Location features of office market centers within the São Paulo metropolitan area

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ABSTRACT

The research was based on evidences from the São Paulo Metropolitan Area office market. We discussed that there was a connection between the evolution in urban structure of business centers and the performance of real estate office building markets. The objective was to identify the main factors in which a region could be qualified, according to the needs of the activities that take place in the office spaces, so as to become attractive to their potential and current occupants.

The demand of office space in São Paulo has increased in the last years due to the economic growth, as well as the new work arranges. As a result, the city occupation has deeply changed, with many new business centers emerging. Under that scenario, we examined the development of the two new centers comparing them to an existing center, established since the 70's, on a 10-year long perspective.

In the study, some location features were observed so as to allow the qualifying of such a location according to the 3 main aspects. The first one was the quality of the center image, as well as the whole region where it was placed in. The second referred to the gains in scale economies due to the concentration and size of the business center and its synergy to the others. The third one was that of the face-to-face contact, available in high-density clusters. The last one considered the business center district accessibility to both the main directions in the city and the main business centers. A survey was conducted including the rescue of historical data, real estate indexes and the examination of the changes in local surroundings.

The comparison among those three features in each of the three business centers with market performance indexes allowed us to evaluate the impact of the urban evolution on each region and their market performance. We could also identify the main features that distinguish and qualify a business center in São Paulo and other similar cities.

I. LITERATURE REVIEW

The studies focused on sharing services among different cities are often found in those regions or countries where there are many equivalent options in choosing among different cities, like those great metropolitan cities in US or Central Europe. Nowadays, in Brazil, as only few cities can provide a structure capable of carrying out specialized services, the competition among cities is still small. Some researches discuss what features are needed

to point out a global city, according to the required sophistication of its urban structure (KOULIOUMBA, 2002; FERREIRA, 2003).

The studies related to the intra-metropolitan location using hedonic models took into account the access among main business centers, the services density, the need of face-to-face contacts, the downtown accessibility (O'HARA, 1975; SIVITANIDOU, 1996; GAT, 1998), the accessibility to the main housing districts, the transportation cost, the access to markets (ARCHER, 1981), and also the center image (RIENSTRA e RIETVELD, 1997; NAHN, 1999).

The relevance on the accessibility feature among service centers is important to understanding the share within the city sub-centers (SIVITANIDOU, 1996; O'HARA, 1975). The requirements on face-to-face contact may relate not only to the clients' requirements but also those of the suppliers'. (ARCHER and SMITH, 2003, IHLANFELDT and RAPER, 1990).

Different studies are available on both the location of main firms headquarters and the competition generated among cities in order to attract them. All of them state that it is a phenomenom similar to that of the industry occupation in industrial belts, where they were searching for synergy among similar or complementary industries. (SHILTON e STANLEY 1999; KLIER e TESTA 2002).

In the last decades, the trend of movements from the old business centers toward the new ones was widely discussed in the geography field. Some studies present the evolution in business occupancy in São Paulo city; their approach associate both the economic development, the city land structure and the related social issues. (FRÚGOLI JR., 1998).

Due to the technological advances in communications, the decline in travel cost significance and the increase in office sector, the locational desired features for the new centers are different from those considered in the development of the old ones. (ARCHER e SMITH, 2003)

The intra-metropolitan approach in the studies of business location inside the metropolis is still missing, especially in Brazilian literature, where the studies do not add to this discussion at all.

The studies related to the office location according to the users' needs are still scarce. Exploring this perspective, we can contribute to the improvement in the planning of new projects, searching for the best comprehension of the changes in users' needs, in order to achieve a better positioning to the project in relation not only to market but also to the urban insertion. It will provide a project life cycle longer and safer, therefore, a better performance for the project.

Many different researchers have been attracted to developing studies related to metropolitan issues due to its high complexity. As those cities present a great concentration in the third sector activities and the new technological changes play an important role, the intra-metropolitan location studies are important.

II. OBJECTIVE

The main objective of this paper is to identify the validity of locational factors in which an office region in metropolitan areas could be qualified, according to the needs of the activities that take place in the office spaces, so as to become attractive to their potential and current occupants.

III. METHODOLOGY AND TEXT STRUCTURE

At first, a short historical evolution of the occupation in São Paulo city will be presented, focused on both the supply of office spaces, the growing in services, the development of the business centers and the municipalities actions, in a 10-year long perspective. Besides the availability of the information, the recent changes that happened in the city of São Paulo were the main key to adopt the 10-year lag for the study.

In order to make clear the relation between the market performance and the locational attractiveness, we picked out the main possible factors (factors related to the supply, to the demand, to the city dynamics and to the quality of a business center) that could alter the life cycle of the attractiveness of a locational quality of 3 business centers in São Paulo.

Three different regions were chosen: PAULISTA (that refers to the region around the Paulista Avenue), BERRINI (related to the Eng. Luis Carlos Berrini Avenue and its neighbourhood) and CSA (the region that comprehends the district called Chácara Santo Antonio). Each of them shows a particular occupational pattern and a high density in modern office buildings. PAULISTA has been considered the most eminent location for a long time, and its main characteristic is that of the change in its use; in the 70's and in the 80's it was the most important center in the whole country. BERRINI was strongly modified by a "urban operation"[1] and plays an important role in the migration trends towards southwest areas. In the 70's, the "São Paulo Office Park" was built and CSA has become a new location, on the edging belt.

According to the premises already used in other studies, we will evaluate the locational features of each one of the selected regions and search for answers in what relates to their quality, by means of their market performance indexes. Then, the changing movements in the market occupation will be analyzed, in which the main aim will be the discussion in the development in locational quality, trying to evaluate how those indexes match the changing process in spatial office location.

IV. CASE STUDY

Briefings in office building market in São Paulo

The city of São Paulo and its metropolitan region comprise the economic center of the Brazilian and South American economy. The São Paulo Metropolitan Area (SPMA) is responsible for 18,5% of the GDP, providing 50% of the state GDP[2]. For the year 2000,

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[1] "...A Urban Operation is identified by a set of interventions and policies coordinated by the Local Public Power, by gathering owners, users, and private investors, in order to achieve urban transformation, social improvements and environment gains..." Estatuto da Cidade, Lei nº 10.257 de 10/07/2001 apud SALES (2005)

[2] Source: EMTU/SP based on IBGE. (available in: http://www.emtusp.com.br/saopaulo.htm)

the demografic census data showed that the population was 17,833,811 inhabitants (about 10,5% of the whole Brazilian population), only behind Mexico and Tokyo. SEADE (2005)

The state of São Paulo, where the SPMA is addressed, is responsible for 35% of the Brazilian GDP and for 49,2% of the national industrial production. It is also the main financial center in the country. According to the Brazilian Federal Reserve Bank, in 2000 the state of São Paulo accounted for more than half of the total deposits and credit operations in the whole country. [3]

Although São Paulo state is not as representative as it was in the 70's, it still plays the most important role in the Brazilian economy, especially in those most modern industrial sectors and most sophisticated services, as hospitals and advisories (AZZONI, 1999). The city of São Paulo is the biggest city in the country and it is placed in a region with a high density of modern industrial plants, advanced personal, commercial and bank services net, the best transportation and telecommunication infrastructure, availability of specialized labor force, presence of both the most important Universities and the main research institutes in the country as well.

Azzoni (1999) concluded that considering the productivity indexes and labor costs, the city will still keep on growing, receiving new investments and developments for many decades, because it is still attractive, in a qualitative point of view.

Not only the spreading of its center in the 70's but also the latest migration toward the south and west sides showed us a movement trend and with it, new requirements to be fulfilled.

Nobre (2000) observes that, according to the former Richard Ellis Consulting (current CB Richard Ellis) reports, published in 1982, "as far as a new economic developing cycle occurred in the city, a new business center started developing. Because of that, at that time, São Paulo had four different centers: downtown, born in the coffee boom epoch; PAULISTA, correspondent to the period of the industry consolidation; JARDINS/FARIA LIMA, related to the "Brazilian Miracle"[4] era and the GREAT MARGINAL AVENUES region[5], of current and future expansion." Nowadays, we can say that the last one corresponded to changes caused by the globalization and digital advances.

The choice of the São Paulo city to develop the research was due to its sophisticated and unconstrained structure in what relates to locational issues, responsible for the development and change of its business centers, in the last 10 decades. Downtown has already expanded and new business centers were born as well. Now, new locational references are being settled, and must be recovered in order to understand the progress in the qualities of the business centers and its reflexes in the office market.

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[3] This and other information related to the representativeness of São Paulo leadership in Brazil and Latin America can be found in SEADE - http://www.seade.gov.br/negocios/snpci-v2.html.

[4] The so-called Brazilian Miracle corresponds to the years when the country was governed by the military forces, always referring each good result to the importance of government actions.

[5] The region that later defined the centers of BERRINI and CSA.

Quality investigation in locational structure

According to Cerqueira (2004), the main factors that can contribute to the attractiveness of an office space location are shown in the following table.

Neighborhood	Users and Uses	Non-office	Types of uses in the region	Residences, industries, commerce
			Urban equipments	Hotels, convention centers, restaurants, stores, cinemas, theaters, airports
			Support services	Transportation (taxi, travel to/from the airport, copy services, courier services, etc.)
		Office	Office activities range (Economic sector, function, pattern)	Business, government, industrial, financial, services
			Sinergy level among firms (office concentration)	Cluster area, total stock area
			Complementary activities	Survey, advertisement, advisory firms, …
	Quality of the environment		Location history	Stock age, old uses
			Whole Architectural design	Building finishes, famous architects' design
			Green spaces, open areas	Squares, parks, tree planting, lighting
			Safety	Criminality and violence indexes
			Pedestrian area	Paving, urban equipments, open areas
	Office Market			Vacant area
				Rent value

Acessibility	Factors that contribute to a good accessibility	Structure, flowing and comfort	Public transportation, single transportation	Chartered buses, regular buses, subways, trains
			Communication	Highways net (volume and flowing), cableway, optical fiber net, telefone net
	Important accessibility aspects	Residential districts	Clients and labor force	Proximity to the residencial districts with the same users/clients profile
		Useful location	Complementary activities, clients and suppliers	Highways, airports, heliports, stations (subways, trains, buses), convention centers
		Other centers	Complementary activities, clients and suppliers	Central business district, other business districts

The most important factors analysed can be devided into: accessibility, image, face-to-face contact and scale economies.

In order to examine the **accessibility** of the centers, the distances[6] between each one of the analysed centers and the others important centers (CBD, PAULISTA, BERRINI and FARIA LIMA, according to their stock areas and density) were considered, and also the

[6] Measured by the waste of time in travelling. (see table 4)

distances between each center and the two main São Paulo airports (Congonhas and Cumbica).(Table 3)

The **image** would be inferred by four different parameters: the first one was how many of the biggest firms (picked out from a list of the most important enterprises) were settled in that specific center (Graph 1); the second one was the age of the existing inventory (Graph 3); the third parameter was the availability of high quality hotels and restaurants (Table 2); the last one was related to both the set of service structure, the cluster maturity and the built environment and open areas (Tables 1 and 2).

The **face-to-face contact** can be recognized according to the concentration in the region and to the total stock (Graph 2), that represents the center dimension and the distance between centers (previously considered).

The gains in **scale economies** were observed by the service provided (restaurants, hotels, mailing agencies, bus stops, among others). (Tables 2)

Due to both the non-availability of data and the complexity and variety of the features that can contribute to a quality location, many features were not considered. Among them are: the occupancy profile of the region, the range of assistance services, the quality of the whole architectural design, social profile of the districts and the pedestrian structure.

Market performance indexes (graphs 4, 5, 6, 7, 8, 9 and 10)

The market performance indexes considered in each region, during the time lag, were: the existing inventory, the occupied stock and the stock absorption (new local demand). These indexes were selected in order to check how they match the spatial changes in the city, and then, identify the growing or dispersion trends in each region.

The vacancy rate quotient shown in graphs 8, 9 and 10 was used to identify the positioning of each region in relation to the city average, no matter what affects the city behaviour, either its macroeconomics or its market features. It's obtained by dividing the local vacant rate by the city vacant rate average. Therefore, it can show the attractiveness of a region when compaired to others.

The three selected locations

- **PAULISTA**

Frúgoli Jr. (2001) states that the urban context of Paulista Avenue has been historically identified as an aristocratic location – firstly as a dwelling area and then, with tall-buildings that hold the modern tertiary sector, essentially the financial sector. The first evidence of its decay happened when the companies started their way out towards new locations.

The PAULISTA center had increased the most in the 70's, when its stock went from 204,000 sqm to 632,000 sqm. Nowadays it represents 17% of the whole city stock[7]. It is the biggest concentration in the city; the other centers don't have even the half rate

[7] Source: Jones Lang LaSalle (2004).

between the land and built area (total stock). It's stock of "A"and "AA" office business performs 14% of the overall city supply. (Table 1)

According to Bolsa de Imóveis do Estado de São Paulo apud NOBRE (2000), the occupation profile were composed of 35% on services, 9% on industrial sector, and 22% on financial one. As PAULISTA is the location where the concentration on finacial sector is the most expressive in the city, it suggests a specialized function. Eleven out of the biggest firms in the city were addressed there. Five years later, the number was 9. (see Graph 1)

The latest new buildings present 91,000 sqm and more 44,700 sqm are expected to 2005. In a central position, there is a park (Trianon) and, just across from, the Art Museum of São Paulo (MASP), one of the most important art museums of Latin America. The avenue is placed in the highest location in the city, which helps the visibility of its high buildings.

The service structure is very meaningful inside the PAULISTA boundaries. There are 5 post offices, 11 travel agencies, 6 delivery firms, 3 fitness centers, and 1 shopping mall in its borders.

Its neighbourhood is varied and its transportation structure is one of the most complete in the city. 29 bus lines that connect to many districts and downtown serve the region, as well as an underground line, that began its operation in 1992, with 3 stations. Due to the great demand, 7 taxi stands and airport services are available. (Table 2)

Its accessibility is improved by public transportation, mainly the subway, although its subway line is not long enough. According to the investigated useful locations, Cumbica airport was the only one nearer to the other centers. But PAULISTA center is geographically centralized when considering important residential districts in the city, like Jardim Paulista, Vila Mariana, Higienópolis and Perdizes.

All the happenings and popular celebrations (new years'eve, concerts and demonstrations) take place on the Avenue. It may be considered as a negative externality but on the other hand, it strengthens the location notoriety.

Part of the region presents an especialization degree if compaired to the other centers, in what relates to hospital and labs, as many of the most important ones are placed there.

Due to not only the high activities concentration, but also the big built environment, transportation infrastructure, cultural and recreation activities, the PAULISTA image is linked to the city image. Moreover the society is aware of PAULISTA region, as it can be seen by the actions of different associations, involving local entrepreneurs who want to preserve the locational qualities. Although restricted, it acts like a control device to the speed of decaying, as a result to the diseconomies, usual in such concentrations[8].

The main observed diseconomies were the heavy traffic and the lack of parking lots (that can be compensated by the availability of enough public trasportation).

[8] Regions like that are very deprived of residencial áreas. On weekends, it rouses the emptyness of the streets, that could be easely degradated. On the other hand, the region has got many cultural centers where many events take place.

- **BERRINI**

The district office spaces started being occupied in 1975 as well as VILA OLÍMPIA region. According to BRAKTE, 1985 apud NOBRE, 2000, the land high prices of the settled business centers prevent from developing buildings for small firms. As an early developer in the region, in order to reach that target market, he mentioned that his firm began to search for altenative areas, according to the following premises: land prices, road system and accessibility, nearness of the residential districts and the lack of big buildings in the neighbourhood.

Although it was a wet land, its positioning was quite good, allowing the communication with many different important sites in the city and with its suburban areas, like the industrial cluster in ABC[9] and the central state cities. Another important aspect was that of the nearness to high-income residential districts, as Chácara Flora, Alto da Boa Vista and Brooklin; it would certainly be an important attraction point to the enterprises location.

The location started attracting not only new office spaces but also big firms, offering a great deal of office areas (NOBRE, 2000). Nowadays, its stock represents 7.7% of the total stock of the city. It has grown 270% in the last 10 years, from 224,000 sqm to 605,000 sqm. A 87-building cluster is spread inside its limited area. The biggest "A" and "AA" stock of the city – 19% - is there (Table 1).

In 1998, there were 3 big enterprises there; today the number has doubled.

Many landscapes interventions are being introduced there, such as the central road sidewalk of the main avenue. Nevertheless, its original plan was not conceived as an office building area. It can be seen by the allowed rate between the built and the land area, stated not bigger than 4. High-tech buildings, like Bank Boston and Grand Hyatt Hotel, compose half of the settlement.

Lately, the hotel supply has been enlarged. From 2000 to the beginning of 2004, 7 new hotels have opened, three of them considered as top city hotels. Likewise, some of its restaurants are among the best ones[10].

The service structure supplies not only the office users, but also the neighbour districts. It can be shown by the existence of 3 different shopping malls in the nearby area. (Table 2)

According to Jones Lang LaSalle report, in the 90's, 85% of the public investiments in urban road network and infrastructure helped the area, directly or undirectly.

These days, the public transportation is not enough yet; as new bus lines are still missing, chartered buses are helpful. The new metropolitan train line is still set apart; as it is not linked to other kind of transportation, it is still underoccupied. (Table 2)

The traffic flowing problems are getting worse as the commercial occupation grows not only in the BERRINI avenue itself, but also in the surrounding areas. As an example, only the World Trade Center (WTC) building plus the Centro Empresarial Nações Unidas

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[9] An important industrial cluster in São Paulo Metropolitan Area.

[10] According to the guide 4 Rodas Brasil, ed. Abril, 2004

(CENU) correspond to 250,000 sqm of office space with more than 15,000 users, almost all of them driving their own cars[11].

- **CSA**

In CSA area, the office market started in 1985. At that time, the land-use of those urban areas was composed by medium to low-income residences, and a quite big area of industrial buildings as well (NOBRE, 2000).

In the beginning of the 80's, Richard Ellis was in charge to the marketing consultancy of the São Paulo Office Park, the first modern office building in the area. Based on the north-American concept of the *office parks*, it consisted of short buildings surrounded by treely parking lots. This 70,000 sqm-development was supposed to have about 10 to 15 commercial building units (NOBRE, 2000).

The innovative feature was that each building would house only one enterprise, thus the design could match the users' needs, and also in a 10-year long lease contract (NOBRE, 2000).

Many famous Brazilian architects were responsible for the unusual design, contributing to the quality of the whole architectural and landscape design (NOBRE, 2000).

The area now has 55 buildings but the trends in its evolution are not so strong, as far as the land-use is too restrictive.

Its environment is the most treely and not verticalized when compaired to other areas. About 25% of its stock is less than 10-year old.

The urban infrastructure of the region is the less updated if compaired to other areas: there are 3 hotels but no top restaurants are found in there[12]. (Table 2)

The transportation structure is even poorer than that of the BERRINI area, as far as it is still more distant from the CBD. The buildings were thought considering that the users were all coming by car. The CSA accessibility has become damaged as far as the population in MARGINAL and BERRINI grows, because it depends on the same access roads. One of the avenues is plenty of bus lines and the other by heavy car traffic. The train line is that of BERRINI, suffering from the same problem of unlinkage.

Comparison among centers

The **image** of PAULISTA area can be qualified first by its office users notoriety. Nevertheless, the other centers showed greater numbers in what relates to the top 100 enterprises (Graph 1), although the quality, technology and majesty of its building architecture helps its good **image**.

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[11] According to Jones Lang LaSalle, 2004.

[12] According to the guide 4 Rodas Brasil, ed. Abril, 2004.

50% of the PAULISTA total stock is older than 20 years, but BERRINI has got the most appealing set of buildings, due to its volume and technological design.

The infrastructure of the region also acts on its **image**. Inside PAULISTA area there are 5 out of 12 city upperclass hotels[13], and also many cinemas, schools, cultural centers, the MASP (Art Museum of São Paulo), restaurants and travel agencies. In the other centers, the structure is not that rich, due to the fact that the majority of its population is composed by people who work there, as far as the neighbour districts are not so crowded.

It is curious how big is the number of courier services in BERRINI and CSA; it suggests that they try to compensate the accessibility difficulties in there.

In BERRINI area, the first scale economy happened at the time the area was being occupied by short buildings, designed to small firms. Then, beginning with an earlier structure (train station, shopping malls), the region enhanced its attractiveness to greater developments[14].

The accessibility problems found in both BERRINI and CSA regions are related not only to the structure, but also to their geographical placement inside the city. As the CSA center is not as big as BERRINI, the problem there is not such relevant; the BERRINI concentration attracts much people but its lack of centrality raises difficulties, as the São Paulo road network and trasportation system are both designed from downtown area.

The accessibility among the 3 centers enhance the **face-to-face contact**, as far as they can be considered like different parts of the same office center network, composed along by the axes PAULISTA-FARIA LIMA, and FARIA LIMA–BERRINI, the last one close to CSA. Considering BERRINI and CSA stocks altogether, they help **face-to-face contact**. The same occurs with the number of firms in PAULISTA. Nevertheless, the differences on the scales can be seen through the dynamics inside each area.

The arouse **synergy** due to the concentration can be seen by the great number of buildings inside the different areas. PAULISTA presents the greatest concentration with 190 buildings, against 87 in BERRINI and 55 in CSA. The Paulista concentration has been already mentioned. An interesting point is that BERRINI and CSA present equivalent areas according to its size, although the land-use allows different utilization rates in each one of them.

Performance market indexes and locational features

The PAULISTA area keeps its attractiveness, maybe with a differentiated occupational profile, but still presenting a high occupancy rate. Its vacancy rate quotient is above those observed in the other centers (Graph 8), what can be explained by its image and urban structure, by far better than the other two regions. Its low vacancy rate is probably due to the changings in its occupational profile, which tends to strengthen even more.

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[13] According to the classification of 4 Rodas Guide.

[14] The same phenomenon can be observed in FARIA LIMA region.

In what relates to BERRINI area, its own expansion attracts improvements in the urban infrastructure, from the simplest ones like travel agencies, to those more complex like the on-developing project of a new bridge over the river. It can be inferred that its structure will become even strongest, not only by its existing inventory, but also by the on going stocks.

The late changes due to the renewal of the stocks can be observed in (Graph 10), by the fluctuation in the vacancy rate quotient. Hence, the best measure to analyse the center attractiveness is that of the gross absorption. The "C" stock shows to be steady and under the city average; considering that this stock is the oldest one in the area, we can state that this market is already settled.

The absorption in the region is the most significant in the city, what can be explained by the last 10-year new stock. But recently, the São Paulo office market is experiencing a high vacancy rate time with a reducing in gross absorption, which endangers new developments.

In 2003, CSA area has got a positive gross absortion after two years of decreasing in its occupancy rate, alike the rest of the city. The infrastructure supply expanded as the center increased in 36% during the analysed period. In 2002, when the stock area was 294,000 sqm, the number of hotels was 3, the same observed in BERRINI in 1995, when its stock was 291,000 sqm. (Table 2)

According to (Graph 10), with the increase in relative vacancy rate since 2001, the "AA" market was propitious at that time. The cyclical movements observed in a 2 to 3-year long periods can be explained by a few firms occupancy, although big ones. The unsteady behaviour could represent the movement of only one firm, instead of a loss in the center attractiveness. As far as the region presents quite a specialized occupation (industrial sector responds to 29,43% of the office use) [15], the flexibility in what relates to changes in the demand is restricted.

CSA area suffered from external economies and diseconomies during the BERRINI development. In one hand, its infrastructure grew and it became closer to the office concentrations but, on the other hand, shared the nuisance of the traffic jam. Nevertheless, both the image and the environment of an *"office park"* are maybe lost, what can damage its attractiveness to that market previously served.

Migration and competition trends among regions

On comparing both the graphs 5 and 7 ("A" and "AA" gross absorption and vacancy rates per regions) to the positioning of the selected biggest firms, some migration movements among areas are visible, mainly in 2001 and 2002.

In 2002, while 9,000 sqm became vacant (about 5% of CSA total stock), the Berrini absorption was 15,000 sqm. But those movements are not significant at all in order to for

[15] Source: Jones Lang LaSalle, 2004

recognize trends or responses in what relates to choices among regions, as the occupants ought not to be the same.

But according to the Jones Lang La Salle report[16], in 2003, 80% of the leased area in corporate buildings came from firms changing their address. Thus, we can conclude that the competiteveness among regions is more related to the attractiveness of the firms, the so-called corporative market. The migrations are due to the searching for best quality of the building itself (corporate buildings). Nevertheless, the profiles of the other markets ("A", "B" and "C") are more flexible in what relates to high-tech building designs, making evident the importance to the locational features.

It can be noticed that the PAULISTA center, along the 10-year period, keeps its vacancy rate quotient steadily, while BERRINI experimented a 37% break in the last 5 years (1999-2004) when compaired to the past period (1994-1998), in average terms, and CSA increased in 40%.

Because of it, contrary to its decay expectations, PAULISTA shows to be an attractive region, showing the lowest vacancy rates in the city. Even if the big firms move to more modern buildings, new users will occupy such a location, qualified due to its well-defined business center image, with a sophisticated urban infrastructure and privileged urban tissue insertion.

At BERRINI, as long as the structure and the neighbourhood have grown (support services, its urban infrastructure and the increase in its stock), it became more attractive to the office users.

CSA showed the worst occupation. Some features can be considered responsible for the increase in its vacancy rate. The first one is the non-diversified occupational profile. Another aspect could be that of being affected by the late growing in Marginal area; that could be related more to diseconomies than to agglomeration economies. Besides, its land-use is not able to promote its expansion, acting on its attractiveness, as we could see that the office and services concentration contributes to the location.

We can overcome the original objective and consider that the market tend to change gradually as it structure will grow at the same speed.

V. FINAL REMARKS

Real estate developers appeared to be agile enough to attend the changes in users' needs, offering modern buildings, with alternative locations and prices.

The office users' profile also changes along the time, and so does the agglomeration needs. The motives to the face-to-face contacts change as well: what was firstly explained by the lack of communication (fisical exchange needs), now is explained by its complexity (communication technology).

[16] "Perfil Imobiliário – Balanço 2003". Available at: www.joneslanglasalle.com.br

The dispersion trend occurs but its constrained by both the physical contact need, the locomotion difficulties (traffic jams) and also the need of the connection among centers[17].

We can state that some of the features that qualify a location may generate attraction forces to the beginning of a new center, while others derive from the agglomeration. Anyway, the features become more noticeable as the office concentration grows.

The most important factor on propelling a center settlement is that of an original small center, able to generate the firsts scale economies, close both to the residential districts and to the useful locations in the city, and with available land at compatible prices. In addition, the influence of social and political factors may intensify the trend in occupation, as happened in BERRINI.

The image can be a prior lure to a location, related to social, cultural or environmental factors (urban equipments accessibility like schools, museums, parks and historical buildings). Nevertheless, it can be also created, through architecture and building facilities. This is just the appealing of BERRINI area; in contrast, the PAULISTA image is related to the 70's industrial development, followed by the financial sector growth; anyway, reinforcing the idea that the image must match its desired target market.

The locational quality features derived from the agglomeration are the scale economies (expressed by the services offers) and the infrastructure.

On observing the São Paulo office market, we can notice that the flux structures evaluate according to the center dimension. It means that the complexes, expensives and impacting structures depend on how many people they will help. That is why their responses are not so quick, like those ordinary structures, easy to be implemented.

It was noticed that, in a 10-year long observation, is not possible to recognize a complete life cycle for the most complex attractive locational features, what suggests the needs of longer observing periods. Nevertheless, we were able to identify behavioural trends that can demand long or short cycles, according to the structure complexity, like the net road system or the image.

[17] What means that is natural the arise of new centers when linked.

VI. TABLES AND GRAPHS

ENVIRONMENT	Paulista	Berrini	CSA
Age and importance of each center inside São Paulo market			
Age (in years) (A)	>30	>20	>20
Number of buildings (B)	190	87	55
% of total "A"and "AA" city stock (B)	14%	19%	11%
Number of firms among the biggest 500s (D)	9	6	5
Open air areas and quality of surrounding building features			
Green areas and free space	1 park	6 squares	1 square
% of total "A" and "AA" region stock (B)	19%	54%	61%
Stock younger than 4 years	91,513	135,176	29,795

(A) Age from the previous 200,000 sqm total stock formation. Source:NOBRE (2000).
(B) Source: Jones Lang LaSalle
(C) Source: guia de ruas de São Paulo, 2004
(D) Taking adapted from (NOBRE, 2000), and Listas OESP.

Table 1 – Quality of the center environment

URBAN INFRASTRUCTURE	Paulista	Berrini	CSA
Supporting services (number)			
Hotels (A)	14	12	3
Bars and restaurants (B)	79	8 + (14)*	2 + (14)*
Post offices (A)	5	1	1
Travel agencies (B)	29	10	6
Courier services (B)	9	20	11
Fitness centers (B)	7	6	3
Shopping Malls (B)	1	3	2
Transports			
Taxi stands (A)	7	4	2
Bus lines (A)	29	20	9
Subway stations (A)	3	0	0
Train stations (A)	0	1	1

* restaurants located inside shopping malls nearby the area
(A) inside the center area
(B) inside 1 Km radius.

Sources: (1) www.apontador.com.br; (2) guia de ruas 4 rodas, 2004;
(3) guia 4 rodas Brasil, 2004.

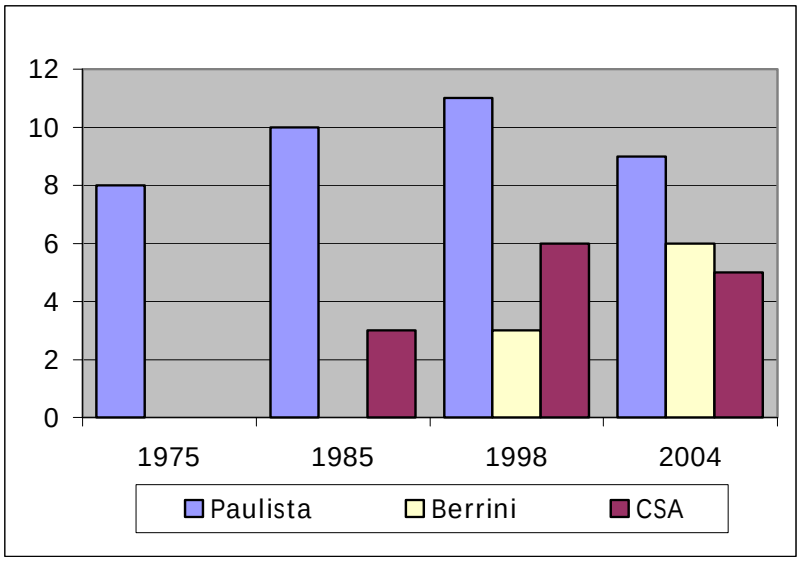
Table 2 – Current infrastructure

ACCESSIBILITY	Paulista	Berrini	CSA
useful locations			
		Distances*	
Cumbica Airport	30 km	36 km	40 km
Congonhas Airport	9.4 km	6.0 km	6.4 km
*Other big centers***:*			
Downtown	4.0 km	11.4 km	13.9 km
Paulista	-	8.5 km	11.3 km
Berrini	8.5 km	-	3.8 km
Faria Lima	5.6 km	4.9 km	8.4 km

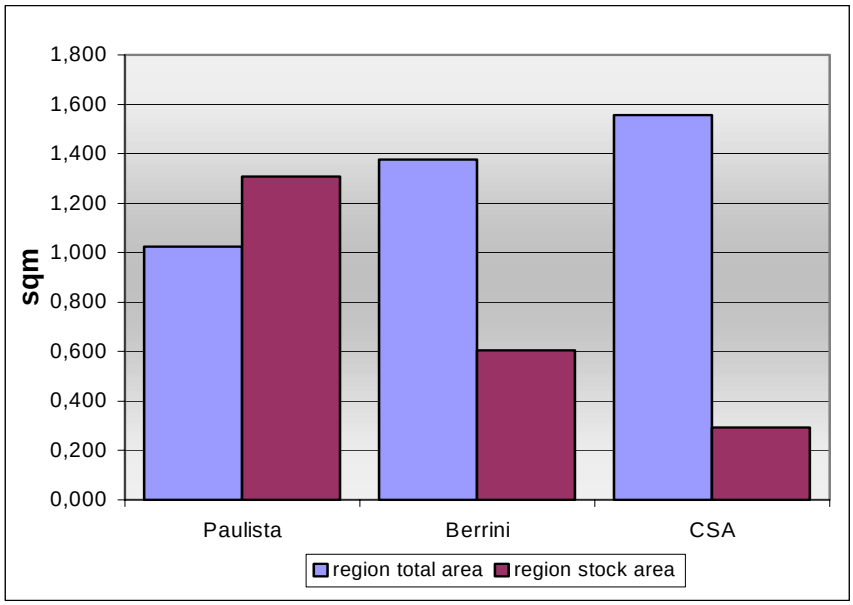
*Distances through main streets. Source: www.apontador.com.br

**The four biggest business centers (in sqm)

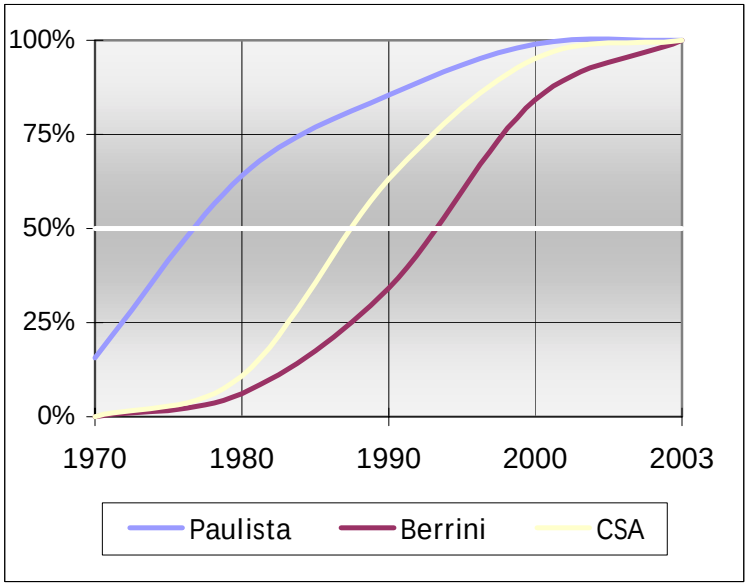
Table 3 – Accessibility



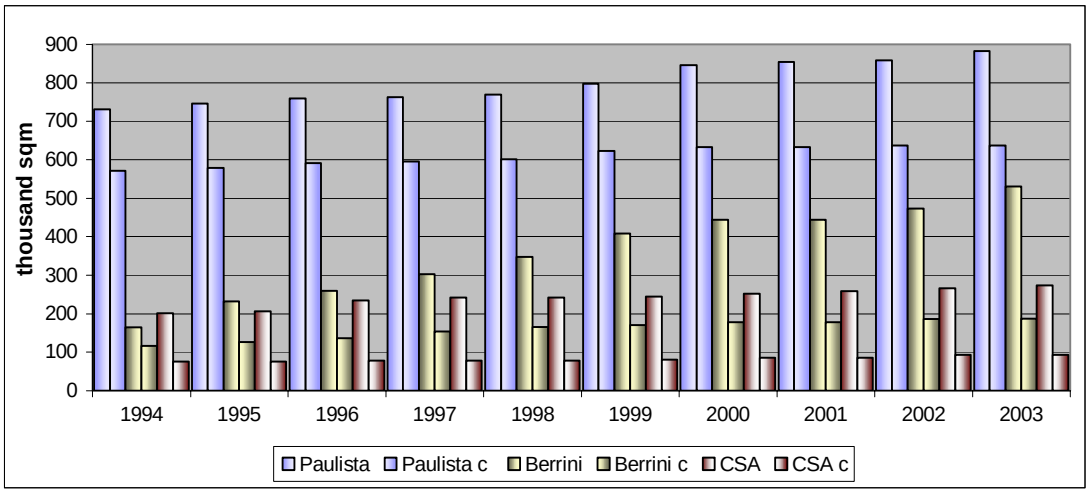
Graph 1 – Location of the biggest firms.
Source: adapted from NOBRE (2000) and Guias Oesp.



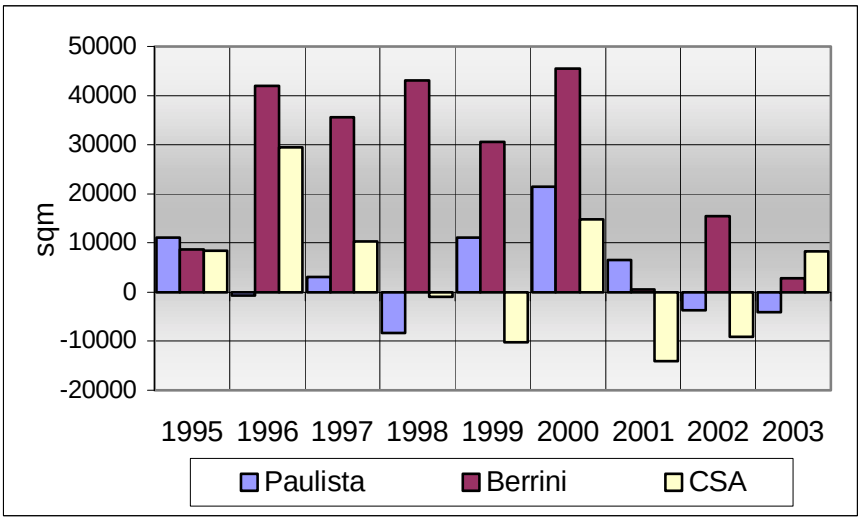
Graph 2 – Concentration in the centers.
Source: CERQUEIRA (2004) and Jones Lang LaSalle.



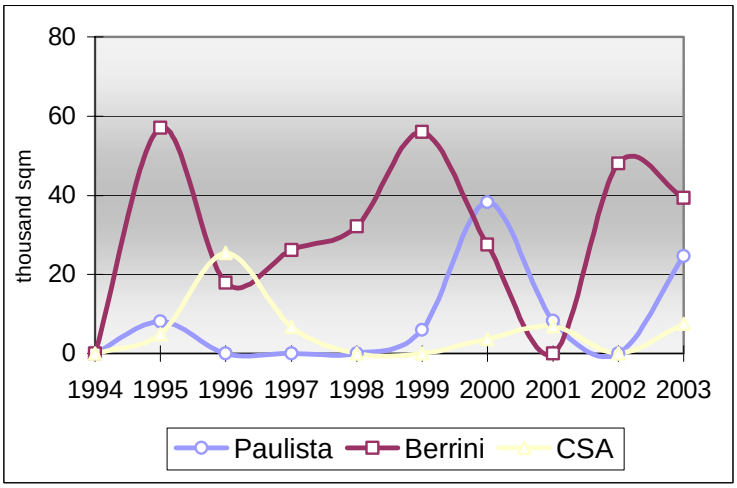
Graph 3 – Stock age. Source: Jones Lang LaSalle.



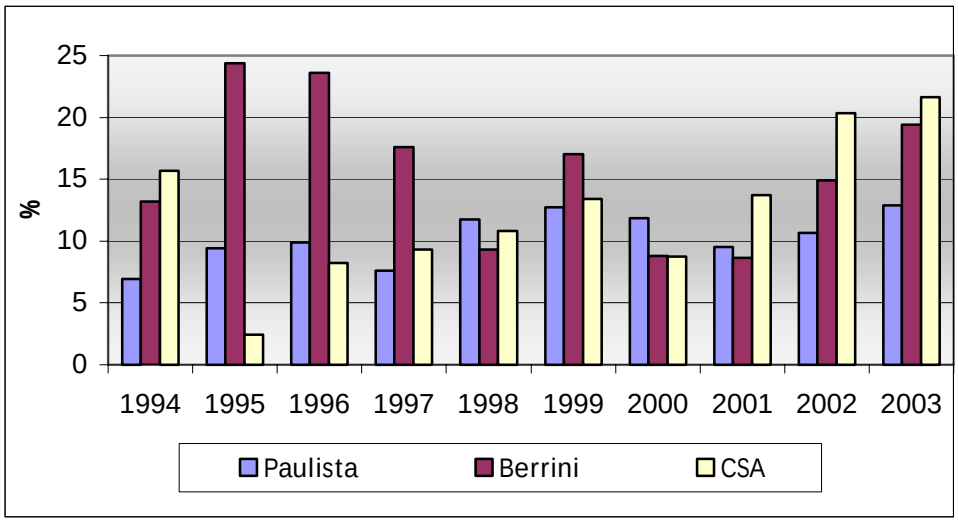
Graph 4 – Stock evolution by region and by class. Jones Lang LaSalle.



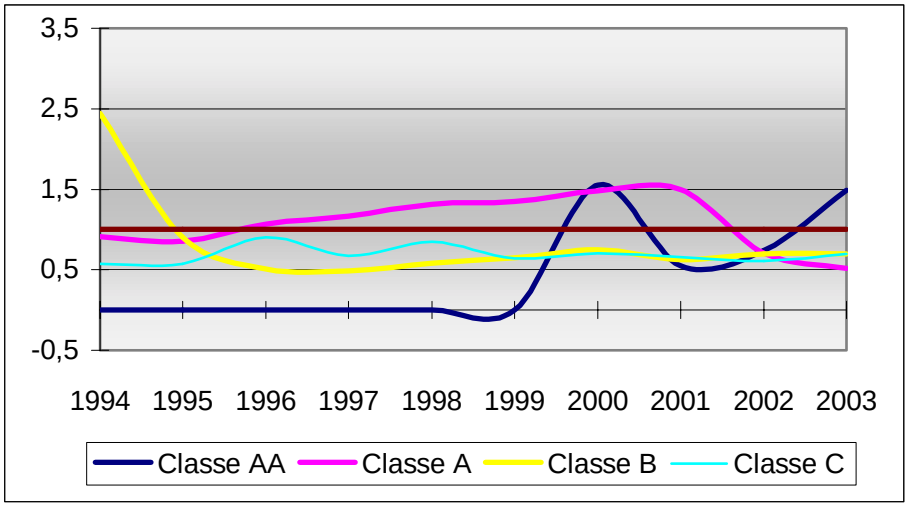
Graph 5 – Gross absorption A and AA. Source: Jones Lang LaSalle



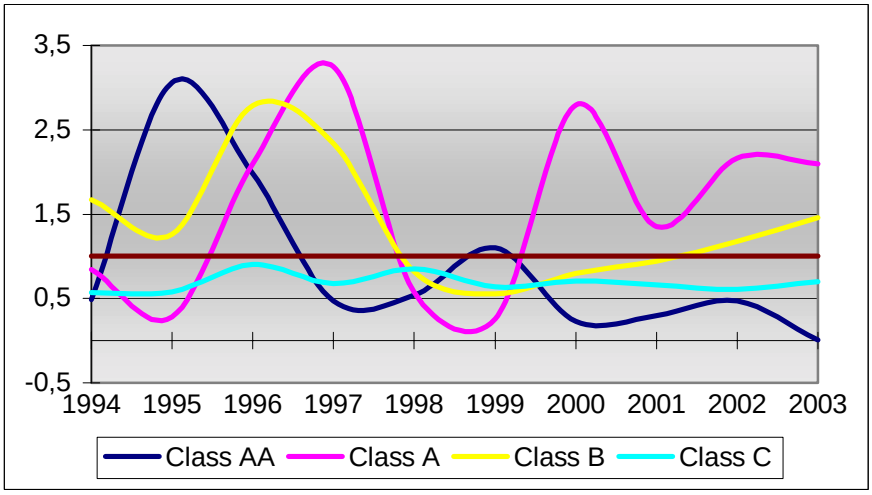
Graph 6 – New stock A and AA. Source: Jones Lang LaSalle



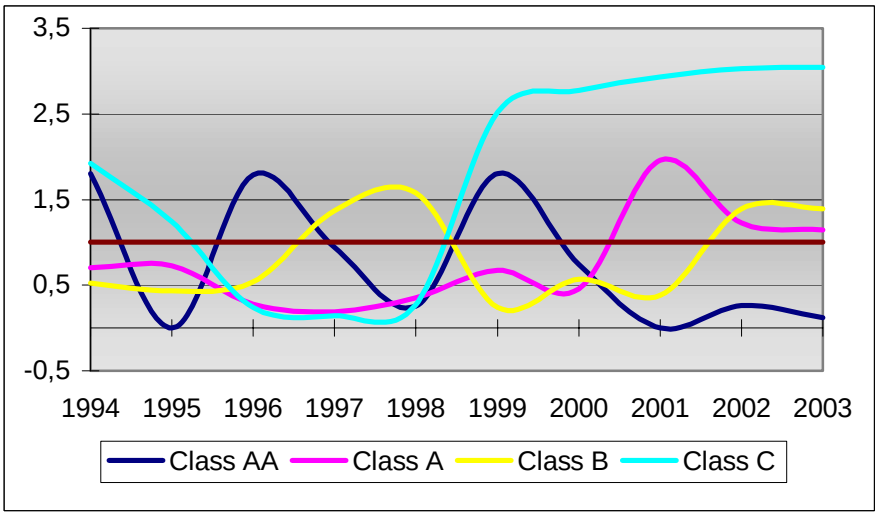
Graph7 – Vacancy rate per region. Source: Jones Lang LaSalle



Graph 8 – Vacancy rate quocient - PAULISTA. Source: Jones Lang LaSalle



Graph 9 – Vacancy rate quocient - BERRINI. Source: Jones Lang LaSalle



Graph 10 – Vacancy rate quocient - CSA. Source: Jones Lang LaSalle

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