Universität Zürich[UZH]

Masterthese
zur Erlangung des
Master of Advanced Studies in Real Estate

Global Real Estate Investment in Latin America
Portfolio Diversification Strategies and Urban Development

Verfasser:	Miguel Hernandez Cammardella Kalkbreitestrasse 134, 8003 Zürich hernandez@miguelhernandez.eu +41 76 220 93 80
Eingereicht bei:	Mihnea Constantinescu, Clinical Associate Professor, NYUSCHACK Institute of Real Estate
Abgabedatum:	12.08.2013

Table of Contents

List of abbreviations and acronyms

AMBA	Área Metropolitana de Buenos Aires
AMS	Área Metropolitana de Santiago
AGBA	Aglomeración Gran Buenos Aires
BA	Buenos Aires
BRIC	Brazil, Russia, India, China
BRT	Bus Rapid Transport
CASEN	Caracterización Socioeconómico Nacional
CB	Conurbano Bonaerense
CBA	Ciudad Autónoma de Buenos Aires
CONAMA	Commission Nacional del Medico Ambiente
CPI	Corruption Perceptions Index
GBA	Gran Buenos Aires
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GNI	Gross National Income
IMF	International Monetary Fund
INDEC	Institutor Nacional de Estadística y Census
INE	Institutor Nacional de Estadísticas Chile
LAC	Latin America and the Caribbean
LP	Linea de Pobreza
NATM	New Austrian Tunneling Method
NBI	Necesidades Basics Insatisfechas
OEDC	Organization for Economic Cooperation and Development
PNUMA	Program de las Naciones Unidas para el Medico Ambiente
PPP	Purchasing Power Parity
PQMB	Program Quiero Mi Barrio
RMS	Región Metropolitan de Santiago
TFP	Total Factor Productivity

List of illustrations

List of tables

Executive Summary

Latin America and the Caribbean is the most urbanized developing region of the world. Therefore, urban development plays a decisive role in terms of economic growth and wealth in this region. The rapid urbanization process of the last decades caused infrastructural and environmental problems, such as air pollution in Santiago de Chile and water pollution in Buenos Aires, as well as transportation infrastructural deficits in both cities. Today, the region is still growing. Buenos Aires and Santiago de Chile, both with their surrounding areas, account for most of their national populations', and both cities are the most important source of their countries' economical strength.

This thesis focuses on these two cities' qualities for possible real estate investments from foreign institutional investors and urban development. It also discusses portfolio diversification strategies, such as location selection strategies (e.g. going local or global) or property selection strategies (e.g. location or tenants' quality). It will turn out that new markets with good development prospects can provide investment opportunities that the domestic market usually cannot offer, in particular with regard to portfolio diversification. Today, growth in the centers of Buenos Aires and Santiago is hampered by urban as well as environmental problems, while the agglomerations of both cities grow rapidly. At the same time, Argentina's and Chile's current GDP growth outperforms that of most advanced economies. As a consequence, poverty is decreasing rapidly in what is now called the "Latin American decade"[1].

To summarize, Chile is developing well economically, and an investing in Santiago's real estate market is viable. There the office and the housing markets offer good investment opportunities, as the economy improves, a young and well-educated work force is sought after, and policy makers are working on their major challenges regarding infrastructure and pollution. At present, foreign direct real estate investments of institutions are not feasible in Argentina. Political problems, inflation, and currency control, as the US Dollar has traditionally been the currency for real estate transactions, are negatively affecting the real estate market. Despite the political problems, the country's economy is developing well, and Argentina might become an interesting market for real estate investments in the near future. Therefore, the country's development should be closely observed. At present, diversification possibilities are limited to Chile's real estate market.

[1] World Economic Forum (2011), p. 34

1 Introduction

1.1 Motivation

Latin America is more urbanized than other developing regions of the world (Illustration 5). By 2025 almost 85% of the population of Latin America will live in cities. Today its *top ten cities*[2] already have a total population of over 95 million and the cities continue to grow at a fast rate. The large cities, which are affected by this rapid development, must adjust their urban structures to meet this new challenge. This brings about both new problems and opportunities. The rising consumer class, which carries more wealth and changes to the cities' urban and social structures, could significantly influence the real estate market and play a key role in future real estate investment strategies.

Since the risks of investing in emerging markets are considerably high, an effective risk reduction strategy without a negative impact on the rate of return is desirable.

This Master's Thesis analyses two of the top ten cities of Latin America.

- Buenos Aires: One of the largest city of *the top ten cities*
- Santiago de Chile: This city represents the smaller cities of the *top ten cities*, but nevertheless an important Latin American city

Illustration 1: **Latin America's 198 Cities with a Population of 200'000 or more**

Source: Cadena, A. (2011), p. 7

[2]This group consists of Latin America's ten largest urban areas based on their GDP in. The four megacities (populations of 10 million or more) Buenos Aires, Mexico City, Rio de Janeiro and São Paulo and the middleweight cities (population of 200'000 to 10 million) Bogotá, Brasilia, Caracas, Lima, Monterrey and Santiago de Chile.

1.2 Objective

How will the development of urban structures affect the real estate investment market? Is a portfolio diversification strategy possible, which aims at investing in different areas depending on their stages of development? The result could be an answer to how a few of the most important Latin American cities' populations can affect the real estate market with their future development. One potential outcome would be the accumulation of sufficient information for correct market selection.

This Master's Thesis has the aims to analyze the different areas' socio-spacial, environmental and urban stages, identify chances for different real estate branches, and suggest possible investments for the future for foreign institutional real estate investors.

1.3 Delineation

This Master's Thesis focuses on the two Latin American cities of Santiago de Chile and Buenos Aires, both with their surrounding metropolitan areas. Each city is confronted with geographical, environmental, social, economical, structural and political challenges.

The focus lies on the urban development and the population prospects in the cities of Santiago de Chile and Buenos Aires, as well as the market situation of each, with its risks and challenges for a possible real estate investment from a foreign institutional investor's point of view. With regard to these two cities, the World Bank released the Enterprise Survey 2010, which gives us an insight into the challenges companies are facing with the current situation in each country.

1.4 Approach

This Master's Thesis is a drop-down analysis resulting in a recommendation for possible real estate investments in the analyzed cities. It uses primarily data from international and national institutions and the countries governments. Portfolio diversification could be achieved by investing in different developing areas of Buenos Aires and Santiago de Chile. This study will give an overview of the cities' development and their urban context. Although political difficulties are evident in Argentina, this thesis will analyze both cities with the same methodology and compare their strengths and weaknesses.

2 Portfolio Diversification Management

'Diversification' is a rather generic term. This chapter focuses on the theoretical background of portfolio diversification management in real estate. In order to diversify, it is necessary to understand the entire real estate portfolio's structure. In this regard it shall be noted that – contrary to common intuition – even global portfolios can be badly diversified.

Long before Harry Markowitz published his paper on portfolio theory in 1952, people tried to diversify their risks. This is also called intuitive diversification. In order to reduce risk, investing in different assets that do not correlate is desirable. The important question is: Which markets do not correlate and bring about the effects of diversification allowing investors to avoid excessive exposure to losses in the event of a market downturn?[3] Some combinations of assets are better than others. Here, we focus on real estate and the differences of various real estate characteristics to gain a less risky real estate portfolio with high returns.

There are various reasons to invest in global real estate. If the investor's own country has a developed real estate market with low returns, the opportunities in emerging markets can be more promising. An investment in various foreign countries can provide diversification benefits because not all markets may behave equally worldwide. A third reason to invest globally, especially in emerging markets, is the development expertise that a superior portfolio management can bring to that market.[4] As the world becomes more global, local market knowledge increases. This is particularly the case in emerging real estate markets like Brazil where, in recent years great progress has been made as international real estate investors have entered the market, and competition has increased.

Markets are not predictable and up- and downside risks exist. What we can work with is that markets usually do not act in a synchronous fashion - a fact we can use for diversification. When we diversify, we try to expose ourselves to different segments of the property market and different economies. Countries react differently, as they have different economic bases. The Netherlands, for example is a service economy while

---

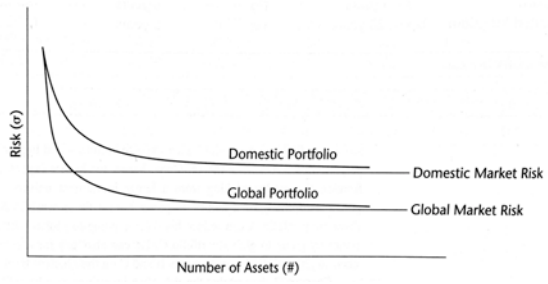
[3] cp. Geltner D. M. et. al. (2001), p. 531
[4] cp. Geltner D. M. et. al. (2001), p. 633

Canada is a mining and agriculture economy. International diversification can be measured by studying correlations. If the fundamentals that drive real estate property returns, like GDP growth, interest rate, and Consumer Price Index, show low international correlations, the correlation of the different real estate property markets is weak, and therefore a strong diversification potential is evident.[5]

How can we classify diversification in real estate portfolio management? Diversification is one of the risk reducing factors in an investment process. In order to structure the components of risk, we split risk into *market risk* and *specific risk*. If our assets only relate to the local market, we can only get the maximum diversification within our local investment possibilities, which can have limited potential compared to the international market. By expanding the investments to the global market, the diversification effect is higher and, hence, the risk lower – overall the market risk declines. If assets are priced in integrated markets, the risk will be on the lower line of Illustration 2 and expected returns will be related to the global *systematic risk*. If they are priced in segmented markets, the returns are in line with the risk of the domestic market, resulting in a higher risk with higher returns. An investor by who is able to avert this market segmentation will get a better investment by going international.[6]

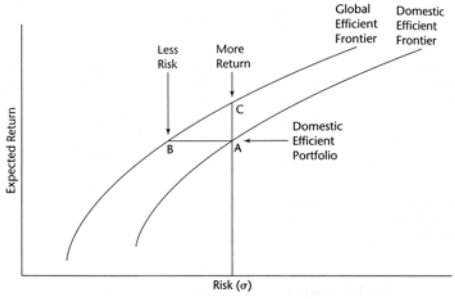
A downsize potential could be reached by investing globally, as Illustration 2 shows. If we choose the global market for an investment, we can reach more markets that do not correlate with each other and result in a lower risk with the same expected return, as Illustration 3 exhibits. The global efficient frontier dominates the domestic one, with a higher return at the same risk or the same returns with lower risk.[7]

Illustration 2:
Domestic and Global Market Risk



Source: cp. Geltner D. M. et. al. (2001), p. 644

Illustration 3:
Domestic vs. Global Efficient Frontier



Source: cp. Geltner D. M. et. al. (2001), p. 644

[5] cp. Geltner D. M. et. al. (2001), p. 641
[6] cp. Geltner D. M. et. al. (2001), p. 643-644
[7] cp. Geltner D. M. et. al. (2001), p. 642

The diversification effects depend on the international correlation of the assets. In the real estate market each object is different and thus diversification potential is high. Some of the most important criteria for a good investment are the location of the property and the influencing conditions. As a result, the analysis of a possible investment goes through different steps and scales, including *the global market, national market, local market and property*, as shown in Illustration 4. We cannot exert influence on global markets' risks. Globalization is taking place and the interdependency of regional markets and international development is getting stronger. The world market cycle cannot be influenced. Nevertheless, where a diversification of the systematic risks is not possible, we try to implement the risks into our portfolio management, for example, by using the adapted capitalization rate and the rate of discount. Changes in world employment rates and industrial growth are other factors that influence the global economy. Analysis of the national market in the fields of employment, demographic trends and the loan structure, helps us classify the development. Together with national taxes, regulations and inflation, the national market can be assessed. Regarding the local market, the relevant criteria for location selection are the aforementioned change of the working population, its composition in age and income, which can differ depending on a company's location, whether it is in an urban or rural area. Construction costs depend on the availability of work force and their quality. Local differences in vacancy rates and the structure of the population's needs for rentable space are related to the local culture. Chile and Argentina are countries that used to have a small number of tenants and more land and real estate owners, as the World Bank Survey 2010 confirms (4.3.6 Real Estate Market). More specifically, property characteristics of a single investment are *non-systematic* facts that contribute to diversification. Physical characteristics such as quality, dimension and age of the property, as well as the specific location with its qualities, such as a good infrastructure are relevant points on the property level. Rental cash flows and their volatility are driven by local factors and the specific details of rental conditions. An example of diversification through a contract policy could be to mix retail contracts with and without a linked turnover in order to diminish risk.[8]

[8] cp. Geltner D. M. et. al. (2001), p. 641

Taking a closer look at Santiago de Chile and Buenos Aires, these different steps and scales could help us, together with the actual portfolio composition, to find an adequate investment. Good diversification is difficult to attain as the number of good properties for the specific investor's portfolio is usually limited, division is small, and investment in one building is high and cannot be easily subdivided as shares. Furthermore, buying and selling property is a slow process compared with that of shares and could thus be a disadvantage in attaining the perfect diversification. On the other hand, the property owner has more influence on the return of his investment than a shareholder does.

Illustration 4: **Diversification through Location Selection**

Global Market	**No possible diversification (systematic risk)** Through globalisation analogue regional developments and dependency from the world market affect the investment - world market cycle - risk premium (e.g. capitalization rate) - maturity structure of the (e.g. rate of discount) - industrial production (e.g. increasing employment)
National / Regional Market	**Possible diversification (non-systematic risk)** - basis for employment and an increasing work force - demographic trends - national taxes and regulations - loans and loan growth - inflation
Local Market	- basis for employment and an increasing work force - demographic trends - loans and loan growth - vacancy rates / efficiency of space use - branch trends / rental branches - construction costs - local taxes and regulations
Property	- physical attributes (e.g. quality, dimension, age) - location / location quality - rental contracts (e.g. tenants' quality, turnover linked or not linked) - property management expertise - financing (e.g. loan to value)

Source: cp. Pagliari, J. L. (1995), p. 1017

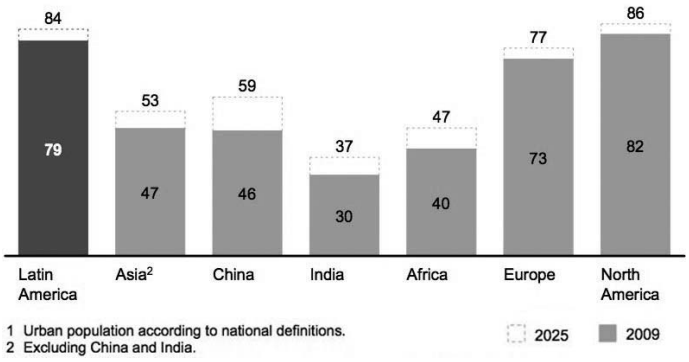
3 Structural and Political Overview

3.1 Urban Structures

In 2011, Latin America had 198 cities with a population of 200'000 or more. 45% of Latin America's population lives in these cities, where more than 60% of its GDP is being generated.[9]

As shown in Illustration 5, in 2025 almost 85% of the population of Latin America will live in cities. This increase in population will bring a new labor force of 50 million people into the market by 2025.[10]

Illustration 5: **Population Living in Urban[1] Areas 2009 and 2025**



Source: Cadena, A. (2011), p. 1

In Argentina, around 30% of the population lives in Buenos Aires and contribute more than 50% of the national GDP. Another 17 large cities account for 25% of the national GDP. Therefore, a sustainable urban structure can support a sustainable economical growth. The Metropolitan Region of Santiago accounts for about 40% of Chile's population.[11] The country has eight major cities, where 55% of the national population live, and which account for 65% of the country's GDP. *Santiago*, *Gran Concepción*, and *Viña del Mar-Valparaíso* account for more than 45% of the population and about 55% of the country's GDP.[12] A populations' distribution in regions can be seen in Appendix 1.

---

[9] cp. Cadena, A. et al. (2011), p. 1
[10] cp. Cadena, A. et al. (2011)
[11] cp. INE (2012a)
[12] cp. Cadena, A. et al. (2011), p. 10

3.1.1 *Urban structure of Buenos Aires*

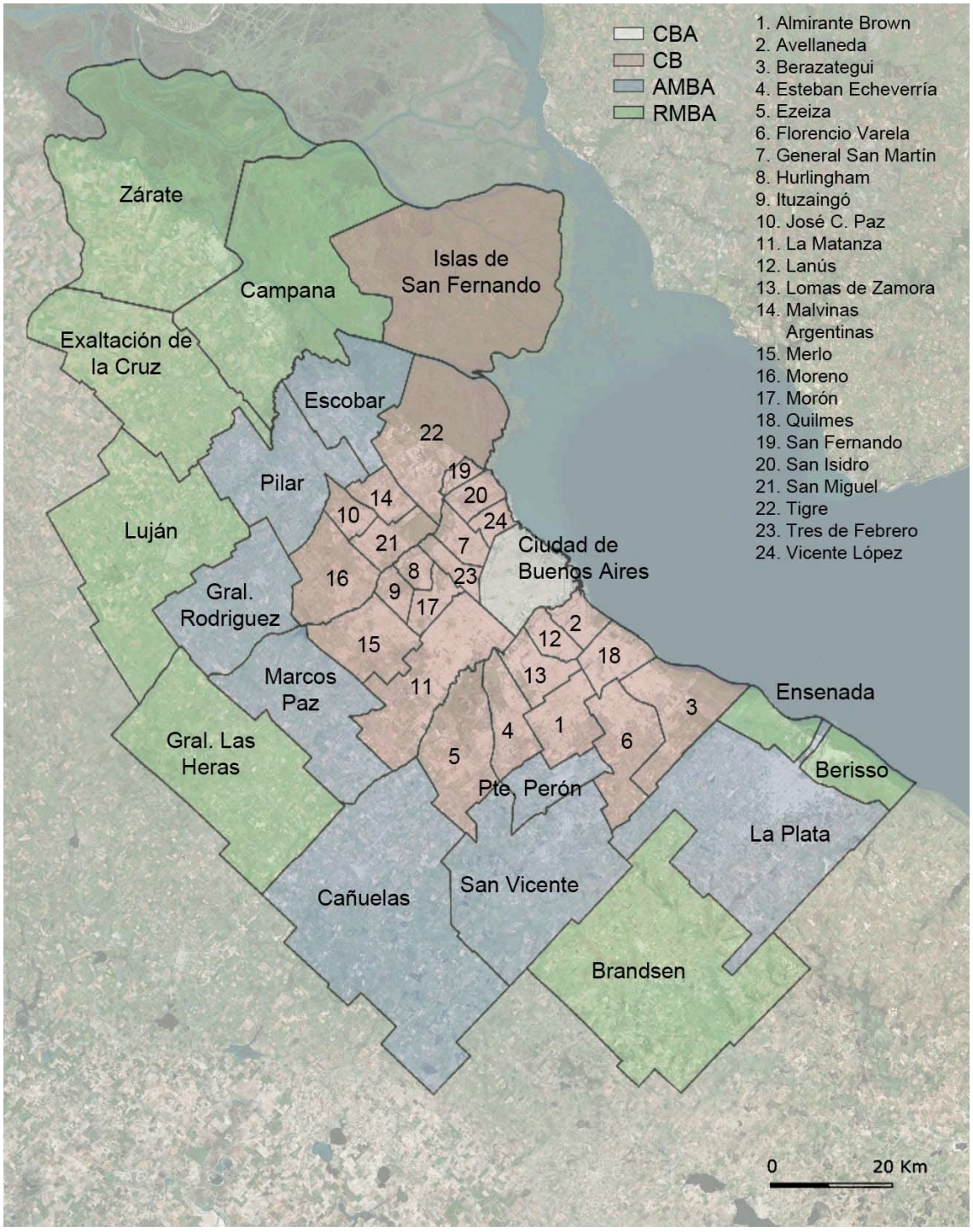
Argentina is a federal state consisting of 23 provinces and the CBA (Ciudad Autónoma de Buenos Aires). The provinces are made up of different municipalities (*partidos*), which are each governed by their own constitutions and laws. These municipalities and the Autonomous City of Buenos Aires (which is formed by 48 *barrios*) act autonomously in terms of administration and legislation.[13] For instance, the national government, the Autonomous City of Buenos Aires, the province of Buenos Aires and the *partidos*, manage bodies of water (3.2.1), which are of particular concern to the municipalities. Due to a high population, some *partidos* could play an important role in an urban planning process. Nevertheless, as the Autonomous City of Buenos Aires is the largest area, population and concentration of economic activities, it exerts the strongest influence on issues of urban planning.[14] The lack of a joint organization and an integral regional planning strategy is an important problem facing urban planning.

Illustration 6: **CBA - The Autonomous City of Buenos Aires**

Source: Jordán, R. et al. (2010a), p. 97

[13] cp. PNUMA (2003), pp. 19-20
[14] cp. Jordán, R. et al., Regional Panorama Latin America - Megacities and Sustainability, (2010), p. 96

Illustration 7: **RMBA - Metropolitan Region of Buenos Aires**



RMBA

<table>
<tr><td colspan="4">RMBA[1]
Metropolitan Region of Buenos Aires:
(40 + 1 partidos)</td></tr>
<tr><td colspan="3">AMBA[2]
Metropolitan Area of Buenos Aires:
(32 + 1 partidos)</td><td rowspan="2"></td></tr>
<tr><td colspan="2">GBA[2]
Gran Buenos Aires
(24 + 1 partidos)</td><td rowspan="2"></td></tr>
<tr><td>CBA[3]
Ciudad Autónoma de BA
1 partido (comunas 1-15)</td><td>CB
Conurbano Bonaerense
24 partidos</td></tr>
<tr><td>1. Retiro, San Nicolás, Puerto Madero, San Telmo, Montserrat y Constitución
2. Recoleta
3. San Cristóbal y Balvanera
4. La Boca, Barracas, Parque Patricios y Nueva Pompeya
5. Almagro y Boedo
6. Caballito
7. Flores y Parque Chacabuco
8. Villa Soldati, Villa Riachuelo y Villa Lugano
9. Mataderos, Liniers y Parque Avellaneda
10. Floresta, Monte Castro, Vélez Sarsfield, Versalles, Villa Luro y Villa Real
11. Villa Gral. Mitre, Villa Devoto, Villa del Parque y Villa Santa Rita
12. Coghlan, Saavedra, Villa Urquiza y Villa Pueyrredón
13. Belgrano, Colegiales y Núñez
14. Palermo
15. Chacarita, Villa Crespo, Paternal, Villa Ortúzar, Agronomía y Parque Chas</td><td>1. Almirante Brown
2. Avellaneda
3. Berazategui
4. Esteban Echeverría
5. Ezeiza
6. Florencio Varela
7. General San Martín
8. Hurlingham
9. Ituzaingó
10. José C. Paz
11. La Matanza
12. Lanús
13. Lomas de Zamora
14. Malvinas Argentinas
15. Merlo
16. Moreno
17. Morón
18. Quilmes
19. San Fernando
20. San Isidro
21. San Miguel
22. Tigre
23. Tres de Febrero
24. Vicente López</td><td>1. Cañuelas
2. Escobar
3. Gral. Rodriguez
4. Marcos Paz
5. Pilar
6. Pte. Perón
7. San Vicente
8. La Plata</td><td>1. Berisso
2. Brandsen
3. Campana
4. Ensenada
5. Exaltación de la Cruz
6. Gral. Las Heras
7. Luján
8. Zárate</td></tr>
</table>

[1] cp. Fernández L. (n.b.)
[2] cp. INDEC (2005), p. 6
[3] cp. Vecslir L./Ciccolella P. (2012), p. 7

3.1.2 *Urban structure of Santiago de Chile*

Chile is divided into 15 regions (*regiones)*, one of them the RMS, the *Región Metropolitana de Santiago*. The regions are in turn divided into provinces (*provincias)*. The RMS contains six provinces: *Provincia de Chacabuco, Cordilliera, Maipo, Melipilla, Talagante*, and *Santiago*. Finally, the province of Santiago is divided into 32 localities (*comunas)*. Santiago de Chile is the most important urban system of the country. Since the mid 1980s, economy grew and the deregulation of urban planning boosted the population's growth.

The *Area Metropolitana de Santiago* (AMS) does not have clear boarders and consists of 34 localities (*comunas)* with a total of 84'000 ha. The urbanized area that could be received as one continuous space has an extension of about 60'000 ha. The building area increased the last decade 2.2% per year.[15] During 2002 to 2012, population grew yearly 0.80% in the AMS.

The 34 localities of the AMS are composed by 32 localities of *Santiago*, *Puente Alto* as part of the province *Cordillera* and *San Bernardo* as part of *Maipo*. While the city's extension includes three localities policy is complex and the importance of regional and national institutions for an integral planning increases. The plans of infrastructure, such as transportation and sewage, for example, were realized from national institutions, while the territorial plans of the AMS has been made by the *Secretaría Regional de Vivienda y Urbanismo,* which is a regional agency. Both, the mayor's of the RMS and the national institutions have the same competences and responsibilities that caused difficulties and brought up new different levels of coordination that covers the total RMS or particular problematic areas, such as the *Zona Sur* or the *Precordillera,* for example.[16]

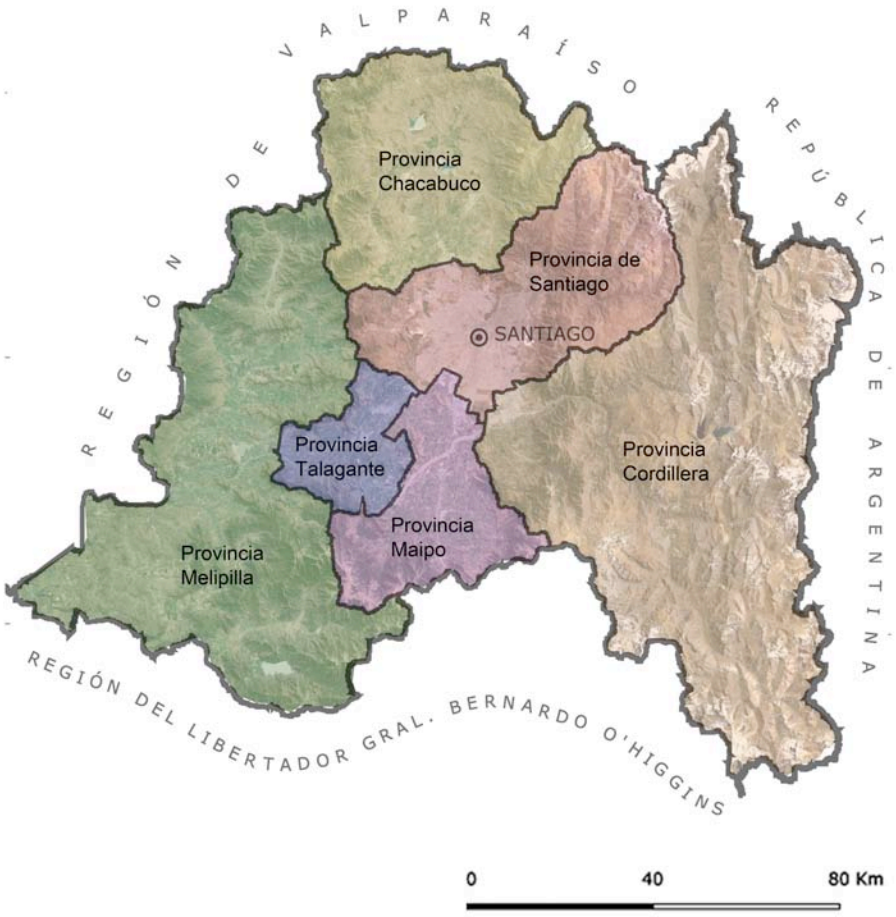
The development of the RMS is driven by the localities and their influence depends on their financial possibilities that for low-income *comunas* is less than for high-income localities. *"...the significant disparity in socio-spatial configuration within the Santiago Metropolitan Area reflects the structure of power within this metropolitan space, whereby municipalities in the eastern cone are better able to shape public and private*

[15] cp. Jordán, R. et al. (2010), p. 137
[16] cp. PNUMA (2003b), p. 5

actions in support of the public interests of their resident populations." [17]
This difference gives the *comunas* different power and influence on the urban development.

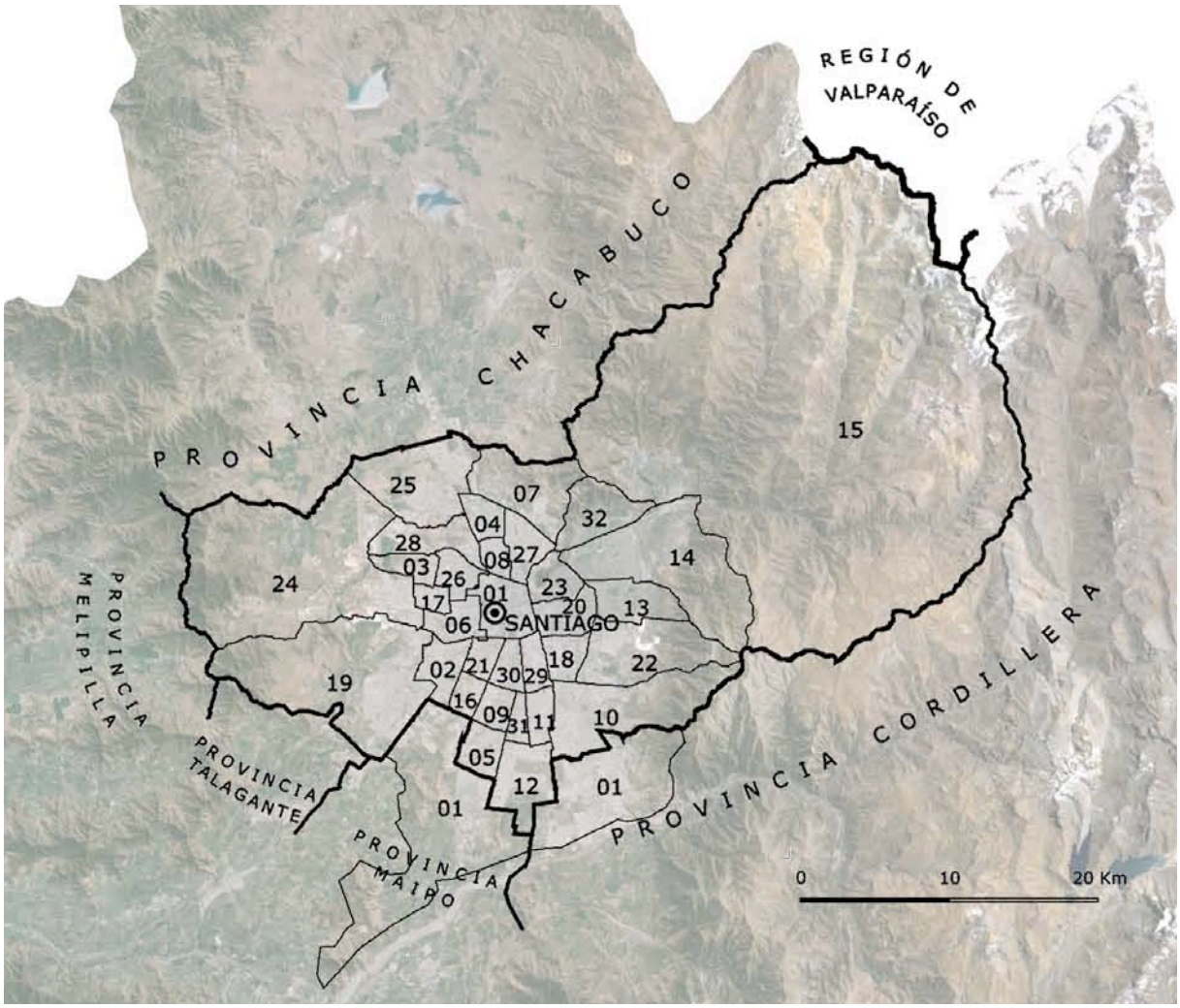
In the RMS, the transport infrastructure is facing a huge challenge caused by the dramatic population increase. A second important challenge remains the air pollution exacerbated by a geomorphology that impedes air circulation in the *Santiago Basin* (3.2.2).

Illustration 8: **RMS - Metropolitan Region of Santiago**



[17] Orellana A. (2009), p. 101

Illustration 9: **AMS - Metropolitan Area of Santiago de Chile**



AMS

Province of Santiago: 32 (of 32) Localities (*comunas*):

1. Santiago
2. Cerrillos
3. Cerro Navia
4. Conchalí
5. El Bosque
6. Estación Central
7. Huechuraba
8. Independencia
9. La Cisterna
10. La Florida
11. La Granja
12. La Pintana
13. La Reina
14. Las Condes
15. Lo Barnechea
16. Lo Espejo
17. Lo Prado
18. Macul
19. Maipú
20. Ñuñoa
21. Pedro Aguirre Cerda
22. Peñalolén
24. Providencia
24. Pudahuel
25. Quilicura
26. Quinta Normal
27. Recoleta
28. Renca
29. San Joaquín
30. San Miguel
31. San Ramón
32. Vitacura

Province of Cordillera: 1 (of 3) Locality:

1. Puente Alto

Province of Maipo: 1 (of 4) Locality:

1. San Bernardo

Source: Jordán, R./et al. (2010), p. 193

3.2 Urban Development

3.2.1 *Infrastructural and environmental situation of Buenos Aires*

The Urban Subway of Buenos Aires (*Subte*) was opened 1913 with the A line and is one of the oldest subways in the world. In the 1930s and 1940s it was expanded with the B, C, D and E lines. In the 1980s, the *Subte* was privatized and, as a result, lost many of its passengers. The last expansion occurred in 2008 with the H line. Today the subway has 6 lines and 74 stations[18] and covers a distance of 52 km. The urban rail transport has seven suburban trains, in addition to the *Pre-Subte*, connected to the metro system. In December 2008, a law was approved to implement a *Bus Rapid Transport* (BRT), similar to the successful Metrobus in Mexico and the Transmilenio in Bogota. This high-speed bus system travels along the *Avenida Juan B. Justo* and establishes a rapid east-west connection[19]. The latest map of the *Subte* can be seen in Appendix 2.

Pollution of superficial bodies of water is the biggest problem of the Metropolitan Area of Buenos Aires[20]. The most important bodies of water in Buenos Aires (Appendix 3 and Appendix 4) are the *Río de la Plata,* the *Paraná* (with its wide river delta in the north of de AGBA), and three other rivers of local importance, the *Luján,* the *Reconquista* and the *Riachuelo*[21]. The basins of the *Riachuelo* and the *Matanza* are considered to be the most polluted bodies of water worldwide[22]. Most of the pollution comes from the people living without sewage systems[23]. The pollution of the rivers poses high social and health risks, especially among the low-income inhabitants and those with little access to medical care.

The supply and management of water is an important issue in many of the urbanized parts of the Metropolitan Area.

In the surroundings of the City of Buenos Aires, the informal and precariously situated houses are particularly vulnerable to the increasing number of floods. Also the growing water and soil pollution are issues that need to be addressed.

---

[18] counting interconnecting stations as different stations of each line
[19] Starting at the intersection with the Avenida General Paz and ending near the Río de la Plata
[20] cp. Jordán, R. et al. (2010), p. 106
[21] Suárez F./Lombardo R. J. (2004), p. 184
[22] Blacksmith Institute (2007), p. 7
[23] Greenpeace (2009)

3.2.2 *Infrastructural and environmental situation of Santiago de Chile*

Compared with other large cities, Santiago has a uniquely low housing density which causes a huge demand for long distance transport at all social levels.[24] This means that not only the public transport, but also individual traffic has to improve. In 2004, Díaz published a study on the problems of public transport and the need for an intelligent regional public transport network to meet the considerable demands on the transport infrastructure.[25] In 2007, Santiago found an answer to these problems with the new public transportation system *Transantiago*. It faced initial difficulties but an improvement process is taking place.

Illustration 10: **City Area Santiago de Chile**

Source: cp. PNUMA (2003a), p. 19

The Metropolitan Area of Santiago is still growing (3.4.1). The economic development is stable and an upward trend can be seen (3.4.3 and 3.5.3). The rapid spatial growth of the city has caused a huge demand for transportation infrastructure. Therefore, the central government has extended its infrastructure investments and built new highways.[26] Also, since it first opened in 1975, Santiago's subway has continually expanded, as it can be seen in the illustrated stages in Appendix 5 to Appendix 9. In 1987, the new *Metrobus* system expanded the city's public infrastructure with 11 lines, starting with the *Escuela Militar, Lo Ovalle* and *Las Rejas* stations. With the *New Austrian Tunneling Method* (NATM), the subway could be built more efficiently by working completely underground.[27]

In order to improve the network of public transport, an integrated public transport system of buses and underground trains, named *Transantiago*, has been developed. Opened 2007, it consists of 371 bus services and more than 100 km of underground

[24] Martínez R. (2006), p. 4
[25] Díaz G. et al. (2004), p. 8-9
[26] Jordán, R. et al. (2010), p. 150
[27] Metro de Santiago (June 2013)

railways. A single payment method can be used for the entire system. Also at this time some road infrastructure was extended where it had been missing from along some of the city's important avenues[28]. In June 2013, a new section of the government was created. The *Directorio de Tranporte Público Metropolitano* is managed by the Ministry of Transport and Telecommunications, the Ministry of Housing and Urbanism, the Ministry of Public Constructions, and the mayor (*intendante*) of the region. [29]

In the 1990s, Santiago de Chile was one of the most polluted cities in the world. This was caused by the lack of control over polluting emissions. Furthermore, geographical and climatic characteristics of Santiago are responsible for extensive pollution of its environment. The *Santiago Basin* has no winds that can stream through and ventilate the city. This causes a thermal inversion and leads to smog, which causes health risks, such as respiratory problems and skin diseases.[30] The United Nations Environment Programme analyzed this problem in 2003 and found out that there is a correlation between the degree of contamination and the number of respiratory problems, and rates of mortality especially among children and the elderly.[31]

In 2003, Pedro Jacobi wrote about the environmental problems in Latin America. He stated that in Santiago de Chile the most important source of pollution was the transport sector, and that more regulatory control should be exerted in order to reduce the negative environmental impact.[32] The National Commission of Environment (CONAMA), together with regional commissions, is the leading institution concerned with the improvement of Chile's ecology. From 1997 on, a constant decline in toxic components in the air of the AMS can be observed.[33]

---

[28] Pajaritos, Santa Rosa, Vicuña Mackenna, Grecia and Dorsal and others
[29] Transantiago (2013)
[30] Jordán, R. et al. (2010), p. 146
[31] PNUMA (2003b), p. 80
[32] Jacobi, P. (2003), p. 84
[33] CONAMA (2008), p. 6

3.2.3 *Strategic Urban Planning*

Both cities have to improve in order to become attractive places for living, which can offer a good political, environmental, infrastructural and cultural surrounding. Therefore, solutions must be found, in the case of Argentina a transportation infrastructure with an overall vision for the RMBA. Santiago de Chile has to focus particularly on segregation and its effects on urban development.
The type of property, whether it is housing, retail or office and the buildings' scale are elementary for the future urban development. Too dense housing areas can lead to an accumulation of low-income households and an increase of social problems. Both cities need to restructure their urban planning policies, install effective planning and supervising administrations, and make decisions that contribute to a promising urban planning.

Buenos Aires:
The urban structure of Buenos Aires brings with it problems of intransparency, ecology and coordination:

1. Different levels of government with overlapping functions and responsibilities
2. AMBA as an extensive urban area to be considered for transportation infrastructure
3. Water as an environmental challenge
4. Lack of common long-term vision of the market participants
5. Lack of participation from the public sector in the city's vision

Santiago de Chile:
With regards to its urban development we can list the following risks and obstacles:

1. Air pollution
2. The management of public and private transportation infrastructure
3. Segregation and its negative effects
4. Lack of control of growth of the Metropolitan Region
5. The absence of a regional planning

3.3 Political Situation

In order to analyze urban development, we will look at the way one of the megacities of Latin America has emerged. After the World War II, an import substitute industrialization policy boosted the growth of the large metropolitan centers of developing countries. In Mexico City, for example, policy makers pursued a centrally planned economic management in order to strengthen and protect local industry from the surrounding international markets, causing a concentration of population and industry. Since 1980, manufacturing employment in Mexico City has declined. The change from an inward orientated policy to a liberalized one has caused a shrinking process.[34]

3.3.1 *Political obstacles in Buenos Aires*

In March 2012, a statement was issued that sum up the basic functions of the projects of the *Area Metropolitana de Buenos Aires* (AMBA). Its aim was to create a strategic plan for a common policy throughout the Metropolitan Region of Buenos Aires, through implemented inter-municipal concepts.[35] The target was to serve as an interactive hub for the organizations and administrations of the region. In addition, a better quality of urban life and more participation by design board, politics were also important objectives.[36]

Not only the structure of a city but also other external influences affect urban development. In this regard, a common long-term vision for the city of Buenos Aires is missing. From the 1990s onward, the private sector grew significantly strong. Its interests are focused only on short-term profit, as opposed to sustainable urban development, which also considers the different constituent entities of the AMBA.[37]

---

[34] cp. Krugman P./Livas Elizondo R. (1995), pp.137-150
[35] Buenos Aires (2012), p. 10
[36] buenosaires.gob.ar (2013)
[37] Jordán, R./et al. (2010), p. 95

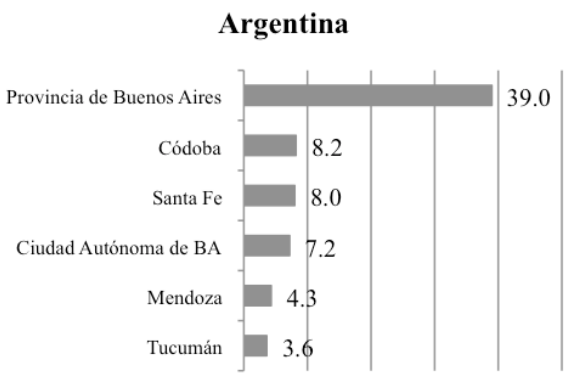
3.3.2 *Governance of the Metropolitan Region of Santiago de Chile*

The administration of the RMS is divided into three levels. Two of them are of higher importance. The RMS is lead by the Regional Mayor (*intendente regional)*, who is the most important political authority in the region. He leads the Regional Council (*Consejo Regional*) and the Environmental Commission (*Comisión Regonal del Medio Ambiente*) of the region. At the second level, the provinces and their governors are responsible for coordination and representation of regional interests. The third level is the level of the localities, which are represented by their Mayors.[38]

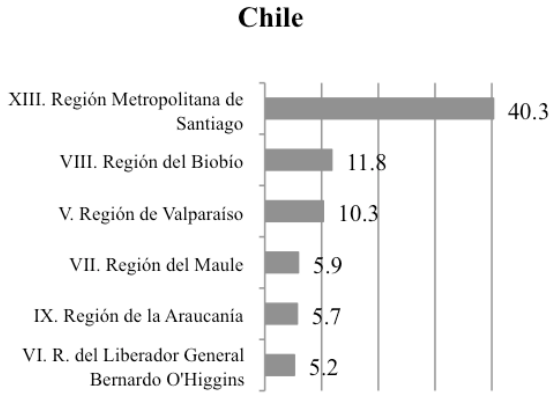
3.4 Population

In 2010, 70.3% of the population of Argentina lived in the six biggest regions, out of 23 provinces and the Autonomous City of Buenos Aires, with 46.2% of the country's population living in the city and the province of Buenos Aires.
In Chile, the six most highly populated regions had a population of 79.2%. Similar to Argentina, about 40.3% of Chileans live close to the biggest city of the country.

Illustration 11: **Distribution of the Argentinian and Chilenian Population** (in percentage)



Source: cp. INDEC (2012a), p. 64



Source: cp. INE (2012)

In the last decade, the population of the city center of Buenos Aires has slowly increased, while in the Metropolitan Area's[39] growth has been more than triple that of

[38] cp. PNUMA (2003b), p. 5
[39] 24 municipalities surrounding the Autonomous City of Buenos Aires

the central area (Table 1). This brings with it new challenges to establish a working infrastructure of private and public transportation and basic services.

3.4.1 *The urban and rural population*

The Metropolitan Area of Buenos Aires is characterized by suburban and peri-urban structures. The peri-urban realm, which is more distant from the city core, is composed of independent and diversified regions with different functions and qualities.[40] In contrast to the suburbs, which are monofunctional areas closer to the city center, the peri-urban space is multifunctional land where urban and rural uses are mixed and social and economic activities occur. This area could be seen as an area between city and countryside with a higher autonomy, in contrast to the suburbanized parts of the Metropolitan Area of Buenos Aires.

Between 2002 and 2012, the population of Santiago's central area grew by about 1.01% in a 10-year-average. This was brought about by the exceptionally high growth of the *comuna* of Santiago, with an increase of about 50% of its population between 2002 and 2012, from 200'792 to 311'415. The localities that are situated in the eastern part of the city center could all register an increase of their populations, while the rest of the central localities[41] have all been shrinking. This illustrates the tendency of the city's development towards the east and can be seen in detail in Table 5. There, the locality *Las Condes* is currently developing as the 'financial center' of Santiago de Chile. In the north-eastern part of the city center, high income communities are settling, as shown in Illustration 15.

In the last ten years, the center of Buenos Aires grew more moderately. By contrast, the larger regions of Buenos Aires and Santiago both show strong increases. Here the agglomeration of Buenos Aires grew slightly more than the surrounding area of Santiago's center. In general, both cities' peripheries show a higher increase than their central areas.

---

[40] Jordán, R. et al. (2010), p. 103-104

[41] 11 comunas: Santiago, Estación Central, Independencia, Macul, Ñuñoa, Pedro Aguirre Cerda, Providencia, Quinta Normal, Recoleta, San Joaquín, San Miguel

Nevertheless, for a future investment, the absolute numbers are at least as important as the relative values. Property size and its integration into the urban context are vital in determining the potential for future developers and investors.

Table 1: **Population Changes in Santiago and Buenos Aires**

Buenos Aires (in population)	2001[5]	2010[5]	absolute variation	10 year average absolute	10 year average in %
City of Buenos Aires[1]	2'776'138	2'890'151	114'013	12'668	0.46
Urban Agglomeration[2]	8'684'437	9'916'715	1'232'278	136'920	1.58
Santiago de Chile (in population)	2002[6]	2012[7]	absolute variation	10 year average absolute	10 year average in %
Central Area Santiago[3]	4'724'311	5'199'609	475'298	47'530	1.01
Urban Agglomeration[4]	1'336'874	1'486'076	149'202	14'920	1.12

[1] Ciudad Autónoma de Buenos Aires
[2] 24 municipalities de Gran Buenos Aires
[3] 11 Comunas: Santiago, Estación Central, Independencia, Macul, Ñuñoa, Pedro Aguirre Cerda, Providencia, Quinta Normal, Recoleta, San Joaquín, San Miguel
[4] Metropolitan Area of Santiago de Chile
[5] cp. INDEC (2012b), p. 33
[6] cp. INE (2002)
[7] cp. INE (2012), p. 45

3.4.2 *The socio-spatial segregation of Buenos Aires*

In addition to the increasing suburban and peri-urban population, the wealth structure of each developing area should be a focal point. Here the two countries use different methods to measure poverty. In Argentina, the NBI - *Necesidades Básicas Insatisfechas* is used as the method to indicate poverty. This method has not been changed since 1980 and employs data periodically collected by Argentina's government. This type of data does not rely on the population's earnings, but is health-related. The NBI includes structural quality and sanitation of housing, primary education and the labor market. The social component of labor, such as integration and social interactivity are as important as the income level.[42]

Upon close inspection of Table 2, the Autonomous City of Buenos Aires shows a lower NBI than the country's average, while the Metropolitan Areas' poverty rate is nearly the same as the national value of 12.5% of people living in Argentina with *unsatisfied basic needs*. Since 2000, poverty has decreased considerably and been reduced to 12.4% in

[42] cp. INDEC (2012a), p. 309

the Metropolitan Area and 7.0% in the center of Buenos Aires. The agglomeration data shows a more than six times faster improvement in the quality of life, with poverty decreasing by 5.2% per year. Considering the huge population of the City of Buenos Aires, the unsatisfied basic needs are significantly lower there.

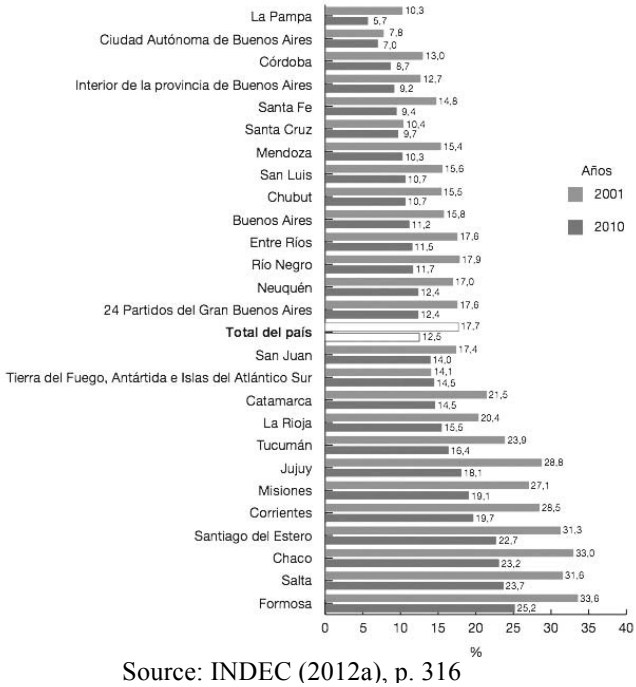
Table 2: **Poverty Rates in Urban and Rural Areas of Buenos Aires**

	Population 2010[4]	NBI[1] absolute[4]	NBI[1] %[4]	Variation 2000-2010 p.a. in %[5]
Argentina	39'627'520	4'953'206	12.5	-5.2
Buenos Aires Central Area[2]	2'827'535	198'114	7.0	-0.8
Buenos Aires Urban Agglomeration[3]	9'859'658	1'219'700	12.4	-5.2

[1] NBI - Necesidades Basics Insatisfechas
[2] Autonomous City of Buenos Aires
[3] 24 municipalities of GBA
[4] cp. INDEC (2012a), p. 310
[5] cp. INDEC (2012a), p. 316

In 2010, the population living with NBI with 7.0% in the CBA is low, then it increases significantly to 12.4% in the CB and decreases to 9.2% in the outer parts of the province of BA (Illustration 12). If we look closer at the social structure of the Metropolitan Area of Buenos Aires, not only poor people, but also high income groups settle in the suburban and peri-urban areas and are thus responsible for their growth. The tendency to build exclusive and closed communities began in the 1990s. These developments have been built in the northwestern part of the Metropolitan Area. With about 500'000 citizen living there, a significant percentage of people (about 5% of the Gran Buenos Aires population) live in these closed and segregated areas.[43] This development has brought about the urban and social fragmentation of the Metropolitan Area, which can be seen today. It also shows a trend

Illustration 12:
Population living with Unsatisfied Basic Needs (NBI)



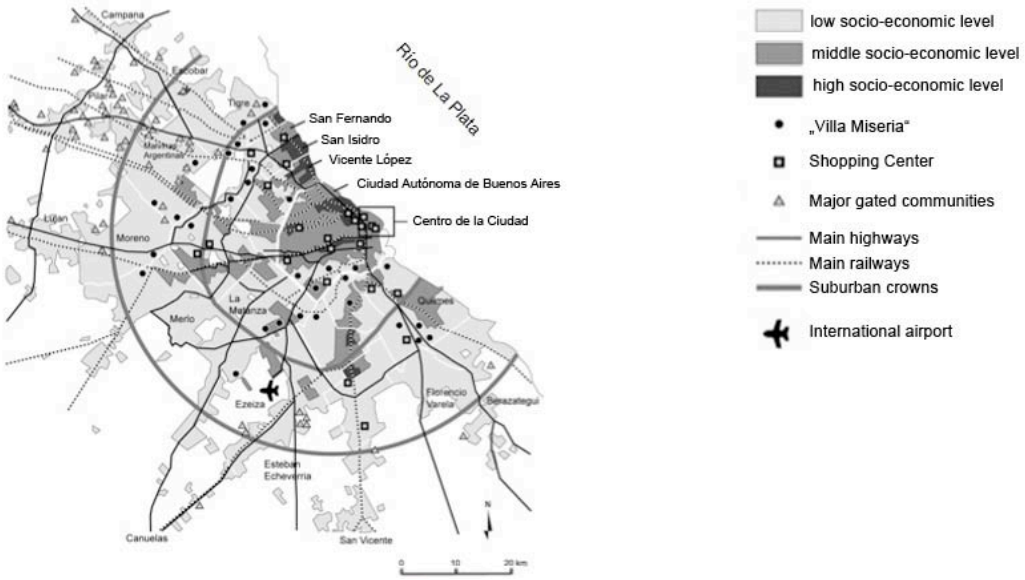
Source: INDEC (2012a), p. 316

[43] cp. Riwilis V. (2008), p. 121

for future markets and makes clear the demand on other urban structures. Instead of living in the dense urban area of the high-income city center, people prefer the suburban and peri-urban living environment.

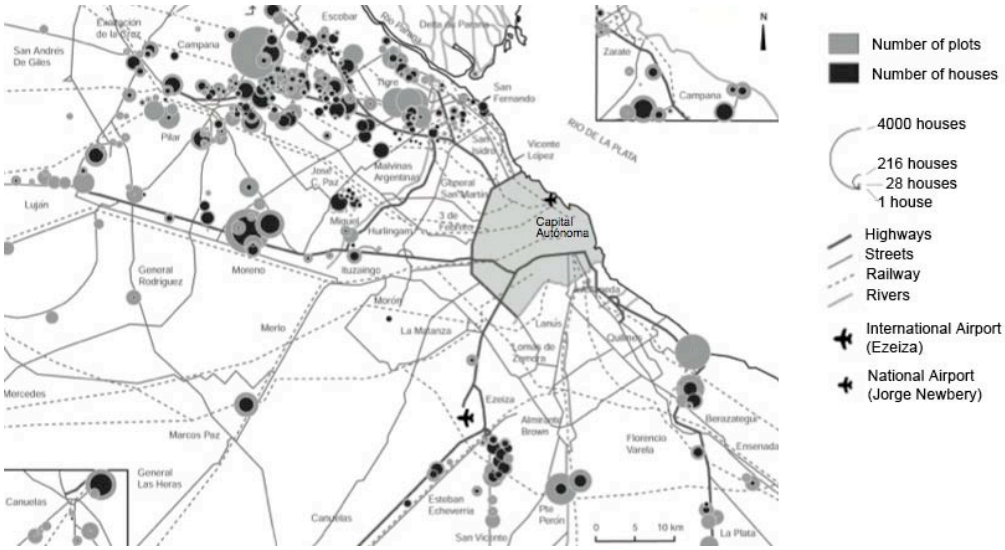
Another important trend in the peri-urbanization process is the creation of new subcenters, which show a functional relationship to Greater Buenos Aires, despite their long distance to the city core. This is supported by the good infrastructure, especially in the north-western part of the Metropolitan Area. There, the density of highways and railways, but also of gated communities, is high (Illustration 13 and Illustration 14).

Illustration 13: **Metropolitan Area of Buenos Aires: Socio-spatial Organization**



Source: cp. Thuillier G. (2005), p. 8

Illustration 14: **Metropolitan Area of BA: Number of Plots & Houses in Gated Communities, 2000**



Source: cp. Thuillier G. (2005), p. 8

"*The loss of the traditional middle class has been discussed as the most important structural change of the city's society. This is clearly visible in the extremely high poverty rates of 60% in the Provincia de Buenos Aires and 20% in the City of Buenos Aires in the post-crisis year 2003."*[44]

During the 1990s, the number of informal settlements grew continuously. The number of people with very low income living in informal housing increased rapidly during the 2001/2002 crises.[45]

Informal settlements can be divided in two different types of housing: The *villas* and the *asentamientos,* which are located in the City of Buenos Aires and the rest of the Metropolitan Area. Most of these settlements were built in the AMBA[46], the suburban areas, where about 10% of the inhabitants live in informal settlements.[47]

In 2003, the country's economic growth driven by the exportation industry began, bringing wealth and reducing poverty.

3.4.3 *The socio-spatial segregation of Santiago de Chile*

The method used to measure poverty in Santiago de Chile has been applied since 1987, which allows us to compare the data over this period of time. It also allows for a comparison between the national development and that of surrounding societies and economies. It is called *Linea de Pobreza* (LP) and analyses poverty and indigence in absolute numbers, as it does the NBI. The poverty threshold is defined by the determined minimum for satisfaction of basic needs. The indigence threshold is defined by the determined minimum for satisfaction of alimentary needs. To measure poverty, Chile focuses on the income necessary to satisfy the basic needs. The LP is the minimum income necessary per person to satisfy their basic needs and is based on the cost of a basic 'basket of commodities', adjusted by a factor, which depends on the region where a person lives.[48]

The values shown in Table 3 of the LP do not differentiate between poverty and indigence. Nevertheless, we can observe a difference between urban and rural regions.

---

[44] cp. Jordán, R. et al. (2010c), p. 99
[45] cp. Scheinsohn, M./Cabrera C. (2009), p.110
[46] The Environmental Atlas of Buenos Aires calls the *Metropolitan Area of Buenos Aires* AMBA, while the National Institute of Statistics and Census calls the same Area *Greater Buenos Aires Agglomeration* AGBA
[47] cp. Cravino, M. et al. (2009), p. 13
[48] Gobierno de Chile, Ministerio de Desarollo Social (n.d. d)

The national average LP is 15.1%, higher than the LP of the urban and rural areas of the RMS. At 11.7%, the urban poverty is high compared with the rural value of 5.4%, less than a half of the urban rate. If we look back at the poverty rates of Buenos Aires in Table 2, we can observe very different percentages and more poverty in the agglomeration than in the city center with a faster decline in the rural area than in the urban center. This progress is similar again to Buenos Aires, but occurs much more slowly.

Table 3: **Poverty Rates in Urban and Rural Areas of Santiago de Chile**

	Population 2009[1]	LP absolute[1]	LP %	Variation 2000-2009 p.a. in %
Chile	16'582'835	2'508'880	15.1	-0.57
Región Metropolitana - urban	6'522'669	765'806	11.7	-0.38
Región Metropolitana - rural	207'303	11'210	5.4	-0.78

LP - Linea de Pobreza

[1]Gobierno de Chile, Ministerio de Desarollo Social (n.d. b)

In the long term view, poverty in Chile has decreased sustainably. Between 2006 and 2009, poverty increased from 13.7% to 15.1%. This was the first time since the 1990s that the LP increased. As the result of an increase in food prices, 260'000 people fell under the *poverty line* and were identified as poor. Chile's government repeated the CASEN[49] in 2011, and it showed a decline of 0.7% in the LP rate, down to the national average of 14.4%. A lower rate of unemployment, higher loans and social policy has improved the economic situation of Chile's population today.[50]

The impact of the earthquake in February 2010 is still not clear, but could possibly have affected the survey results of the CASEN 2011 and delayed the improvement of the poor people's situation. The data from a few regions that were affected by the earthquake does not confirm this, however.[51]

Unusual for such a large Latin American city, Santiago has a very small percentage of people living in informal settlements (*campamentos*). The fast growing construction areas are usually highly segregated places, often planned as large scale housing

[49] Caracterización Socioeconómico Nacional
[50] Gobierno de Chile, Ministerio de Desarollo Social (n.d. a)
[51] Gobierno de Chile, Ministerio de Desarollo Social (n.d. a)

projects.[52] This significant change in scale also brings with it other difficulties, such as infrastructural and socio-environmental challenges.

From the 1970s on, more than 200'000 social housing units were built in the RMS. On the one hand they improved the quality of life and reduced overcrowding, but on the other hand they caused problems of segregation, loss of local identity, insufficient access to some services and bad connectivity.[53] The current rapid urbanization faces a lack of infrastructure and urban planning. Typically these social housing projects are located in areas with low real estate prices. This means that they concentrate in suburban and peri-urban areas. This worsens the problems of a deficient infrastructure of roads and public transport. Policy makers have to face up to these challenges "...to raise density in already developed and damaged areas and to solve distance problems and traffic congestion."[54]

The growth of the suburbs and the peri-urban areas has a tendency to affect not only the social housing. In 1979[55] and 1980[56] the military government eliminated the legal boundaries, which had limited the growth of the suburban areas and made it possible to subdivide rural plots of land to a minimum of 0.5 ha, thus making the urbanization of this new region of the Metropolitan Area of Santiago possible.[57] This was the starting point of expansion of the northern region of the RMS into the province of *Chacabuco* with its three *comunas* (*Lampa, Colina, Tiltil*). By the end of the 1990s about 120'000 ha had been developed in this way. In the province of *Chacabuco* the developed areas covered 60% of the land.[58]

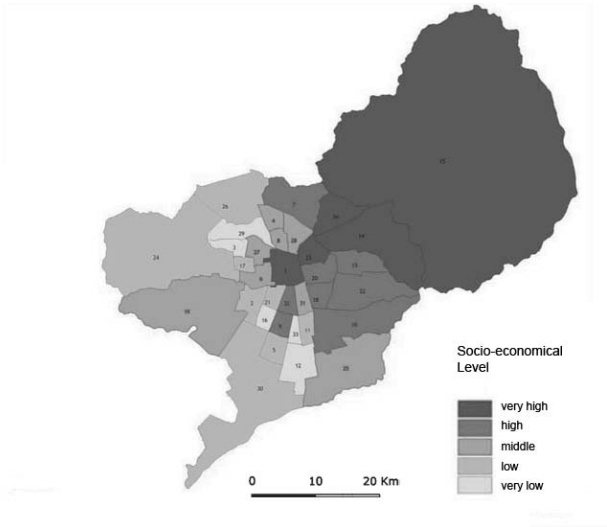
In Chile, 27'378 families live in 657 c*ampamentos.* In the Metropolitan Area of Santiago, 117 *campamentos* with a total of 4'645 families are registered. Most of the informal housings are in small settlements of about 50 families. 60% of Chile's *campamentos* are located in the regions *Valparaíso*, *Región Metropolitana de Santiago* and *Biobio*.[59]

---

[52] cp. Yañez G. et al. (2010), p. 1
[53] cp. Hidalgo R. et al. (2008), p. 219, qtd. in Jordán, R./et al. (2010), p. 140
[54] Jordán, R. et al. (2010), p. 140
[55] Decreto Supremo 420
[56] Decreto Ley 1536
[57] cp. Naranjo G. (2008), p. 181, qtd. in Jordán, R./et al. (2010), p. 140
[58] cp. Naranjo G. (2008), p. 190, qtd. in Jordán, R./et al. (2010), p. 140
[59] Gobierno de Chile (2011), p. 11-14

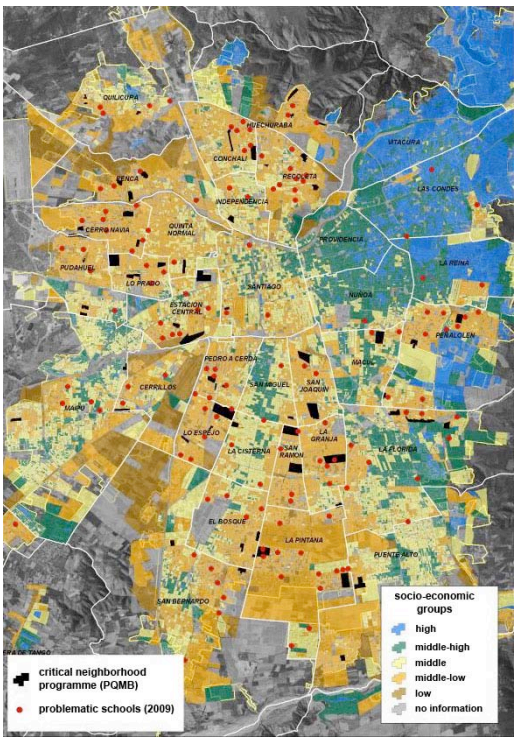
In the *comunas* of *Santiago* and *Providencia,* a concentration of young professionals with a university degree could be observed.[60] This shows a change in social structure and a possible increase in real estate prices due to a higher demand from a well-educated society in this area.

Illustration 15: **Metropolitan Area of Santiago (AMS): A Socio-territorial Map of the *comunas***



Source: cp. Orellana A. (2009), p. 113

Illustration 16: **Metropolitan Area of Santiago: A Socio-economic Map of the Neighborhoods**



Source: Airas Suazo G. et al. (2011), p. 8

[60] Jordán, R. et al. (2010), p. 144

3.4.4 *Population prospects*

The continuous growth of Argentina's population is moderate. In 2003, it reached 38 million inhabitants and by 2011 increased to 40.8 million. The United Nations' medium variant for a possible development of Argentina's population states it will reach its peak at 50.6 million in 2050 and then decline to 49.2 million by 2100.[61] In Chile a similar development is prognosticated. There the population will reach its maximum in 2050 with 20.1 million and decline 50 years later to 17.1 million.[62] Forecasting this into the future is nearly impossible and only the numbers before 2050 can be attributed some degree of certainty.

Other numbers of the population's composition could also help us to understand future changes. Argentina's fertility rates[63], which indicate the average number of children per woman, show an initial decline from 1975-1980 with 3.44 children to 2020-2025 with 1.85, then a slight increase in 2095-2100 to 1.94. In Chile the numbers of children per woman for the same time periods are 2.80, 1.74 and 1.96. Considering the more detailed data from the United Nations on this, the development is similar to Argentina's, but shows a more moderate decline.[64] In the future, demographical change in these countries will occur, and due to improvements in health care, people will live longer.

The percentage of the age group of 15-59 year olds will change in Argentina from 60.5% in 2011, to 57.3% in 2050 and 50.6% in 2100. For the same years and age groups, the forecasts for Chile are 64.8%, 54.4% and 49.0%. As a comparison, in the United States the age distribution is very similar to that in Chile, the percentage of the 15-59 year old population will be 61.2% in 2011, 54.6% in 2050 and 51.3% in 2100. In 2011, 2050 and 2100 Columbia will have 62.7%, 58.5% and 50.1% of people between the ages of 15-59 years.[65] In 2050, Argentina and Columbia show a 3-4% larger potential work force than in Chile. Together with a good education system, it could boost future development in Argentina and Columbia.

If we analyze Argentina's older population with 60+ years, this group accounts for 17.4% in 2011, will reach 21.1% in 2050 and 44.9% in 2100. In Chile the

---

[61] cp. United Nations (2011), p. 85
[62] cp. United Nations (2011), p. 85
[63] medium variant
[64] cp. United Nations (2011), p. 116
[65] cp. United Nations (2011), p. 103

corresponding values are 15.7% in 2011, 38.9% in 2050 and 48.6% in 2100.[66] As a result of this, the country will be faced with the same problems of an aging population, as Europe is today, and the size of the labor force will decrease.

3.4.5 *Shifting the cities' balance points*

In the last decade, the population of Buenos Aires and Santiago de Chile has increased. As we already observed in chapter 3.4.1 (The urban and rural population), the growth occurred mainly in the urban agglomeration of the city centers.
Looking closer at the municipalities (*partidos*) of the different urban areas in Buenos Aires, we can see (Table 4) a population increase in the CB of more than four times that of the CBA. In absolute numbers (Appendix 10) *La Matanza*, *CBA*, *Florencia Valera*, *Moreno*, and *Tigre* have the largest populations with an increase of 858'736 inhabitants and nearly 70% of the RMBA's growth.

The growth rate of Buenos Aires' center (CBA) is moderate and differs from Santiago's development. There, the highest growth has been in the city center. The surrounding areas are developing differently to the CBA. Half of Santiago's *comunas* next to the city center experienced a decrease in population, whereas the bordering provinces of the RMS all increased. The highest increases in absolute numbers (Appendix 11) have been recorded in *Santiago, Puente Alto, Quilicura, Maipú, and Colina* with a total of 364'645 and nearly 60% of the RMS's total growth.

The detailed Table 4 and Table 5 show a shift in the populations' living space to the suburban areas around the big cities, without the environmental and transport infrastructural problems of both city centers. But this shift in living areas causes more infrastructural problems due to the populations' daily work. Today, the denser suburban areas are not strong enough to become suburban centers alongside the centers of Santiago and Buenos Aires. A decentralization of the urban structure would help to improve the quality of the old city center and the potential new suburban centers.

This could be an opportunity for a foreign investor. Given the fact that Santiago and Buenos Aires are cities where owning property is common, new suburban centers could

[66] cp. United Nations (2011), p. 103

open new market possibilities for investors. The question would be if diversification throughout different areas in one city makes more sense than investing in different cities in Chile and Argentina.

Chile's concern is that with about 17 million inhabitants, it remains a small country with a small population and investing in cities and regions other than the RMS would not be interesting as the property size in the smaller cities is not big enough for foreign institutional investors. Also the populations in the midsize cities of Chile are not expected to grow substantially according to the population prospects from the United Nations (3.4.4). The population growth in the GBA, with a 10-year-average growth of 1.31%, is a little bit higher than the increase recorded in the RMS, with 1.03% per year (Table 4 and Table 5).

If we take a closer look at the growth rates of each municipality in GBA, we can observe a high growth of the boundary area of the CB and a lower increase – or even a population drop – in municipalities immediately adjacent to the CBA, such as *Vicente López, San Isidro, Lanús, Tres de Febrero* and *General San Martín*.

In Santiago, the city center's population has grown rapidly in the last ten years. A tendency is evident, upon analyzing the individual localities. The *comunas Quilicura, Lo Barnechea, Ñuñoa*, and *Huechuraba* in the eastern part have the highest growth rates in the province of Santiago. As half of the *comunas* of Santiago's province decrease, we can observe a clear shift of the city's balance point. In the RMS, the suburban growth is an important and additional challenge for transport infrastructural problems.

Table 4: **Population GBA: Gran Buenos Aires** (percentage)

CBA - Ciudad Autonóma de Buenos Aires	**2001**	**2010**	% change
Ciudad Autónoma de Buenos Aires	2'776'138	2'890'151	4.1%
Total	**2'776'138**	**2'890'151**	**4.1%**
CB - Conurbano Bonaerene			
Almirante Brown	515'556	552'902	7.2%
Avellaneda	328'980	342'677	4.2%
Berazategui	287'913	324'244	12.6%
Esteban Echeverría	243'974	300'959	23.4%
Ezeiza	118'807	163'722	37.8%
Florencio Varela	348'970	426'005	22.1%
General San Martín	403'107	414'196	2.8%
Hurlingham	172'245	181'241	5.2%
Ituzaingó	158'121	167'824	6.1%
José C. Paz	230'208	265'981	15.5%
La Matanza	1'255'288	1'775'816	41.5%
Lanús	453'082	459'263	1.4%
Lomas de Zamora	591'345	616'279	4.2%
Malvinas Argentinas	290'691	322'375	10.9%
Merlo	469'985	528'494	12.4%
Moreno	380'503	452'505	18.9%
Morón	309'380	321'109	3.8%
Quilmes	518'788	582'943	12.4%
San Fernando	151'131	163'240	8.0%
San Isidro	291'505	292'878	0.5%
San Miguel	253'086	276'190	9.1%
Tigre	301'223	376'381	25.0%
Tres de Febrero	336'467	340'071	1.1%
Vicente López	274'082	269'420	-1.7%
Total	**8'684'437**	**9'916'715**	**14.2%**
Urban Agglomeration (CB)	**8'684'437**	**9'916'715**	**14.2%**
Central Area (CBA)	**2'776'138**	**2'890'151**	**4.1%**
Total GBA	**11'460'575**	**12'806'866**	**11.7%**
10-y-average			1.31%

Source: cp. INDEC (n.b.)

Table 5: **Population RMS: Metropolitan Region of Santiago de Chile** (percentage)

P. SANTIAGO	**2002**[1]	**2012**[2]	% change
Santiago	200'792	311'415	55.1%
Cerrillos	71'906	79'164	10.1%
Cerro Navia	148'312	128'090	-13.6%
Conchalí	133'256	121'118	-9.1%
El Bosque	175'594	162'671	-7.4%
Estación Central	130'394	119'292	-8.5%
Huechuraba	74'070	87'667	18.4%
Independencia	65'479	73'874	12.8%
La Cisterna	85'118	80'910	-4.9%
La Florida	365'674	363'903	-0.5%
La Granja	132'520	121'214	-8.5%
La Pintana	190'085	182'930	-3.8%
La Reina	96'762	91'927	-5.0%
Las Condes	249'893	282'972	13.2%
Lo Barnechea	74'749	97'230	30.1%
Lo Espejo	112'800	99'527	-11.8%
Lo Prado	104'316	94'766	-9.2%
Macul	112'535	111'436	-1.0%
Maipú	468'390	525'229	12.1%
Ñuñoa	163'511	195'410	19.5%
Pedro Aguirre Cerda	114'560	104'018	-9.2%
Peñalolén	216'060	237'862	10.1%
Providencia	120'874	130'808	8.2%
Pudahuel	195'653	225'509	15.3%
Quilicura	126'518	197'346	56.0%
Quinta Normal	104'012	101'737	-2.2%
Recoleta	148'220	152'985	3.2%
Renca	133'518	142'136	6.5%
San Joaquín	97'625	94'255	-3.5%
San Miguel	78'872	90'846	15.2%
San Ramón	94'906	85'195	-10.2%
Vitacura	81'499	84'195	3.3%
Total	**4'668'473**	**4'977'637**	**6.6%**
Urban Agglomeration	**1'336'874**	**1'486'076**	**11.2%**
Central Area[3]	**4'724'311**	**5'199'609**	**10.1%**
Total RMS	**6'061'185**	**6'685'685**	**10.3%**
10-y-average			1.03%

P. CHACABUCO	**2002**[1]	**2012**[2]	% change
Colina	77'815	113'614	46.0%
Lampa	40'228	79'421	97.4%
Tiltil	14'755	16'737	13.4%
Total	**132'798**	**209'772**	**58.0%**
P. MAIPO	**2002**[1]	**2012**[2]	
San Bernardo	246'762	277'802	12.6%
Buin	63'419	78'593	23.9%
Calera de Tango	18'235	23'113	26.8%
Paine	50'028	66'238	32.4%
Total	**378'444**	**445'746**	**17.8%**
P. MELIPILLA	**2002**[1]	**2012**[2]	
Melipilla	94'540	110'871	17.3%
Alhué	4'435	5'493	23.9%
Curacaví	24'298	28'439	17.0%
María Pinto	10'343	12'501	20.9%
San Pedro	7'549	8'485	12.4%
Total	**141'165**	**165'789**	**17.4%**
P. TALAGANTE	**2002**[1]	**2012**[2]	
Talagante	59'805	65'020	8.7%
El Monte	26'459	32'468	22.7%
Isla de Maipo	25'798	33'723	30.7%
Padre Hurtado	38'768	50'670	30.7%
Peñaflor	66'619	86'193	29.4%
Total	**217'449**	**268'074**	**23.3%**
P. CORDILLERA	**2002**[1]	**2012**[2]	
Puente Alto	492'915	583'471	18.4%
Pirque	16'565	20'732	25.2%
San José de Maipo	13'376	14'464	8.1%
Total	**522'856**	**618'667**	**18.3%**

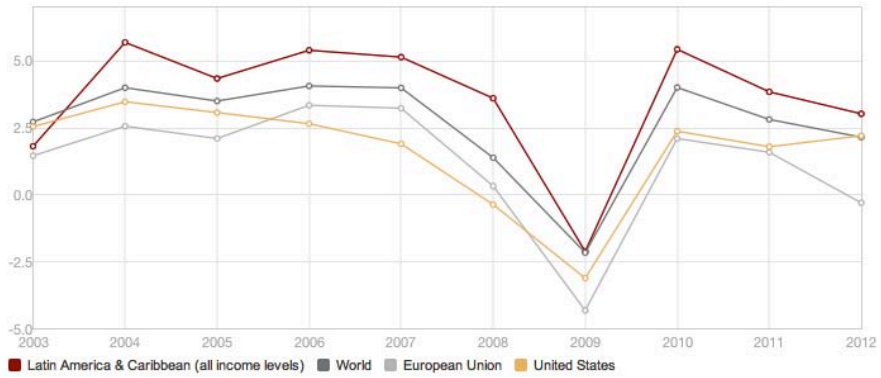
[1] cp. INE (2002)
[2] cp. INE (2012), p. 45-47
[3] 11 comunas: Santiago, Estación Central, Independencia, Macul, Ñuñoa, Pedro Aguirre Cerda, Providencia, Quinta Normal, Recoleta, San Joaquín, San Miguel

3.5 Market Situation

3.5.1 *Introduction*

After the last economic crisis, Latin America and the Caribbean recovered quickly and robustly. Due to this, the region could demonstrate its economic and financial strength. With GDP growth rates of 5.4% in 2010, 3.9% in 2011 and 3.0% in 2012, the region outperforms most advanced economies (Illustration 17).[67]

Illustration 17: **GDP Growth (annual %) of LAC**



Source: The World Bank (2013)

3.5.2 *The Latin American decade*

In Chile, as a commodity-exporting country, the GDP growth has been 6% in 2011.[68] Here signs of overheating with inflationary pressure are already evident and should be carefully observed.[69] Nevertheless, ambitious attempts to maintain a stable macroeconomic framework and a sound international demand for commodities at the international level are reasons for a stable economy. Nationally, a stable internal demand has helped the region attain positive forecasts for the future. The impressive economic development of this region in the so-called "Latin American decade"[70] has been described as similarly prosperous compared to the Asian economies' growth.[71]

Low productivity rates, however, are unfavorable for a sustainable growth. Latin America suffers from a few fundamental challenges that could affect its

---

[67] cp. The World Bank (2013)
[68] cp. The World Bank (2013)
[69] cp. World Economic Forum (2011), p. 31
[70] World Economic Forum (2011), p. 34
[71] cp. World Economic Forum (2011), p. 34

competitiveness. Physical insecurity, underdeveloped institutional frameworks, overstrained infrastructure, the rigid labor market and, to a certain extend, an insufficient competitiveness could decelerate the economic growth.
After productivity gains and socio-cultural improvement occur, diligent innovation will be important to boost Latin America's economy. With that, companies could develop higher-value-added jobs with higher loans and attract new well-educated employees from other social classes. Also policy makers have to face up to challenges, such as climate change, pollution, and poor health care, never forgetting that there is worldwide competition from other countries such as China who have boosted their innovation performance. The Global Competitiveness Index shows a stable innovation performance for Latin America. China has advanced and is getting closer to the developed OECD-Economies, while Latin America's improvement is not yet enough to catch up to China and the economies of the OECD. Looking closer at the innovation performance of the Latin American countries, Brazil and Chile perform better than Peru and Argentina.[72]

To be competitive with more sophisticated countries, in light of the innovation score, Latin America will have to invest much more in its development than the OECD countries and China, for example (Table 7). A higher investment of public and private resources in education and training activities, as well as research and development, will be necessary. An innovation-friendly environment should be created so that companies begin to innovate themselves in order to stand out from others as particularly attractive for a well-educated work force. In addition, the government must allocate sufficient financial resources.
Access to financial resources is important in gaining innovation-related expenditures. For Argentina, it is a more problematic factor than for Chile. The government must guarantee these in order to allow for the possibility of investments and in order to accelerate the creation of new innovative markets. In recent years, the region has been conscious of the need for improvements in their productivity. Several countries such as Chile have a pro-implementation policy to accelerate this process. The economic outlook shows positive prospects for Latin America and should be an ideal basis for its future development and increase productivity.

[72] cp. World Economic Forum (2011), p. 35

Table 6: **Global Competitiveness Index 2011-12 Rankings & Comparison 2010-11**

best values[1]		middle values[1]				bad values[1] - drop
Mexico	+8	Panama	+4	Barbados	+1	Costa Rica
Peru	+6	Ecuador	+4	Chile	+1	Guatemala
Bolivia	+5	Argentina	+2	Uruguay	+1	El Salvador
Brazil	+5			Columbia	0	Nicaragua
						Jamaica

[1] The number is the change of position in the ranking from de GCI 2011-2012 and GCI 2010-2011 out of the 139 analyzed economies in 2010

Source: World Economic Forum (2011)

The Global Competitiveness Index (GCI) forecasts a good development in LAC (Table 6). Mexico, Peru, Bolivia and Brazil were best ranked, while other countries had a more moderate positive change, such as Panama and Argentina. Chile and Columbia did not improve significantly. The reason for this could be an already slightly flattened improvement because of their more advanced stages of development. The highest declines occurred in some countries of Central America and have been mainly caused by deterioration in safety.[73]

While the geographical extension of LAC is enormous, there are multiple factors affecting each economy in the region. We can name four main challenges[74]:

1. Weak institutions with high costs associated with a lack of physical security
2. Poor development of infrastructure
3. An inefficient allocation of products and human resources
4. A lag in innovation

These challenges must be considered and improved upon, to ensure a sustainable economic and social development.

In terms of innovation, LAC growth is not really significant. China continues its rapid growth focused on innovation. The large differences in the specific rankings in Table 7 show the large structural differences of each Latin American country but also their capacity for possible improvements.

[73] cp. World Economic Forum (2011), p. 31
[74] cp. World Economic Forum (2011), p. 31

Table 7: **Innovation Investment, Conditions, and Performance**[75]

	OECD	China		Brazil		Chile		Colombia		Mexico		Argentina		Peru	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
INNOVATION PILLAR	**4.4**	**29**	**3.9**	**44**	**3.5**	**46**	**3.5**	**57**	**3.3**	**63**	**3.2**	**78**	**3.1**	**113**	**2.7**
Enabling environment															
Competition	4.8	66	4.3	132	3.6	23	4.9	128	3.7	103	4.0	141	3.0	59	4.4
Quality of math and science education	4.6	31	4.7	127	2.7	87	2.8	83	3.7	126	2.7	113	3.2	135	2.4
Quality of education system	4.4	54	4.0	115	3.0	124	3.4	72	3.7	107	3.1	86	3.4	128	2.6
ICT use	4.9	74	2.5	63	2.7	56	3.0	78	2.5	73	2.5	55	3.0	82	2.3
Gov't procurement of advanced tech products	3.9	16	4.4	52	3.9	47	4.0	45	4.0	75	3.6	127	2.8	98	3.3
Intellectual property protection	4.9	47	4.0	84	3.2	63	3.6	86	3.2	85	3.2	128	2.5	122	2.5
Venture capital availability	3.1	22	3.5	52	2.8	34	3.1	49	2.9	78	2.5	129	1.9	38	3.0
Investment															
Company spending on R&D	4.2	23	4.2	30	3.8	60	3.1	76	3.0	79	2.9	72	3.0	118	2.6
Quality of scientific research institutions	5.0	38	4.3	42	4.1	51	4.0	69	3.6	54	3.9	41	4.2	109	2.9
University-industry collaboration in R&D	4.7	29	4.5	38	4.2	44	4.1	43	4.1	45	4.0	48	3.9	103	3.2
Availability of scientists and engineers	4.8	33	4.6	91	3.8	29	4.7	77	4.0	86	3.9	75	4.0	102	3.5
Performance															
Capacity for innovation	4.3	23	4.2	31	3.8	66	3.0	59	3.2	76	2.9	77	2.9	99	2.7
Utility patents per million population	89.8	46	2.0	60	0.9	53	1.3	76	0.1	58	0.9	55	1.1	83	0.0

Source: World Economic Forum (2011), p. 35

3.5.3 *Economic data of Argentina and Chile*

In 2003, Argentina's GDP was around 129 billion and grew extremely fast to 446 billion US$ in 2011. Particularly from 2009 onward, the economy boomed and the GDP reached 368 billion US Dollar. During the same time, Chile's economy increased more slowly from about 78 billion in 2003 to 249 billion US Dollar in 2011. The stronger increase of the Argentinian GDP, compared to Chile's growth, can be explained with the deep crisis Argentina suffered in 2001/2002. From then on, the country again began to regain its economic strength.[76]

Looking at the GNI (Gross National Income) per capita of purchasing power parity (PPP) in the period from 2003 to 2006, we can observe a stronger development in Argentina than in Chile. In Argentina the GNI per capita PPP grew from 8'190 to 11'740 US Dollar, while in Chile the change has been from 10'300 to 13'640 US Dollar in 2006. By 2012, Chile's GNI per capita PPP was 21'590 US Dollar, compared with Brazil, 10'720 US Dollar, the United States 48'820 US Dollar, and Germany 41'370 US Dollar, in the same year. For a better understanding and to smooth fluctuations in prices and exchange rates, the World Bank applies the Atlas method of conversion. A comparison with this method shows that Chile's GNI exceeds the Latin American values, while Argentina outperformed the Latin American and Caribbean benchmark

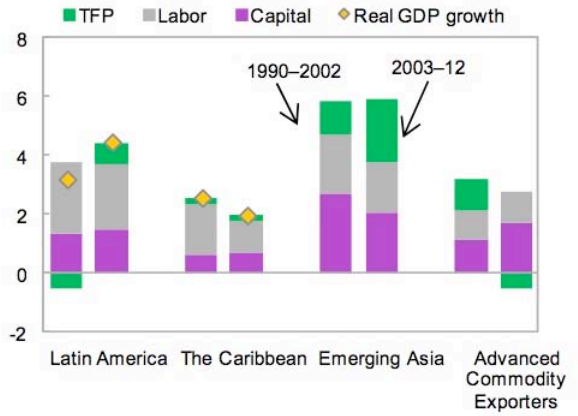
[75] ranking out of 142 countries
[76] cp. The World Bank (2013)

until its deep crisis in 2001/2002, when a correction occurred and the GNI fell. Until 2006, the performance varied similarly to the LAC's values.[77]

3.5.4 *Total Factor Productivity of Latin America and the Caribbean*

Latin America and the Caribbean's growth seem to have accelerated. In the last ten years, LAC grew on average by 4%, which is high compared to 2.7% in the 1990s and 2.0% in the 1980s.[78] Together with China and India, Brazil is establishing itself as a greater power and has gained political influence in WTO-negotiations. Its recently high GDP is mainly due to growth of capital and labor, while the TFP (Total Factor Productivity) remains low.[79] Sustainable growth can only be achieved if a renewing process of education and technology takes place, as it is occurring in Eastern Asia. Compared to the TFP of the countries within 'Emerging Asia', the Latin Americans' productivity increase is moderate. Due to this, speaking of the BRIC countries is difficult. The different internal structures of the BRIC countries' GDP growth, in particular comparing China with Brazil, speak against putting these countries in the same league.

Illustration 18: **Contribution to Real GDP Growth**
(Annual average, percent)[1]



Sources: Penn World Table 7.1; IMF, *World Economic Outlook*; and authors' calculations.
[1] Simple average of countries within each group. Latin America includes all Latin American countries in our sample. Emerging Asia includes Indonesia, Malaysia, Philippines, Thailand, and China. Advanced commodity exporters includes Australia, Canada, New Zealand, and Norway. The Caribbean includes Barbados, Jamaica, and Trinidad and Tobago.

Source: Sosa S. et al. (2013), p. 8

Latin America's TFP growth during the last 10 years was small. Its deep-rooted institutional problems, which constrain an improvement of the political and economical environment, could be one reason of this small increase. But efforts are being made to

[77] cp. The World Bank (2013)
[78] cp. Sosa, S. et al. (2013), p. 2
[79] cp. Sosa, S. et al. (2013), p. 15

improve this, as can be seen in Mexico, where president Enrique Peña Nieto is increasing the investment in education.

There has also been a small improvement in the TFP differences across the Latin American countries. Between 2003 and 2012, a strong growth was recorded in Panama, Peru, and Uruguay related to the upward trend in the economic cycles of most of these economies. Specific economically important changes, like the canal expansion in Panama, also affected the TFP.[80]

In the 1980s and 1990s, Chile was one of the few countries with a positive TFP in Latin America. During the last 10 years, TFP growth was negative, reflecting a declining productivity in the mining sector. Due to the recent commodity price boom, the expansion of energy and mining production has now become profitable. A similar change in TFP could also been seen in commodity-exporting advanced economies, such as Australia, Canada, and Norway.[81]

The latest GDP growth has been supported by external conditions such as strong global growth, high commodity prices, and easy external financing conditions. As for internal conditions (supply side perspective), the factor accumulation of capital, quality-adjusted labor, and changes in the TFP, has had an impact on the GDP's growth. Here especially labor is the main driver of growth. But the contribution of labor to the economic growth will decline due to an aging population.[82]

Comparing the productivity of the LAC with that of emerging Asia, the growth is very moderate, with a considerable difference in their TFP (Illustration 18). LAC must improve their productivity, otherwise a sustainable strong growth is unlikely. Improvements in education, technology, and economical structure are essential, if the LAC are to compete with emerging Asia.

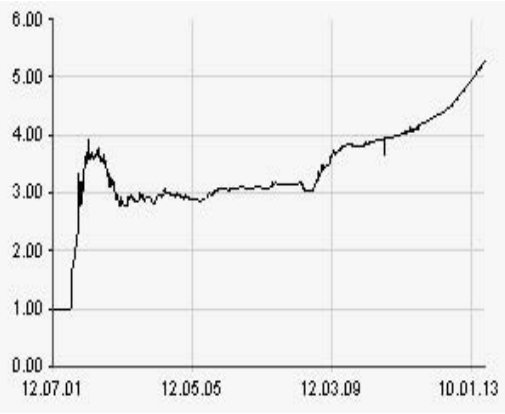
[80] cp. Sosa, S. et al. (2013), p. 9
[81] cp. Sosa, S. et al. (2013), p. 9
[82] cp. Sosa, S. et al. (2013), p. 12

3.5.5 *Financial Crisis in Argentina*

During the 1990s Argentina's economic and political model, together with the effects of the financial, fiscal and economic crisis of 2001/2002, caused an extremely high and continuously growing rate of poverty. Before, the country had seen a phase of economic growth and high per capita income, which ended with the crisis in 2001/2002.

In social terms, the economic model of the 1990s caused a high level of poverty, with more than 30% poverty in the suburban areas, in 1995.[83] *"In this period, the society suffered polarization, low income sectors suffered from growing poverty, modernization was showing excluding patterns (socially and spatially) and the traditional middle class was already showing a growing fragmentation."*[84] The dramatic devaluation of the peso in 2002 was followed from a dramatic loss of dollar-based private capital, as can be seen in Illustration 19, and poverty grew extremely rapidly.

Illustration 19: **US-Dollar/Argentinian Peso**



Source: Finanzen (2013)

3.5.6 *Global Competitiveness Index (GCI) of Chile and Argentina in LAC*

Chile remains the most competitive economy in Latin America and the Caribbean. The reasons for Chile's constant improvement since the 1990s are a solid institutional framework, transparent public governance, and sound counter-cyclical macroeconomic policy. Today it is one of the countries with the highest per capita incomes in LAC. High levels of foreign and domestic competition have been measures to open and liberalize Chile's markets. A flexible labor market and an advanced financial market, compared to others in the region have also been reasons for its stable development. The worldwide increase of commodity prices, such as the price of copper, helps the

[83] cp. Ciccolella P. (2002), pp. 203-223
[84] cp. Jordán, R. et al (2010b), p. 99 qtd. in Svampa, M. (2005)

government with financial resources to support weaker regions of the country.[85] This has raised the GDP's growth to 3.9% in 2011 and 3.0% in 2012.[86]
With its higher rents, solid basic requirements, and efficiency, Chile has progressed rapidly to the next stage of development. Still, companies lag behind in their efforts to innovate. Relatively low-quality scientific research institutions and weak university-industry collaborations in research and development predominate. The overall lower quality of education, with an overall poor performance in math and science, hampers Chile's development and needs to be improved to bring knowledge into the market.[87]

Argentina's large domestic market size and the high level of tertiary education are excellent conditions for a growing economy. Nevertheless, a lack of good working institutions that the public can trust and extensive inefficiencies in the allocation of goods are problems the country must face. The absence of an efficient labor force and financial resources are also problematic. As a result, the country has a lack of financing opportunities for investments. The institutional framework has considerable structural problems and cannot offer a stable base for investments. The excessive bureaucracy supports the development of an informal economy, hinders a sound domestic competition, and causes high barriers to trade. Not least, a worsening of the macroeconomic situation by pro-cyclical policies starting in 2001 and the high inflation rate lead to questions regarding the sustainability of Argentina's economical development. Due to these facts, stability of the growth that started in 2003 is questionable and continued growth improbable.[88]

A detailed comparison of Argentina's and Chile's competitiveness can be seen in 3.5.8 Obstacles and Risks.

[85] cp. World Economic Forum (2011), p. 32
[86] cp. The World Bank (2013)
[87] cp. World Economic Forum (2011), p. 32
[88] cp. World Economic Forum (2011), p. 36

3.5.7 *Asset Qualities*

Which sectors offer the best opportunities for institutional investments in foreign countries? The retail and the office markets are the quite common markets for international investments. Plentiful data for a good analysis is available and long-term contracts of large-scale property are also easier to handle than a strongly divided property with many different contracts.

In Chile, larger buildings used to be owned by multiple proprietors, because people traditionally owned the space they needed, instead of renting it. Due to this, it is nearly impossible to buy a whole building as investment for foreign institutional investors. In recent years, international investors have entered the real estate market in Santiago de Chile, resulting in a steadily increasing dealable real estate market. Due to this, new buildings owned by particular institutions entered into the market. Today, Santiago de Chile is one of the most attractive real estate markets in Latin America. In 2014 the office space on offer will have doubled.[89] This fast growth should be monitored continuously. Indeed, the atmosphere in Santiago de Chile is good and the economy is sound, but an excessive growth could affect an increasing vacancy.

Nevertheless, a project development in Santiago in the sector retail or office buildings could be an option. The *comuna "Las Condes"* is the financial center of Santiago and the place where international investors presently act. However, enormous traffic problems are already evident as a result of an underdeveloped transport infrastructure.[90]

Currently, the biggest problem in Argentina and for an investment in Buenos Aires is the critical political and economical situation. Inflation is high and taxes have increased even more than inflation. The prohibition against buying US Dollars, which President Christina Fernández Kirchner announced in July 2012, has had the greatest impact on the real estate market. As a result, the transactions on the real estate market fell by more than 40%.[91] In Argentina, the currency for large and mid-range real estate deals has been the US Dollar for the last 40 years. Due to this recent limitation, international investors cannot act on the Argentinian market. Still, despite these critical circumstances, Buenos Aires' future urban development could be interesting.

---

[89] cp. Fariña Fischer, F. (2013) [date of interview: July 1, 2013]
[90] cp. Fariña Fischer, F. (2013) [date of interview: July 1, 2013]
[91] Rebossio, A. (2013)

3.5.8 *Obstacles and Risks*

Transparency International published the Corruption Perceptions Index 2012 that shows the relative position to the 176 analyzed countries and the Corruption Perceptions Index score, which indicates the corruption problems of a country (Appendix 12). Chile is in position 20 out of 176 countries. This ranking is quite high for a Latin American country and stands out, together with that of Uruguay. Even Austria ranked 25 and Spain 30 on the list, having a public sector that is more liable to corruption than Chile and Uruguay - both ranked 20. The US holds rank 19. Argentina is ranked at 102, approximately 30 ranks below Italy. In between lie the countries such as Panama and Peru in Latin America and Greece in Europe.
Looking at the scores of Chile and Argentina, we can see certain differences. Transparency International considers countries with a score of 0 to 50 to have a serious corruption problem in their public sector. With a score of 72 out of 100, Chile and Uruguay are estimated to have a value similar to the UK at 74, the US at 73, Austria 69 and Spain at 65. Argentina's rating of 35 could be grouped with the scores of Mexico 34, Bolivia 34 and Peru 38 in Latin America as well as Greece 36 and Italy 42 in Europe.[92]

The surprisingly poor results for a few European Countries and the growth potential of the Latin American countries, though still in an earlier stage of development than Europe, indicate opportunities for investments. At the moment, the structures in Chile and Argentina are young and not yet consolidated. The strong population and economic increase is not yet reflected in a complete urban, social and structural environment.

However, in addition to a systematic due diligence of facts an investment in fast growing Latin America requires an analysis of elusive factors that, in the end could be decisive for a successful investment. To better evaluate the risks of an investment in Argentina, the Bribe Payers Index 2011 indicates to us one of the critical aspects of corruption.
Natural resources oil and gas are important sectors of Argentina's economy and are among the sectors most affected by bribery. The Bribe Payers Index 2011 evaluated

[92] cp. Transparency International (2012)

these industries to be very susceptible for bribery with a rating of 6.2 out of 10[93]. Other sectors that are also important for Argentina's economy, such as farming and manufacturing, are also listed on the Index and are therefore at risk. The Bribe Payers Index 2011 lists Argentina at position 23 of 28 analyzed countries and classifies it in a disadvantageous position.

Chile is not listed in this index. Nevertheless for Chile's economy, the very important mining sector industry is where illegal payments are quite possible and could take place. The governments of the affected countries have a responsibility to improve their regulatory and legal resources against corruption. They should set an example and act against bribery and corruption in the public sector.[94]

The Bribe Payers Index that measures foreign bribery by its companies, and the Corruption Perceptions Index that indicates a government's fight against corruption within the country, are strongly correlated.[95]

Even if there are a number of international conventions against corruption, 21 out of 38 states, including Australia, Brazil, Canada, Mexico, South Africa and Turkey are barely or not at all interested in the *OECD Anti-bribery Convention*. The aim should be that countries, such as Argentina, Bulgaria, and South Africa, amongst others, make bribery a crime.[96]

The Global Competitiveness Report 2011-2012 states that the most problematic factor in doing business in Argentina is *inflation*. After that, *corruption* and *political instability* are the second and third most problematic obstacles, followed by *labor regulations* and the *access to financing. Tax rates* and *tax regulations* as well as the *government's bureaucracy* also need to be considered as issues of high importance.[97]

Comparing the GDP (PPP) per capita of Argentina with the average of the whole LAC, Argentina's value from 1990-2002 was better than that of LAC. With the 2001/2002 crises in Argentina, performance broke down. From then on the GDP (PPP) per capita began to grow faster and reached in 2010 a 1/3 higher value than LAC.

---

[93] the given scores reach from 5.3 to 7.1. The average is 6.6. 10 = the companies never bribe. 0 = the companies always bribe

[94] cp. Transparency International (2011), p. 8

[95] cp. Transparency International (2011), p. 8

[96] cp. Transparency International (2011), p. 9

[97] cp. World Economic Forum (2011), p. 98

The only advantageous aspect of Argentina's economy, compared with other countries in the same stage of development, is its market size. Together with 17 other countries Argentina is in a transformation process from an *efficiency-driven* to an *innovation-driven* economy.[98] The institutions' and the goods market's efficiencies have huge deficits and the rankings concerning the financial market development, labor market efficiency, and infrastructure are under the values of the peer group.

Compared with the whole 142 monitored countries of the Global Competitiveness Report 2011-2012, Argentina's *higher education and training* (rank 54) and its *health* and *primary education*, which ranks on position 56 show advanced development stages.[99]

The overall ranking of Argentina 2011-2012 is at 85 out of 142, which is an improvement over the last three years, but nevertheless is far behind Chile. However, if the political situation improves, Argentina could begin to tackle its toughest problems to attain a stable market with a young educated population and a good health care system.

The most problematic factors in doing business in Chile are the *restrictive labor regulations*, for which Argentina is ranked in the fourth position. After that, the *inefficient government bureaucracy* and the *inadequately educated work force* are the second and third ranked factors that have been classified as problematical issues for a business in Chile. At position four and five, *tax regulations* and *tax rates* should also be considered and analyzed.[100] Chile has to combat less difficult problems than Argentina, but inflation, corruption and instability are fundamental problems, which require a radical change in politics.

The GDP (PPP) per capita in Chile developed in a different way. As this country did not suffer an economic collapse like Argentina, its development has been steady. Around 1991, Chile's GDP (PPP) per capita passed that of LAC and is today nearly on par with that of Argentina. This occurred slowly and constantly and can be seen as more sustainable growth.

In each of the twelve analyzed factors of the GCI except for *health* and *primary education*, Chile outperforms. Chile ranks best in the factor *macroeconomic*

---

[98] The group consists of 18 economies: Argentina, Barbados, Brazil, Chile, Croatia, Estonia, Hungary, Lativa, Lebanon, Lithuania, Mexico, Oman, Poland, Russian Federation, Slovak Republic, Trinidad and Tobago, Turkey, Uruguay

[99] cp. World Economic Forum (2011), p. 98

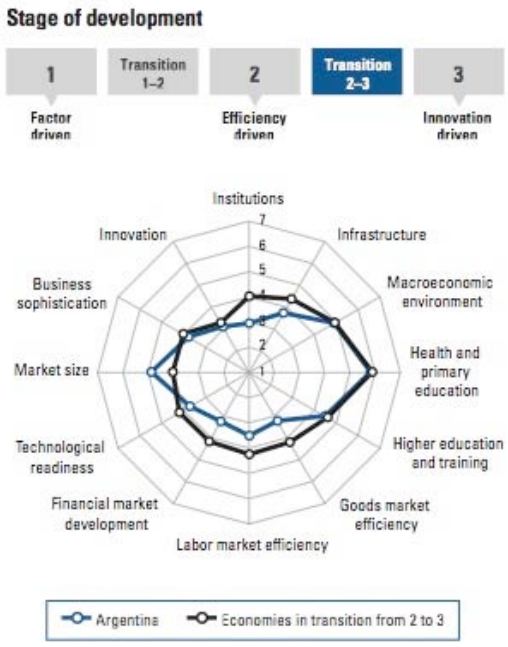
[100] cp. World Economic Forum (2011), p. 146

environment, with position 14 out of 142. *Goods market efficiency* ranked 25 and *institutions* ranked 26. *Institutions* and *macroeconomic environment* stand out and scored much better than the whole LAC. The biggest deficits are the *innovation* and *infrastructure*, though these are problematic throughout the whole LAC area.

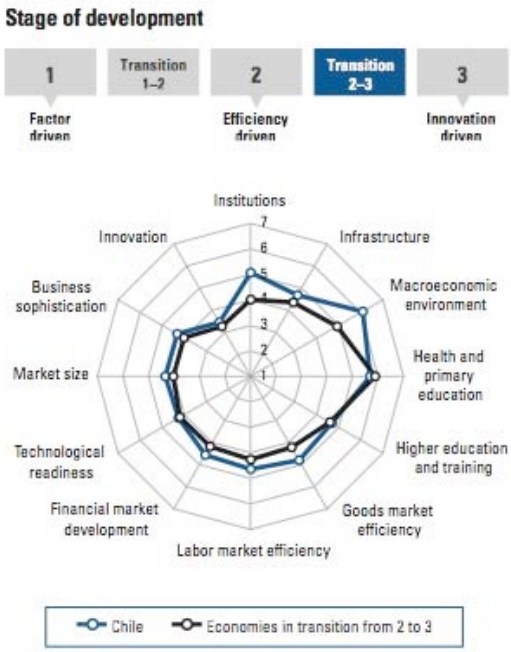
Finally in 2011-2012, the GCI[101] ranked Chile at position 31 out of 142. Comparing this with the last two years, we can observe a constant improvement. The small population makes realizing political programs easier than in Argentina, despite Chile's geographical extension. On the other hand, overregulation leads to slowing things down and bureaucracy becomes an obstacle. The country needs a better educated work force than it now has to accelerate the growth of innovation in Chile.

Illustration 20: **The Global Competitiveness Index 2011-2012**

Argentina



Chile



Source: World Economic Forum (2011)

[101] Global Competitiveness Index

4 A Real Estate adjusted analysis of the Enterprise Survey 2010

4.1 Introduction

Going international brings about obstacles and risks. First, for a good and detailed due diligence, related costs are incurred. Often, a foreign investor has informational disadvantages to his competitors from the region or country. Currency and political risks are higher. The liquidity for an investment abroad is usually less and could be an added challenge for an international investment.[102] Regulatory aspects, such as currency control in Argentina, where transactions on the real estate market were historically carried out in US Dollars and thus liquidity were disrupted, must be considered.[103] These challenges and barriers are also represented in the way people appraise their environment, how they act and what they consider important for them.

4.2 Method

In 2011, the World Bank published the Enterprise Survey 2010 of companies in Chile and Argentina, among other countries.

The survey is based on investigations on company level and is composed of a representative sample of companies of the economy's private sector. The data from the Argentinian enterprises was collected between March 2010 and March 2011 and was part of the Latin American and Caribbean Enterprise Survey. In the course of the survey, in Argentina, data from 1'054 enterprises were analyzed. In Chile the research was conducted between May 2010 and April 2011 and included 1'033 establishments. The Chilean questionnaires had a total of 290 questions, while the Argentinian survey listed a total of 288 questions.

---

[102] cp. Geltner D. M. et. al. (2001), p. 635
[103] cp. Rosso C. (2013)

4.3 The Enterprise Survey 2010 for Argentina and Chile

In this thesis, we focus on 40 of the analyzed questions the World Bank published in the Enterprise Survey 2010. 39 of them are subdivided into six groups, each headed by a title and some preliminary questions; and one is analyzed in section 4.4.

Determining factors for the companies development:

I. **General Governmental & Regulatory Compliance:**
   What are the main challenges in the local, national and international framework?
   What are the obstacles caused by regulations?

II. **Legal Framework & Political Situation:**
   How easy are structural changes in the company feasible?

III. **Market Improvement:**
   Are changes occurring?
   Is there an improvement of the companies' structures and efficiency in process?

IV. **Work Force:**
   How does the professional qualification affect the companies' improvement?

V. **Socio-Cultural Effect:**
   What is the situation in the countries concerning corruption and crime?

VI. **Real Estate Market:**
   Where are the chances in the space and construction market?

4.3.1 *General Governmental & Regulatory Compliance*

The results of the questions on general governmental and regulatory issues show a more relaxed situation in Chile than in Argentina. What are the main challenges to the local, national and international framework? What are the obstacles caused by regulations? The questions and a table with an extract of the interviewed establishments' answers can be found in Appendix 13.

In Argentina 27.5% of the companies said that custom and trade regulations are not an obstacle, while in Chile more than double the companies say this (58.3%). Conversely, 61.2% in Argentina and 37.8% in Chile see customs and trade regulations as a minor to a very severe obstacle. For 16.9%, labor regulations in Argentina are rated as a small obstacle, while more than twice as many Chilean companies or 39.1% value this as a small obstacle, too. How well is the government organized? How much time does a senior manager spend per week on dealing with requirements imposed by government regulations? The result is that Chile's governmental structures seem to be easier to deal with and better organized. By comparison, a senior manager in Argentina has to spend more time in dealing with requirements imposed by the government than in Chile. In Argentina, 23.7%, 21.6% and 22.7% spend 5-10, 20 and 30 to 50 hours while in Chile, only 31.8%, 19.5 and 8.1% spend 5-10, 20 and 30 to 50 hours dealing with bureaucracy. A total of 89.5% of the companies see tax rates in Argentina as an obstacle, which can affect current operations of a business, while only 10.5% have an opposite opinion. By comparison, in Chile 50.9% consider tax rates not to be a big obstacle and 48.7% as a moderate to very severe obstacle. Argentina's establishments all agree that tax rates are an obstacle, whereas Chilean companies' opinions differ. Also, tax administration is evaluated differently in the two countries. In Argentina 77.7% see tax administration as a moderate to very severe obstacle and 21.3% rated it as no to a minor factor in affecting the current operations of a business. Here also Chile seems to be a better organized country with 60.4% evaluating the tax administration as a small obstacle and 37.8% think that its influence is not problematic for business.

4.3.2 *Legal Framework & Political Situation*

How easy are structural changes in the company feasible? In general the legal framework does not show significant differences between the two countries, the situation seems to be similar. Only the question concerning political stability has been answered differently. Argentina's companies see a problematic political environment. The questions and a table with an extract of the interviewed establishments' answers can be found in Appendix 14.

The application for a construction-related permit takes nearly the same amount of time in Argentina as in Chile. In Argentina 14.2% of the applications were in process, 14.6% take 30 days, 12.9% take 60 days and 10.5% need 90 days. The numbers in Chile, with 13.7%, 14.1%, 11.1% and 10.1%, are similar. Argentina's companies seem to be more interested in working globally, perhaps because of its huge production industry. However, 87.0% of the Chilean companies did not submit an application to obtain an importation license over the last two years, 12.4% did. In Argentina 26.6% applied for a license and 73% did not. To issue this import license Argentina's government needs more time. In 11.8% cases 120-180 days were required, while in Chile only 3.9% of the applications required this amount of time. In Argentina, 21.1% need 60-90 days from the day of the application to the day it was granted, while in Chile 3.4% of the applications required the same period of time. The obstacles for business licensing and issuing of permits are similar and moderate. With 63.1%, Argentina's establishments rate this factor's influence on current operations of a business equally to Chilean companies, with 57.6%. Differences can be seen in further answers to this question. Here 40.8% of the establishments in Chile definitively do not see an obstacle in business licensing and issuing of permits, while in Argentina, only 21.3% share this opinion. A total of 90.5% think that political instability in Argentina could affect the current operations of a business and 8.6% do not. In comparison to this clear answer, in Chile the opinion is divided, although the majority considers that the political situation is not an obstacle. 51.9% rate political instability as not being an obstacle and 47.6% as being one.

4.3.3 *Market Improvement*

Are changes in Argentina's and Chile's market occurring? Is there an improvement of the companies' structures and efficiency in process? An improvement process in Chile is occurring. Products are improving, efficiency is increasing and the economical use of energy can be observed. An opening to global markets is slow but taking place. The corresponding questions and a table with an extract of the interviewed establishments' answers can be found in Appendix 15.

Over the last three years 72.3% of the interviewed companies from Argentina introduced new or significantly improved products (goods and services), while in Chile 57.7% did the same. In Argentina and Chile, 27.4% and 42.3% did not introduce new or significantly improved products. In terms of process improvement, 57.0% of Argentina's companies introduced new or significantly improved processes for producing and supplying products (goods and services) in the last three years. In the same time period 49.7% could also improve their processes in Chile. Nearly the same amount of establishments, in Argentina with 66.2% and Chile with 65.3%, said that programs and services used in the last three years increased sales in the domestic market. 31.9% in Argentina and 34.0% in Chile could not register an effect. 79.6% of both countries' companies confirmed an improvement in quality of goods and services in the last three years. During this time the unit production cost decreased in both countries in nearly half of the companies. In greater detail, in Argentina 47.1% did and 50.6% did not record reducing their unit production cost, while in Chile 50.0% answered yes and 37.0% no. With 23.5% in Argentina and 30.7% in Chile, they reduced their energy consumption (electricity, gas, etc.), in the last three years. Here, Chile's companies seem to be more aware about environmental issues. For both countries, the main market is the national market, with 62.3% in Argentina and 58.1% in Chile, while the international figures are 8.7% and 7.5%. Chile's local market is stronger with 34.3% than Argentina's with 28.6%. The international presence of the two countries is low, but new efforts are taking place and 74.0% of Argentina's and 81.6% of Chile's companies had programs and services and opened new foreign markets, during the last three years. 67.5% and 68.2% of Argentina's and Chile's companies obtained a quality or export certification, during the last three years, which could help going international.

4.3.4 *Work Force*

Are there any efforts to improve the professional training for a better educated work force? In general both countries have similar ambitions to improve the quality of their employees and implement quality certifications. In Chile, we can observe stronger support from the government in offering training opportunities through partially or fully funded external trainings. The corresponding questions and a table with an extract of the interviewed establishments' answers can be found in Appendix 16.

49.9% and 54.5% of the companies in Argentina and Chile offered services and programs to improve quality control or training to obtain quality certification during the last three years. Also, looking into the future, 74.8% of Chile's companies want to continue to enforce their commitment for a better quality control or training during the next three years. In Argentina, 70.5% of the companies envisage this future improvement. There only 8.3% offered external training partially or fully funded by the government, while in Chile 52.0% affirmed external training with governmental support. Help from the government for a better educated work force is particularly important for the growing younger increasing population. Their companies must support the employees, in order to get adequate trained. In Argentina, 69.8% of the interviewed companies offered external trainings, which they funded partially or fully. In Chile, 70.1% confirmed the same. Over the past three years in Argentina, 10.9% received public support (financial or other types of assistance) for training-related activities. That amount is much higher in Chile, where 39.3% of the establishments received support from the government.

4.3.5 *Socio-Cultural Effect*

What is the situation in the countries concerning corruption and crime? Losses through theft, robbery, vandalism or arson, as well as crime and disorder are comparatively small problems in the analyzed countries. A minor difference could be seen in the way informal payments and gifts are used to influence administrational processes and to obtain permits. As we saw in section 4.3.2 (Legal Framework & Political Situation) governmental problems also influence different parts of the countries' societies and economies. Corruption in general and especially in the court system is a challenge, which concerns Argentinian companies more than Chile's. The questions and a table with an extract of the interviewed establishments' answers can be found in Appendix 17.

In Argentina, 10.5% confirmed that informal gifts or payments were expected or requested for a construction related permit. In Chile, only 1.3% answered the same question positively, showing a clear difference to the neighboring country. Losses as a result of theft, robbery, vandalism or arson could be recorded at 35.2% in Argentina and 37.1% in Chile. Regarding the questions about how crime, theft and disorder affect their current operations, companies in Argentina rated this aspect as a less severe problem than companies in Chile did. In Argentina, 82.2% and in Chile, 72.8% valuate crime, theft and disorder as an obstacle. Corruption in general seems to be an important problem in both Latin American countries. In Argentina, 83.5% see corruption as an obstacle for their business. In Chile, 50.4% voted the same way and demonstrate a balanced response to this question. The same situation can be observed by evaluating the courts' effects on the current operations of a business. Here 83.5% of the establishments in Argentina and 54.3% in Chile see the court as an obstacle for their work. 57.0% of Chile's companies believe in their court system's fairness, impartiality and uncorrupted behavior, whereas only 19.4% in Argentina disagree with that.

4.3.6 *Real Estate Market*

Where are the chances in the space and construction market? The ownership structure is similar in both countries. Most of the companies own the land they work on and 1/3 are trying to expand their property. With regards to buildings, the companies themselves own a big part, while the majority does not own the buildings they use. Access to land is not easy and nearly half of the interviewed companies in Argentina have problems acquiring land. In Chile the situation is a bit better and about 60% are positive and do not valuate this as an obstacle. The questions and a table with an extract of the interviewed establishments' answers can be found in Appendix 18. The detailed lists of the companies' total selling area can be seen in Appendix 19 and Appendix 20.

With 54.4% in Argentina and 55.9% in Chile, the companies themselves own most of the land occupied by the interviewed establishments. In Argentina, 27.1% and in Chile 29.8% indicated that they rent or lease the land they occupy. As already mentioned, there are ambitions to extend their property. In Argentina, 28.0% and in Chile 29.6% applied in the last two years for a construction-related permit. The total selling area varies in both countries. In general the space companies use is larger in Argentina than in Chile. The buildings are usually not owned by the establishments. In Argentina, 39.2% and in Chile 44.4% do not own the space they use, while 5.8% and 5.1% are half owned. The companies themselves own about 34.2% and 35.9%. During the last three years, 40.8% of the companies in Argentina and 36.8% in Chile tried to acquire additional land or buildings to expand their operations. In Argentina 57.1% have been successful in acquiring land or buildings to expand their operations, while in Chile only 46.5% were. The access to land is more challenging in Argentina than in Chile. In Argentina, 51.5% of the companies consider that getting new land for the current operations of the establishment it is not an obstacle, whereas in Chile 61.3% answered that.

The companies interviewed in Argentina have bigger total selling areas than the Chilean establishments. In both countries owning the occupied space is very common, though the necessary building type could differ in order to offer the right typological structure for each countries' needs. Nevertheless, this would not be enough to diversify an investment.

4.4 An overview of the companies' appraisals

The last selected question illustrates the greatest obstacle that the interviewed companies must overcome. Most of the Chilean companies consider labor regulations as the biggest problem. After that an inadequately educated work force and the informal sector are seen as challenging issues. In Argentina, labor regulations also rank first. Political instability and the practices of competitors in the informal sector are ranked second and third. Other considerable obstacles are access to finance and electricity.

Illustration 21: **Biggest Obstacles for Argentina's and Chile's Companies 2010**

m1a: The World Bank's numeration for this question in the Enterprise Survey 2010
Source: The World Bank (2011)

If we analyze the less conspicuous rakings, which the countries' companies answered differently, we see additional issues that probably can be considered as a 'weak signal' for actual and future projects. Strong divergence can be observed in access to land that Chile's companies consider as an obstacle, as well as crime, electricity, and transportation. Argentina's enterprises regard corruption and customs and trade regulations as an obstacle for their business.

5 Summary and Results

5.1 Summary

diversification: To get the highest possible return with the lowest possible risk, a portfolio has to be well diversified. This can be achieved with a good portfolio diversification management. At the top level, diversification can be realized on a global market selection. On the bottom level the diversification strategy would define in detail the adequate property scale with its physical and contractual characteristics. Intermediate levels of diversification would identify suitable combinations of types, locations and degrees of quality of the property to invest in. It has to be stressed that a detailed assessment of the urban development prospects in each market has to be carried out, as the gained information the basis of every good portfolio diversification strategy is.

urban development: Due to the fast urbanization process in the last decades the transport infrastructure did not grow as fast as the urban population leading to traffic congestion and environmental problems, which are major issues the cities under discussion are facing. In addition, strategic urban planning needs to be developed and a more integral view of the agglomerations' strategic development has to be elaborated.

urban and rural: Argentina's and Chile's urban population has significantly grown within the last decades. Buenos Aire’s agglomeration grew more than triple of the central area, whereas the differences in growth between city center and agglomeration have been modest in Chile. The agglomeration of Buenos Aires is beginning to develop a second, autonomous layer with new cities in the metropolitan region surrounding the core city. A direct and extended communication network can interconnect these subcenters and increase their value. Through this, the subcenters may complement the city center in the near future as condensation points for commerce, trade and quality living areas without congestion and pollution.

poverty: Poverty is decreasing in the two analyzed regions. Since poverty in the cities’ centers is already low, it does not diminish as fast as in the agglomerations. The RMBA shows a more than six times stronger improvement in the population’s wealth than the

central area, which is similar to the national level. In Chile, the contrary situation can be observed. There, the urban poverty rate is similar to the national average and the rural value is less than a half of the urban rate. Despite the low rural rate the improvement of quality of life is higher in this area and differs to the situation of the RMBA.

socio-spatial: In terms of a socio-spatial development high-income households are situated at the north-eastern part of the city in Santiago de Chile. In the city center, an increase of young professionals with a university degree can be observed and a spatial segregation is starting. In the north-western part of BA, a similar accumulation of gated communities can be observed. Poverty in Buenos Aires concentrates in the CB and decreases to its center and to the agglomeration.

population: The United Nations forecast a peak of Argentina's and Chile's population in 2050. The fertility rates of Argentina and Chile are expected to decline by 2025 and the group of 15-59 year olds will most likely not grow any more after 2050. With regard to the overall growth of the population, wealth the next decades will be essential. The greatest potential for both countries to raise their populations' wealth lies with the young professionals and a well-educated youth.

shifting: Focusing on real estate investment possibilities, a strong growth of the boundary area of the CB to the AMBA (Illustration 7) can be observed. In Santiago de Chile, the *comunas* in the eastern part of the city center (Illustration 9) have the highest growth rates in the region. In the north-eastern part of the city center, high income communities are settling. Due to this, the developing areas of each city are identified, and the shifting of the cities' population has been illustrated.

market: The Latin America's and the Caribbean's GDP growth outperform that of advanced economies (Illustration 17) and a stable national and international demand can be observed there. Still, the extraordinary low productivity (TFP) in LAC, as well as the shortage of well-educated work force curtails the country's improvement. A higher investment of public and private resources in education and research will be necessary to gain an innovation-friendly environment. Therefore, companies and governments have to step up their efforts.

ratings: The Global Competitiveness Index shows a better performance of Chile than Argentina. Overall, forecasts for the development of LAC are good. The GCI rates inflation to be the most problematic factor for doing business in Argentina, closely followed by corruption and political instability, which are considered as the second and third most problematic obstacles. In Chile, the most problematic factors for doing business are the restrictive labor regulations, the inefficient government bureaucracy and the inadequately educated work force.

The Corruption Perceptions Index shows that Chile offers a more reliable regulatory environment for investments than Argentina does. With a score of 72 of 100[104], Chile is estimated to have a value similar to the UK, the US and Austria. Argentina's rating is similar to Mexico's, Peru's and Italy's. The Bribe Payers Index 2011 lists Argentina at rank 23 of 28 analyzed countries, classifying it as disadvantageous. Chile is not listed in the index.

the survey

Table 8: **The Enterprise Survey 2010: Obstacles and Improvements**

		Argentina	Chile
I.	General Governmental & Regulatory Compliance	**obstacles** - Taxes	**obstacles** - Labor regulations
II.	Legal Framework & Political Situation	**obstacles** - Political Instability	**obstacles** - Business licensing & permits
III.	Market Improvement	**improvement** - Introduced new products (goods & services)	**improvement** - Increase sales in domestic market
IV.	Work Force	**improvement** - External training offered by companies - Improve to obtain quality certification	**improvement** - External training offered by government - Public support for training-related activities
V.	Socio-Cultural Effect	**obstacles** - Corruption and fairness courts	**obstacles** - Crime, theft and disorder
VI.	Real Estate Market	- 54% own land - 28% applied for a construction permit - large selling areas - 39% rented or leased the building - 41% want to acquire land or building - 57% acquired successful land or building - 47% rated access to land as obstacle	- 56% own land - 30% applied for a construction permit - small selling areas - 44% rented or leased the building - 37% want to acquire land or building - 47% acquired successful land or building - 39% rated access to land as obstacle

[104] 0 - highly corrupt to 100 - very clean
Transparency International considers countries with a score of 0 to 50 to have a serious corruption problem in their public sector

In The Enterprise Survey 2010, Chile's companies considered labor regulations and a lack of well-educated work force as major issues for their business. Argentina's establishment has to struggle with labor regulations, political instability, and a high inflation rate.

The real estate market is changing in both countries and more companies lease or rent the property or land they use. While Argentina's companies tend to develop and own the land or building they use themselves, Chile's companies tend to rent or lease more.

5.2 Results

The unfavorable environmental situation in the city centers support the increase of the suburban population in the metropolitan areas of both cities. Growing wealth and the political framework support a shift the populations' growth to the eastern part in Santiago de Chile and the northern area of Buenos Aires, where gated communities accumulate. Furthermore, a population increase can be observed at the boundaries of Gran Buenos Aires.

An interesting fact pointed out in the urban development analysis, as well as in the Enterprise Survey 2010 is the growing rate of tenants, which makes it possible for an investor to develop or buy larger buildings in order to rent them out, for example, in units per floor.

Larger buildings have to fit into the urban context and have to be placed carefully. The type of building, whether it is housing or office, the target group, whether low-income, high-income or both income groups, and the projected density with its effects on quality of life as contribution to the urban space have to be considered carefully. Examples can be social effects, such as segregation and a densification of the high-income class or an accumulation of the low-income class, which could lead to a surge in the crime rate. Urban strategic plans to improve quality of the whole metropolitan regions could help to provide a sustainable urban development.

Chile’s eastern *comunas* and the agglomeration are increasing. With regard to the developing infrastructure and population, as well as the current rents attractive developing areas can offer possibilities to develop or buy property. Although political difficulties are evident in Argentina, investment potentials are given. Due to the large population and the currently strong increase of a young well-educated work force, the country is able to grow strongly within the next decades.

6 Concluding Remarks

6.1 Conclusion

Portfolio diversification strategies can be based on urban development. Due to inflation and the political situation, an investment in Argentina is currently not recommended, while Chile is offering a promising environment for its real estate market.

This thesis examined Buenos Aires and Santiago de Chile with their surrounding metropolitan areas, focusing on their urban development and their real estate markets' situations in order to gain sufficient information that a potential foreign institutional investor need for decision-making. Therefore, it analyzed different aspects such as spatial, environmental, social, political and economical issues.
Both cities struggle with their environmental and transport infrastructural problems, and if quality of the cities' centers does not improve sufficiently, the agglomeration will develop better, leading to continued segregation and further loss of population of the city centers'.

At present, the changes in populations in each region lead to a shift from the central areas to the agglomerations. In Buenos Aires, a strong growth of the boundary area of Gran Buenos Aires can be observed. Currency control through the Argentinian government cut real estate transactions down, as the US Dollar used to be the transaction currency for real estate there. At present, buying or developing property in Buenos Aires does not make sense for an foreign international investor. However, due to low poverty, a growing economy, and a steady increase in population Argentina may become a potential market for foreign investors in the future. The currently developing new centers in the peri-urban space, with their amenities, as well as the large population in the metropolitan region are very likely to provide sustainable investment opportunities.
In Santiago de Chile investment opportunities can be found in the growing eastern part of the city nearby *Las Condes*, which is the 'financial center' of Santiago, in the city's center, and probably in Santiago's suburbs. This is under the condition that poverty continues to decrease steadily in the suburban areas and that transportation infrastructure continues to improve. Currently Buenos Aires' poverty decreases faster in

the city center, in Santiago the improvement in quality of life is higher in the rural areas. As a result, investment and diversification possibilities in Santiago's property markets, such as the office and the housing market are given. The improving quality of life can also bring the middle- and high-income class into the city's center.
The two analyzed cities' GDPs are growing, but the low *total factor productivity* (TFP) can hamper a sustainable growth if an improvement of the education system, as well as in research and development does not take place.

Focused on a real estate adjusted due diligence, this thesis gave an insight into the challenges companies are facing in Argentina and Chile. The result of the Enterprise Survey, concerning regulations, policy, market improvement, work force and socio-cultural issues is similar to the conclusions gained from the productivity measuring TFP and institutional ratings, such as the Global Competitiveness Report, the Corruption Perception Index and the Bribe Payers Index. All studies confirm that the obstacles companies are concerned about, are labor regulations, a lack of a well-educated work force in Chile and regulations, taxation, inflation, and corruption in Argentina.
A continued analysis of the real estate markets in both countries together with close monitoring of the urban development and the shifting of the cities' balance points can identify new investment possibilities.

6.2 Discussion

This Masters' Thesis gives an overview of the two countries' urban developments and their political and economic improvement in view of analyzing potential areas of a sustainable real estate investment. It illustrates the present challenges and problems the cities' governments have to solve, as well as their assessment in the international context.
Understanding the spatial relations of the two metropolitan areas with respect to their cities centers' helps to assess the actual development, not only considering return rates as they only reflect the actual 'market price', but instead the 'real asset quality' in a long-term vision.
The Enterprise Survey 2010 provides an idea how local companies think about their country's political, social, economical, and environmental strengths and weaknesses.

Particularly the surprisingly high amount of companies renting or leasing the land or building they use, extends the investment possibilities for foreign institutional investors. Nevertheless, without information advantage prices are ‘market prices’ and are adapted to investment's risk. In addition to a thorough due diligence, the direct contact to locals should be sought in any case.

6.3 Outlook

Are there any other cities in Argentina and Chile than the two megacities Buenos Aires or Santiago de Chile, which can provide interesting alternatives for investments, such as smaller cities with international airports and a good infrastructure in addition to a high quality of life? Today, Chile is too small to be considered for investments in other cities in the country. In Argentina and Chile, the future development of cities of smaller size could result in interesting investment opportunities, nevertheless.

Another possible next step can be an analysis of the improvement of peri-urban space and its subcenters in Buenos Aires. Do they have the potential to grow and become independent working centers? An investigation into this question could yield important results, in particular with respect on diversification strategies. In Chile the interrelation between transport infrastructure and the development of new city areas should be analyzed, as city authorities are currently undertaking considerable efforts to enhance Santiago’s transportation network.

With this, correlations of transport infrastructural improvements and rents in these improving areas can be calculated for both cities and their particular progress.

Overall, it can be stated that Latin America is a world region, which should be taken into account global real estate investment is an option. As detailed information about the real estate markets should form the basis of every investment strategy in the region, a study similar to the one presented in this Thesis should be carried out for countries other than Argentina and Chile as well.

List of references

Blacksmith Institute (2007): The World's Worst Polluted Places. The Top Ten of The Dirty Thirty, *Blacksmith Institute* (2007)

Buenos Aires (2012): Boletín Oficial N° 3880, *Buenos Aires, Gobierno de la Ciudad Autónoma de Buenos Aires* (2012), pp. 10-11

Cadena, A./Remes J./Manyika J./et al. (2011): Building globally competitive cities: The key to Latin American growth, *McKinsey Global Institute* (August 2011)

Ciccolella, P. (2002): La metrópolis postsocial: Buenos Aires, ciudad - rehén de la economía global, *Seminar: El desafio de las áreas metropolitanas en un mundo globalizado. Una mirada a Europa y Amárica Latina, Institut Catala de Cooperació Iberoamericana - Institut d'Estudis Territorials – Pontificia Universidad Católica de Chile, Barcelona* (June 4-6, 2002), pp. 203-233

CONAMA (2008): Resultados Plan Operacional para la Gestión de Episodios Críticos de Contaminación Atmosférica por Material Particulado, *Area de Decontaminación Atmosférica Conama Metropolitana de Santiago* (2008)

Cravino, M. C./del Rio, J. P./Duarte, J. I. (2009): Magnitud y crecimiento de las villas y asentamientos en el Área Metropolitana de Buenos Aires en los últimos 25 años, *Research from the Instituto del Conurbano - Universidad Nacional de General Sarmiento* (2009)

Geltner D. M./Miller N. G./Clayton J. et. al. (publ.) **(2001):** Commercial Real Estate, Analysis and Investments, Mason Ohio (2001)

Greenpeace (publ.) **(2009):** Napas contaminadas. Cuenca Matanza Riachuelo. Estudio de potabilidad de agua de pozos, *Greenpeace.org* (2009)

Gobierno de Chile (publ.) **(2011):** Catastro 2011: Mapa Social de Campamentos, *Secretaría Ejecutiva de Campamentos, Ministerio de Vivienda y Urbanismo, Gobierno de Chile* (2011)

Hidalgo, R. et al. (2008): La precariópolis estatal. Repercusiones socio-espaciales de la edificación de vivienda social en la periferia del área Metropolitana de Santiago, 1992-2005, In: Yañez Warner G. et al. *(Eds.): Ciudad, Poder, Gobernanza*, Santiago de Chile (2008)9, pp. 217-240

INDEC (publ.) **(2005):** Que es el Gran Buenos Aires*? Instituto Nacional de Estadística y Censos* (2005)

INDEC (publ.) **(2012a):** Censo Nacional de Población, Hogares y Viviendas 2010, *Instituto Nacional de Estadística y Censos* B(2012)1

INDEC (publ.) **(2012b):** Censo Nacional de Población, Hogares y Viviendas 2010, *Instituto Nacional de Estadística y Censos* B(2012)2

INE (publ.) **(2002):** Censo 2002**,** Principales resultados XVII Censo Nacional de Población y VI de Vivienda, *Instituto Nacional de Estadísticas* (2002)

INE (publ.) **(2012):** Resultados XVIII Censo de Población 2012, *Instituto Nacional de Estadísticas - Chile* (2012)

Jacobi, P. (2003): Participación de la ciudadanía y fortalecimiento de su intervención activa en la lucha contra la contaminación atmosférica en América Latina. In: Daniela Simioni *(Ed.): Contaminación atmosférica y conciencia ciudadana. Libros de la CEPAL 73,* Santiago de Chile (2003), pp. 67-94

Jordán, R./Rehner J./Samaniego J. (2010): Regional Panorama Latin America, Megacities and Sustainability, *Economic Commission for Latin America and the Caribbean (ECLAC)*, 2010

Krugman P./Livas Elizondo R. (1995): Trade policy and the Third World metropolis, *Journal of Development Economics*, 49(1996), pp.137-150

Martínez Lemoine, R. (2006): Densificar Santiago. Una receta equivocada. *Diseño Urbano y Paisaje* 3(2006)8

Díaz, G./Gómez-Lobo A./Velasco A. (2004): Micros en Santiago: de enemigo público al servicio público, *Centro de Estudios Públicos Chile (CEP)* 96(2004)

Naranjo, G. (2008): Instrumentos de ordenamiento territorial en el espacio rural; ¿ordenan? In: Yañez Warner G. et al. *(Ed.): Ciudad, Poder, Gobernanza*, Santiago de Chile (2008)9, pp. 175-200

Orellana A. (2009): La gobernabilidad metropolitana de Santiago: la dispar relación de poder de los municipios, *Eure*, 35(2009)104, pp. 101-120

Pagliari J. L. (1995): Management Process, *The Handbook of Real Estate Portfolio Management*, Chicago, 1995

PNUMA (publ.) **(2003a):** Perspectivas del Medio Ambiente Urbano: GEO Buenos Aires, (2003), p. 19-20

PNUMA (publ.) **(2003b):** Perspectivas del Medio Ambiente Urbano: GEO Santiago de Chile, (2003)

Riwilis, V. (2008): Los barrios cerrados en las metrópolis latinoamericanas. ¿Nuevo producto inmobiliaria o una nueva forma de habitar la ciudad? El caso de Nordelta en Buenos Aires, In: Pereira P. C. X./Hidalgo R. (Eds.): *Producción inmobiliaria y reestructuración metropolitana en América Latina,* São Paulo, 2008, pp. 119-135

Scheinsohn, M./Cabrera C. (2009): Social movements and the production of housing in Buenos Aires; when policies are effective, *Environment and Urbanization* 21(2009), pp. 109-121

Sosa, S./Tsounta E./Kim H. S. (2013): Is the Growth Momentum in Latin America Sustainable? *International Monetary Fund, Western Hemisphere Department*, Working Paper, May 2013

Suárez, F./Lombardo R. J.: (2004): Pitting the polluted against the flooded: water resource management in Tigre, Buneos Aires. *Environment and Urbanization* 16(2004)2, pp. 185-198

Svampa, M. (2005): La sociedad excluyente. La Argentina bajo el signo del neoliberalismo, Buenos Aires: Taurus 2005

Thuillier G. (2005): El impacto socio-espacial de las urbanizaciones cerradas: el caso de la Región Metropolitana de Buenos Aires, *Revista eure* 31(2005)93, pp. 5-20

Transparency International (publ.) **(2011):** Bribe Payers Index 2011, *Transparency International* (2011)

United Nations (publ.) **(2011):** World Population Prospects: The 2010 Revision, Highlights and Advanced Tables, *Department of Economic and Social Affairs/Population Division* (2011)

Vecslir L./Ciccolella P. (2012): Transformaciones territoriales recientes y reestructuración metropolitana en Buenos Aires, In: Vecslir L./Ciccolella P. (Eds.): *Buenos Aires: Procesos metropolitanos*, Barcelona, Buenos Aires & Palma de Mallorca, 2012, pp. 1-7

World Economic Forum (publ.) **(2011):** The Global Competitiveness Report 2011-2012, *World Economic Forum* (2011)

Internet sources

Gobierno de Chile, Ministerio de Desarollo Social (publ.) **(2012):** CASEN 2011, Encuestra de Caracterización Socioeconómica Nacional, *Ministerio de Desarollo Social* From: http://observatorio.ministeriodesarrollosocial.gob.cl/layout/doc/casen/001_CASEN_2011.pdf [retrieved July 14, 2013]

Russo C. (2013): Argentine Housing Bust Has Government Dialing for Dollars, *bloomberg.com*, From: http://www.bloomberg.com/news/print/2013-07-29/argentine-housing-bust-has-government-dialing-for-dollars.html [retrieved August 7, 2013]

Buenos Aires Ciudad (publ.) **(n.d.):** AMBA, *Buenos Aires Ciudad,* From: www.buenosaires.gob.ar/gobierno/area-metropolitana-de-buenos-aires [retrieved June 19, 2013]

Espacio Agua (n.d.): El agua en la Metrópolis Buenos Aires, *espacioagua.org.ar*, From: http://www.espacioagua.org.ar/archivos/cuenca/cuenca_del_plata.pdf [retrieved June 11, 2013]

Fernández L. (n.d.): Censo 2010. Somos 14.819.137 habitantes en la Región Metropolitana de Buenos Aires, *urbared, Instituto den Conurbano, Universidad National de General Sarmiento,* From: http://www.urbared.ungs.edu.ar/pdf/pdf-articulos/Censo%202010.pdf [retrieved July 24, 2013]

Finanzen (2013): Devisen, *finanzen.ch,* From: http://www.finanzen.ch/devisen/us_dollar-argentinischer_peso-kurs [retrieved June 03, 2013]

Gobierno de Chile, Ministerio de Desarollo Social (publ.) **(n.d. a):** Indicatores de Pobreza, CASEN 2011, Encuestra de Caracterización Socioeconómica Nacional, From: http://observatorio.ministeriodesarrollosocial.gob.cl/layout/doc/casen/publicaciones/2011/pobreza_casen_2011.pdf [retrieved July 14, 2013]

Gobierno de Chile, Ministerio de Desarollo Social (publ.) **(n.d. b):** Situación de Pobreza a nivel de personas, por Región y zona, From: http://www.ministerio desarrollosocial.gob.cl/casen/Estadisticas/pobreza.html [retrieved July 14, 2013]

Gobierno de Chile, Ministerio de Desarollo Social (publ.) **(n.d. c):** Situación de Pobreza a nivel de personas, según Provincia, From: http://www.ministerio desarrollosocial.gob.cl/casen/Estadisticas/pobreza.html [retrieved July 14, 2013]

Gobierno de Chile, Ministerio de Desarollo Social (publ.) **(n.d. d):** Encuesta CASEN, Pobreza, From: http://www.ministeriodesarrollosocial.gob.cl/casen/definiciones/pobreza.html [retrieved July 14, 2013]

INDEC (publ.) **(n.b.):** Provincia de Buenos Aires, 24 partidos del Gran Buenos Aires. Población total y variación intercensal absoluta y relativa por partido. Años 2001-2010, *Censo Nacional de Población, Hogares y Viviendas 2010, Instituto Nacional de Estadística y Censos, Censo 2010* From: http://www.censo2010.indec.gov.ar/resultadosdefinitivos.asp [retrieved July 14, 2013]

Metro de Santiago (publ.) **(2013):** Gobierno Cooperativo, *Historia, Metro de Santiago*, From: http://www.metrosantiago.cl/corporativo/historia [retrieved June 18, 2013]

Rebossio, A. (2013): Quince indicatores de cómo está la economía argentina, *Info-latam*, From: http://www.infolatam.com/2013/05/06/quince-indicadores-de-como-esta-la-economia-argentina [retrieved June 30, 2013]

Subte (publ.) **(n.b.)**: Mapa Subte, *Subterráneos de Buenos Aires,* From: http://www.subte.com.ar/mapas/subte.asp [retrieved July 20, 2013]

The World Bank (publ.) **(2011):** Enterprise Survey 2010, *The World Bank*, From: http://data .worldbank.org/country [retrieved June 22, 2013]

The World Bank (publ.) **(2013):** World DataBank, *The World Bank*, From: http://data .worldbank.org/country [retrieved July 7, 2013]

Transantiago (publ.) **(2013):** Nueva institucionalidad para el Transporte Público, *Transantiago*, www.transantiago.cl/NOTICIAS/INSTITUCIONAL/CLSANCURWLE1_4011777.html [retrieved June 18, 2013]

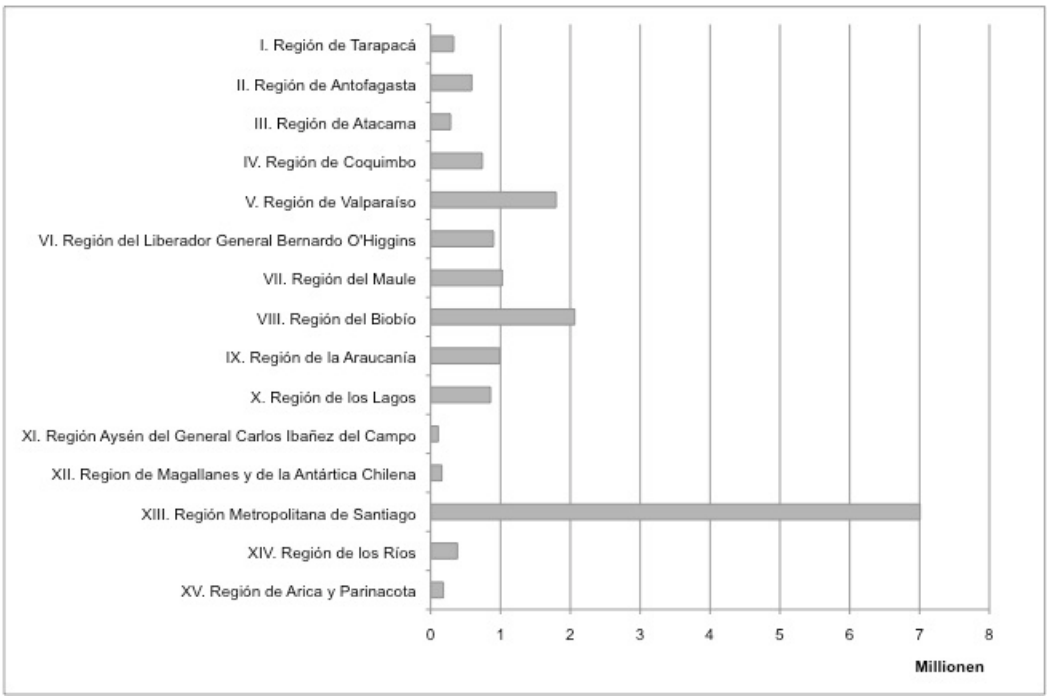
Transparency International (publ.) **(2012):** Corruption Perceptions Index 2012, *Transparency International*, From: http://cpi.transparency.org/cpi2012/results [retrieved June 26, 2013]

Interview

Fariña Fischer, F. (2013): International Real Estate Products, Credit Suisse AG [date of interview: July 1, 2013]

Appendix

Appendix 1: **Chiles Population 2010**

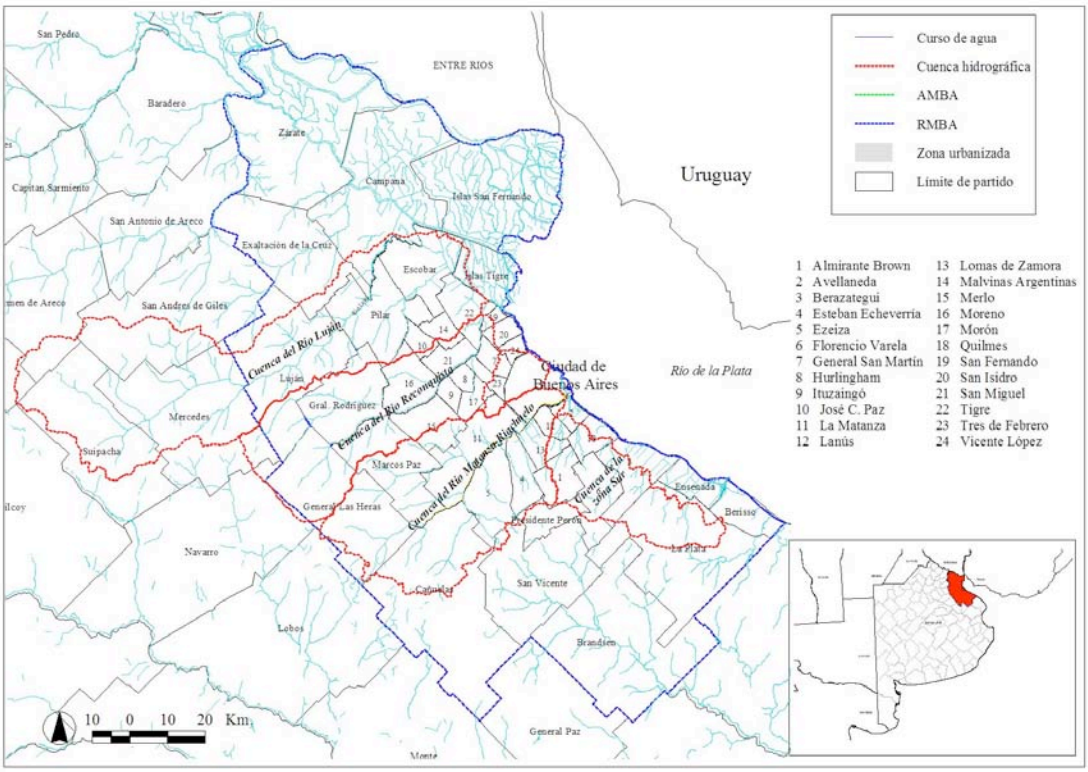


Source: INE (2012a)

Appendix 2: **Metro of Buenos Aires 2013**

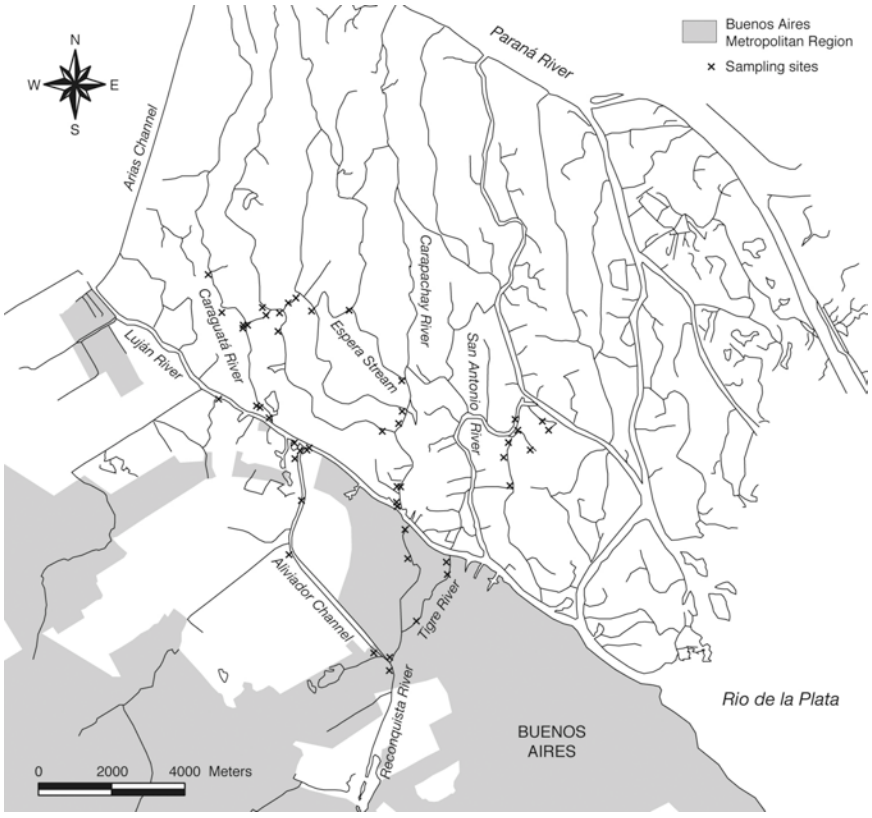
Source: Subte (2013)

Appendix 3: **Groundwater Basins of the Metropolitan Region of Buenos Aires**



Source: Espacio Agua (2013)

Appendix 4: **Fresh Water Bodies in the Northern Part of Buenos Aires**

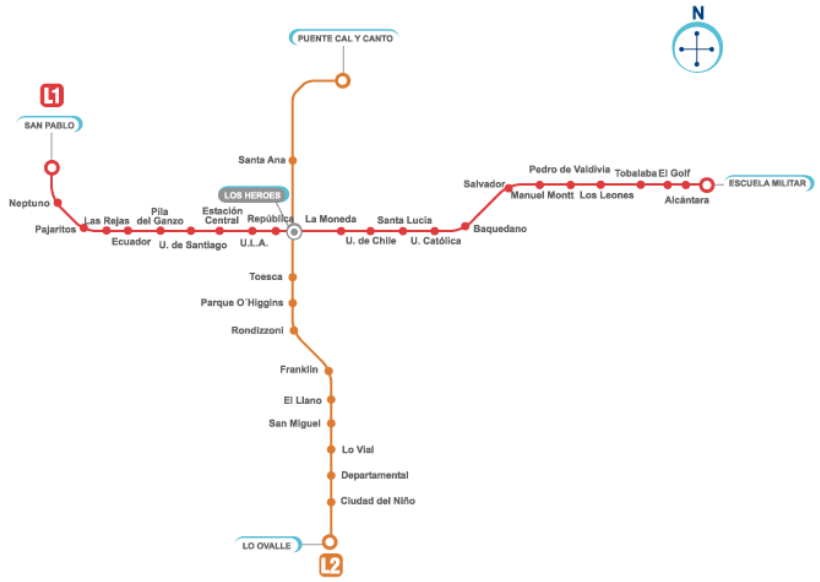


Source: Suárez, F. et al. (2004), p. 187

Appendix 5: **Metro of Santiago de Chile, 1975**

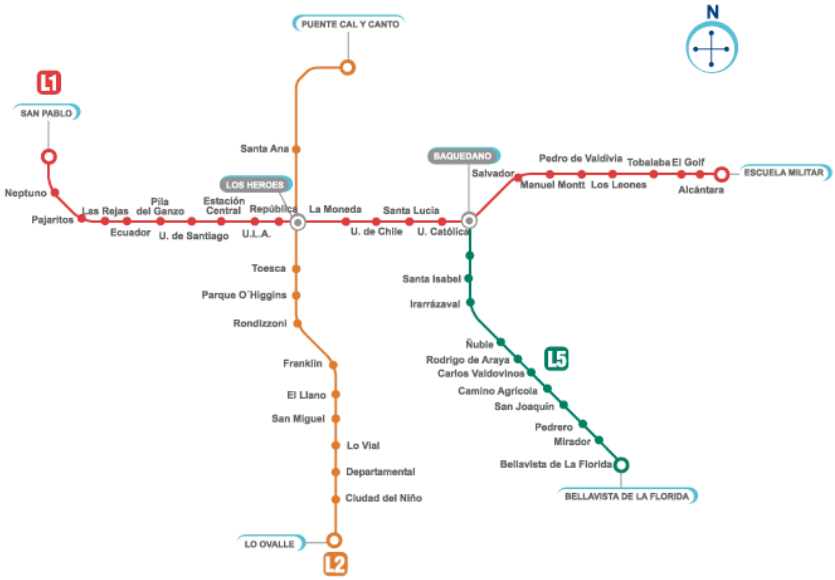
Source: Metro de Santiago (2013)

Appendix 6: **Metro of Santiago de Chile, 1987**



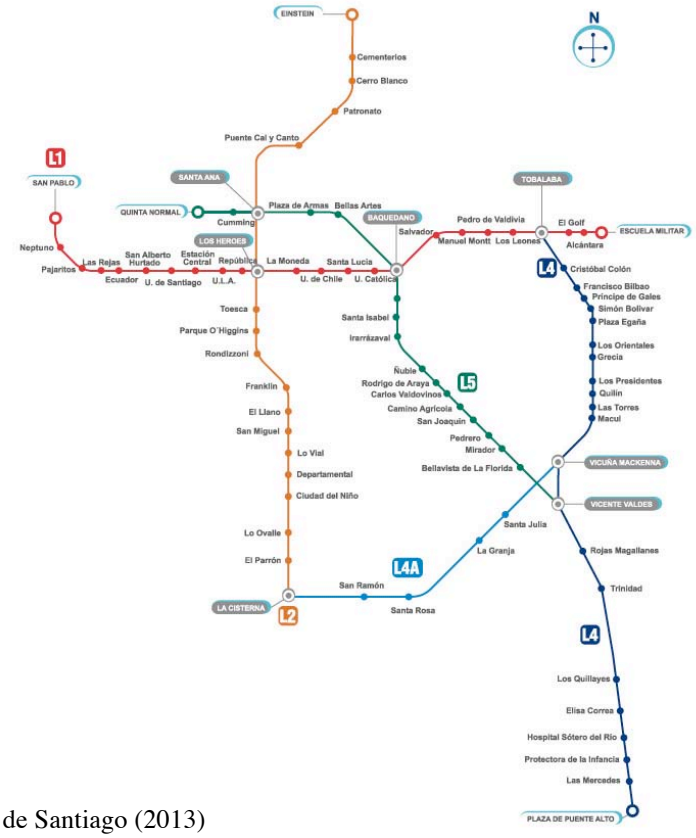
Source: Metro de Santiago (2013)

Appendix 7: **Metro of Santiago de Chile, 1997**



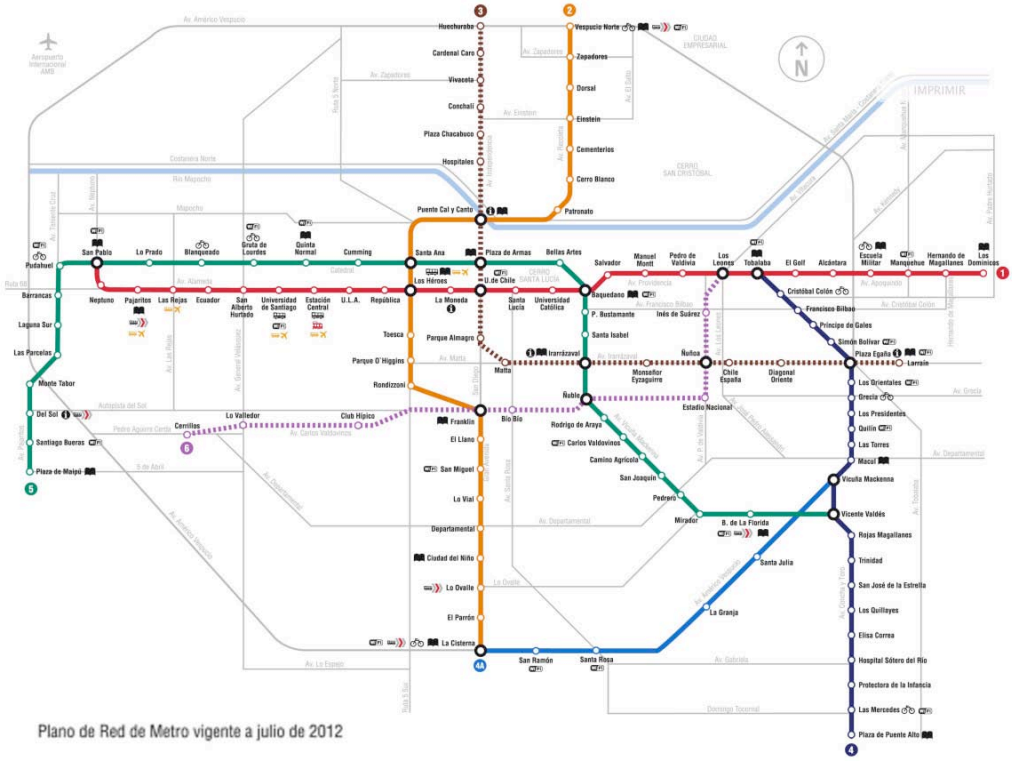
Source: Metro de Santiago (2013)

Appendix 8: **Metro of Santiago de Chile, 2006**



Source: Metro de Santiago (2013)

Appendix 9: **Metro of Santiago de Chile, until 2018**



Source: Metro de Santiago (2013)

Appendix 10: **Population GBA: Gran Buenos Aires** (absolute numbers)

	2001	**2010**	% change	absolute
CBA - Ciudad Autonóma de Buenos Aires				
Ciudad Autónoma de Buenos Aires	2'776'138	2'890'151	4.1%	114'013
Total	**2'776'138**	**2'890'151**	**4.1%**	**114'013**
CB - Conurbano Bonaerene				
Almirante Brown	515'556	552'902	7.2%	37'346
Avellaneda	328'980	342'677	4.2%	13'697
Berazategui	287'913	324'244	12.6%	36'331
Esteban Echeverría	243'974	300'959	23.4%	56'985
Ezeiza	118'807	163'722	37.8%	44'915
Florencio Varela	348'970	426'005	22.1%	77'035
General San Martín	403'107	414'196	2.8%	11'089
Hurlingham	172'245	181'241	5.2%	8'996
Ituzaingó	158'121	167'824	6.1%	9'703
José C. Paz	230'208	265'981	15.5%	35'773
La Matanza	1'255'288	1'775'816	41.5%	520'528
Lanús	453'082	459'263	1.4%	6'181
Lomas de Zamora	591'345	616'279	4.2%	24'934
Malvinas Argentinas	290'691	322'375	10.9%	31'684
Merlo	469'985	528'494	12.4%	58'509
Moreno	380'503	452'505	18.9%	72'002
Morón	309'380	321'109	3.8%	11'729
Quilmes	518'788	582'943	12.4%	64'155
San Fernando	151'131	163'240	8.0%	12'109
San Isidro	291'505	292'878	0.5%	1'373
San Miguel	253'086	276'190	9.1%	23'104
Tigre	301'223	376'381	25.0%	75'158
Tres de Febrero	336'467	340'071	1.1%	3'604
Vicente López	274'082	269'420	-1.7%	-4'662
Total	**8'684'437**	**9'916'715**	**14.2%**	**1'232'278**
Total GBA	**11'460'575**	**12'806'866**	**11.7%**	**1'346'291**
Urban Agglomeration (CB)	**8'684'437**	**9'916'715**	**14.2%**	**1'232'278**
Central Area (CBA)	**2'776'138**	**2'890'151**	**4.1%**	**114'013**

Source: cp. INE (2012)

Appendix 11: **Population Metropolitan Region of Santiago de Chile** (ansolute numbers)

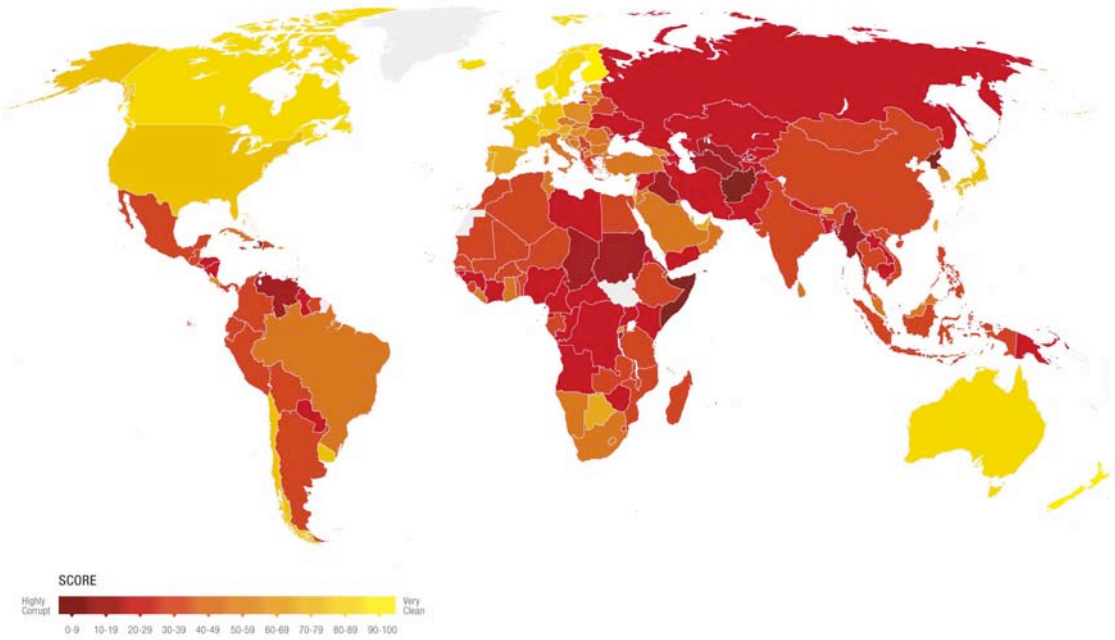
	2002[1]	**2012**[2]	% change	absolute
P. SANTIAGO				
Santiago	200'792	311'415	55.1%	110'623
Cerrillos	71'906	79'164	10.1%	7'258
Cerro Navia	148'312	128'090	-13.6%	-20'222
Conchalí	133'256	121'118	-9.1%	-12'138
El Bosque	175'594	162'671	-7.4%	-12'923
Estación Central	130'394	119'292	-8.5%	-11'102
Huechuraba	74'070	87'667	18.4%	13'597
Independencia	65'479	73'874	12.8%	8'395
La Cisterna	85'118	80'910	-4.9%	-4'208
La Florida	365'674	363'903	-0.5%	-1'771
La Granja	132'520	121'214	-8.5%	-11'306
La Pintana	190'085	182'930	-3.8%	-7'155
La Reina	96'762	91'927	-5.0%	-4'835
Las Condes	249'893	282'972	13.2%	33'079
Lo Barnechea	74'749	97'230	30.1%	22'481
Lo Espejo	112'800	99'527	-11.8%	-13'273
Lo Prado	104'316	94'766	-9.2%	-9'550
Macul	112'535	111'436	-1.0%	-1'099
Maipú	468'390	525'229	12.1%	56'839
Ñuñoa	163'511	195'410	19.5%	31'899
Pedro Aguirre Cerda	114'560	104'018	-9.2%	-10'542
Peñalolén	216'060	237'862	10.1%	21'802
Providencia	120'874	130'808	8.2%	9'934
Pudahuel	195'653	225'509	15.3%	29'856
Quilicura	126'518	197'346	56.0%	70'828
Quinta Normal	104'012	101'737	-2.2%	-2'275
Recoleta	148'220	152'985	3.2%	4'765
Renca	133'518	142'136	6.5%	8'618
San Joaquín	97'625	94'255	-3.5%	-3'370
San Miguel	78'872	90'846	15.2%	11'974
San Ramón	94'906	85'195	-10.2%	-9'711
Vitacura	81'499	84'195	3.3%	2'696
Total	**4'668'473**	**4'977'637**	**6.6%**	**309'164**
P. CORDILLERA				
Puente Alto	492'915	583'471	18.4%	90'556
Pirque	16'565	20'732	25.2%	4'167
San José de Maipo	13'376	14'464	8.1%	1'088
Total	**522'856**	**618'667**	**18.3%**	**95'811**

(continued Appendix 11)

	2002[1]	2012[2]	% change	absolute
P. CHACABUCO				
Colina	77'815	113'614	46.0%	35'799
Lampa	40'228	79'421	97.4%	39'193
Tiltil	14'755	16'737	13.4%	1'982
Total	**132'798**	**209'772**	**58.0%**	**76'974**
P. MAIPO				
San Bernardo	246'762	277'802	12.6%	31'040
Buin	63'419	78'593	23.9%	15'174
Calera de Tango	18'235	23'113	26.8%	4'878
Paine	50'028	66'238	32.4%	16'210
Total	**378'444**	**445'746**	**17.8%**	**67'302**
P. MELIPILLA				
Melipilla	94'540	110'871	17.3%	16'331
Alhué	4'435	5'493	23.9%	1'058
Curacaví	24'298	28'439	17.0%	4'141
María Pinto	10'343	12'501	20.9%	2'158
San Pedro	7'549	8'485	12.4%	936
Total	**141'165**	**165'789**	**17.4%**	**24'624**
P. TALAGANTE				
Talagante	59'805	65'020	8.7%	5'215
El Monte	26'459	32'468	22.7%	6'009
Isla de Maipo	25'798	33'723	30.7%	7'925
Padre Hurtado	38'768	50'670	30.7%	11'902
Peñaflor	66'619	86'193	29.4%	19'574
Total	**217'449**	**268'074**	**23.3%**	**50'625**
Urban Agglomeration	**1'336'874**	**1'486'076**	**11.2%**	**149'202**
Central Area (11 Comunas)	**4'724'311**	**5'199'609**	**10.1%**	**475'298**
Total RMS	**6'061'185**	**6'685'685**	**10.3%**	**624'500**

[1] cp. INE (2002)
[2] cp. INE (2012), p. 45-47

Appendix 12: **Corruption Perceptions Index 2012**



Source: Transparency International

Appendix 13: **General Governmental & Regulatory Compliance**

I. General Governmental & Regulatory Compliance: What are the main challenges in the local, national and international framework? What are the obstacles caused by regulations?

	*	Question	Argentina	Chile
1	d30b	Are **customs and trade regulations** No Obstacle, a Minor Obstacle, a Moderate obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?	27.5% of the Companies said, that Customs and Trade Regulations aren't an obstacle. The results from minor to very severe obstacle are together about 61.2%.	58.3% of the Companies said, that Customs and Trade Regulations aren't an obstacle. The results from minor to very severe obstacle are together about 37.8%.
2	l30a	Are **labor regulations** No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?	16.9% no to minor obstacle 82.8% moderate to very severe obstacle	39.1% no to minor obstacle 60.6% moderate to very severe obstacle
3	j2	In a typical week over the last year, what percentage of total senior management's **time was spent on dealing with requirements imposed by government regulations?** [By senior management I mean managers, directors, and officers above direct supervisors of production or sales workers. Some examples of government regulations are taxes, customs, labor regulations, licensing and registration, including dealings with officials and completing forms]	23.7% 5-10 hours 21.6% 20 hours 22.7% 30-50 hours	31.8% 5-10 hours 10.5% 20 hours 8.1% 30-50 hours
4	j30a	As I list some factors that can affect the current operations of a business, please look at this card and tell me if you think that each factor is No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment. **Tax rates**	10.5% no to minor obstacle 89.5% moderate to very severe obstacle	50.9% no to minor obstacle 48.7% moderate to very severe obstacle
5	j30b	As I list some factors that can affect the current operations of a business, please look at this card and tell me if you think that each factor is No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment. **Tax administration**	21.3% no to minor obstacle 77.7% moderate to very severe obstacle	60.4% no to minor obstacle 37.8% moderate to very severe obstacle

* This column contains the World Bank's numeration for each question

Source: The World Bank (2011)

Appendix 14: **Legal Framework & Political Situation**

II. Legal Framework & Political Situation: How easy are structural changes in the company feasible?

	*	Question	Argentina	Chile
1	g3	In reference to that **application for a construction-related permit**, approximately how many days did it take to obtain it from the day of the application to the day the permit was granted?	14.2% in process 14.6% 30 days 12.9% 60 days 10.5% 90 days	13.7% in process 14.1% 30 days 11.1% 60 days 10.1% 90 days
2	j10	Over the last two years, did this establishment submit an **application to obtain an import license?**	26.6% yes 73.0% no	12.4% yes 87.0% no
3	j11	Approximately how many days did it take to **obtain this import license** from the day of the application to the day it was granted?	31.9% 10-30 days 21.1% 60-90 days 11.8% 120-180 days 0% 240-420 days	25.8% 10-30 days 3.4% 60-90 days 3.9% 120-180 days 0% 240-420 days
4	j30c	As I list some factors that can affect the current operations of a business, please look at this card and tell me if you think that each factor is No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment. **Business licensing and permits**	21.3% no obstacle 63.1% minor to very severe obstacle	40.8% no obstacle 57.6% minor to very severe obstacle
5	j30e	As I list some factors that can affect the current operations of a business, please look at this card and tell me if you think that each factor is No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment. **Political instability**	8.6% no obstacle 90.5% minor to very severe obstacle	51.9% no obstacle 47.6% minor to very severe obstacle

* This column contains the World Bank's numeration for each question

Source: The World Bank (2011)

Appendix 15: **Market Improvement**

III. Market Improvement: Are changes in Argentina's and Chile's market occurring? Is there an improvement of the companies' structure & efficiency in process?

	*	Question	Argentina	Chile
1	LACe1	Over the last three years, did this establishment introduce any **new or significantly improved products** (goods or services)?	72.3% yes 27.4% no	57.7% yes 42.3% no
2	LACe4	Over the last three years, did this establishment introduce any **new or significantly improved processes** for producing or supplying products (goods or services)?	57.0% yes 42.2% no	49.7% yes 50.2% no
3	LACp16c	Have any of the programs and services used in the last three years by this establishment had any of the following impacts? **Increased sales in domestic market**	66.2% yes 31.9% no	65.3% yes 34.0% no
4	LACp16d	Have any of the programs and services used in the last three years by this establishment had any of the following impacts? **Improved quality of goods or services**	79.6% yes 19.4% no	79.6% yes 20.3% no
5	LACp16e	Have any of the programs and services used in the last three years by this establishment had any of the following impacts? **Reduced unit production costs**	47.1% yes 50.6% no	50.0% yes 37.0% no
6	LACp16f	Have any of the programs and services used in the last three years by this establishment had any of the following impacts? **Reduced energy consumption (electricity, gas, etc)**	23.5% yes 72.3% no	30.7% yes 67.9% no
7	e1	In fiscal year [insert last complete fiscal year], which of the following was the **main market** in which this establishment sold its main product?	28.6% Local - main product sold mostly in same municipality 62.3% National - main product sold mostly across the country 8.7% International - main product sold mostly to nations outside	34.3% Local - main product sold mostly in same municipality 58.1% National - main product sold mostly across the country 7.5% International - main product sold mostly to nations outside
8	LACp16b	Have any of the programs and services used in the last three years by this establishment had any of the following impacts? **Opened new foreign markets**	24.5% yes 74.0% no	18.3% yes 81.6% no
9	LACp16g	Have any of the programs and services used in the last three years by this establishment had any of the following impacts? **Obtained quality certification or export certification**	31.6% yes 67.5% no	30.9% yes 68.2% no

* This column contains the World Bank's numeration for each question

Source: The World Bank (2011)

Appendix 16: **Work Force**

IV. Work Force: Are there any effort to improve the professional training for a better educated work force?

	*	Question	Argentina	Chile
1	LACp1	Over the last three years, did this establishment use any services or programs to **improve quality control or training to obtain quality certification?**	49.9% yes 49.9% no	54.3% yes 45.3% no
2	LACp3	In the next three years, this establishment envisages to use any services or programs to **improve quality control or training to obtain quality certification?**	70.5% yes 24.5% no	74.8% yes 21.6% no
3	LACl12	Referring to the training programs run over fiscal year [insert last complete fiscal year], did this establishment **offered any external training partially or fully funded by the government?**	8.3% yes 91.4% no	52.0% yes 47.6% no
4	LACl14	Referring to the training programs run over fiscal year [insert last complete fiscal year], did this establishment **offered any external training partially or fully funded by this establishment?**	69.8% yes 30.1% no	70.1% yes 29.1% no
5	LACl20	Over the last three years, did this establishment receive any **public support (financial or other types of assistance) for training-related activities?**	10.9% yes 88.4% no	39.3% yes 60.4% no

* This column contains the World Bank's numeration for each question

Source: The World Bank (2011)

Appendix 17: **Socio-Cultural Effect**

V. Socio-Cultural Effect: What is the situation in the countries concerning corruption and crime?

	*	Question	Argentina	Chile
1	g4	**Informal Gift/Payment Expected Or Requested For A Construction-Related Permit**	10.5% yes 85.8% no	1.3% yes 97.7% no
2	i3	In fiscal year [insert last complete fiscal year], did this establishment experience **losses as a result of theft, robbery, vandalism or arson?**	35.2% yes 64.5% no	37.1% yes 62.5% no
3	i30	Are **crime, theft and disorder** No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?	17.6% no obstacle 82.2% minor to very severe obstacle	27.0% no obstacle 72.8% minor to very severe obstacle
4	j30f	As I list some factors that can affect the current operations of a business, please look at this card and tell me if you think that each factor is No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment. **Corruption**	14.1% no obstacle 83.5% minor to very severe obstacle	48.6% no obstacle 50.4% minor to very severe obstacle
5	h30	As I list some factors that can affect the current operations of a business, please look at this card and tell me if you think that each factor is No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment. **Courts**	14.5% no obstacle 83.5% minor to very severe obstacle	44.9% no obstacle 54.3% minor to very severe obstacle
6	h7a	I am going to read some statements that describe the courts system and how it could affect business. For each statement, please tell me if you Strongly disagree, Tend to disagree, Tend to agree, or Strongly agree. **The court system is fair, impartial and uncorrupted.**	78.7% strong disagree - tend to disagree 19.4% strong agree - tend to agree	41.0% strong disagree - tend to disagree 57.0% strong agree - tend to agree

* This column contains the World Bank's numeration for each question

Source: The World Bank (2011)

Appendix 18: **Real Estate Market**

VI. Real Estate Market: Where are the chances in the space and construction market?

	*	Question	Argentina	Chile
1	g1a	Of the land occupied by this establishment, what percent is: **Owned by this establishment**	29.2% nothing owned 54.4% totally owned	32.3% nothing owned 55.9% totally owned
2	g1b	Of the land occupied by this establishment, what percent is: **Leased by this establishment**	56.8% not rented or leased 27.1% rented or leased	58.9% not rented or leased 29.8% rented or leased
3	g2	Over the last two years, did this establishment submit an **application to obtain a construction-related permit?**	28.0% yes 71.6% no	29.6% yes 70.1% no
4	g5a	What is the **total selling area** of this establishment?	See Appendix 19	See Appendix 20
5	g6a	Of the buildings occupied by this establishment, what percentage is owned and what percentage is rented or leased? **Owned by this establishment**	39.2% not owned 5.8% half owned 34.2% owned	44.4% not owned 5.1% half owned 35.9% owned
6	g6b	Of the buildings occupied by this establishment, what percentage is owned and what percentage is rented or leased? **Rented or leased by this establishment**	35.0% not leased 5.8% half leased 38.3% leased	35.9% not leased 5.1% half leased 44.4% leased
7	g7	In the last three years, has this establishment acquired or attempted to **acquire additional land or buildings** to expand operations?	40.8% yes 58.3% no	36.8% yes 63.2% no
8	g8a	In the last three years, has this establishment been **successful in acquiring land or new premises?**	57.1% yes 42.9% no	46.5% yes 53.5% no
9	g30a	Is **access to land** No Obstacle, a Minor Obstacle, a Moderate Obstacle, a Major Obstacle, or a Very Severe Obstacle to the current operations of this establishment?	51.5% no obstacle 47% minor to very severe obstacle	61.3% no obstacle 38.5% minor to very severe obstacle

* This column contains the World Bank's numeration for each question

Source: The World Bank (2011)

Appendix 19: **Total Selling Area: Enterprise Survey 2010, Argentina**

What Is The Total Selling Area In This Establishment? (g5a)

File: Argentina-2010-full data-

Overview

Type: Discrete
Format: numeric
Width: 6
Decimals: 0
Range: -9-552400

Valid cases: 120
Invalid: 934

Categories

Value	Category	Cases
-9	Don't know	9 7.5%
16	1	0.8%
30	2	1.7%
40	4	3.3%
50	5	4.2%
56	1	0.8%
60	2	1.7%
70	3	2.5%
80	1	0.8%
90	2	1.7%
98	1	0.8%
100	9	7.5%
120	2	1.7%
145	1	0.8%
150	4	3.3%
180	1	0.8%
200	5	4.2%
240	2	1.7%
250	4	3.3%
280	1	0.8%
300	3	2.5%
320	1	0.8%
350	3	2.5%
400	7	5.8%
450	2	1.7%
500	5	4.2%
600	5	4.2%
700	2	1.7%
800	4	3.3%
900	1	0.8%
1000	5	4.2%
1100	1	0.8%
1200	2	1.7%
1500	1	0.8%
1700	1	0.8%
1800	1	0.8%
2000	1	0.8%
2500	1	0.8%
3350	1	0.8%
3500	1	0.8%
5000	1	0.8%
10000	2	1.7%
12000	1	0.8%
25000	3	2.5%
27000	1	0.8%
27580	1	0.8%
30000	1	0.8%
120000	1	0.8%
552400	1	0.8%
Sysmiss	934	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

Questions and instructions

LITERAL QUESTION

What is the total selling area of this establishment?

INTERVIEWER INSTRUCTIONS

Total selling area refers to the space where sales take place. It does not include warehouses. Whenever the establishment is composed of several locations the selling areas of each location should be added.

Source: http://microdata.worldbank.org/index.phpcatalog/667/variable/V131

Appendix 20: **Total Selling Area: Enterprise Survey 2010, Chile**

What Is The Total Selling Area In This Establishment? (g5a)

File: Chile-2010-full data-

Overview

Type: Discrete
Format: numeric
Width: 5
Decimals: 0
Range: -9-552400

Valid cases: 117
Invalid: 916

Categories

Value	Category	Cases
-9	Don't know	4 3.4%
10	1	1 0.9%
15	2	2 1.7%
18	1	1 0.9%
20	1	1 0.9%
24	2	2 1.7%
25	1	1 0.9%
30	2	2 1.7%
40	3	3 2.6%
45	3	3 2.6%
50	3	3 2.6%
54	1	1 0.9%
60	1	1 0.9%
64	1	1 0.9%
80	5	5 4.3%
100	5	5 4.3%
120	3	3 2.6%
140	1	1 0.9%
145	1	1 0.9%
150	2	2 1.7%
160	1	1 0.9%
180	2	2 1.7%
200	2	2 1.7%
220	1	1 0.9%
238	1	1 0.9%
250	3	3 2.6%
300	2	2 1.7%
308	1	1 0.9%
340	1	1 0.9%
379	1	1 0.9%
380	1	1 0.9%
400	7	7 6.0%
450	1	1 0.9%
480	1	1 0.9%
500	3	3 2.6%
550	1	1 0.9%
600	3	3 2.6%
625	1	1 0.9%
680	1	1 0.9%
700	3	3 2.6%
750	1	1 0.9%
800	2	2 1.7%
840	1	1 0.9%
1000	4	4 3.4%
1180	1	1 0.9%
1200	2	2 1.7%
1500	2	2 1.7%
1630	1	1 0.9%
2000	1	1 0.9%
2100	1	1 0.9%
2300	1	1 0.9%
2500	5	5 4.3%
3000	1	1 0.9%
3200	1	1 0.9%
3266	1	1 0.9%
3300	1	1 0.9%
4000	1	1 0.9%
4250	1	1 0.9%
4300	2	2 1.7%
4850	1	1 0.9%
5918	1	1 0.9%
6200	1	1 0.9%
8000	1	1 0.9%
8369	1	1 0.9%
12500	1	1 0.9%
28000	1	1 0.9%
Sysmiss	916	

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

Questions and instructions

LITERAL QUESTION

What is the total selling area of this establishment?

INTERVIEWER INSTRUCTIONS

Total selling area refers to the space where sales take place. It does not include warehouses. Whenever the establishment is composed of several locations the selling areas of each location should be added.

Source: http://microdata.worldbank.org/index.phpcatalog/665/variable/V132

Ehrenwörtliche Erklärung

Ich versichere hiermit, dass ich die vorliegende Arbeit mit dem Thema *„Global Real Estate Investment in Latin America, Portfolio Diversification Strategies and Urban Development“* selbstständig verfasst und keine anderen Hilfsmittel als die angegebenen benutzt habe.
Alle Stellen die wörtlich oder sinngemäss aus veröffentlichten oder nicht veröffentlichten Schriften entnommen sind, habe ich in jedem einzelnen Falle durch Angabe der Quelle (auch der verwendeten Sekundärliteratur) als Entlehnung kenntlich gemacht.

Die Arbeit hat in gleicher oder ähnlicher Form noch keiner anderen Prüfungsbehörde vorgelegen und wurde auch noch nicht veröffentlicht.

Zürich, den 12.08.2013

_____

Miguel, Hernandez Cammardella