output of the country.

IV - The Case of Greater Buenos Aires

The case of Buenos Aires agglomeration is particularly interesting for several reasons. It is, in terms of population and output, the third largest agglomeration of Latin America, after Sao Paulo and Mexico. It accounts for about a third of the population of Argentina, and nearly half of its output, so that what happens in Buenos Aires has a major and direct impact upon the economy of the country. Then, it typifies many of the municipal-urban issues discussed here.

The Buenos Aires agglomeration, or Greater Buenos Aires (11.8 million inhabitants), is defined as the city of Buenos Aires (2.7 million inhabitants), plus 25 municipalities (9.1 million inhabitants) of the province of Buenos Aires¹. It is a socio-economic reality, and a statistical artefact, but it is not an administrative or political institution. The fact that it "belongs", so to say, to two strong provinces, and that it has been for long the subject of direct interference of the Federal government, does not facilitate its governance.

¹ One of these municipalities, Presidente Peron, has recently been created, and some studies only refer to 24 municipalities. Some people also add an additional 15 municipalities (1.6 M. inhabitants), forming what is occasionally called a "third ring", to define a metropolitan region of Buenos Aires. Some of these municipalities, however, seem quite far from the city center, and do not belong to anything like a labor market. We will therefore follow the INDEC definition of Greater Buenos Aires, and limit ourselves to the 26 municipalities (counting Buenos Aires city as one municipality) area.

We shall try to argue : (i) that there is no pilot in the GBA plane, (ii) which leads to serious structural and functioning inefficiencies, particularly in the area of planning and transportation, (iii) resulting in a surprisingly small effective labor market for such a large city, (iv) which in turn contributes to explain the relatively poor productivity performance of the area.

No Pilot in the Plane

It is easy to show that there is nobody really in charge of operating and developing Greater Buenos Aires. Four sets of institutions are partially responsible for this: the city of Buenos Aires, the province of Buenos Aires, the municipalities which are part of GBA, and the Federal government. For different reasons none of these institutions does much.

The 25 municipalities of the province that are part of GBA, and account for the bulk of it in population terms, are financially much too weak to be able to play a leading role. In addition, they are legally and intellectually not empowered to get together to decide jointly on issues of a metropolitan interest.

The city of Buenos Aires, which is financially better off because it has access to the resources of a province, cannot do much either. It accounts for only one fourth of the total population. It can, in principle, talk to adjacent municipalities and cooperate with them, but politically and legally, it needs approval if not authorization from the Buenos Aires province to do so, and in practice does not do it much.

The province of Buenos Aires would seem to be in a better position to help develop metropolitan policies. It is better off than municipalities. The 25 municipalities that are part of GBA account for nearly three-fourth of the provincial population. And the province has the legal power to coerce or induce these municipalities to develop joint policies. However, it seems that the province—the capital of which is located outside GBA, in La Plata— is not very active or even very interested. For one thing, the political power of the remaining 110 municipalities of the province is much stronger than what their population share would suggest. In the provincial senate, for instance, they account for [Find out] % of the seats. For another thing, many or most of metropolitan policies would require joint action with the city of Buenos Aires. Politically, and even legally, such actions are difficult and costly for the province, and do not have a sufficiently high pay-off.

The Federal government has traditionally been involved, when it was in charge of what is now the city of Buenos Aires, and when it was directly managing water, railroads, roads, in the GBA area. It feels much less concerned now that many of these services have been privatized and that direct management of the city has been decentralized. In addition, the Federal government has been cash-strapped and has been trying, with a measure of success, to reduce public expenditures. Politically, in such a Federal country as Argentina, GBA does not weight much. Finally, doing something in and for GBA means running the risk of conflicts with the powerful Buenos Aires province—a risk few governments are ready to take.

Resulting Inefficiencies

This absence of metropolitan leadership, and of metropolitan policies, leads to inefficiencies. GBA is far from being as efficient an urban area as it should and could be.

A first consequence of this lack of leadership is a remarkable dearth of data, statistics, analysis and studies on Greater Buenos Aires. As a 11 million people and a relatively rich area, it weights economically (not to mention culturally) much more than countries like Uruguay, Paraguay, Bolivia, Ecuador, Peru (in GDP terms), or Central American countries. Yet, the amount of economic analysis devoted to any of these countries is many times greater than to GBA. Even the GDP of the area is not directly available ! Not only is there no pilot, but there is not even a road map in the plane. In this respect, things have worsened rather than improved over the past decade. In the 1980ies, there was a forum for the joint discussion of metropolitan matters called CONAMBA (*CONsejo Area Metropolitana de Buenos Aires*) that at least was producing metro-wide data and analysis. The Federal Investment Council (*Consejo Federal de Inversiones*) was also active in producing data for the entire agglomeration area.

A number of basic urban public services seem to be inadequately provided in the area for lack of metropolitan planning and policies. Water and sanitation is a case in point.

Substantial progress has been made in the past decade the framework of the 1993 contract between the Federal government and Aguas Argentinas. The number of people with access to a water network increased from 5.7 million people to 7.8 million people—a 37% increase. The number of people with access to a sewer system increased from 4.7 to 5.9

million people –a 25% increase. In both cases, quality increased. The city of Buenos Aires, which was well serviced at the beginning of the period, was not particularly interested. The province of Buenos Aires was also slow to show interest. Only the 17 weak municipalities of the concession area¹, who have hardly any voice in the matter, were keen stakeholders.

Nevertheless, it proves very difficult to extend the benefits of this improved system to the remaining 11 municipalities of the Greater Buenos Aires, and their 2 million inhabitants –even when it would be highly desirable and cheap. Worst perhaps, there is a serious underground water table problem that is developing. The level of the water table keeps increasing, which leads to flooding and contamination issues. Institutionally, this is nobody's responsibility. As a consequence, the problem is not even considered, much less solved. Clearly, water and water related issues (pumping from the Rio de la Plata and/or from the water table, treatment, distribution, used water collection, used water treatment, etc.), which are closely inter-related, extend geographically and thematically much beyond the concession contract. Optimization in the provision of water and of sanitation could only be done in a broader institutional setting.

There are two additional –and key– areas in which GBA does not work very efficiently : spatial development, and transportation. In both cases, there are no institutions to design and implement, or even discuss, policies.

Spatial development, be it residential or industrial and commercial, is very much left to developers and market forces. This is somewhat surprising in a country with a long and strong anti-business tradition, where private enterprises are usually distrusted and highly regulated. We have seen, for instance, that municipalities are empowered to control the quality of food imported into their jurisdiction (and charge a fee for that purpose) or to verify the safety of every engine in every enterprise of their jurisdiction (and to charge a fee for that purpose). There is a provincial law (Ley 89-12) supposed to “plan” spatial development, but it seems toothless. Land use constraints, when they exist and are implemented –a big when– exist at the level of each municipality. They are therefore ineffective to impose or even promote a efficient use of the land at the metropolitan level. As a result,

¹ There were originally 13 municipalities in the ex-OSM, but Quilmes (which used to produce its water by itself) was added to it, and two municipalities were each divided into two.

GBA, which was already a fairly spread over city, has been spreading or sprawling even more in recent years. [Waiting for Pierre's contribution on density profiles]

As Pablo Ciccollela (2002, p. 208) puts it: "In the 1990ies, more than 500 gated communities (*urbanizaciones cerradas*) have been developed. More than 75% of them were located on the North and North-East axis. [...] These developments cover about 50,000 ha, at a distance of 25-75 km from the city center [representing] a fifth or a sixth of the total build up historic agglomeration".

In a highly motorized environment, a Los Angeles type of development might be efficient. A dense city with a good public transport system and a low motorization rate might also be efficient. This is *a fortiori* true of a dense city with a good public transport system and many automobiles. But it is hard to believe that the Buenos Aires combination of a sprawled city, a low motorization rate and a poor public transport system could be efficient.

The number of motor vehicles in GBA is not known. What is known (www.dnrpa.gov.ar) is the number of recorded motor vehicles per province. Assuming that 70% of Buenos Aires province vehicles are used in the GBA municipalities, adding the vehicles recorded in the city of Buenos Aires, and multiplying by 0.64 to take into account the officially estimated 36% of recorded vehicles no longer on the roads, one obtains an estimate of 2,95 millions motor vehicles. This is about 272 vehicles per 1000 inhabitants, a relatively low motorization rate, very much in line with what is known of income and income distribution.

A large number of people therefore are dependent upon public transportation for the trips they want or must make. It is reported that about half the trips undertaken in GBA are by private car and another half by public transportation. For journey to work trips, the share of public transportation would certainly be significantly higher. Although we did not study public transportation in depth, it seems clear that it is poorly organized, and therefore inefficient, in GBA.

Bus transportation dominates the picture. Buses are private, and operate on licensed routes. There is no single authority to deliver these licenses. For bus routes that are confined within the borders of a given municipality, including the city of Buenos Aires, it is the municipality that grants licenses. For bus routes that cross municipality borders within Buenos Aires province, it is the province. For bus routes (and there must be many) that

cross the border between the city and the province, it is the Federal government. This allocation of route granting powers, without any coordinating authority, is a safe recipe for inefficiency. In addition, it is not sure that route licencing, at each level, is well done. The problem is not privatization *per se*. Publicly owned and managed buses would probably fare even worst. But a bus route is a largely a monopoly, and private monopolies can be as bad as public monopolies, when they are not granted as a result of competitive, fair, honest, well organized bidding procedures.

Rail transportation, which used to be public, highly subsidized, and not very efficient, has been privatized. In the process, many rail lines have disappeared. Some of the remaining private lines seem to be well managed, but on the whole the supply of suburban rail transport has probably declined.

Subway transportation is in principle a desirable mode in a large agglomeration. In Buenos Aires, however, the subway network —the oldest in Latin America— is not very large: only about 50 km [Check]. It is limited to the city of Buenos Aires. This is not enough to give it an effective integrating role in the GBA.

For private automobile transportation, the picture is much better. The entire area has historically been blessed with very large streets and avenues. In the recent past, a network of tolled expressways has been created, that greatly facilitates center-suburbs and (some) suburbs-suburbs trips. This is good in itself. It nevertheless has two serious limitations. First, it constitutes an incentive to yet more sprawl. Second, it does not do much for non car-users¹, and might even harm them because of the sprawl effect it induces.

In addition, urban trips in GBA seem to be costly, relative to incomes. This is obviously the case for car transportation, in a country where gasoline is highly taxed. This is also the case for public transportation. Subsidies seem to be relatively modest. Fares are generally a function of distance, and for long distances fares are high.

These few lines on transportation in GBA do not aim at presenting a real diagnosis of transportation issues in the area —this would require an entire study— but more modestly

¹ It does something, however, in the sense that some of these expressways are used by bus lines.

to suggest that the lack of proper institutional arrangements is very likely to lead to an inadequate supply of urban transportation in GBA.

If jobs are on average far away from workers, and if trips from home to work are slow and costly, then many workers cannot access all jobs offered, and symmetrically many enterprises cannot count on a very large pool of workers. The important potential advantages associated with a large labor market cannot be reaped in Buenos Aires.

A Measure of the Effective Size of Buenos Aires Labor Market

There are 4 million jobs and employed workers in GBA. This is potentially a very large labor market, one of the largest in the world. Is it in reality? The procedure described above produces a quantitative answer.

The data used to this effect was prepared by the Buenos Aires Subway (*Subterrneos de Buenos Aires*)¹. The area covered is that of Greater Buenos Aires, and is divided into 101 zones. For each zone, we have total employment, and total population, and we each pair of zones we have an estimate of the transport time by mode. This is very useful, although imperfect in several respects. It relates to 1997, but this is not a serious problem, because variables utilized have not changed much since that date. Employment by zone is very incomplete, because the total number of jobs amounts only to 2 million, when we know that there are about 4 million jobs. We have to assume that non-recorded jobs are located like recorded jobs. Labor force by zone is not available; instead, we have total population by zone; we have to assume that activity ratios are identical for all zones. Transport times from zone to zone are calculated, not measured on the basis of a survey. For public transport, transport times ignore access time and waiting time; we added 10 minutes to obtain better estimates of origin-destination times. The modal split is only available for the agglomeration as a whole, and for trips actually made. It is 50% public transportation – 50% private transportation. This ratio is used to calculate averages. This procedure tends to exaggerate the effective size of the labor market. Many non car-users do not find jobs at a reasonable distance of their home and are not recruited. We have no possibility to correct this bias. The results obtained, and presented in Table 7, are therefore

¹ Very kindly provided to us by Dr. Luis Yanes, without whom we could not have done this analysis.

imperfect. They nevertheless provide a reasonable picture of the effective size of Buenos Aires labor market¹.

Table 7 – Effective Size of the Buenos Aires Labor Market, as a Function of Travel Mode and Travel time, 1997

(in % of potential labor market size)			
	Public transportation	Automobile	Average
45 minutes	23	87	55
50	29	91	60
60	44	97	70
70	59	99	79
75	66	99	82
90	81	100	90

Source : Own calculatation

This Table reads as follows. The 23% of the first line and first column means that, on average, people using public transportation have access to 23% of all the jobs available in the agglomeration in less than 45 minutes. Two conclusions emerge from Table 7. First, the effective size of the labor market for public transport users is much smaller than for car users. This is not surprising in itself, and the same is true everywhere : on average, car transportation is much faster (twice as fast is a reasonable order of magnitude) than public transportation. What is surprising is the great difference observed in Buenos Aires. At 45 minutes, the size for public transportation (23%) is very small and the size for car transportation (87%) relatively large. This reflects the inefficient provision of public transport on the one hand, and the benefits of the good expressway system created, on the other hand. Second, for already high transport times, such as 50 or 60 minutes, implying nearly two hours per day of journey to work, the effective size of the labor market is about two-thirds of the total or potential size. On average, a given worker has access to around 2.5 million jobs, not 4 million jobs. Considering higher transport times is not very meaningful, because of the high time costs, and also money costs they imply. Transport costs are a function of distance, and long trips are prohibitively expensive for low or even middle-income workers.

Table 8 provides comparative data for Seoul, London and Paris. These agglomerations are about the same size as Buenos Aires in population and in employment terms. The numbers given must be taken with care, because it is not sure that they are rigourously comparable. They suggest

¹ We are heavily indebted to Bernard-Henri Nicot, who performed the required calculations.

that Buenos Aires fares slightly better than London and Seoul. This is probably because the share of car transportation, the fast mode, is higher in Buenos Aires than in these cities (although it has increased in Seoul since 1987), and because car transportation functions well in Buenos Aires. Paris, which has at the same time a highly developed expressway system (accounting for two-thirds of agglomeration motorized trips) and an efficient public transport system (accounting for one third of motorized trips), however, fares much better than Buenos Aires.

Table 8 – Effective Size of Labor Markets at 45 and 60 Minutes, Buenos-Aires, Seoul, London, Paris

	(in % of total employment)	
	At 45 min	At 60 min
Buenos-Aires (1997)	55	70
Seoul (1987)	31	55
London (1991)	49	62
Paris (1991)	80	87

Source : For Seoul, London and Paris : Lee 1997

Note : A similar calculation for Sao Paulo produced, for 60 minutes, a figure of 22% (Prud'homme 2002) ; however, this figure cannot be compared with that for Buenos Aires, because the data utilized for Sao Paulo is grossly incomplete (it could only be used to compare and appraise various scenarios for Sao Paulo).

If the available data is to be believed, the Buenos Aires expressway system is sufficiently developed to ensure that workers who have a car have access to most of the jobs in the area, which is good for them and for the enterprises that hire them. This good expressway system compensates the relatively high degree of sprawl of the agglomeration. For workers who do not have a car –and they constitute a large share of the working population– the low efficiency of the public transport system means that they do not have access to a large labor market. They either remain unemployed, or take jobs which do not match very well their skills, which implies a loss for them and for their employers, and therefore for the economy. What is at stake here is significant. An increase in average public transport speed of 20% (which corresponds roughly to a change of the 50 minutes to 60 minutes lines in Table 7) would produce a 17% increase in the effective size of the labor market. If we believe the elasticity of productivity to effective size of labor market estimated in Prud'homme and Lee (1999) of about 0.18, this would imply an increase in productivity and output of about 3%, or about 1% of the Argentinian GDP.

V – Conclusions and Recommendations

Main Features of the Present System

The preceding analysis can be summarized in a few sentences. First, municipalities in Argentina are economically and politically rather weak. They do not have access to good tax bases. Their tax resources consist of a property tax, that doubles a provincial property tax, and of a business activity tax that also doubles a provincial business activity tax. Both taxes are difficult to assess and collect. Municipalities also receive formula-driven provincial transfers. These transfers do not seem to redress significantly disparities in tax bases. As a result, intra-provincial disparities and even more so inter-provincial disparities between municipalities are large or very large.

Second, most medium or large agglomerations consist of several municipalities that do not cooperate much for the provision of agglomeration-wide public services, such as water provision, sanitation, urban transportation, land use planning, garbage collection, etc. In many cases, the municipalities of the agglomeration do not cooperate at all. This is in part because of their weakness, in part because of political conflicts, in part because there are no institutional mechanisms to do so. In fact, in some cases, they are prevented from cooperating by the province, because multi-jurisdiction activities are the domain of the provinces –and even of the Federal government in some multi-provincial agglomerations.

Third, as a result, Argentinian cities do not operate as well as they could and should. What is at stake is significant. Argentinian cities are a very important share of the country and of its economy : the ten largest cities account for exactly half the population of the country, and at least 60% of its output. Improving their operation is therefore one way of improving the output of the country. There are reasons to believe that the functioning of Argentinian cities is particularly deficient in terms of urban transport and of urban planning, and that this leads to effective labor markets smaller or much smaller than possible, which in turn lowers the productivity of Argentinian cities –and of the economy at large.

Fourth, all these deficiencies are particularly apparent, and even magnified, in the case of Greater Buenos Aires. Here again, what is at stake is particularly important, because Greater Buenos Aires represents nearly

one-third of the population of the country, and a much larger share of its output. The lack of institutional mechanisms to manage this large agglomeration area —shared by two provinces, with Federal government interference— is particularly blatant. There is no pilot in the GBA plane. As a result, spatial development is largely uncontrolled, area-wide public transport is embryonic, and the effective labor market is a fraction of the potential labor market. GBA does not reap the economic benefits that could and should be associated with its size.

This analysis leads to obvious policy suggestions. Changes could be considered in two distinct although related directions : the strengthening of municipalities, and the development of agglomeration wide institutions.

Need for Decentralization

Strengthening municipalities is another name for decentralization. Argentina is highly decentralized to the level of provinces, but highly centralized at that level. In most countries, decentralization means shifting power, responsibilities and money *from the central government* to municipal governments. In Argentina, it should mean shifting power, responsibilities and money *from provincial governments* to municipal governments.

First and foremost, municipal resources should be increased. Municipal taxes could be increased by allocating property taxation, and perhaps also business activity taxation, to municipalities only. In practice, it would mean eliminating the provincial property tax and business activity tax. The present duplication, or double taxation of similar tax bases, is not healthy. Such taxes are typically local government taxes, and this is what they are in most countries.

The amount of transfers from provincial governments to municipal governments (about 1% of GDP) is probably about adequate. What could be improved are the allocation formulae. A greater role should be given to the correction of disparities in municipal tax bases. Whatever the tax bases, there will always be municipalities that have smaller than average tax bases, that are "poor" in terms of tax bases. They should in part be compensated by greater (per capita) transfers. In some provinces at least, this is presently done. But it should be more systematic and more important.

This raises a technical issue. If a given province wants to compensate for differences in municipal tax bases,

it must know what municipal tax bases are. This means that municipal tax bases assessment cannot be left entirely to municipal governments. Otherwise, municipal government would be tempted to under-assess tax bases in order to increase their transfers (even if it meant increasing tax rates). Municipal tax bases assessment must therefore be done, or at least controlled and supervised, by provincial governments. This does not impinge upon the tax freedom of municipal governments : what matters in tax policies is the setting of tax rates, which is a political decision, not the evaluation of tax bases, which is a technical action.

There are great disparities Federal transfers to provincial governments. On a per capita basis, some provinces get much more than other. This is a problem in itself, that will not be discussed here. But it is also a problem for local government resources, because it gets transmitted to municipal governments. Local governments in much aided provinces get much more in provincial transfers than municipal governments in less aided provinces. Part of the large inter-provincial disparities in municipal governments resources has its source there. One solution to this very serious problem lies in developing a system of transfers from the Federal government to the municipalities. Such systems exist in most countries, including Federal countries. Brazil is a case in point; in this federal country, municipalities receive transfers (of comparable amounts) from both their State and the Federal government; nobody sees this as incompatible with the federal nature of the country. Transfers to municipalities have an equalizing objective. But the goal is to equalize (or to contribute to equalize) over all the country as much as over each province; and this goal is best achieved by Federal to municipality transfers, rather than by province to municipality transfers. The possibility of establishing Federal to municipalities transfers, probably at the expense of Federal to provinces transfers, should therefore be seriously considered.

Together with increased municipal resources should come increased responsibilities. It should be clear that municipalities are responsible for water provision, sanitation, environmental quality, land use planning, urban transport, local economic development, and that they are co-responsible (with the provinces) for health and education.

Horizontal Cooperation

The other policy direction relates to the creation of institutional changes or incentives for agglomeration wide

urban management. It is quite clear that the provision of many, if not most, urban public services in multi-jurisdictional agglomerations require some form of horizontal cooperation between the various municipalities that constitute an urban area. The problem is not specific to Argentina. It can be found in most world cities. But it is exacerbated in Argentina by the weakness of municipalities, and by the strength of provinces.

The least that could be done would be to create permanent and independent bodies to prepare *area-wide* studies, analysis, information, forecasts, and proposals. In decision-making, the final word should remain with elected politicians. But decisions must be prepared, choices must be specified, and the range of feasible options must be narrowed. When this is done, some supposedly political issues might appear as false issues, and agreement on decisions be facilitated. These bodies could be called foundations, planning agencies, study groups, intelligence units, or otherwise. The key words here are independence, competence and relevance. They should be protected from political interference (and change), yet be trusted and used by citizens and by politicians -by citizens and politicians from all the municipalities of each agglomeration. They should consist of small teams of professionals -small means 15-20 people- perhaps associated with universities. They would be overseen by boards or committees including not only representatives of governments, but also of the business community, of citizen's associations, and qualified individuals. It would be quite justified that they be, at least in part, financed by the Federal government.

Should there be some sort of metropolitan governments in larger agglomerations ? We do not think so. The advantages of area-wide governments are important and obvious. It is true that many distinct urban services (such as urban planning, urban transport, and water provision) are inter-related, and would benefit from joint policies : it does not make much sense to allow new urban developments without providing transport and water to their future inhabitants. But the better can be an enemy of the good. The technical, practical, and above all political, difficulties associated with the creation of metropolitan governments are so great that it does not seem to be a realistic option in to-day's Argentinian context.

The way of *ad hoc*, limited, sectoral, area-wide wide provision of specific urban services seems more promising. It is probably too much to expect all the municipalities of a given agglomeration to cooperate for "urban management"

at large. But it may be reasonable to expect certain of these municipalities to cooperate for one (or several) services. Urban transport, water provision, sanitation, garbage collection, would be the first candidates. Health, education, safety and planning might come next. On a voluntary basis, willing municipalities might create an entity (called association, consorcium, syndicate, or otherwise) for the provision of a given urban public service, such as public transport for instance. The board of this entity would consist of representatives of participating municipalities, with or without representatives of the provincial and federal governments. It would decide whether the service is to be provided directly, on force account, or whether it is to be contracted out to private enterprises. In many cases, it would mostly regulate. In other cases, it would have to finance, which would imply a negotiated allocation of costs amongst participating municipalities. Two points can be added.

One is that, in a given agglomeration, there could be several such entities (one for transport and one for garbage collection and/or disposal, for instance) with different geographic borders. Some municipalities might decide to join the transport entity, but not to join the garbage entity. This might be justified by good, technical, reasons. The optimal area for urban transportation policies is usually not the same as the optimal area for garbage collection and disposal. It might also be justified by not so good, political, reasons. But it would not matter much. It might imply a small loss in inter-services coherence, but this would be a very small loss indeed, many times smaller than the benefits created by the intra-service coherence produced by the system.

The other is that the Federal, or the provincial, government might provide incentives to encourage this type of horizontal cooperation between municipalities. The initiative of the creation of area-wide specific entities should come from participating municipalities. Upper level governments should refrain from deciding in their place. It does not mean that Federal or provincial governments should remain passive. They should support and facilitate the development of agglomeration-wide entities. They should create an appropriate legal framework. They might design specific grants, going only to municipalities joining such entities or to the entities themselves. They might go as far as creating special taxes that could only be levied by such entities. An example of the latter can be found in France in the area of transportation. The French municipalities of an agglomeration are invited to create

what is called an "organizing transport authority" to provide public transportation at the meaningful agglomeration level. These authorities, and only those authorities, are entitled to levy a special tax¹, based on the wages paid by enterprises located in the authority zone, the proceeds of which are used to finance public transportation. No municipality is forced to join the authority, but those that chose not to (there are some) cannot benefit from the transport services provided by the authority. In practice, nearly all municipalities, including municipalities of very different political persuasion, join these "organizing authorities".

Creating stronger municipalities for stronger cities for increased economic efficiency in Argentina is certainly not the most important strategy for economic development in this country. Macro-economic considerations obviously dominate the picture, and call for immediate attention. But they should not provide an excuse for not examining other issues, identifying other problems, and carrying out other policies. Just the opposite. In the difficult present situation, all that can contribute to economic efficiency should be welcome. And the very seriousness of the present situation might help overcome reluctance and resistance to much needed changes.

References

Bird, Richard. 2003. *Intergovernmental Fiscal Relations in Latin America : Policy Design and Policy Outcomes*. Polygr. 65p. IADB.

Burki, Shahid Javed, Guillermo Perry & William Dillinger. 1999. *Beyond the Center : Decentralizing the State*. Polygr. 104p. The World Bank.

Cline, William. 2003. *Restoring Economic Growth in Argentina*. 11p. (World Bank Policy Research Paper 3158. Oct. 2003)

Cuevas, Alfredo. 2003. *Reforming Intergovernmental Fiscal Relations in Argentina*. Polygr. 27p. IMF Working Paper (WP/03/90)

Lee, Chang-Woon. 1997. *L'Impact de l'efficacité du transport urbain sur la productivité de la ville*. Paris.

¹ called *versement transport*

Ecole Nationale des Ponts et Chaussées. Polygr. Juin 1997. 205p. (PhD thesis, Ecole Nationale des Ponts et Chaussées)

Porto, Alberto. 2003. *Prioridades de reforma y fortalecimiento institucional e inversion local en Argentina desde la perspectiva de los diferentes actores e involucrados*. Polygr. 68p. (paper prepared for the IBRD-Ministry of Interior Workshop on Decentralization and Local Development in Argentina : Challenges and Opportunities, Buenos Aires, November 20-21, 2003)

Prud'homme, R. & Chang-Woon Lee. 1999. « Size, Sprawl, Speed and the Efficiency of Cities ». *Urban Studies*. Vol. 36, n° 11, pp. 1849-1858.

Prud'homme, Rémy (for the IADB). 2002. *Estimating the Benefits of the Rehabilitation of Sao Paulo Downtown*. Polygr. 30p.

Prud'homme, Rémy. 2003. *The Potential Role of Cities and Municipalities in Argentina*. Polygr. 26p. (paper prepared for the IBRD-Ministry of Interior Workshop on Decentralization and Local Development in Argentina : Challenges and Opportunities, Buenos Aires, November 20-21, 2003)

World Bank. 2002. *Argentina : Provision de Servicios Municipales - Temas y Opciones*. Polygr. 67p. (Informe n° 23685-AR)

Annexes

Annex A - Maps

Annex B - Local Taxes in La Plata (Buenos Aires) Municipality, 2202

Annex C - Relative Importance of Transfers in Municipalities Resources, 2001

Annex D - Income per Worker as a Function of City Size, May 2003

Annex B - Local Taxes in La Plata (Buenos Aires) Municipality, 2202

	(in M. pesos)	(in %)
Property tax	37.7	44.1
Business activity tax	19.8	23.4
Electricity consumption tax	5.0	5.6
Provincial contribution ^a	4.3	5.1
Pavement tax ^b	3.9	4.6
Gas consumption tax	3.3	3.9
Office (stamp) duties	2.8	3.3
Advertisement rights	1.5	1.8
Betterment tax	1.4	1.7
Cemeteries fees	1.3	1.6
Other	3.6	4.3
Total	84.6	100.0

Notes : ^aProvincial properties are tax exempt ; in lieu of property tax, however, the provincial government pays a special contribution ;
^bThe pavement tax is a form of betterment tax ; residents of streets that are paved pay a special contribution.

Annex C - Relative Importance of Transfers in Municipalities Resources, 2001

Transfers / Current Expenditures, Selected Provinces, by Size of Municipalities, 2001 (in %)

	Total	Larger	Medium	Smaller
Mendoza	65	65	63	79
Misiones	48	43	61	54
Chaco	60	55	62	74
Santa Fe	43	43	37	45
Rio Negro	32	29	15	46
Neuquen	61	53	71	65
Buenos Aires ^a	31	36	29	24

Note : ^aData refers only to the 25 municipalities which are part of of Greater Buenos Aires.

Source : Encuesta Nacional a Municipios (ENM)

Annex D – Income per Worker as a Function of City Size, May 2003

City (agglomeration)	Labor Force (in 1000)	Income/worker (pesos/month)
Bahia Blanca	92,7	588
Catamarca	64,5	387
Comodoro Rivadavia	56,7	822
Concordia	45,6	373
Cordoba	445	479
Corrientes	113,3	321
Formosa	66,2	395
Gran Buenos Aires	4031,8	621
Jujuy	98,1	384
La Plata	206	573
La Rioja	51,4	420
Mar del Plata	187	557
Mendoza	315,8	456
Neuquen	97,6	668
Parana	80,8	427
Posadas	87,5	393
Rawson	49,3	564
Resistencia	108,4	396
Rio Cuarto	59,2	510
Rio Gallegos	35,1	723
Rosario	361,9	439
Salta	153,7	353
San Juan	140,9	429
San Luis	52,5	406
San Nicolas	48,5	516
Santa Rosa	39,6	580
Santiago del Estero	105,7	370
Tucuman	241,1	398
Ushuaia	43,6	856
Viedma	24,1	564
Weighted average		552
Unweighed average		499
Médiane		447,5

Source : calculated from the INDEC site, Encuesta Permanente de Hogares, cuadro 27