

## **Bolivia : Urban System and Economic Dynamics**

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### **Abstract**

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In Bolivia the urban and economic evolution, especially in terms of spatial configuration, has been influenced by the Extractable Cycles. Those were the origin of the emergence of “centers of production” that have changed depending on the natural resources and on the period of Bolivian history.

Close to the Andean Region, the productive axis has been transferred during the last half century. The last decades have testified the emergence and consolidation of a bipolar urban structure.

This paper focuses on the two principal Bolivian agglomerations that polarise the economic and urban dynamics. They have different economic specialisations. On the one hand, La Paz, the political capital, concentrates administrative services and on the other hand Santa Cruz is the economic capital, playing the role of the “economic lung” of this Less Developed Country.

Firstly, the goal is to analyse and describe the roles and the impact of departments of La Paz and Santa Cruz in the Bolivian economic development.

Secondly, this paper explains the emergence and consolidation of Santa Cruz as an important economic pole that nowadays has taken some advantage in terms of economic growth at national scale.

To reveal the nature of economic specialisation of the two agglomerations of this bipolar economic and urban structure is also a priority of the present research.

In sum, there was a take-off process in favor of Santa Cruz thanks to its regional polarisation of hydrocarbons and agricultural export. This hegemonic change, in terms of economic power, from La Paz to Santa Cruz, principally feed by raw material export that characterizes Bolivian economy, results also in a widening of international relationship for Bolivia.

*Keywords: Economic growth, bicephalous structure, Spatial configuration, Bolivia, Urban growth.*

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## INTRODUCTION

Since the beginning, Bolivian history has been influenced by raw material extractable cycles. Those determined, depending on the historical period and on the raw material, the spatial configuration from Bolivia.

Currently, urban structure and economic dynamics is characterized by a kind of bipolarisation of this less developed country, LDC<sup>1</sup>.

To one side, the politic capital, La Paz city, has always been important due to its nature as a seat of government. Historically, La Paz has concentrated a high economic and urban dynamics. In spite of its politic importance, this urban center is losing ground in economics field, meanwhile Santa Cruz, the new main urban center, gains unexpected economic and urban status, thanks to its polarisation of natural resources from the east Bolivian region and thanks to its dynamics with foreign exchange market.

The last half century witnessed the emergence and consolidation of a new urban center. Santa Cruz results from public policies applied searching for reactivating the east side of Bolivia. During the 1950s, number of politics has been tested to colonise the amazonian territory. One of this policies was to build colonies and to incitate foreign migrants to come and to settle in this part of the country. The main reason was to populate the east side and diversify urban centers, that where concentrated during longtime in the Andean region, La Paz being the most representative of the west side.

Most of the time, public policies are stimulated by “external” factors. In fact, the discovery in 1928 of oilfields and later of gas fields in the eastern Bolivian side spurred government’s projects. This factor could be one among others that permits Santa Cruz emergence.

The present paper focuses on the bipolar urban structure and the economic growth of Bolivia. One of the questions is to analyse and describe the roles and the impact of departments of La Paz and Santa Cruz in the Bolivian economic development.

Besides, this paper explains the emergence and consolidation of Santa Cruz as an important economic pole that nowadays has taken some advantage in terms of economic growth at national scale.

To reveal the nature of economic specialisation of the two agglomerations of this bipolar economic and urban structure is also a priority of the present research.

Is this bipolarisation sustainable in the long term? Overall when spatial configuration has been influenced by a switch motion of productive centers depending on the raw material and consequently on the extractable cycle?

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<sup>1</sup> In the World Urban Population 2005, United Nations classifies cities in three groups: Least Developed Countries, Less Developed Countries and More Developed Countries.

As far as possible this paper focuses on the concentration of high-order services within La Paz and Santa Cruz to measure the strategic importance of both poles.

Previously, a brief review of some historical aspects could help clarifying the nature of Bolivian economic development and spatial configuration.

### HISTORICAL ASPECTS

Since the independence, Bolivia has been characterized by extraction, exploitation and exportation of raw materials

Economic activity that born from these extractable cycles was accompanied by urban growth<sup>2</sup>, *i.e.* by the emergence of several agglomerations. Depending on the period and on the raw material, urban consolidation has been more or less confirmed during the time.

DELER (1994) studies spatial configuration of Bolivian territory according to the “extractable cycles”. From a general classification of four raw material cycles that DELER identifies (Silver 1545-1650, Tin 1880-1986, latex (rubber tree) 1880-1910, and Hydrocarbons since 1930), Mineral extraction prevailed giving to the Andean region a high rank in the urban hierarchy.

Bolivia is characterized by its narrow economic base, specialised production and single exportation. Raw material dependency, like on minerals or hydrocarbons in the last decades, put the economy in a vulnerable situation. The risk of price variations on the international market is highly and dangerous for the Bolivian economy.

In terms of road structure, west as east side have been influenced by extraction and trading of raw materials. Taking the example of railway, oddly enough each region has built its own railway and they are not connected at all between them. Andean region’s railway was built in order to transport mineral exportation to the Pacific Ocean to be shipped. In the case of Santa Cruz, it implemented railways to export latex and chestnut at the end of nineteenth century to reach the river and to reach Argentinian and Brazilian markets.

Having said that, east side of Bolivia has tolerated the lack of road structure until the second half of the twentieth-century. The discovery of an oilfield in 1928 encouraged public policies. However, integration by road building was effective three decades later (1957), by the construction of the main national road that linked La Paz – Cochabamba – Santa Cruz. In a way, it was the beginning of the national integration and the aim to develop east side.

As a result migration and trade have increased. For instance: the population of Santa Cruz, which was 43,000 inhabitants in 1945, nowadays reaches the 2 million of inhabitants. It means 22% of national population.

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<sup>2</sup> As Mario POLESE’s terminology, we identify Demographic Growth with “Urban growth”.

### **Bolivia: some aspects to be considered**

Bolivia is located in the heart of the Latin American continent. His adjacent countries are: Peru and Chile on the west side, Brazil on the north and east side, and Argentina and Paraguay on the south.

The surface of Bolivia (one million of km<sup>2</sup>) is more or less twice the surface of France and might be compared with the surface of Venezuela (912,500 km<sup>2</sup>), the surface of Colombia (1,138,914 km<sup>2</sup>), and the surface of Peru (1,285,215 km<sup>2</sup>), even if in demographic terms it is not the case<sup>3</sup>.

One of the aspects that characterize Bolivia is its mediterranean situation. This feature handicaps the economy, because there is no harbor to sell abroad, especially when we consider Bolivia as the second gas field in Latin America (53: Trillion Cubic Feet, TCF, proved) after Venezuela. The “Pacific” war between Bolivia and Chile, in 1879<sup>4</sup>, admitted 25 years later by both nations, was the last frontier backward step of Bolivia.

In 1825, Bolivia was born to the independent life as a nation with 2,350,000 Km<sup>2</sup> of surface. Unfortunately, nowadays there are only 1,098,580 square kilometers because of neighboring conflicts. This nation is divided in three big sections: the high lands (“Altiplano”) that represent 16 % of the national territory, with 3,500 to 5,000 meters of altitude, the “valleys” (14 %; with 1,500 to 3,000 meters of altitude) and the “Flatlands” or rainforests, also known as low lands, that fulfill 70 % of bolivian total surface.

Despite the importance of rainforests (two-thirds of the national surface), the Andean region has predominated since the beginning of history of Bolivia. Surely, this phenomenon could be explained by extractable cycles that drew bolivian spatial configuration and that principally set up in high lands, with silver and tin as principal mineral products sold abroad.

Territorially, Bolivia is divided in nine departements<sup>5</sup>, each department is divided in Provinces (112 in the whole territory) and each one is divided in municipalities (314 in total). We highlight the three main departments, named central axis of Bolivia: La Paz (seat of government or political capital), Cochabamba and Santa Cruz (the economic capital).

Even if Cochabamba has an important demographic concentration, and belongs to the “principal economic and demographic axis” this city is mainly a transit zone in this bipolar structure.

<sup>3</sup> Table A in the appendix provides further information to compare Bolivian indicators with a few neighbour nations.

<sup>4</sup> Office of the United Nations High Commissioner for Human Rights, Geneva, Switzerland 1996. “Document de base constituant la première partie des rapports des états parties : Bolivia. 07/10/96 ».

<sup>5</sup> Table B in the Appendix shows population’s trend data since the 1976 population census.

## BIPOLAR URBAN STRUCTURE AND ECONOMIC POLARIZATION

As explained, during the last half century, Bolivian urban hierarchy has been modified. The emergence and consolidation of Santa Cruz, nowadays named “economic lung of bolivian economy” lead to a bipolarisation in spatial distribution at national scale.

Geographically, La Paz and Santa Cruz have huge differences. It’s not only the climate (altiplanic versus tropical) but above all the physical geography. La Paz is a kind of basin, surrounded by mountains. The more it slopes down the higher the temperature gets, because it approaches to the valleys. By contrast, Santa Cruz is placed between the valleys and the amazonic territory, and physically is like a plain. This kind of differences reinforces comparative advantages, giving as we will explain later economic specialization to each agglomeration.

Table 1 shows the population census data updated to 2005, by departments and by agglomerations.

**TABLE 1: TOTAL POPULATION IN 2005  
MAIN CENTRAL AXIS DEPARTMENTS OF BOLIVIA**

DEPARTMENTS AND PROVINCES	TOTAL POPULATION IN 2005
<b>BOLIVIA</b>	<b>9, 427,219</b>
<b>LA PAZ</b>	<b>2,630,381</b>
* PEDRO DOMINGO MURILLO	1, 683,920
**Seccion Capital : La Paz	839,169
**Cuarta Seccion : El Alto	800,273
**Tercera Seccion : Achocalla	16,242
**Primera Seccion : Palca	15,218
**Segunda Seccion : Mecapaca	13,018
<b>Main agglomeration =La Paz + El Alto</b>	<b>1, 639,442</b>
<b>COCHABAMBA</b>	<b>1, 671,860</b>
* CERCADO	578,219
Primera Seccion : Cochabamba	578,219
<b>SANTA CRUZ</b>	<b>2, 388,799</b>
* ANDRES IBANEZ	1, 526,187
**Seccion Capital : Santa Cruz de la Sierra	1, 372,356
**Tercera Seccion : La Guardia	49,921
**Cuarta Seccion : El Torno	46,188
**Primera Seccion : Cotoca	45,277
**Segunda Seccion : Porongo	12,445
<b>Main agglomeration = Santa Cruz de la Sierra</b>	<b>1, 372,356</b>

Source: INE, National Institute of Statistics, July 8<sup>th</sup>, 2005

<sup>1</sup>NOTE: Data took in account only urban agglomerations with significant urban population

\* Main capitals by department are located in these Provinces

\*\* The new classification of « Secciones de provincia » is « municipalities ». Ley de Descentralizacion Administrativa (#1654), 1994 and Ley de Participacion Popular (#1551), 1995.

In 2005, the departments of La Paz and Santa Cruz both concentrated 53 % of the population of Bolivia. The main agglomerations, or capitals, La Paz and Santa Cruz, (named like the departments they belong to) reached respectively 60.03 % and 57.45 % of urban population.

Before developing economic indicators, we highlight that the department of Santa Cruz stands out because it has an urban population more uniform than La Paz.

As table 2 shows, the urban distribution of the department of Santa Cruz is well balanced. The case of the department of La Paz is completely different. The capital of La Paz, the seat of government, concentrates 62 % of the department's population while urban population over the other provinces fluctuates between 0.09 % and 1.32 %. La Paz is a typical case of big cities from Less Developed Countries (LDC) with a high urban hierarchy. It's probably because the seat of government influences and attracts population in general, especially rural population that hopes to find a job and a minimum life status in the political "capital".

**TABLE 2: PROVINCES WITH PREDOMINANT URBAN POPULATION  
IN SANTA CRUZ DEPARTMENT, CENSUS OF 2001**

PROVINCE	TOTAL POPULATION	URBAN POPULATION	URBAN PERCENTAJE
Andrés Ibañez	784,678	725,087	<b>92.40</b>
Obispo Santiestevan	104,660	76,738	<b>73.32</b>
G. Busch	25,426	18,517	<b>72.82</b>
Sara	29,607	17,193	<b>58.07</b>
Chiquitos	42,519	22,584	<b>53.11</b>
Guarayos	20,902	10,936	<b>52.32</b>
<b>TOTAL</b>	<b>1,007,792</b>	<b>871,055</b>	<b>86.43</b>

Source: INE, Censo Nacional de Poblacion y Vivienda 2001

We focus on the two main urban agglomerations: La Paz-El Alto and Santa Cruz de la Sierra. It is important to highlight that the distance between the agglomerations of La Paz and Santa Cruz is approximately 900 km.

The Bolivian bipolar structure has many differences in economic, urban and social patterns. One way to analyse and describe the roles and the impact of departments of La Paz and Santa Cruz in the Bolivian economic development is to explain in detail each pattern.

To explain the gap of development within this bipolar structure, we will focus mainly on GDP data. The analysis depends on availability of data. Most of the time it is only available at the department scale. If necessary we will infer from department scale to agglomeration scale.

Besides, we will analyze FDI<sup>6</sup> and foreign trade from both poles. Finally, we will put in evidence migration data to show how this take-off process influences or not the urban hierarchy.

### ECONOMIC GROWTH WITHIN THE BIPOLAR STRUCTURE

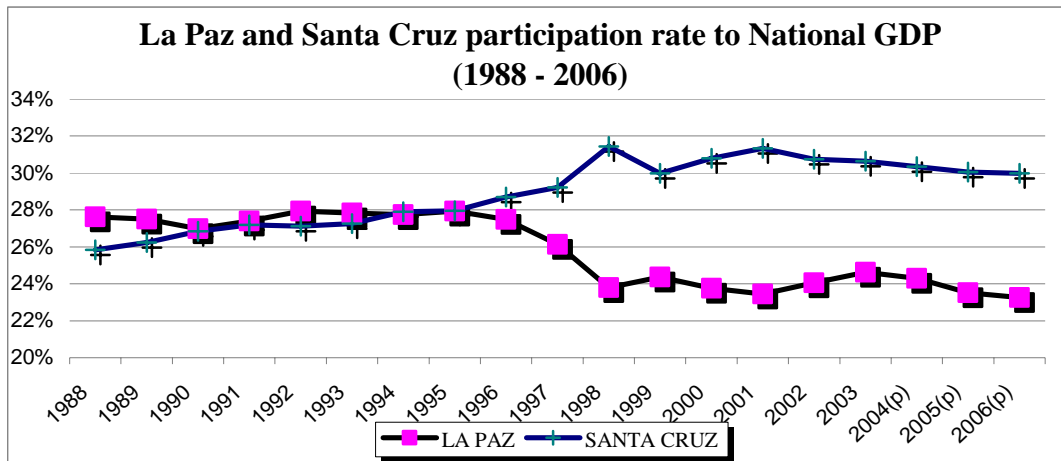
As mentioned before, there is an increasing economic gap between La Paz and Santa Cruz. Graph 1 points out the growth rate trend at department data scale. It takes in account data from 1988 to 2006.

<sup>6</sup> FDI : Foreign Direct Investment.

Indeed, graph suggests the existence of a take-off process in favor of Santa Cruz. La Paz reveals a downward trend in participation rate to national GDP during this period. If we compare 2006 to 1988, the GDP trend of La Paz dropped away in 5 %, meanwhile, the GDP trend of Santa Cruz increased by 4 % at the end of this period.

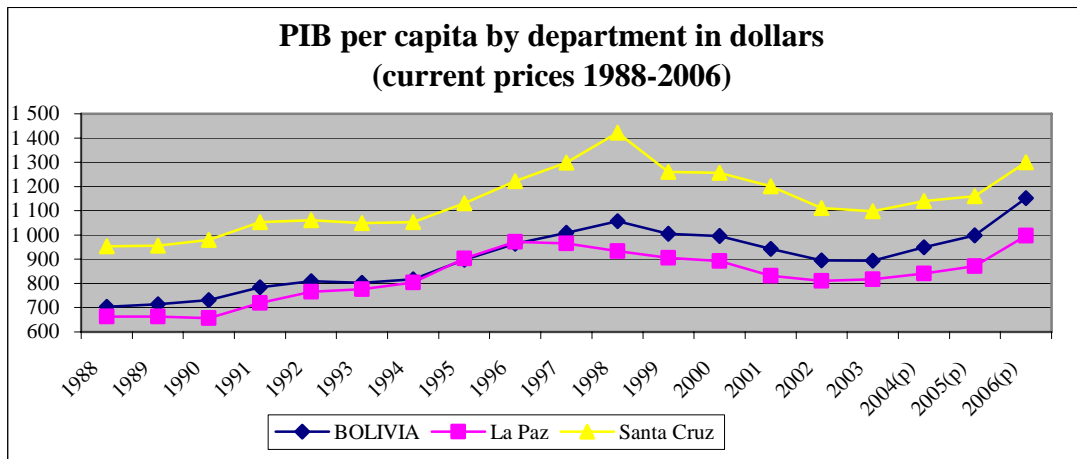
The gap in participation rate in the national GDP during these two decades is in favor of Santa Cruz, even though there is not a huge difference. In fact, in 2006 Santa Cruz concentrated 30 % of national GDP while its participation in 1988 was 26 %. On the other hand, the participation of La Paz in 1988 was 28 % and was reduced to 23 % in 2006.

GRAPH 1



Source: (INE, 2009), (p): preliminar data

GRAPH 2



Source: National Institut of Bolivian Statistics (INE, 2009)

Graph 2 shows GDP per capita. According to data, Santa Cruz GDP per capita is higher than La Paz GDP per capita and even superior to the national GDP per capita.

In 2006, Santa Cruz GDP per capita was 1300 american dollars whereas La Paz GDP per capita was 997 american dollars and Bolivia GDP per capita reached 1152 US\$.

### SPECIALIZATION OF LA PAZ AND SANTA CRUZ

In this section we present data of economic activities most developed by both poles. Unhappily, there is no data available at agglomeration level so most of the time we will infer from data at department level of GDP by main productive sectors.

At department level, agriculture is the activity developed in first place by Santa Cruz and represents between 18 % (1998) and 22 % (1996) of department GDP. On the contrary, this activity is one of the less important in La Paz. Its participation at department GDP does not surpass 8 %. As we explained before, geographically there are huge differences in weather, altitude and other factors between La Paz and Santa Cruz. It means that the economic activities developed by each one are different.

Santa Cruz develops manufacture more than La Paz. In the first case, the participation of this sector reaches 20 % of department GDP, while in the case of La Paz, manufacture represents around 15 %. We can highlight the fact that La Paz develops beverage, textile, clothing and leather products whereas Santa Cruz is specialized in refined oil and other petroleum derivative products.

Financial Institutions prevail as an economic activity developed in La Paz with 15 % of average participation.

Santa Cruz develops domestic trade more and more. It can be explained by the increasing migration flow of unskilled labor during the last decades.

Finally, it is important to notice that public administration is one of the most important activities of La Paz, which is explained by its place as a seat of government

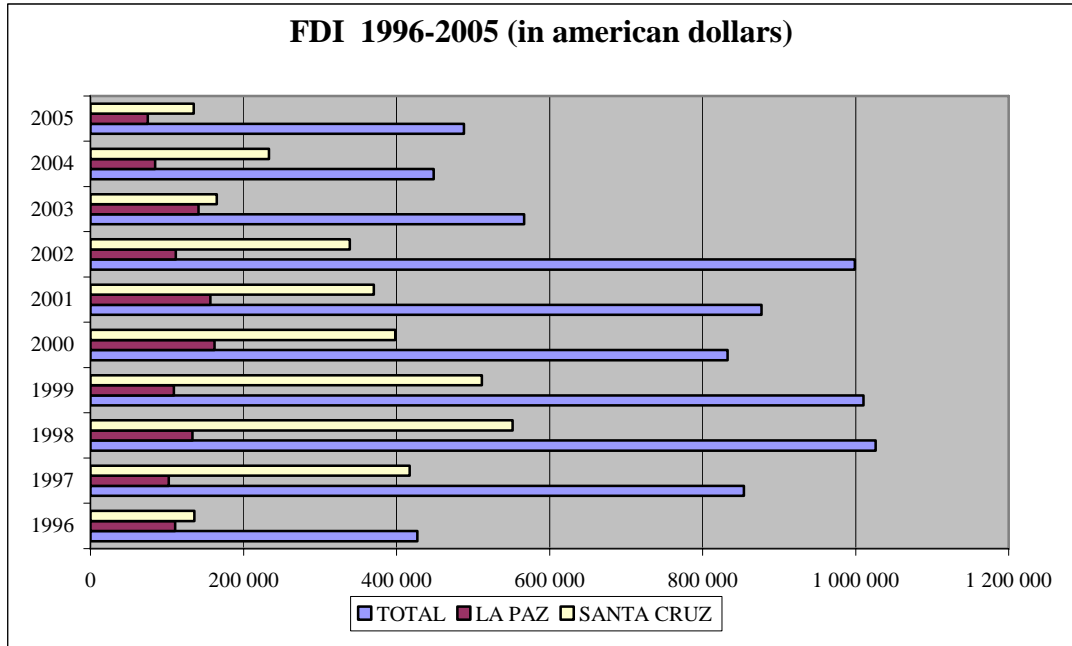
Next, we are going to show how both departments capture foreign direct investments.

### FOREIGN DIRECT INVESTMENT (FDI)

Graph 3 points out FDI at national and department levels. The data analyzed start in 1996 because the capitalization law that allows foreign companies to make investment in Bolivia was voted in 1995.



GRAPH 3



Source: INE, 2008

The data presented above show a fluctuating trend of FDI during 1996-2005. From 1997 to 2002, FDI is relatively important at national level. From 2003, the trend is less important than during the preceding period.

It can be assumed that the economic vocation of Santa Cruz, that is to say hydrocarbons, exploitation and exploration of petroleum and gas, influences the attraction level of the FDI. The point is that petroleum and gaz reserves give strong profit to the east pole of Bolivia, recently named as the new Bolivian economic lung. Furthermore, the construction and manufacture industries are also important sources of captation of the FDI of Santa Cruz.

On the other hand, the FDI of La Paz is principally concentrated in transport, stockage and communication sector. The geographic location of La Paz, which has a developed road infrastructure with the Pacific Ocean harbor, gives that pole a strategic role. Besides, the “proximity” to Pacific harbor explains the importance of stockage of merchandises that have to pass through La Paz to be exported. It is important to point out the extent of this sector dropped since 2002.

Financial trading is also an important sector that attracts the FDI to the west pole, La Paz, even if its importance decreased since 1998 and has a fluctuating path.

### EXPORT LEVEL

Continuing with the presentation of economic data, to measure the impact of departments of La Paz and Santa Cruz in the Bolivian economic development and to explain the emergence and consolidation of Santa Cruz, table 4 shows data of export at national and departmental scale.

We take into account data from 1994 to 2004.

In 1994, the data reveal that the export level of La Paz was twice the one of Santa Cruz. Nevertheless, this tendency changes in favor of Santa Cruz in 1998. From this year, the exportations of Santa Cruz increased. In 2004 it was more than twice superior to the export level of La Paz

In average, the participation of La Paz at national export level fluctuates between 9 % and 17 %, while the participation rate of Santa Cruz recorded a take-off process, reaching in 2004 a participation of 40 % in national export level. In other words Santa Cruz polarises economic growth thanks to its important level of exportations, principally hydrocarbons, and agriculture production.

In addition to this, in the opinion of some economists, Santa Cruz offers a good business environment to the industry.

**TABLE 4**  
**EXPORT LEVEL AT NATIONAL AND DEPARTMENTAL SCALE**  
**(1994 – 2004 In thousands of USD)**

DEPART.	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004(p)
TOTAL	1,124,231.6	1,181,213.3	1,295,347.3	1,272,099.1	1,324,734.8	1,405,363.5	1,474,992.2	1,352,892.9	1,374,888.2	1,676,561.2	2,254,370.9
Chuquisaca				579.6	945.0	618.3	1552.0	3921.5	1,750.6	1,974.0	8,010.6
La Paz	115,252.2	118,402.0	111,530.2	160,035.1	151,518.9	152,639.0	175,299.0	151,210.2	191,240.3	256,920.7	384,709.0
Oruro	313,822.5	374,860.8	385,488.4	367,082.9	306,440.5	310,199.0	313,622.1	272,517.0	287,541.4	323,467.3	459,704.6
Potosí	91,219.4	139,407.9	141,813.0	188,913.6	149,305.4	127,040.8	177,575.5	134,692.5	143,900.4	162,540.1	189,341.0
Tarija	155,371.9	138,431.8	153,744.6	140,154.8	111,073.9	53,607.8	28,508.5	25,517.5	17,070.2	21,794.6	84,757.8
Santa Cruz	63,836.2	87,413.9	138,803.9	144,314.8	151,277.5	193,265.6	347,529.2	439,724.0	481,147.6	638,637.7	892,795.3
Beni	18,983.0	6,972.1	4,547.4	6,229.5	6,816.3	2,512.3	2,489.8	2,652.4	145.3	313.2	503.7
Autres	332,516.7	273,578.6	280,267.3	248,332.2	232,698.3	204,850.5	202,288.3	198,999.7	199,728.7	186,755.8	166,453.4
Aéreo	330,866.6	270,409.7	273,771.2	238,669.5	221,912.8	194,660.0	195,401.8	194,351.7	196,522.1	182,617.9	163,129.0
Correos	6.1										
NoEspecificad	1,644.1	3,168.9	6,496.1	9,662.7	10,785.5	10,190.4	6,886.4	4,648.0	3,206.6	4,137.9	3,324.4
RE-EXPORT	33,229.5	42,146.1	79,152.4	16,456.4	214,658.9	360,630.4	226,127.9	123,658.2	52,363.8	84,157.8	68,095.5

Source: National Institut of Satatistics Anuario Estadístico 2004 (published in May 2005)

(p): Preliminary data

Unfortunately, trade is limited by the dirt roads serving the interior which prevail in road infrastructure at national level. Travel is slow and slippery in times of rain (from November to February). To increase the market area and trading volume, it is urgent to build up more roads with stone and gravel.

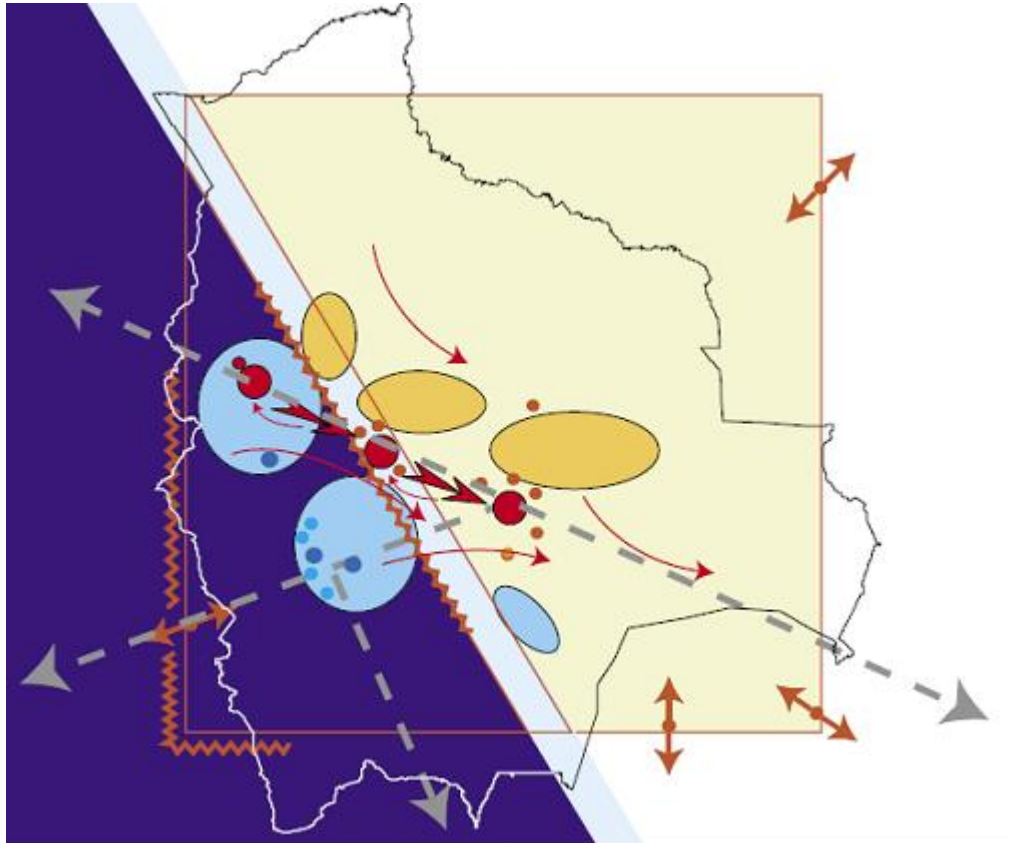
Taking everything in account, Santa Cruz became strong during the last decades thanks to hydrocarbons industry and favorable foreign trade. However, this strongness could also be a weakness, because of economic Bolivian history which was highly influenced by raw material production and export.

To reduce this kind of risk the ideal scenario is to transform more and more export products in value-added export products.

Graph 4 summarises the diversification of poles in the Bolivian urban system, and the diversification of international relationships thanks to the emergence and consequently consolidation of the east Bolivian pole: Santa Cruz.

Bolivia has maintained international relationships with Peru and Chile thanks to its historical trading mainly with minerals exportations. Nowadays, the consolidation of Santa Cruz as a new economic pole could be a widening of international relationships for Bolivia. Argentina and Brazil were commercial partners of Bolivia since the nineteenth century thanks to latex trading developed and centralised in Santa Cruz.

**GRAPH 4: CHANGE OF PRODUCTIVE AXIS AND WIDENING OF INTERNATIONAL RELATIONSHIPS**



Source: ARREGHINI L., ROUX J-C. (2000), « La Bolivie : des Andes vers les Orient. Disparités spatiales, et dynamiques socio-économiques », IRD – UMSA.

### CONCLUSION

The extreme concentration of population in some poles does not only obey to the demographic pattern that characterizes less developed countries (LDC). It also means a high urban hierarchy. In the case of Bolivia, urban agglomerations were the result of productive cycles generated by raw material extractions and commercialisation. Besides, the lack of road infrastructure connecting the whole territory emphasised the inequal development of this nation. Andean region, named also “high lands” developed road infrastructure separately from east side. The west pole took advantage of mineral cycle that was in the peak and prevailed until the second half of the twentieth century, when hydrocarbons and agricultural production were giving strenght to the east Bolivian pole. Nevertheless, Santa Cruz established at the end of the nineteenth century the commercialisation of latex and chestnut, using exportation routes through the Argentinian and Brazilian territories.

In addition, the inequality of the spatial distribution of population was favored by a poor road infrastructure which connected principal agglomerations in the whole territory.

A take-off process in favor of Santa Cruz seems to be produced, and consolidated especially during the last two decades. La Paz and Santa Cruz play important roles in the Bolivian economy.

Currently, each department has around two million of inhabitants. However, there is a real difference in economic field. La Paz has kept its administrative status as government seat; meanwhile, Santa Cruz has developed exportations and taken advantage of high prices of market cycles and foreign trade thanks to raw material as hydrocarbons.

As general information, migration flow data show that Santa Cruz has an important level of migrant unskilled labor. It is probably a factor that explains the expansion of informal sector and commerce within this pole.

There is a widening of international relationships of Bolivia, in particular with Argentina and Brazil, which began in the nineteenth century with latex trading.

Actually, it's been more than a century that Bolivia has been developing strong complementarity with coastal nations like Peru and Chile. If Santa Cruz consolidates its importance as economic lung of the nation, it could strengthen the external position of Bolivia. Santa Cruz is a strategic pole because it can become the connecting point between national and foreign relationships, especially when gaz export is an important tool. In the other hand, Brazil is interested in Bolivia as a possible access gate to the Pacific Ocean. It means that Brazil is trying to diversify its seaborne access and in the long term to reinforce and to consolidate his economic position as one of the main emergent economies.

The goal of this paper was to present the state of the art of Bolivian bipolar structure. During the two last decades, a new pole, Santa Cruz, became strong in economic and urban terms by comparison with the seat of government, La Paz, which used to concentrate economic power. It can be assumed that the economy of the new east pole relies on hydrocarbons export and on an industry that is consolidated more and more over the years.

However, this bipolar structure that characterises Bolivia is a factor that deserves to be studied with a "metropolisation" point of view. In the strict sense of internationalisation degree of the main poles: La Paz and Santa Cruz. This implies to explain the city as a place able to create *sufficient diversity, skills and information externalities to permit the emergence of global coordination functions* (Bourdeau-Lepage et Huriot). Preceding points are the objectives for futur research.

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## APPENDIX

Table A : EVALUATION INDICATORS

SOURCE	INDICATOR	BRASIL	ARGENTINA	MEXICO	BOLIVIA	CHILE
<sup>7</sup> WUP 2005 in thousands	Area in thousands km <sup>2</sup>	8,515	2,780	1,958	1,098	757
WUP 2005 in thousands	Total Population	186,405	38,747	107,029	9,182	16,295
WUP 2005 in thousands	Urban Population	157,010	34,907	81,334	5,896	14,280
WUP 2005 in thousands	Rural Population	29,395	3,841	25,696	3,286	2,015
WUP 2005 in thousands	Urban Percentage	84.2	90.1	76	64.2	87.6
<sup>8</sup> WTI UN 2005	Population density by Km <sup>2</sup>	22	14	54	8	21
WTI IMF 2004	GDP Total (B US\$)	602.9	153.2	636.9	8.8	94.1
WTI IMF 2004	GDP Per capita (in millions of US\$)	3,338	4,007	6,328	977	6,108
WTI 2005	Total	107,987.2	30,900.0	66,974.1	3,067.7	14,005.5
Total Teleph Suscribers	Per 100 inhab (AL average 80, World 49)	59.78	80.07	62.58	33.41	89.82
Total (000s)	MainTeleph Lines 2000	30,926.3	7,894.2	12,331.7	510.8	3,302.5
	MainTeleph Lines 2005	42,382.2	8,800.0	19,512.0	646.3	3,435.9
Per 100 inhabitants	MainTeleph Lines 2000	18.21	21.46	12.47	6.22	21.71
	MainTeleph Lines 2005	23.46	22.80	18.23	7.04	22.04
Total	CelularMobile Suscrib 2000	23,188.2	6,487.9	14,077.9	582,60	3,401.5
	CelularMobile Suscrib 2005	86,210.0	22,100.0	47,462.1	2,421.4	10,569.6
Per 100 inhabitants	CelularMobile Suscrib 2005	46.25	57.27	44.34	26.37	67.79
2005	As%Total telephSuscrib	67.0	71.5	70.9	78.90	75.5

<sup>7</sup> UNITED NATIONS Department of Economic and Social Affairs/ Population Division. "World Urbanization Prospects: The 2005 Revision" New York, 2006.

<sup>8</sup> WORLD TELECOMUNICATION INDICATORS UNITED NATIONS, 2005.

**TABLE B : DEMOGRAPHIC GROWTH BY DEPARTMENTS  
AND MAIN PROVINCES  
POPULATION CENSUS : 1976, 1992, 2001, and 2005<sup>1</sup> (ESTIMATION).**

DEPARTMENTS	MAIN PROVINCES	TOTAL POPULATION (CENSUS)				RELATIVE DISTRIBUTION In PERCENTAGE			
		1976	1992	2001	2005	1976	1992	2001	2005
CHUQUISACA		358,516	453,756	531,522	601,823	7.8	7.1	6.4	6.4
	OROPEZA	-	-	-	289,749	-	-	-	48.1*
LA PAZ		1,465,078	1,900,786	2,350,466	2,630,381	31.8	29.6	28.4	27.9
	PEDRO DOMINGO MURILLO	-	-	-	1,683,920	-	-	-	64.0*
COCHABAMBA		720,952	1,110,205	1,455,711	1,671,860	15.6	17.3	17.6	17.7
	CERCADO	-	-	-	578,219	-	-	-	34.6*
ORURO		310,409	340,114	391,870	433,481	6.7	5.3	4.7	4.6
	CERCADO	-	-	-	262,847	-	-	-	60.6*
POTOSI		657,743	645,889	709,013	768,203	14.3	10.1	8.6	8.1
	TOMAS FRIAS	-	-	-	198,163	-	-	-	25.8*
TARIJA		187,204	291,407	391,226	459,001	4.1	4.5	4.7	4.8
	CERCADO	-	-	-	183,001	-	-	-	39.9*
SANTA CRUZ		710,724	1,364,389	2,029,471	2,388,799	15.4	21.2	24.5	25.3
	ANDRES IBANEZ	-	-	-	1,526,187	-	-	-	63.9*
BENI		168,367	276,174	362,521	406,982	3.6	4.3	4.4	4.3
	CERCADO	-	-	-	92,553	-	-	-	22.7*
PANDO		34,493	38,072	52,525	66,689	0.7	0.6	0.6	0.7
	NICOLAS SUAREZ	-	-	-	39,577	-	-	-	59.3*
TOTAL NATION		4,613,486	6,420,792	8,274,325	9,427,219	100.0	100.0	100.0	100.0

SOURCE : CODEPO 2004 ; INE Censo de Poblacion y Vivienda, 1976, 1992, 2001.

<sup>1</sup> National Institute of Statistics: Notas de prensa, N° 75, 8 julio 2005

\* Demographic participation (in percentage) of main provinces in relation to the total Department population