

3. ECONOMIC REACTIVATION

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A. Introduction

The city of Cali is in the midst of possibly the worst economic crisis in its recorded history, with a GDP falling since 1995 by over 2% per year. Colombia is also in severe recession, and the city cannot in the short term disconnect its fate from this wider context and the effects of the national trade regime, fiscal and monetary policy, and the exchange rate policy. Thus, this is the most urgent time to think about change and reform, but one of the worst in terms of the inevitable pessimism of the citizens of Cali at the depth of recession, and the fact that Cali's comparative advantages are mediated by factors beyond the control of the city.

There are also important methodological qualifications to the economic reactivation component of the Cali City Development Strategy exercise. First, a 'city' is normally defined by a bounded administrative area, but in economic terms this territorial area is entirely arbitrary. Cali as an economy cannot therefore be easily separated from the Valle del Cauca department, the Paez region, and many other localities whose contributions make possible for Caleños to work and earn. Thus, defining the output of the city is inevitably arbitrary. Second, there are major economic data deficiencies in Cali. Data about the informal economy is patchy and anecdotal although this sector might be an important source of dynamic growth and change. There is no short-term way to solve this problem. On the other hand, national statistical systems are ill-equipped to collect the most useful data at the city level. Often it is difficult to separate reliably the city from the department, much less identify in the city the groupings of specialized economic activity which are vital for understanding the patterns of spatial interaction. Similarly the categories employed in presenting national statistics are far too aggregated to be useful at the city level.

This chapter is organized in five subsequent sections. The first one contains an overall review of Cali's economy in order to provide basic data and context. The second section covers in more detail the output and employment figures by main economic sectors. The third section presents an analysis of exports, as a key element in identifying what might be the economic future of the city and to understand the city's 'distinctive' advantages (those that cannot be copied by rivals) as opposed to the 'reproducible' advantages (those that can be copied). The fourth section covers social and physical infrastructure as facilitators of the city's economy. The final section takes all the elements studied to begin to frame a strategy to facilitate and support the leading growth sectors and ease the decline of contracting sectors.

B. Overview of Cali's economy

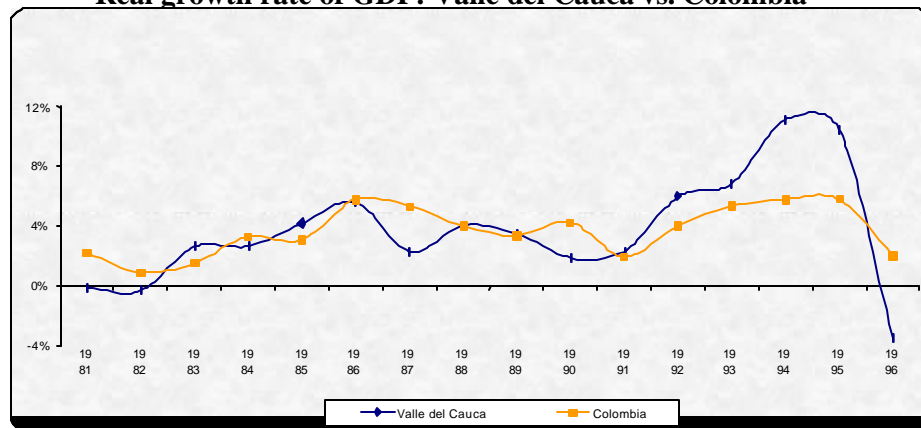
In order to understand Cali's economy, it is important to first examine the national background, then some departmental statistics, to finally overview the main economic sectors in Cali and their dynamics.

The Colombian economy expanded moderately fast in the first half of the 1990s, faltering in 1996-97 and then moved into a severe recession. The components of the onset of recession, as enumerated by informed commentators, include (in no order of priority): (i) the drawn out

¹ Edited by Alexandra Ortiz

effects of a national economy's opening process that was not accompanied by significant improvements in infrastructure and labor qualifications, essential to support competitiveness of the local industry; (ii) important changes in government policy to control a fiscal deficit and a high rate of inflation, through increased taxation, high rates of interest, a freeze on public expenditure and cuts in public employment; (iii) changes in external prices (coffee, petroleum) were important contributions to a balance of trade deficit; (iv) currency changes and increased risks as the result of the financial crisis in South-east and East Asia, reflected in Russia and Brazil, affected the inflow of foreign investment and thus the capital account; and (v) a severe financial crisis (from the third quarter of 1998) and the disruption of credit markets exaggerated problems of high interest rates. By the time interest rates were reduced, general recession had radically cut the demand for capital, so that devaluation (September 1998) increased the cost of imports (with negative effects on the inputs to domestic production) without raising incentives to export (credit growth declined 29% in 1997; 12% in 1998; and 2% in the year ending in June 1999). This, it is said, interacted with the continuing effects of the disruption of the narcotics trade (the Cali Cartel was eliminated in 1995) and increasing domestic warfare. In sum, a decline in demand became now the major factor in the persistence of recession.

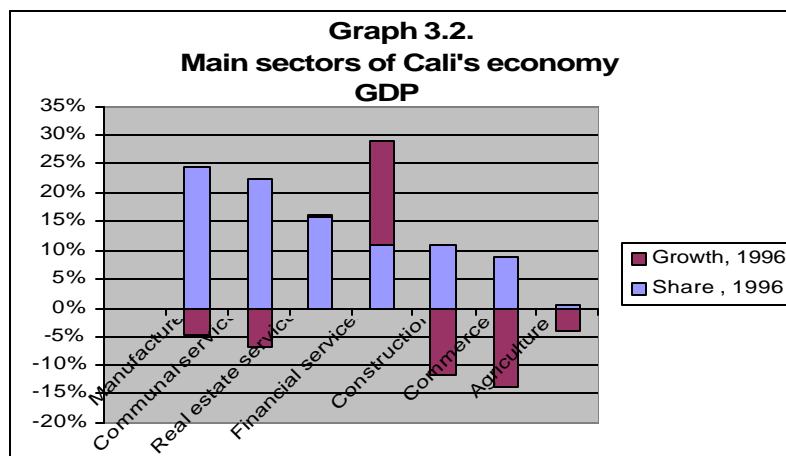
Graph 3.1
Real growth rate of GDP: Valle del Cauca vs. Colombia



Source: DANE

The Valle del Cauca department has not escaped Colombia's economic recession. The department generated, in 1995, 13% of Colombia's GDP, as reported by the National Statistical Department (DANE). In fact, consistently since 1980, the department's economy has been the third largest in Colombia only after the ones of the Cundinamarca and Antioquia departments. Graph 3.1. shows the real growth rate of GDP for both the country and the Valle del Cauca department. Four periods can be identified: from 1981 to 1986 the department's rate of GDP growth follows the national trend; the period 1986-1991 has been characterized by fluctuations; from 1991 to 1995 the department's GDP grew much more than that of the country, but from 1995 on the picture is reversed. The last period, which is still on-going, marks the worst economic recession for the region in its recent history. In terms of economic sectors, consistently since 1980 these have ranked as follows: industry (contributes 15% of the national industrial GDP), agriculture (11% of the national agricultural GDP), commerce (12% of the national commercial GDP), and finance (12% of the national financial GDP) (Mision Siglo XXI, 1999).

DANE reports GDP figures for the country and for the departments but not so for cities. The economic team in the Cali municipality has calculated GDP figures for the city using DANE's methodology. Although these numbers should be taken with caution, as this is a first pilot experience, they are very useful as indicative of the main proportions and trends. Cali's GDP was of US\$6 million in 1996, representing 7% of the national GDP. Graph 3.2. shows, that, according to the most recent available data, the main sectors in terms of Cali's GDP share are: manufacture, personal/social/communal services, real estate services, financial services, construction, commerce, and agriculture. All of these except financial services have had negative growth in 1996.



Source: Secretaria de Fomento Economico (1998)

Table 3.1
Structure of employment in Cali,
1990/94 and 1995/98, and variation

Sectors	1990/94 average % share	1995/98 average % share	% change
Agriculture	1.0	0.9	+2
Mining	0.2	0.1	-31
Industry	24.4	21.6	+5
Electricity	0.7	0.6	+8
Construction	6.6	5.8	+4
Commerce	26.8	26.6	+18
Transport	5.2	6.9	+55
Financial services	5.6	8.8	+87
Personal, social, communal services	29.4	28.4	+14
Total:	100.0	100.0	+18.6

Source: Mision Siglo XXI (1999)

In terms of employment, structural changes in the 1990s are presented in Table 3.1. There has been a remarkable growth in the overall employment in the city of 18.6%. However, this masks a change in the distribution between sectors. Mining has declined absolutely (-31%), and many other sectors, relatively (relative importance is assessed by comparing 1990/91 versus 1997/98 percentage shares). This was most marked in construction (a cyclical industry, so the figures may show recession rather than trend), but also in industry. The continued de-industrialization trend is illustrated here. The growth sectors were transport (55%) and financial services (87%). Commerce and personal, social and communal services showed marginal relative declines, but these are such large shares of the whole, we need to know the performance of different subsectors to understand what happened.

The sectoral changes have also gone with changes in the occupational structure (Table 3.2) – a disproportionate growth in the self-employed (growing from a quarter of the recorded labor force at the beginning of the decade to a third in 1998), and relative declines in almost all other categories (the most important in terms of numbers being private employment) and an absolute decline in public employment and employers. The only other sector to grow was ‘unpaid family workers’ (by a third), but the share of this in the official employment is small (1.5% in 1998). It would be wrong to infer from this changed structure that it represents an increase in poverty – workers being driven to self-employment – rather than an increase in the demand for the goods and services supplied by the self-employed. The category ‘self-employment’ is too heterogeneous to stand proxy for poverty, and there are, in any case, better measures of this.

Table 3.2.
Occupational status of the labor force in Cali,
1990/94, 1995/98, and variation

Status	1990-94 average % share	1995-98 average % share	% change
Unpaid family worker	1.4	1.5	+33.7
Private employee	55.0	49.7	+7.2
Public employee	8.1	6.5	-5.2
Domestic labor	5.7	4.9	+1.1
Self-employed	24.2	33.0	+ 61.6
Employer	5.6	4.4	-7.3
Total	100.0	100.0	+18.5

Source: Mision Siglo XXI (1999)

The Cali labor force is youthful (one third of the population is under the age of 18, and 63%, under 29), and with a high proportion of women immigrants². Although up to 1998 Cali performed well in the creation of jobs in the official economy, the growth of the labor force was even greater – the rate of participation, 58% in December 1996 (compared to 51.8% in

² “Immigrants” is used for domestic migrants, as opposed to foreign migrants.

1976) increased to 65% in 1998. This may have reflected the arrival at working age of earlier cohorts of minors, increases in immigration, and increased participation by those who had previously been inactive (the aged, children, housewives). Increased participation is seen by some commentators as again the result of growing poverty and families being driven to put more people to work, even though, expansions in the size of the labor force are normally the result of increased demand for labor (or a change in its composition); and recession customarily leads to the contraction of the workforce. This is a puzzle which cannot be solved here, but needs to be noted in passing.

The result of this conjuncture was a rapid increase in the official figures for unemployment which more than doubled in the five years up to 1998. This was most extreme for the young (the unemployment rate for those aged 15 to 20 was said to have peaked at 45%); the rate for those who had completed secondary education was higher than those with only primary or tertiary education – making Cali’s labor market a world of low-paid workers (*peones*) and professionals (*doctores*) with no room for intermediate categories (Urrea and Ortiz, 1999). In terms of sectors (Table 3.3), the key sources of contraction have been construction, and trade and commerce, followed by finance, industry, services and transport.

Table 3.3
Unemployment by sector in Cali, 1997

Sectors	% unemployed
Industry	18.9
Construction	25.5
Transport	15.9
Finance	22.9
Trade, commerce	25.5
Services	16.5

Source: Separata (Boletín noticias de la Cámara de Comercio de Cali), various issues.

These severe changes in the structure of employment have been very unequally distributed in the city – between rates of unemployment of over 30% in the poorest *comunas* and less than 10% in the richer ones. Unemployment in poor *comunas* parallels other measures of deterioration in welfare – a decline in the average expectation of life at birth (declining one year in the 1990s – to 75.2 for women and 70.7 for men), declining real per capita income, deterioration in the quality of the housing stock – and a rise in the homicide rate³.

In sum then, despite the very bad figures for unemployment, the Cali economy has done well in the creation of jobs in the 1990s, just not enough to match the extraordinary growth in the workforce. Thus, any strategy for the city must confront the need to generate jobs for the large number of relatively well educated and youthful workers (with a high proportion of women), an asset that in conditions other than recession is a solid resource for rapid economic growth.

³ For more details on the linkages between poverty and unemployment please refer to chapter 4. For additional information on violence, see chapter 5.

C. Economic sectors

In this section sectors are grouped in three categories: (i) manufacture; (ii) traded services which include commerce, finance, and personal/social/communal services; and (iii) construction. In addition some discussion on informal employment, that cuts across all economic sectors, is included. No data is available, at this time, for the real estate services even though these represent almost 16% of Cali's GDP. Data for the informal employment is based on the results of the national household surveys. This is, at present, the best approximation to analyze the informal economy.

Manufacturing boomed in the city – as in Colombia – as a by-product of the Great Depression of the early 1930s and enforced limits on imports. Supplying the domestic market sustained high rates of growth – up to 11% annually – up to the 1970s, with the peak phase of growth between 1930 and 1964, acceleration in the 1950s with the discovery of local energy sources and a world boom for Colombia's raw material exports. As a proportion of Cali's growing labor force, manufacturing moved from 28.5% at the end of the first World War, to peak between 1938 (35%) and 1951 (37.5%), and declining in the 1970s (29% – there were subsequent temporary increases).

The former protectionist regime in Colombia sustained relatively high rates of growth, promoting in Cali a group of large national companies in engineering, food processing, paper and publishing, chemicals and cosmetics. Many multinational companies, in the fields of food processing and chemicals, notably pharmaceuticals, located in Cali in the 60s but direct foreign investment stagnated from the mid-1970s – there have been no new foreign-owned enterprises begun since then.

The manufacturing sector of the region is a mixture of high growth labor-intensive export-oriented light industry (food processing, paper and packaging, garments, and shoes) and capital-intensive heavy and medium industry (chemicals, metals, synthetic materials), mainly focused on the domestic market. Table 3.4. contains data on the share of value added of the four most important industries in Cali before and after the opening of the Colombian economy. The structure has not changed dramatically, with chemicals and foods experiencing relative importance increase whereas paper and publishing have maintained their relative position. On the face of the information available, it would seem unlikely that Colombia's income level would allow it to become in the future an important supplier in the labor intensive fields, competing with much lower income level countries, but perhaps the selection of items produced (unbranded components of garments, it was suggested, rather than finished products) permits Cali to be competitive.

The manufacturing sector employs, officially, over 80,000 people. Of these, the chemical industry employs a 26%, the textile and leather industries employ another 26%, the food processing industry 16%, and paper and publishing have a share of 13%.

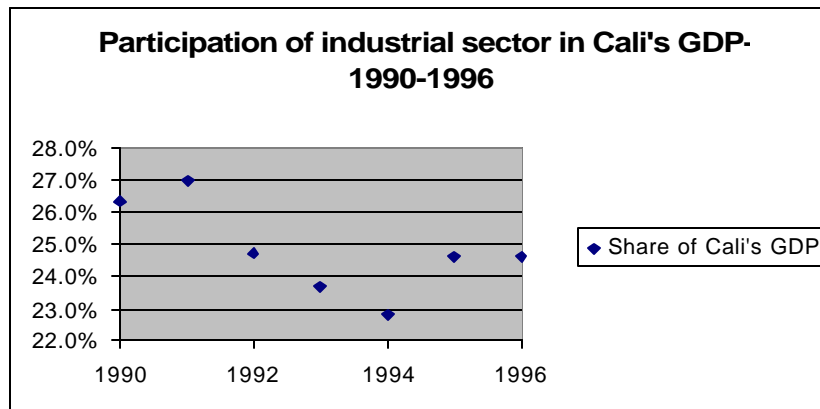
Table 3.4.
Cali's industrial structure
1980-84 and 1995-97

Industry type	% share of industrial value added 1980-84	% share of industrial value added 1995-97
Chemicals (pharmaceuticals, cleaning products, painting products)	22	28
Foods (fats, oil, sugar, sweets)	8	14
Paper	13	11
Publishing	6	7
Textiles and leather	8	5

Source: Mision Siglo XXI (1999)

In the 1990s the manufacture share of Cali's GDP has been overall declining as shown in graph 3.3. This is a result of a general trend of de-industrialization in the city and of deconcentration of industrial location in surrounding municipalities, notably Yumbo to the north, and Puerto Tejada, Santander de Quilichao, and Caloto, to the south in the neighboring Cauca department.

Graph 3.3.



Source: Mision Siglo XXI (1999)

Finally, in terms of geographic location, within the city industrial activity has been concentrated around the downtown in the north east areas (refer to Annex A). Up to 1990 *comunas* 18, 17, 10, 11, and 12, to the south, had significant levels of industrial employment, in addition to *comunas* 3, 4, 5, 6, 7, 8, and 9 to the north east. By 1999 industrial activity is

clearly more concentrated in four comunas: 3, 4, 8, and 9, which surround the downtown area, suggesting that these are light industries that profit from the services and commerce activities of the core. Medium and heavy industry has moved more and more towards Yumbo in the north.

Cali's industries have a high energy consumption per unit of output because of the composition of output – steel, cement, paper, metals and chemicals. Energy supply has been a problem in the past although it is now said that new investment will relieve this bottleneck. However, such industries – with their frequently negative environmental impacts – perhaps represent the past and can expect to be phased out as the unit value of output rises.

In the case of traded services, the data is much more limited, even though this group covers two thirds of the value added in the official city economy and 58% of Cali's GDP in 1996.

Commercial activities represented in 1996 almost 9% of Cali's GDP, with a continuous decreasing trend since the beginning of the 90s. The sector employs over 25% of the labor force, and this indicator, in contrast with the previous one, has remained relatively constant throughout the 90s (see table 3.1.). The largest share of establishments (15%) was in the supply of groceries, 87% of the total being micro-enterprises, including – in the spring of 1996 – some 3,575 wandering street or pavement sellers. About a third of the micro enterprises are estimated to last under one year. There has been a significant decline in the number of micro establishments in the past three years, but a growth in the number of street traders. However, these overall figures do not allow us to see the long term shifts in types of trade (the emergence of growth or declining sectors), nor the different respective markets (local consumption sales versus purchases by visitors to the city), much less the patterns of specialization by locality within the city where public intervention to facilitate growth might be useful (see below on wholesale markets). It is also necessary to separate out restaurants (and hotels) as facilities particularly related to the potential for expanded tourism.

The financial GDP of Cali has represented, since the 1980s between 10 and 14% of the national financial GDP, with a decrease in the period 1985-89 and an overall increase in the 1990s. Besides, financial activities represent 11% of Cali's own GDP, being the only economic sector that exhibited growth in 1996 (see graph 3.2.). The sector employed in the late 90s close to 10% of the working force, several percentage points above the corresponding figure in the early 90s (see table 3.1.). Concentration of financial activity in Cali is also measured by the following indicators: 298 offices of commercial banks, 89 of savings and housing finance, 40 of financial corporations and companies, and a stock exchange. The scale of this activity, the scope, content and geographical spread are however not yet identified. Neither is it clear where exactly the boundaries of the financial quarter, the Central Business District, are, nor the organization of specialized streets or subquarters. It is thus impossible to evaluate the proposal for Cali to become an international financial center, servicing part of the Pacific Rim region. For that we need to know what Cali's financial sector already does, what it could do and what public policy framework is required to facilitate sustained expansion.

At the time of writing, information on the scale, composition and specialization of the health economy is not complete, even though it seems to be of significant size and quality. However, discussions are already underway on the promotion of Cali's medical services exports by attracting patients from Central America and the Caribbean, with particular reference to four areas of identified excellence – heart, eye and cosmetic surgery and kidney

transplants. Plans include links to tourist services (providing package tours for 'medical tourism'), bank credit, air services and recuperative hotel services. However, more attention needs to be devoted to gaining internationally acceptable accreditation (through, for example, US health insurance companies) and to the broader question of ensuring adequate security and quality of life in the city.

The local CDS team for economic reactivation has undertaken a survey of higher education as an economic sector. They enumerated 71 institutions of higher education, including nine universities. The direct and indirect employment (excluding wider multiplier effects) was estimated at 60,000 (or 7% of the official labor force). The universities have grown swiftly during the recession – from 20,000 students in 1992 to an estimated 76,000 in 1999. Student and university spending have thus provided a significant counter-cyclical force offsetting slump. However, there is still little evidence on the precise ways (and magnitudes) in which this spending feeds through to the rest of the economy – in, for example, consumer spending, transport, construction, electronic equipment, books and stationery etc. . However, the team made a preliminary estimate of the value of gross exports from the sector of US\$11 million (almost certainly an underestimate since the flows are so difficult to track). The universities are concentrated in the southern part of the city (which include also the major sports facilities), regrettably distant from the downtown area – close proximity would mean not only that university and student spending would strengthen the city core, but there could be economies of scale in the provision of common facilities, in cultural activities, restaurants, bookshops etc.. However, the emergence of a university quarter in the south should merit attention to maximize the exploitation of the facilities of the area as a single complex, to the benefit both of resident non-university people and outsiders (in terms of culture, sports, non-formal educational facilities such as public lectures, courses, conferences etc).

In terms of the cultural economy, the Cali team on this topic has again begun to reveal something of the magnitudes involved. The city claimed to possess in 1998: 33 cinemas, 16 theatres, 8 museums, 60 libraries, 48 exhibition centers and 138 convention halls and auditoria (figures were not available on radio and television studios and stations, music studios etc). This provides a substantial 'hardware' component to a cultural economy, generating significant revenues for the city. The facilities are concentrated in the northern downtown area (10% of cinemas, 76% of theatres, all museums) and the south (21% of cinemas), and these two points of focus provide a physical framework to enhance general cultural provision (marrying this to the distribution of hotels and restaurants etc., and to tourist policy). There are important festivals which employ these and other facilities – for example, the Cali Fair (25-31 Dec.), attracting some 1.5 million participants (with direct and indirect employment, excluding multiplier effects, of some 20,000); and the biennial two-week International Festival of Arts which in 1999 attracted 12 theatre groups (three of them from abroad) and over 70 music and dance groups. This suggests something of the vigorous cultural life of the city, despite problems of security, as embodied in its numerous cafes and clubs, although there are few reliable figures on the overall economic impact of this on the city, and thus little information on the means to expand it and on what judicial public, private or partnership investments could enhance the activity.

Cali is well-supplied with sports facilities (particularly since the major upgrading undertaken at the time of the Pan American Games in Cali in 1971 – the occasion also of upgrading the airport). Teams participate in 37 sports leagues which with other activities, it is said, draw an audience of up to 19 million per year, generating \$10 billion in gross revenues. The football stadium has a capacity of 40,000, and the city provides facilities for the South American

volleyball championships, for the Davis Cup, world contests in swimming, cycling and hockey. In terms of locality, the largest concentration of activity is in the south (*comuna* 17, with some extension to 18), although additional facilities are in the north (*comunas* 4, 6, 7, 11). As with the cultural economy, sports activities provide an additional element supporting the tourist economy, with the same kinds of implications for city accommodation (hotels etc), restaurants, retail trades, transport etc. There are however no data on the precise impact of this on the city economy at large.

In terms of tourism, the city claims to have 70 hotels and hostels (with over 6,000 beds), 93% of them in *comunas* 2,3 and 4 (and 58% of them in *comuna* 3). A future high-growth tourist industry would rapidly exhaust this stock, but it is a starting point. Tourism, already significant as a generator of activity, could only realize its full potential if security could be guaranteed, and would require an upgrading of the city's facilities, the restoration of the city center, of the colonial and independence period architectural heritage etc.. But the potential could be considerable.

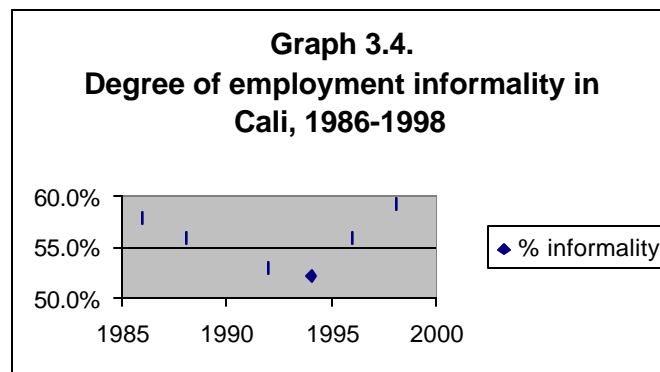
The beginnings of an information industry are already visible both as independent software providers and as part of other important industries (for example, international publishing). For example, Open Systems provides the bulk of software for Colombia's telephone systems and is expanding abroad (to Brazil). Companies like these are small employers and highly specialized, but they provide the possibility of a much wider range of tradeable services – in particular, in the labor intensive sectors of data loading and processing. At present, however, there were few signs of this. However, it appears that the universities are expanding the supply of suitable qualified people speedily.

The servicing economy already produces the major part of the output of the city, yet it is striking how little of it is known or quantified (particularly concerning service exports), how little concern there is with it in the city (tourism may be a possible exception to this). Yet it is *the* city economy in important respects and therefore any strategy for city development must start from here. However, the servicing economy has a peculiar characteristic - it depends economically on the quality of life in the city. It is impossible to offer an export-oriented health sector if visitors suffer from polluted water supplies, or a tourist industry if there are problems of personal safety on the street or during visits outside the city (particularly given the complementary role for Cali's tourist industry of the Pacific coast and the mountains). The old municipal agenda of attaining an efficient system of public services now becomes a necessary condition for the effectiveness of the new urban economy, a key component in supporting the achievement of high employment.

At various points, this account has touched upon important geographical concentrations of activity which need particular attention, bringing to bear both economic and physical planning approaches: the financial quarter or central business district; the 'downtown' locality, combining the historic center and a high concentration of tourist facilities – cinemas, theatres, retail outlets, antiques shops, folkcraft workshops and sales outlets museums, restaurants, hotels etc. It was suggested that it might be worth exploring the idea of pedestrianizing this area so that streets can be redesigned to enhance their character for the walker and walking or pavement traders can be allowed free movement (for established stores, stocks can be replenished outside normal hours). The southern university quarter with another concentration of cultural facilities and also sports areas. The locality of wholesale markets, linked to warehousing, transport junctions, banking facilities etc.

Construction represented in 1996 over 10% of Cali's GDP, making it an important sector. Construction is sometimes credited with playing a particularly important role in the onset and severity of recession in Cali. Between 1989 and 1994, there was a boom in construction with, according to one source (Urrea and Mejia, n.d.), US\$160 million of new investment, 60% in housing (**El Tiempo**, 31 Jan. 1996). This is said to have been partly fuelled by the laundering of narcotic funds in the purchase and development of land (including shopping malls, hotels and restaurants and other tourist facilities). Whether this is true and on what scale it occurred is probably now of less importance than the economic impact on recession. From a peak employment in the industry in 1994 of 8% of the labor force, the industry contracted to a low of 5% in 1998. The contraction of the labor force in construction, as we have seen, made an important contribution to the city's overall unemployed workforce. Another indicator of the crisis in this sector is the number of building permits that went down from 1,659 in 1991 to a low 310 in 1997. The fluctuation in construction could well have been a force precipitating downturn and exaggerating the depth of the trough. However, in the longer term, the cyclical downturn will not affect the city's economy as a whole, and the industry is likely to revive with an increase in demand.

The so-called informal economy is difficult to quantify. Except for employment information included in the national household surveys, carried by the National Statistical Department (DANE), very little is known about this important segment of the economy. According to DANE's methodology, informal employment is made up by four categories: (i) individuals who are self-employed; (ii) enterprises of no more than ten employees; (iii) domestic workers; and (iv) unpaid family workers. Using this definition, the degree of informality in Cali's employment in the period 1986-1998 is presented in graph 3.4.



Source: Mision Siglo XXI, 1999

Employment informality in the city has been very high throughout the last ten years, always exhibiting levels higher than 50%. Up to 1994, when Cali's economy was growing, the degree of employment informality decreased steadily to reach a minimum of 52.3%. With the crisis informality levels have increased sharply to reach a 59.3% in 1998.

The degree of informality decreases with education as shown in table 3.5. Persons with less than ten years of education stand a very high chance (70%) of working informally, earning lower incomes than what they could earn in the formal sector. This is especially so for the most educated.

Table 3.5.
Employment informality and education level
Cali, 1998

Years of education	No of formal workers	No of informal workers	Informality (%)	Average salary, formal	Average salary, informal	Salary ratio F/I
0-5	45,992	195,727	81	243,069	157,757	1.54
6-10	64,436	144,796	69	284,466	212,801	1.33
11-15	145,957	122,261	45.6	425,433	312,070	1.36
16 +	78,760	25,852	24.7	1,054,254	577,535	1.82
Total	335,145	488,636	59.3			

Source: Mision Siglo XXI, 1999

Finally, in terms of economic activities, the highest levels of informality are reached in commerce, construction, agriculture, and non-financial services, all above 59% (see table 3.6.). Even the lowest level, 34.1% in financial services, is very high. In all cases *reported* incomes earned through informal employment are substantially lower than those offered in formal jobs.

Table 3.6.
Employment informality by economic activity
Cali, 1998

Activity	No of formal workers	No of informal workers	Informality (%)	Average salary, formal	Average salary, informal	Salary ratio, F/I
Agricult.	3,115	4,943	61.3	581,778	360,861	1.6
Manufact.	82,616	84,693	50.6	412,682	227,227	1.8
Construct.	11,468	26,046	69.4	426,406	236,715	1.8
Commerce	49,168	162,080	76.7	309,969	228,300	1.4
Financial services	55,757	28,869	34.1	681,866	486,344	1.4
Other services	103,536	152,134	59.5	603,382	174,464	3.5
Total	337,014	491,843	59.3			

Source: Mision Siglo XXI, 1999

D. Exports

We do not have a picture of the changing composition of imports and exports of goods and services between Cali and the rest of Colombia and the world at large, nor how the city's external markets are changing. The specific limitations of the data available are: (i) there is information only on exports to the rest of the world, excluding exports to the rest of Colombia; (ii) the recorded exports are from the Valle del Cauca Department rather than from Cali; and (iii) the exports concerned are goods, not tradeable services, which is especially damaging since the city is 'tertiarising'. In sum, the data available covers at most the exported share of about a third of the city's economy.⁴

Table 3.7. lays out the changing composition of a selection of the main commodity exports of the Valle del Cauca Department between 1992 and 1996 (unfortunately, taking single years masks trends with short term fluctuations). The table has been divided into 'traditional' and 'non-traditional' manufacturing, since this gives a loose idea of the relative labor/skill intensities of the output and thus the different employment potentials. The overall cumulative growth between these years, 48%, provides the benchmark separating subsectors in relative decline (below this level) or expansion (above this level).

Table 3.7.
The changing structure of manufactured exports
Valle del Cauca Department
Dec. 1992-Dec. 1996 (selected items)

Traditional manufacturing:	% share of exports in 1996	Rate of growth (%) 1992-96
Foodstuffs		
Sugar	21.2	+65
Sweets	5.6	+241
Fish	3.8	+38
Other	4.4	+37
Subtotal	37.2	+45
Textiles		
Cotton goods	4.5	-18
Garments	2.6	+193
Synthetic textiles	2.2	+96
Subtotal	10.1	-4
Leather products		
Shoes	1.7	+138
Prepared leather	0.5	-29
Other leather prods.	-	-35
Subtotal:	2.8	+26

⁴ Colombia has a low dependence on exports (about 13% of gross domestic product) compared, say, to Mexico's 35%, let alone the much higher ratios of east and south-east Asia. Thus, the dynamic growth of diversified external markets is not brought to bear to offset domestic recession.

Paper industry		
Wood products	0.5	+140
Paper and packaging	9.9	+103
Publishing	4.2	-35
Subtotal	14.0	+23
Non-traditional manufacturing:		
Metals		
Cast iron	5.9	+85
Electrical equipmt	1.9	+65
Machinery	1.6	+91
Metallurgy	0.8	+43
Subtotal:	10.8	+71
Chemicals and others		
Chemicals	5.9	+92
Pharmaceuticals	3.4	+456
Insecticides, disinfect.	0.6	+327
Subtotal:	9.9	+160
Plastic and others		
Synthetic materials	5.6	+66
Rubber	4.6	+198
Plastics	0.2	+1,082
Petrol and derivatives	-	3,106
Subtotal:	11.6	+107
Minerals		
Non-metallic mineral prod.	0.06	+20
Coal	-	+299
Subtotal:	0.3	+63
Other industrial products	2.6	+55
Total:	100.0	+48

Source: calculated from Plan Regional de Exportaciones del Valle de Cauca: Frente a la Comunidad Andina de Naciones, in SFEC (1998): 22.

The first observation is that the Department depends on manufactured exports which are mainly part processed raw materials with relatively low levels of value added. About 40% of exports are raw material-based. They are subject often to considerable external price

fluctuations: for example, Colombia's coffee exports fell in volume by 16% in 1998 as the result of a 30% decline in prices. In what we have called 'traditional' manufacturing, sugar is the most important single export (with about a quarter of the total), and is expanding moderately (17 points above the average). Very rapid expansion is taking place in sweets (241% cumulative growth in this period), in garments (193%), in shoes (138%), in paper and packaging (103%) and synthetic textiles (96%). On the other hand, 'other foodstuffs' and fish are in relative decline, and cotton goods, prepared leather, other manufactured leather and publishing declined absolutely. Too small to be included here are some other absolute declines – cotton (-91%), processed fruit (-86%), coffee products (-76%), fruit (-46%), shellfish (-39%), and cotton textiles (-26%). 'Other farm products' expanded rapidly (261%), with perhaps a key constituent of asparagus. Also too small to be included are 'cut flowers' with very rapid growth (480%); on the other hand, tobacco which was recorded in 1992 had disappeared by 1996. In sum, if this period represents the trend, it shows a simplification in 'traditional manufacture' – to sugar, garments and shoes and a handful of other smaller items. With more accurate data we might be able to separate out Cali's contribution and the specialization of other particular districts in the Department.

The picture of exports of non-traditional manufactures is generally expansionary, suggesting the Department is moving towards exports with a higher value added and more skill-intensive output. The highest rates of growth have occurred in chemicals and synthetic materials – plastics (1,082% increase), pharmaceuticals (456%), insecticide and disinfectants (327%), and rubber (198%). Coal exports also have expanded rapidly (299%). In the metals fields (including electrical and mechanical machinery), the growth has been respectable although metallurgy is in relative decline, but non-metallic minerals – with the exception of coal – is in relative decline. Transport equipment (0.5% of exports in 1992) shrank by half in the period, but hand tools – too small to be included here in either year, grew by a spectacular 12,000%. Thus, in sum, the Department's particular strength appears to be in chemicals, with some selected items of metal manufacture following on.

The figures cover only a fragment of the exports of the Department and do so here before the full force of the current recession stretched the economy. It is recession which, other things being equal, eliminates the weaker sectors of the economy and rewards with survival those with relative strengths. Nonetheless, the breakdown gives a suggestion of the emerging advantages in export manufacture.

There are unrecorded exports on which there is little information. With a land border with Ecuador within reachable distance (Venezuela and Ecuador take about half Colombia's manufactured exports), it is possible the unrecorded exports affect the Department and the city. There are also unrecorded exports of illegal goods, narcotics, which may also affect transactions in the Department. In the past, some have suggested the inflow of narcotics earnings to Cali may have had a 'Dutch disease' effect, expanding the domestic market and thereby discouraging manufactured exports (on the other hand, drug revenues are said to have financed smuggled imports, affecting the markets for domestic manufactures). The destruction of the Cali cartel may have affected this, exaggerating the scale of the recession, or merely dispersing drug revenues to other locations.

E. Infrastructure

Social infrastructure - particularly education - is dealt with in Chapter 6. Physical infrastructure - particularly power and transport - is crucial to the city's capacity to earn income. In the case of power, it seems plans are already underway to relieve existing bottlenecks through opening new hydroelectric (Calima III) and thermal power facilities. In the case of transport, the problems may be more severe.

Colombia's land communications are well known for being high cost. Compared to much of the rest of Latin America, there is a relatively low number of kilometers per million population, and a low penetration of mountainous areas compared with countries similarly endowed. Partly as a result of this, costs are said to be between 25 and 75% higher than comparable mountain countries in the region. Bottlenecks exacerbate this problem, so that transport costs for exports add some 30% on average to the cost of goods (compared to 10 to 20% in Europe and North America) and thus tend to eliminate any comparative advantages Colombia might possess. Poor communications in the past might have worked to give Cali a measure of protection compared to other centers of the country, but as we see in the next section, this is not so now and Colombia's Caribbean ports compete with Buenaventura on the Pacific coast for cargo from the Valle del Cauca Department. There is also said to be around a million tons of cargo carried by road to Ecuador annually. But generally, road and rail transport are important constraints on Cali's capacity to compete with its nearest rivals.

The Buenaventura port was for a long period a major bottleneck for exporters and importers on the Valle del Cauca Department and Cali. In the 1950s, the port had been the largest in Colombia (handling 60% of national exports by volume, 1955-60, and half of national imports, 1960). This was reduced by 1990 to 20% in each. This was the result of a poor investment record in unfavorable physical conditions as the average size of cargo ships increased - the main channel today cannot handle very large ships. In addition, in the past, poor management of the port raised costs, increased delays, pilferage and breakage. Since then, privatization of Colombia's ports has led to increased investment and rationalization - the 1990 direct and indirect labor force of 10,000 is said to have been reduced to just over 4,000 in 1996 (in 1992, **El Pais** claimed that the unemployment rate in the city was 65% - 22nd March). Efficiency was sharply increased, but costs remained high - the Informe Monitor Report on Cali of 1995 quoted (without sources) costs per ton of cargo bound for New York as US\$40 via Buenaventura and \$5 via Cartagena, implying that port handling charges accounted for a large part of this difference. Nonetheless, the port has reclaimed an increasing proportion of national cargo (60% of the throughput consists of sugar cane and wood from the Valle del Cauca Department) even if there seems still to be a drift of some cargo northwards to the safer and quicker ports of Barranquilla and Cartagena, a trend that may be enhanced by the development of all-year navigation on the Magdalena river and, possibly, the opening of a new tunnel on the Bogota-Cali highway. At the same time Buenaventura is seeking to deepen the main channel (to 30 meters draft) to take larger vessels, to develop an industrial zone and a new deep water container terminal on the Aquadulce peninsula; the proposed rehabilitation of the rail connection between the port and Cali appears to be trapped in litigation over the use of the land on either side of the line. The changes may go some way to restore the port's pre-eminence, although the context is now transformed by privatization and the emergence of nine new private rival ports to the existing five established ports, as well as the competition of other Pacific ports (in Chile, Peru and

Ecuador). However, perhaps the main problem of the port is not in the dock facilities themselves but in the road access through the mountains, particularly the part where both Bogota and Cali cargo are carried. A rail line would ease this so far as Cali is concerned, but ultimately the highway will have to be improved if the full potential of the port can be utilized.

The development of cheap air freight could go a long way to offsetting the disadvantages – including insecurity – of the Buenaventura route. It could be the basis for new high value/low weight manufactured exports. In 1998, the airport handled two million passengers (13% of them international) and 66,000 tons of cargo (65% international), with international connections to Miami, Panama and Quito. The costs however are high – for example, rates for exported publications were quoted at US\$0.08 per kilogram by sea and \$2.50 by air. There are also problems of security (raising insurance costs, delays and the risk of the seizure of aircraft) – for example, in August 1999, narcotic smugglers were arrested seeking to use an American Airlines flight to move half a ton of heroin to Miami. The imminent privatization of the airport may begin to improve its efficiency and lower freight rates, thus allowing Cali's exporters to escape some of the problems of existing road, rail and sea exits, as well as stimulating new exports of goods and services.

It would be useful to explore an overall rationalization of Cali's transport facilities, so crucial for the city's economic future. A dry dock – with Customs services, and the non-stop through shipment of In-Bond cargo to the airport or to seaports on the Pacific or Caribbean coasts – could be located close to the airport, with close access to the proposed rail links and to road junctions, thus minimizing the costs and the delays in transshipping cargo between transport modes. The concentration of activity could also be exploited for a business park of firms associated with cargo movements.

F. Proposed strategic priorities for Cali's economic recovery

The city's economy is in the process of structural change and while we can see the decline in the city's manufacturing (or dispersal of manufacturing away from the city) we cannot yet with precision identify the bundle of tradeable services which will generate the jobs and incomes of the future. Partly this is because so little attention has been paid to the two thirds of the economy which constitutes services. However, some obvious strengths have been noted – the dynamic growth of exports in garments, shoes, cut flowers and asparagus, and printing and publishing. While very small still, the city's software industry has much potential. The severe disadvantages have been noted, particularly those which cumulatively make impossible a significant tourist industry.

However, the strengths enumerated here are all 'reproducible' – that is, rival cities, with application, can replicate these advantages. At this stage, the 'distinctive' advantages of the city are limited to the city's geographical location – commanding the south west corner of the country, between the Andes and the Pacific, and with access to the Pacific-American economic region. The coast also has created a unique culture, particularly in music, which could provide a distinctive basis for tourism in the city. Around that core, reproducible tradeable services could be grouped to generate a strong employment basis, particularly facilitated by a relatively educated labor force. All this, however, requires the establishment of security, an upgrading of social and physical infrastructure, the rehabilitation of parts of the city of particular interest to visitors, and an improvement in the quality of life in the city.

The aim of a strategy should not be simply to provide jobs and incomes, but to create the capacity to respond to opportunities and threats with flexibility, to ride booms and recessions without either sustained high unemployment or urban decay (the two most important signs of rigidity in the economy), but with continuing adjustment, incremental change, repositioning the city and its structure as external markets change. That implies continuing reform at the city level parallel to national macro-economic reform, to continue to remove those characteristic rigidities of the old import-substitution model and of the old forms of planning. That in turn requires a broad political consensus in the city which implies institutional innovations in the forms of governance to strengthen participation in the formulation and implementation of a city economic strategy. As explained in the first paragraph of this section, the existing information is not enough to formulate a precise economic strategy. Nevertheless, preliminary directions can be highlighted, while the local team is fulfilling the informational gaps:

- ***Improve the economic databases***

Detailed information on the tertiary sector and on the informal economy are necessary. The construction of databases to answer this deficiency will most likely start from scratch as different sources produce different data, at different levels of aggregation and with different geographical coverage.

- ***Assess the transport infrastructure needs to support economic development***

A detailed study on the costs of different shipment alternatives must be undertaken. The study should not only assess the existing situation, but also explore the feasibility of new options.

- ***Assess the strengths and potential in terms of labor skills in the city***

Regardless of the economic strategy chosen, it is crucial to determine what are the major skills of the productive force at this time, and what could be the potential in the future. This requires a thorough assessment of the labor supply.

- ***Identify centers and conditions for technological research***

The city has a good number of academic institutions. In the past, research, particularly in the fields of medicine (Universidad del Valle) and agriculture (International Center for Agriculture and Technology, CIAT) was recognized internationally, but has been declining in the 1990s. Revival of this strength and creation of research centers for other important aspects of Cali's economy are a must.

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