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Session Nº 9. Natural Resources in Historical Perspective: Cursing or Blessing?

Public Finances and Natural Resources in Bolivia, 1883-2007. Where is the curse?

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This is a very first draft. Please do not quote.

Abstract

The paper deals with one of the most fashionable explanations in the natural resources curse literature, the "*Rentier State*" (Ross, 1999). It seeks to evaluate the usefulness as the restrictions of this framework when long term economic development is analyzed. It does taking the Bolivian economy as a case study. Trough a very long term approach (1883-2007 and a comparative perspective, the present paper test the "Rentier State" hypothesis as a useful framework to understand long term economic development. It does using a typology previously tested to re-think the impact of State intervention in some colonies of South Asia and Sub-Saharian Africa (Booth, 2008; Frankema, 2011). Looking at the sources of State income and the allocation of State expenditure, the paper suggests that the "Rentier State" hypothesis could be a useless methodological short-cut when long term development is analyzed. On one hand, it could hide that the nature of State intervention changed along the time. On the other hand, it could be an infective tool to understand why despite "good" State intervention, underdeveloped countries are unable to achieve better economic indicators.

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Natural resource curse could be easily attributed as the main explanation of Bolivian underdevelopment. The Bolivian economy presents the two main features identified in the seminal works of this literature (Sachs and Warner, 1995): a permanent dependence on natural resources and low long term economic growth rates (Herranz and Peres Cajías, 2011). However, since there is a growing body of literature which recalls that natural resources are not economically bad *as itself* (see Frankel, 2010; Willebald, 2011, or World Bank, 2011, as excellent surveys), the natural resource explanation seems very restricted. Then, beyond to identify the curse, it is necessarily to understand it.

The present paper takes part of a broader project which seeks to understand the curse looking at State intervention in Bolivia. The project central question is to analyze why, despite changes on the Political Economy strategy lead by the different administrations, the economy has had in the long-run a unique narrow-based development path (Gray, 2003; Wanderley, 2008).[1] It does using Public Finances as an analytical instrument. The project is aware that Public Finances is not the only State intervention tool. However, given the existence of long term data and some precedents in the international literature, focusing in Public Finances could give exceptional clues to understand State intervention failures.

In this context, the present paper questions if the state intervention failure in Bolivia lies in a hypothetical rentier nature, as it has been recently suggested (Laserna, Gordillo and Komadina, 2006). The "Rentier State" explanation is one of the most fashionable explanations among the natural resources curse literature (Ross, 1999). It proposes that the curse relies on the State inability to conduct a rational Public Finances management. The argument stress that natural resources exploitation generates a short term boom on State income. Then, rents boom attract the pressure from several interest groups which seeks to bias State expenditure on their own benefit. The inability of the State to repel this pressure generates a fiscal equilibrium where the extra rents are redistributed among different interest groups. This is done instead of a rational long term investment.

The "Rentier State" hypothesis has been formalized (e.g. Robinson, Torvik and Verdier, 2006). Also, has been used to explain actual economic development in Latin America (e.g. Weyland, 2009). Trough a very long term approach (1883-2007 and a comparative perspective, the present paper test the "Rentier State" hypothesis as a useful framework to understand long term economic development.[2] It does using a typology previously tested to re-think the impact of State intervention in some colonies of South Asia and Sub-Saharian Africa (Booth, 2008; Frankema, 2011). Looking at the sources of State income and at the allocation of State expenditure, this typology presents how the fiscal equilibrium of a given economy could evolved along the time. The analysis of these fiscal equilibriums suggests that the "Rentier State" hypothesis could be a useless methodological short-cut when long term development is analyzed. On one hand, it could hide that the nature of State intervention changed along the time. On the other

[1]A development path where the economic surpluses come almost exclusively from natural resources exploitation, but, given some structural features, could not be efficiently used -neither by the economy itself neither by the State- to foster economic development.

[2] Several Latin American, African and Asian countries are used as benchmarks. This is possible thanks to the compilation of several long term fiscal databases and the reconstruction of Bolivian long term fiscal disaggregated series (Peres Cajias, 2011b)

hand, it could be an infective tool to understand why despite "good" State intervention, underdeveloped countries are unable to achieve better economic indicators.

The paper is organized as follows. First section presents and justifies the framework. The second one presents for the first time an estimation of Bolivian State size on the economy from the last quarter of the 19th Century until today.[3] It shows that until recently, the Bolivian State has been relative small in relation to other Latin American countries. At the same time, it shows the critical role of natural resource rents in this process of State-building. This fiscal reliance is not as high as in some African and Asian countries, but neither small: in the long run, at least one third of Bolivian fiscal income came *directly* from natural resources exploitation. The third section analyses the allocation of State expenditure. It stresses the growing fiscal priority of Social Public Expenditure since the 1930's; in particularly the fiscal priority of human capital investment -education and health. This fiscal priority is high relative to other Latin American countries, as to other economies heavily dependent on natural resources. Given the fiscal priority on human capital accumulation, the forth section stresses the need to re-think the Bolivian fiscal equilibrium. If it is still believed that the Bolivian State has been a rentier one, at least two facts must be proved: *a)* that human capital expenditure has neither equally neither rationally invested; *b)* that low tax levels are explained by a rentier attitude, where the increase in natural resources rents disincentive the collection of other taxes. Both issues will be address in a future version of the present paper.

1. The framework

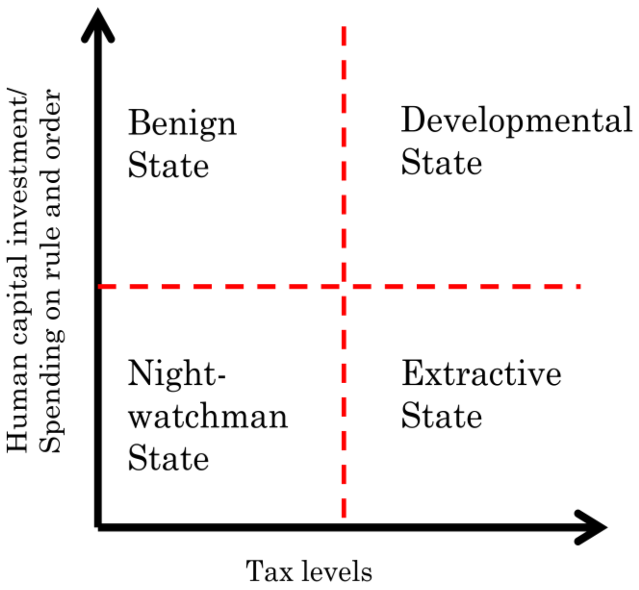
Public Finances has a great value as a research tool (Lamb *et al*, 2005). It allows to understand the evolution of States' income and expenditure. It also permits to understand the State building process. This has been done in the case of most developed economies (e.g. Tilly, 1992) and, recently, in the case of the least ones (Braütigam, Fjeldstad and Moore, 2008). Public Finances has been also used as an instrument which reflects the institutional equilibrium of a given economy (Topik, 1989; Lieberman, 2002; Sokoloff and Zolt, 2006; Azar *et al.*, 2009).

The present paper aim is to take advantage of this heuristic potential. It uses Public Finances as an instrument to understand some institutional equilibriums of the Bolivian economy. This is not a strictly novelty. There are some studies which used Public Finances to re-asses the Bolivian institutional equilibrium in the first half of the 20th Century (Gallo, 1991; Contreras, 1991; Dunkerley, 2001; Barragán and Peres Cajías, 2007). Hence, the paper's particularity lies on its long term and comparative approach. The time span goes from 1882 until today. The starting point is justified by data availability, but also in historic terms. The 1880's decade was the first one after the sea access lost against Chile (1879) and it is considered by the Bolivian historiography as the starting point of a new state building process (Klein, 2011).

[3] This is done taking advantage of two new long term economic series added to the Bolivian Economic History –the Bolivian fiscal income from 1882 until today (Peres Cajías, 2011b) and the estimation of the Bolivian GDP between 1850 and 1950 (Herranz and Peres Cajías, 2011).

The present paper stresses that a correct use of Public Finances as an institutional tool must considered both income and expenditure. This is done taking into account some recent advances in Economics (Romero-Ávila and Strauch, 2008). In this context, it uses a simple typology already used to reassess State intervention in some colonies of South Asia and Sub-Saharian Africa (Booth, 2008; Frankema, 2011). This typology crosses income and expenditure data, looking at the intersection between tax burden and a human capital expenditure ratio. The interest on the intersection final position lies on its potential to summarize the institutional equilibrium of a given economy (Graph Nº 1). The first one is the night-watchmen and it expresses the State inability to raise taxes and its fiscal priority to basic tasks –defense, justice, order and general administration. The second one is the benign state, an equilibrium where the State is complied not only with basic tasks, but with human capital accumulation. These new tasks, however, are not necessarily financed by taxes. The third scenario is the extractive state, one where the State is able to raise taxes, but these are not exclusively used to increase human capital investment. The forth scenario, finally, changes this last feature: the state raises taxes that are used to increase human capital investment.

Graph Nº 1. The Public Finances Typology



Sources: Frankema (2011: 138).

It is worthy to note that this typology is not used in a mechanical way. Instead, it is used because there are several theoretical issues that justify its validity for the present research. In relation with income, it considers not all public income, but tax income. This is not a surprise considering that tax levels are usually used to contrast the State size. Beyond that, it must be recall that not all public income has the same value in terms of government accountability and capability (Moore, 2008). It is expected that a higher significance of tax income in relation to non tax income reflects a higher governance capability: dependence on tax income increase the incentives for the State to negotiate and respond to citizens demands.

It must be recall that direct State intervention could affect the economy altering human capital investment or increasing physical capital accumulation. The typology looks exclusively at the first one. The concentration on the fiscal priority of human capital investment is justifiable. Public human capital investment is almost exclusively done by Central or General Government. In contrast, physical capital investment could be also done by state owned companies. As the present work lies on Central and General State Statistics, information in public physical capital investment could be incomplete. Likewise, human capital investment is also critical for economic growth (Romer, 1990). Beyond economics, human capital investment could be important as itself (Sen, 2000). Even more in the case of Latin America, where is clear that education investment affected the societal political equilibrium and the State relationship with its citizens (Mariscal and Zolt, 2006).

Looking at the typology, it is least probable to find rentier scenarios in the *developmental state*: public income comes from taxes and these are mainly used to assure the long term development of the economy. This will be true only if it is a- priory accepted that human capital investment is good for long term economic development. Then, the probability of rentier scenarios is higher in three of the forth scenarios. However, if the positive feature of human capital investment holds, these three scenarios are not necessarily equal. In the *benign state*, while it is true that the State has not enough ability to raise taxes from its citizens, it gives a high fiscal priority to expenditures which are good for long term economic development. In contrast, if we assume that basic tasks expenditures are more susceptible to rentier attitudes, the probability to find rentier scenarios is higher in the case of the night-watchmen state and the extractive state. Hence, in the following sections it is intend to analyze the evolution of the fiscal equilibrium of the Bolivian and other Latin American economies.

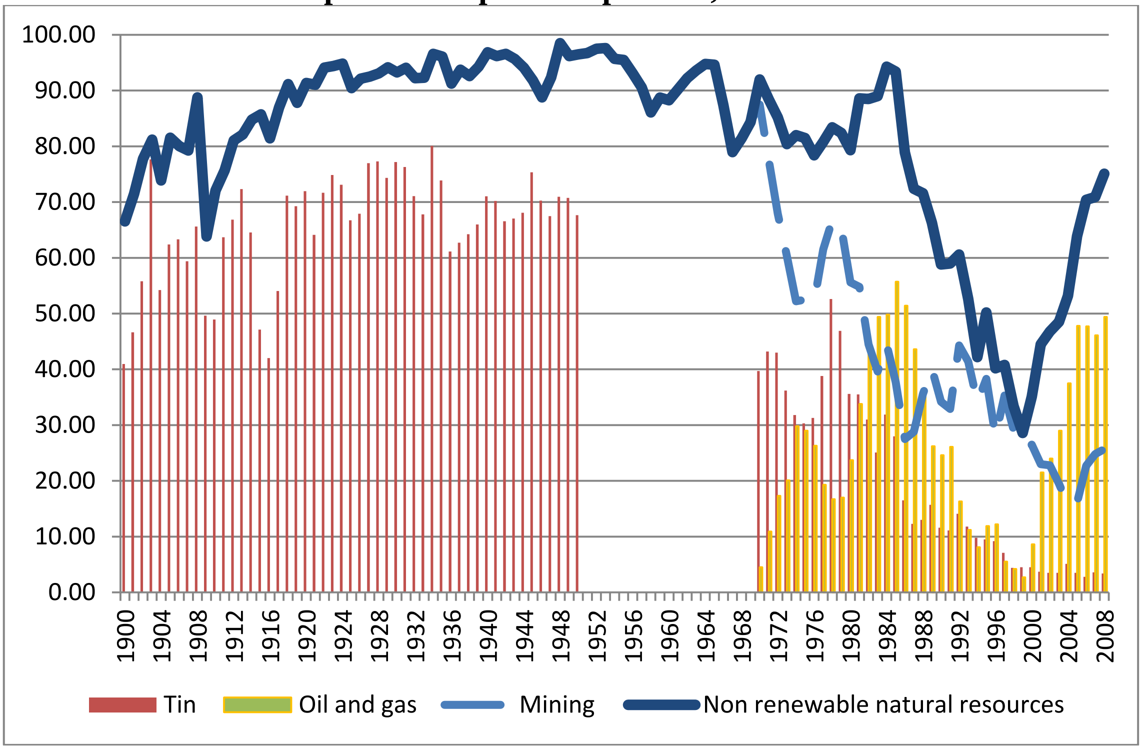
2. Bolivian Fiscal Income, 1882-2007

Export composition has been used to summarize the Bolivian narrow-based development path. Since its independence until today, the Bolivian export sector has been characterized for being highly concentrated in some non renewable natural resources (Graph Nº 2). Since 1825 until 1890's, mining exports accounted for almost the overall Bolivian exports. Furthermore, silver accounted for almost 90% of total exports (Haber and Menaldo, 2011). From 1890's until 1915, in coincidence with silver crisis, the export sector gained some diversification thanks to tin and rubber export booms. Few years later, however, mining exports recovered its past importance. This time, tin exports accounted for a bit more than 70% of total exports. This was the general pattern until 1972, when oil and gas exports started. After the debt crises, several administrations supported some diversification to agricultural as manufactures exports. One more time, this effort was a temporary one. Hence, in the last decade, oil and natural gas exports jumped and non renewable natural resources accounted again for almost 70% of total exports.

The present section's goal is to assess how this economic dependence on non renewable natural resources shaped the evolution of Bolivian Public Finances. Looking at the revenue composition, it proves that, *beyond political reasons*, the narrow-based development path determined an unbalanced income structure. This has been already proved pointing the critical role of indirect external taxes in Bolivian between 1883 and

1986 (Peres Cajías, 2011b). This relevance is one more time proved contrasting the Bolivian experience with other Latin American cases (Board 1).

Graph Nº 2. Export composition, 1900-2008



Sources: Own elaboration based on: *Mining Exports*: for 1900-1907, Memorias del Ministerio de Hacienda; for 1908-1970, Gómez (1978). *Tin Exports*: Peñaloza (1986). Data from 1970 to 2008 from CEPALSTAT.

Board 1. Indirect External Taxes in Latin America, 1900-1989 (relative incidence on Central State total income)

	Bolivia	Brazil	Chile	Colombia	Guatemala	Perú	Uruguay
1900-1909	75.47	52.22	89.43	n.d.	n.d.	54.22	61.21
1910-1919	68.40	43.42	79.68	64.93	n.d.	35.77	53.32
1920-1929	54.91	37.68	63.49	49.89	n.d.	33.32	46.64
1930-1939	51.26	32.80	41.19	45.87	n.d.	24.37	41.91
1940-1949	54.88	14.63	25.75	23.16	38.35	29.61	29.12
1950-1959	32.73	6.90	16.02	28.36	48.48	48.58	21.33
1960-1969	44.09	7.75	14.48	25.46	36.57	23.89	27.46
1970-1979	42.02	7.22	7.20	15.92	31.34	19.11	16.18
1980-1989	20.16	3.85	7.50	14.51	21.93	19.40	15.44

Sources: For Bolivia: Peres Cajías (2011b). Brazil: IBGE, Estadísticas Históricas do Seculo XX; Chile: MOxLAD; Colombia: Kalmanovitz (2010: 148); Guatemala: ICEFI (2007); Peru : Portocarrero, F., Beltrán, A. y Romero, M. E., (1992 : 111-123) ; Uruguay: Azar *et al* (2009).

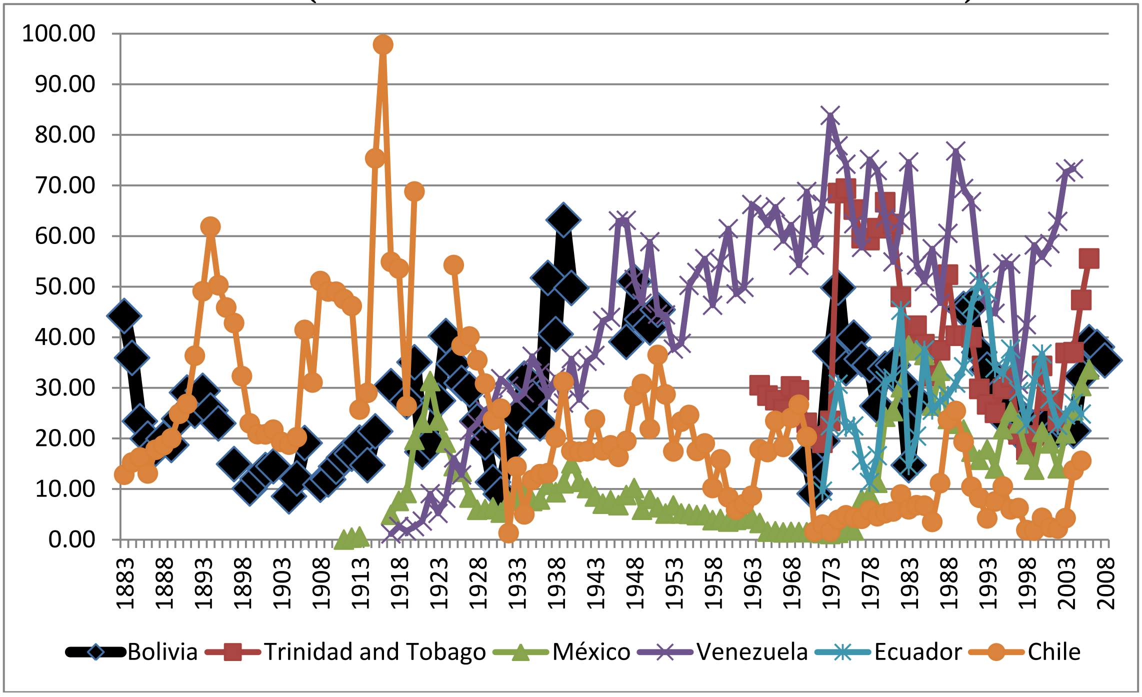
Notes: In the Brazilian and Uruguayan cases, due to data restrictions, the ratio was calculated on total tax income.

It has been said that indirect external taxes were the most important revenue sources in most Latin America countries from its independence until the Great Depression (Coatsworth and Williamson, 2004). The sample shows that indirect external taxes represented *at least* one third of total income between 1900 and 1929. The literature says that after the crisis, this fiscal reliance started to change (Cortez-Conde, 2006). However, the sample shows that this fiscal transition had different paces. As it has been proved, the transition has been very quick in the case of the biggest economies of the region –Argentina, Brazil and Mexico (Díaz Fuentes, 1999). It has been slower in the case of mediums economies -Chile, Colombia, Peru and Uruguay-, where the weight of indirect external taxes was smaller than one third just in the 1950's. It has been even more parsimonious in the case of small economies. Data shows that indirect external taxes were bigger than one third of total income in Bolivia and Guatemala as much as in the 1970's. So, the fiscal transition in the smaller economies was 40 years later than the fiscal transition in the bigger economies.

This fact is not at all a surprise. An indirect relationship has been several times identified between the weight of indirect external taxes and the GDP size (e.g. Burguess and Stern, 1993). This stylized fact suggests that poor economies, given its political and economic restrictions, rely on taxes taken from external trade. More precisely, rely – directly or indirectly- on the dynamism of its export sector. Directly because the payment of export taxes. Indirectly because exports generate the foreign currency necessary to import that is then taxed as custom duties. The weight of indirect external taxes suggests that Public Finances in the smaller economies of Latin America had strongly depended on its export sector at least until the 1980's debt crisis. As it has already shown, in the Bolivian case that meant a dependence on non renewable natural resources, more particularly tin and natural gas. So, the relevance of indirect external taxes reveals the incidence of the narrow-base development path on Bolivian Public Finances at least until the 1980's.

There is another alternative to prove the fiscal incidence of this narrow-based development path. Mining or oil exploitation activities do not only contribute paying export taxes. They also pay utility taxes or valued-added taxes. Then, the fiscal reliance on non renewable natural resources exploitation could be proved measuring all the taxes *directly* generated by this sector. That means gathering all the taxes which have as their tax base an activity related with natural resources exploitation. This new indicator shows that depending on the time, between 10% and 60% of Bolivian total income come from non renewable natural resources exploitation (Graph 3a). This wide range remarks that *direct* fiscal reliance on natural resources has not been uniform all along the time. The first significant episode appeared on the 1920 decade first half. This was the result of a wider fiscal reform which impacted mainly on mining taxes. Thanks to mining lobby this increase was reversed few years later. However, the Great Depression and the Chaco War against Paraguay (1932-1935) lead to a new increase on mining taxes. This time the State could achieve a more sustainable political imposition above the mining elite. So, between 1930 and 1950 mining taxes represented at least one third of Central State total income. Then fiscal reliance decreased, but, in coincidence with the start of oil and gas exports, become critical in the 1970-1990 period. Finally, few years ago, thanks to oil nationalization, natural resources rents recovered its critical role.

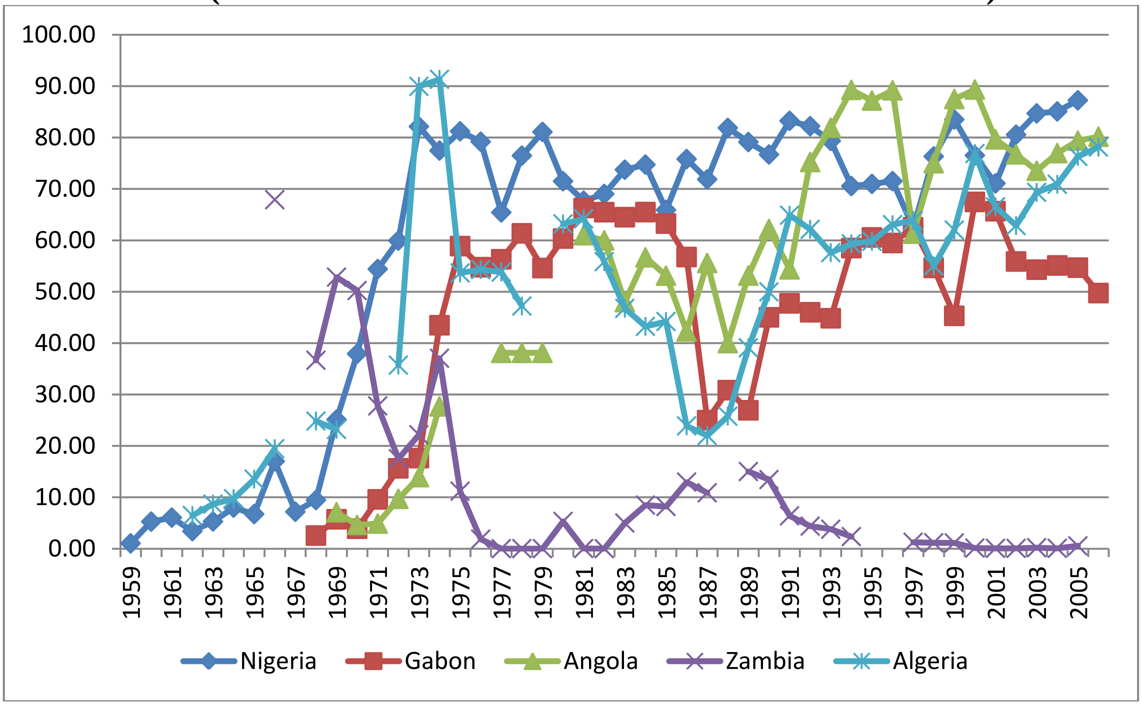
Graph 3a. Fiscal reliance on Non Renewable Natural Resources in Latin America, 1883-2008 (relative incidence on Central State total income)



Sources: Haber and Menaldo (2011). Except for Bolivia. 1882-1929: Memorias del Ministerio de Hacienda and Cuentas Generales; 1930-1940: Banco Minero (1941); 1947-1951: Memorias del Banco Central de Bolivia; 1952-1969: Gómez (1978); 1970-1984: UDAPE (1986); 1990-2008: UDAPE, Dossier Estadístico.

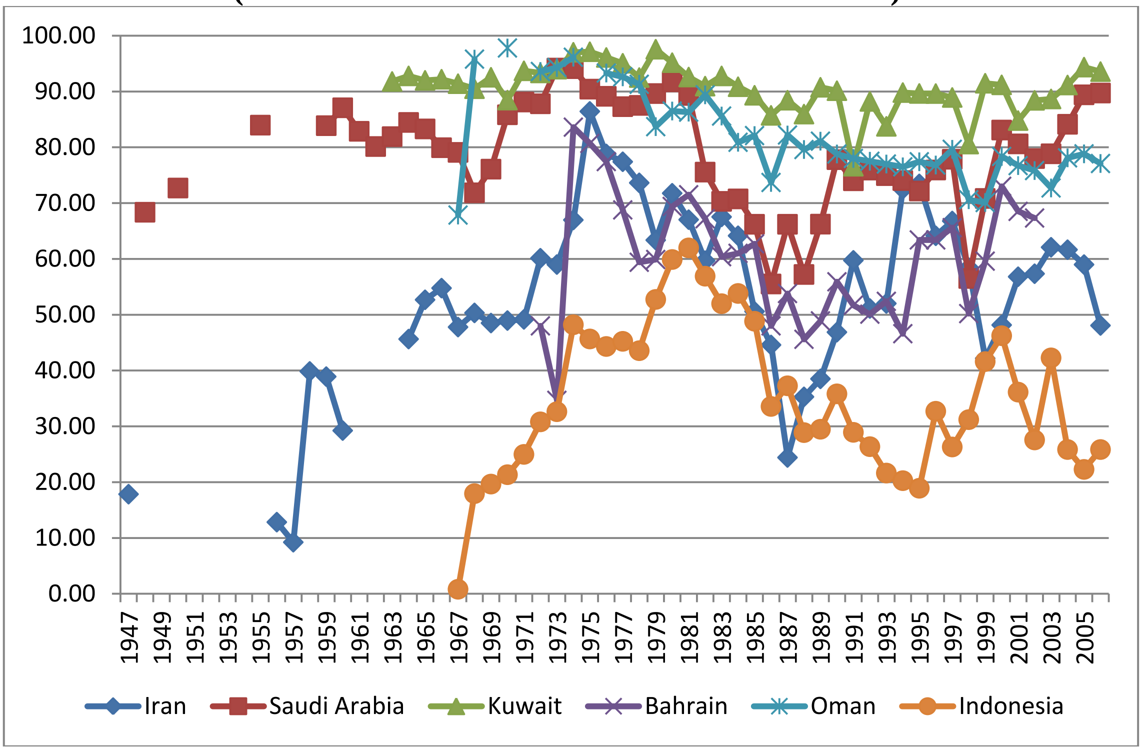
Notes: Bolivia: Relative incidence between 1882 and 1984 is based on Central State total income. Relative incidence between 1990 and 2008 is based on General State total income.

Graph 3b. Fiscal reliance on Non Renewable Natural Resources in Africa, 1959-2006 (relative incidence on Central/General State total income)



Sources: Haber and Menaldo (2011).

Graph 3c. Fiscal reliance on Non Renewable Natural Resources in Asia, 1947-2006 (relative incidence on Central State total income)



Sources: Haber and Menaldo (2011).

A comparative approach suggests that the Bolivian case is not necessarily an extreme one in terms of natural resources fiscal reliance (Graph 3a, 3b, 3c). In the Latin American context, while it is true that the Bolivian fiscal reliance in the long run was higher than in Mexico or Chile, it was still smaller than in Venezuela or Trinidad and Tobago. Likewise, the Bolivian long run average was still smaller than the fiscal reliance identified in several African countries. Oil producer countries as Nigeria, Gabon, Angola and Algeria shows an average fiscal reliance around 50% and 80% of total income. Furthermore, fiscal reliance levels in Bolivia are very different than those experienced in some of the main oil producers in the world. For example, Bolivia has never reached the levels identified in the case of Kuwait or Oman. However, not being an extreme case does not to say that natural resources fiscal reliance did not matter. Beyond the cycles, natural resources rents represented on average one third of Bolivian total income.[4]

Is this fiscal reliance a clear indicator of a cursed economy? Probably yes for many observers, but this kind of association forget some theoretical and historical precedents. Fiscal specialists agreed that to have an unbalanced income structure is not bad as itself. Sometimes, whatever the political desires, the State is more or less destined to rely in some particular taxes.[5] In face of this restriction the State has a second best alternative:

[4] The incidence of natural resources rents will be proved in futures versions of this paper through a cointegration model.

[5] See OECD (2009: 140-144) for an interesting discussion on this issue. In relation to this it has been proposed that, given the economic and political restrictions of the State, an unbalanced income structure could be expected in the Bolivian case (Peres Cajías, 2011a). During the First Globalization, because the magnitude and stability of the tax base, as the option to impose taxes in very concrete places instead all along the territory, it was safer and profitable to rely on indirect external taxes. During the 1930-1980

to collect as much as possible income and expend it in an efficient way ((Richardson y Hildreth, 1999; De Ferranti, Perry, Ferreira y Walton, 2003: 132-140).

This is what some countries did in order to escape from the “natural resources curse”. In the Latin American context, the Chilean case during the First Globalization (1880-1913) has been several times cited as an example where the State used efficiently natural resource rents to foster economic growth (Cortez Conde, 2006; Gallo, 2008). In the context of the least developed economies, the Mauritian case has been explored to show that indirect external taxes could be good both for State building as to foster economic development (Bräutigam, 2008). The recent commodities price rise has shown the ability of some countries to manage efficiently its natural resources rents (World Bank, 2011). What happened in the Bolivian case?

First of all, it must be analyzed how much collected the Bolivian State. This could be done looking at the Bolivian and other Latin American countries tax levels (Board 1).[6] The Bolivian Central State has been steady small until the 20th Century first decade. Then, thanks to mining spurt and fiscal reforms in the 1920’s, it grew somehow; while it remained smaller than Chilean and Uruguayan Central States, it grew above the Colombian and Peruvian levels.[7] During the 1930-1980 period, the Bolivian Central State remained smaller than most Latin American countries. The tax level gap becomes increasingly higher in relation with the more developed economies of the region. Moreover, in the 1970’s, despite its considerable tax income growth, the Bolivian tax level was even smaller than the Guatemalan one -another Latin America small economy. Then, since the 1980’s and driven by two critical fiscal reforms, Bolivian revenues grew and tend to converge to Latin American average standards.[8]

It is true that Central State has been the most important administrative unit until 1990. It is also true that non tax income has not been so critical to Bolivian Public Finances until the 1900’s. However, in the last years, States –Departamentos in the Bolivian case- and Municipalities have grown in importance since 1994. In coincidence, non-tax income has also increased. Then, total income of General State is a better indicator of Bolivian State size (Graph 4). Taking this indicator as a percentage of the GDP, it stand out that Bolivia has increased heavily its revenues. This will not be possible without the recent increase on natural resources taxes. Without denying the perverse effects that extremely

period, the political and economic context changed in Bolivia. However, in contrast with other Latin American countries, the State building process was retarded, as it was the diversification of the economy. For example, while the ratio was around 20 and 25% in other Latin American countries, the weight of industrial production on the GDP remained around 15% in Bolivia from 1940 until 1980 (Herranz and Peres Cajías, 2011). The lack of a diversified economy, imply the lack of a diversified tax base. All along the last years, Bolivia achieved a more diversified income structure, but few years ago fiscal reliance on natural resources grew considerably. One more time, this increase could be understand taking into account sectorial productivity differences, political instability and the simplicity to take taxes in some point sources instead to achieve a broader fiscal pact.

[6] Central State tax level is a good proxy of Bolivian State size. On one hand, Central State becomes the most important administrative unit: between 1890 and 1980 represented 95% of General State income. On the other hand, tax income represented 90% of total Central State income (Peres Cajias, 2011b).

[7] Data suggest that Bolivian Central State was bigger than Brazilian State. However, the Federal nature of this country must be recall. So, in the case of Brazil, when State size is analyzed, the Central State unit is not necessarily the best.

[8] These conclusions could be generalized to total income given the low average importance of non taxes income (Peres Cajías, 2011b).

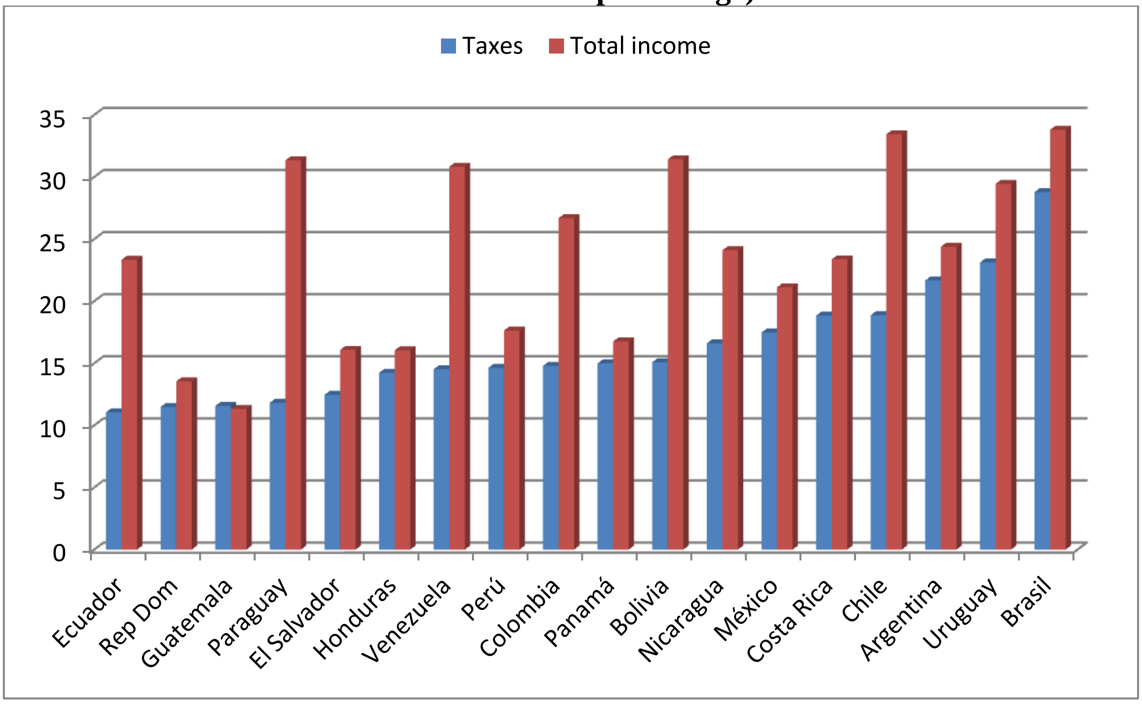
high taxes could have on oil or mining activities, this income increase remarks that the Bolivian State has gained a major potential to intervene on the economy.

Board 2. Tax levels in Latin America, 1882-2008 (decade average on Central State tax income)

	Bolivia	Brazil	Chile	Colombia	Guatemala	Peru	Uruguay
1880-1889	2.05	n.d.	7.06	n.d.	n.d.	n.d.	n.d.
1890-1899	1.89	n.d.	6.96	n.d.	n.d.	n.d.	n.d.
1900-1909	2.93	8.89	7.92	5.04	n.d.	4.10	11.90
1910-1919	4.38	6.57	7.01	3.87	n.d.	3.89	10.22
1920-1929	7.01	5.37	7.58	3.69	n.d.	3.95	11.05
1930-1939	4.38	6.88	9.33	4.31	n.d.	5.10	12.94
1940-1949	6.14	8.46	10.50	4.29	6.58	6.91	12.14
1950-1959	3.44	10.17	12.69	6.72	7.74	7.59	13.61
1960-1969	7.04	12.46	16.57	6.85	7.40	10.82	14.28
1970-1979	8.89	18.34	19.76	8.14	8.50	14.09	15.72
1980-1989	6.57	17.69	21.95	7.45	7.26	12.68	17.21
1990-1999	13.79	18.44	16.98	8.18	9.40	12.82	14.57
2000-2008	18.06	21.89	18.32	11.94	11.77	13.60	17.52

Sources: For Bolivia: Own calculations based on Peres Cajías (2011b) and Herranz and Peres Cajías (2011). Brazil: IBGE, Estadísticas Históricas do Seculo XX; Chile: Base de datos EH CLIO LAB, Iniciativa Científica Milenio Mideplan; Colombia: Kalmanovitz (2010: 148); Guatemala: ICEFI (2007); Peru : Portocarrero, F., Beltrán, A. y Romero, M. E., (1992 : 111-123) ; Uruguay: Azar *et al* (2009).

Graph 4. Tax levels and Total Income in Latin America, 1990-2006 (General State income as GDP percentage)



Sources: OECD (2009: 72-78).

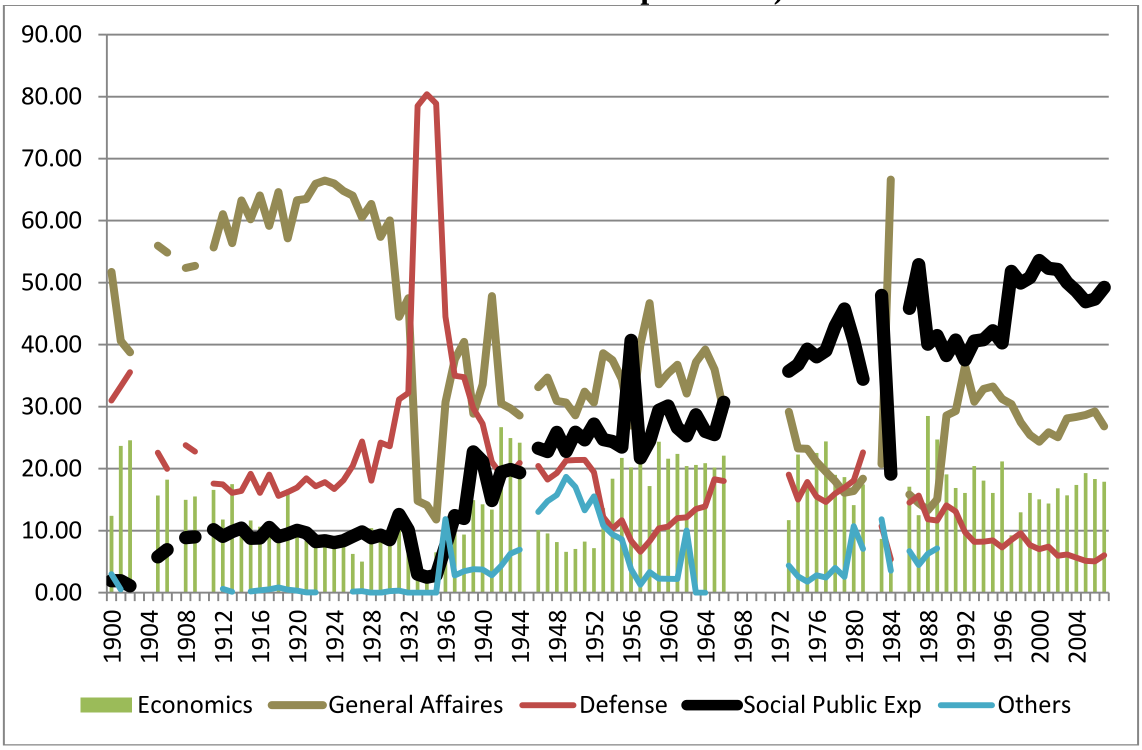
Then, beyond the controversy about the effects of high taxes on the natural resources activities sustainability, tax levels data suggest that without indirect external taxes or natural resources rents the Bolivian State would be steadily smaller than most Latin American countries all along the 20th Century. That means that the Bolivian State would be destined to accomplish only minimal tasks at least until 1985- i.e. when indirect internal taxes grew considerably. Total income data suggest also that nowadays the Bolivian State has a higher impact potential than most Latin American States. In sum, both tax levels and total income data, suggest that the Bolivian State could take advantage of natural resources rents to accomplish the first step of the already cited Political Economy second-best –to collect as much as possible. What happen with the second step? Did the Bolivian State expenditure were directed to foster economic development?

3. Expenditure composition: from Administrative to Social Public

State intervention could foster economic development by several ways –investment, regulation, state owned companies, etc. Using Public Finances as an instrument, State intervention could *directly* affect the economy through two mechanisms: investing on physical capital or investing in human capital. Looking at the expenditure composition it stands out that physical capital investment has had a constant fiscal priority to the Bolivian State: since 1900 until 2007 physical capital investment *through the Central State* has represented, on average, 20% of total expenditure (Graph 5). In contrast, the fiscal priority of the remaining expenditure classifications has changed along the time. With the exception of the Chaco War years (1932-1935) the fiscal priority of Defense expenditure has steadily decreased since 1900 until today. In the long term, the fiscal priority of General Public Services expenditure –administrative, justice and public order- has also decreased; while during the 20th Century first third it represented around 60% of total expenditure, nowadays it represents 30% of Central State total expenditure. In contrast, the fiscal priority of Social Public Expenditure has increased considerably since 1936; while during the 20th Century first third it represented only 10% of total expenditure, nowadays it represents half of Central State total expenditure. This increase is by large the most significant change in expenditure composition. Taking into account the composition of Social Public Expenditure, this change also suggest that the Bolivian State had an increasingly fiscal priority on human capital investment. The present section goal is to prove in a comparative perspective the critical role of both facts: the increase of Social Public Expenditure and the increase of human capital investment.

The significance of the Social Public Expenditure fiscal priority increase is clear contrasting the Bolivian case with other Latin American countries (Board 3). The Uruguayan case has been several times cited as the most similar case of a Welfare State in Latin America (Franzoni, 2006; Azar *et al*., 2009). This is clear in the sample data. The fiscal priority of Social Public Expenditure has been, since the beginning of the 20th until today, much higher in Uruguay than in the rest of Latin American. Then, the fiscal priority of Social Public Expenditure in Bolivia has never reached the Uruguayan levels. However, this is not true in relation with other Latin American case cited as State early worried with social expenditure, Chile (Franzoni, 2006). The fiscal priority of Social Public Expenditure in Bolivia has reached the same levels than in Chile since the 1940 decade until the 1970's. Beyond these particular cases, it stands out that the fiscal priority of Social Public Expenditure has been higher in Bolivia than in other Latin American countries since the 1930 decade until today.[9]

Graph 5. Bolivian Expenditure Composition, 1900-2007 (relative incidence on Central State total expenditure)



Source: Peres Cajías (2011b)

Board 3. Social Public Expenditure in Latin America, 1900-1999 (relative incidence on Central State total expenditure)

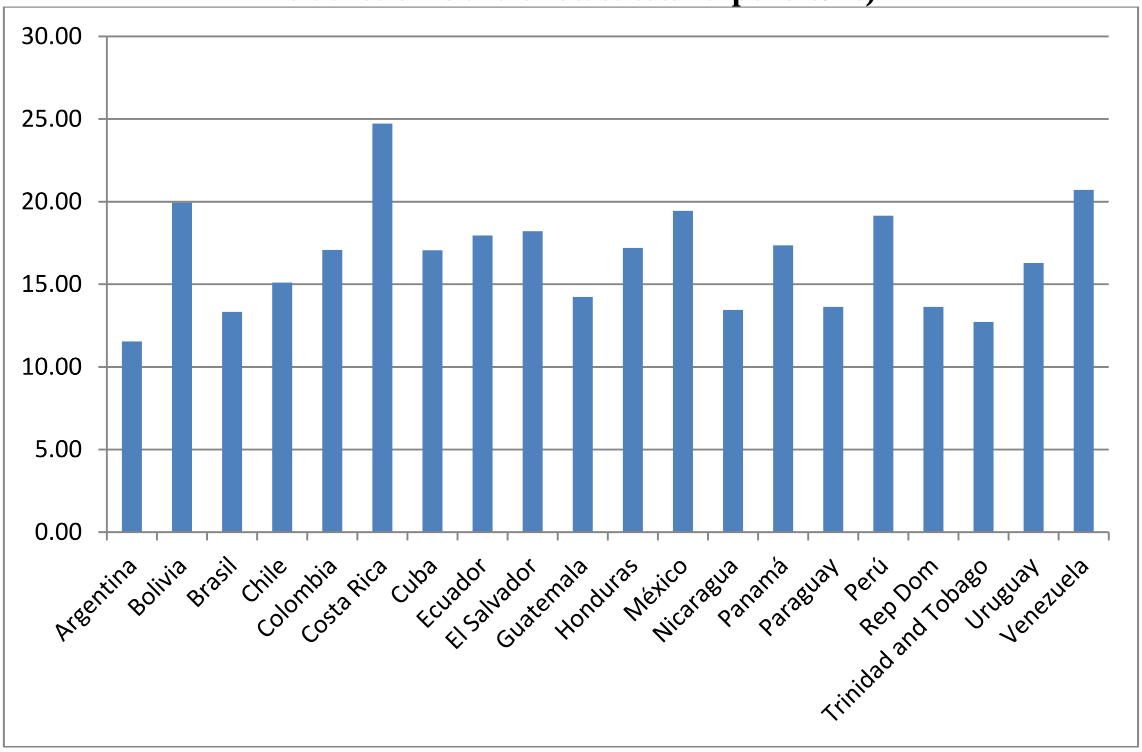
	Bolivia	Brasil	Chile	Guatemala	Perú	Uruguay
1900-1909	5.08		7.54	n.d	12.64	
1910-1919	9.57		11.34	n.d	15.31	25.28
1920-1929	8.98		14.29	n.d	14.41	38.04
1930-1939	9.42	4.71	20.84	n.d	15.94	44.95
1940-1949	21.04	7.44	22.88	n.d	21.89	42.92
1950-1959	26.66	10.46	20.68	n.d	26.57	61.70
1960-1969	27.56	10.30	24.38	n.d	34.67	63.59
1970-1979	39.66	20.59	38.52	35.16	24.52	59.12
1980-1989	40.31	22.65	60.97	25.59	21.64	57.03
1990-1999	43.30	22.40	60.89	n.d		67.74

Sources: For Bolivia: Peres Cajías (2011b). Brazil: IBGE, Estadísticas Históricas do Seculo XX; Chile: Base de datos EH CLIO LAB, Iniciativa Científica Milenio Mideplan; Guatemala: IMF GFS Historic Database; Peru : Portocarrero, F., Beltrán, A. and Romero, M. E., (1992 : 111-123) ; Uruguay: Azar *et al* (2009).

[9] It must not be denied that the Brazilian case is a special one. Being a Federal country, Central State expenditure does not reflects truly all the Social Public Expenditure. Then the gap with the Brazilian case should be smaller than the reflected in Board 3.

It has been shown that until recently Social Public Expenditure in Bolivia meant basically expenditure in health and education. Both items represented around 80% of Social Public Expenditure until 1985 (Peres Cajías, 2011b). Then, the growing fiscal priority of Social Public Expenditure meant a growing fiscal priority in education and health. Once again, this fiscal priority stands outs as high in Latin American levels (Graph 6). Taking this time General State data, it is remarkable that the education fiscal priority in Bolivia has been, on average, higher than in most Latin American countries – being Cuba and Venezuela the only exceptions. The expenditure composition analysis suggests that the Bolivian State not only tried to collect as much as possible, but also to invest a great share of its resources into beneficial items. The what is the Bolivian fiscal equilibrium?

Graph 6. Expenditure on education in Latin America, 1970-2008 average (relative incidence on General State total expenditure)

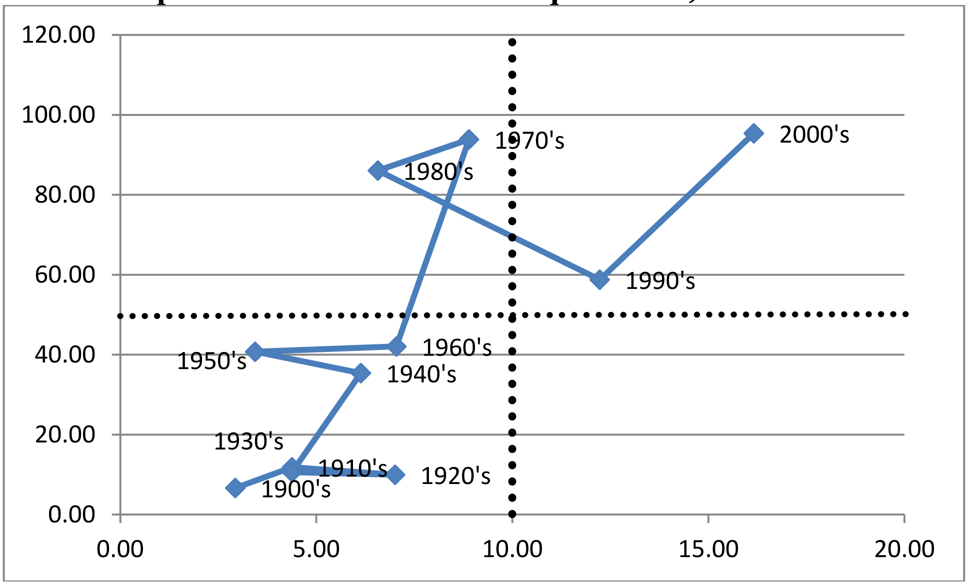


Sources: Own elaboration based on CEPALSTAT

4. The Bolivian Fiscal Equilibrium: a *Rentier* State or a restricted one

Taking into account the income increase and the expenditure composition, what was the fiscal equilibrium of the Bolivian State? Given the low tax levels during the 1930-1980 and the growing fiscal priority in human capital investment, it is still possible to talk about a "rentier State"? To answer these questions, the present section uses the typology presented at the beginning of the paper (Graph 8). The typology does not necessarily discard the "rentier" hypothesis. However, it clearly shows that the fiscal equilibrium has changed along the time. So, if something, it is not possible to talk about a "rentier State", but different rentier scenarios" along the time. In historic terms, it stands out that the Bolivian State could be featured as a minimal one at least until the 1960's. This State was characterized by low tax levels and a bigger priority to general expenditure, rather than human capital investment. Then, thanks to the growing fiscal priority assigned to human capital investment, the Bolivian fiscal equilibrium ended as a benign one. This one remarks a higher fiscal priority to human capital, but the preservation of low tax levels. This last feature changed only in the very last decades, thanks to two critical fiscal reforms (Peres Cajías, 2011b). First, the 864 Law (1986) which amplified considerably the indirect internal taxes and the Oil Law (2004) which increased the natural resources rents.

Graph 8a. The Bolivian Fiscal Equilibrium, 1990-2000's

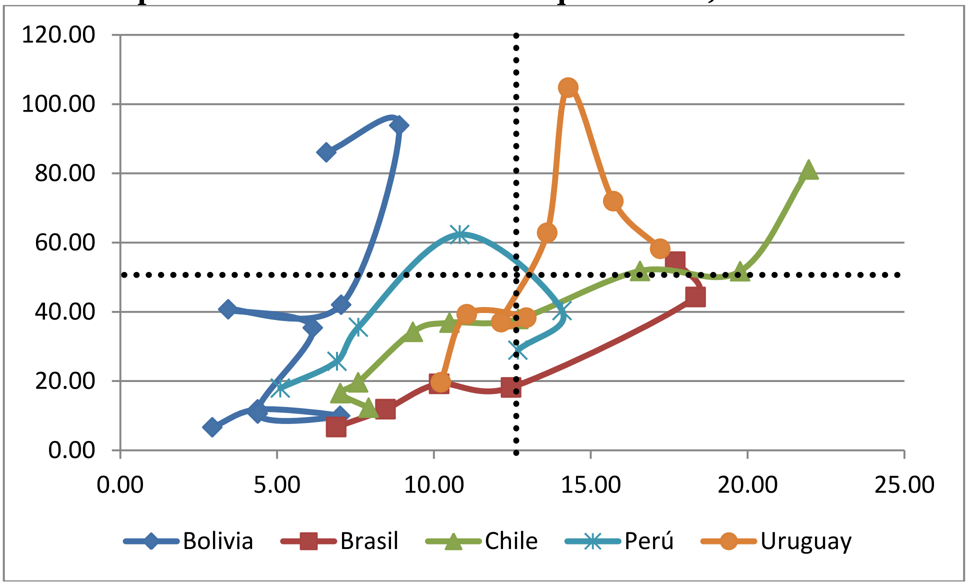


Sources: Own elaboration based on Peres Cajías (2011b)

The transition from a minimal to a benign State stands out as the most salient feature of the Bolivian fiscal equilibrium (Graph 8b). The data confirms the particularities of the Chilean and Uruguayan cases as the most similar Latin American States to the European Welfare States. Both cases show a transition from minimal to developmental states: that means, States which grew along the time, increasingly its commitment with human capital investment. The Brazilian case would present the same path considering that human capital investment was done in a significant way not only by the States and not only by the Central State. The Peruvian case shows a particular path: starting from a minimal passed to a benign and ended as an extractivist in the 1980's.

What means to pass from a minimal state to a benign one? It means that while some Latin American countries could achieve to increase its tax levels, Bolivia did not. Given the low relative importance of non tax levels, that means the inability of the Bolivian State to increase its total income. However, the Bolivian special transition means, at the same time, that Bolivia keep the same fiscal priority gave to human capital investment in other Latin American countries. This is particularly true when the Bolivian case is compared with the Chilean and Uruguayan cases. Once again, if it's a priory accepted that human capital investment is good for long term economic development; it is still possible to talk about a rentier State in the Bolivian case?

Graph 8. Latin American Fiscal Equilibriums, 1900-1980's



Sources: Own ellaboration based on Peres Cajías (2011b)
Note: In order to make a correct lecture of the Graph it must be recall that, due to data restrictions, the starting point is not the same in all the countries. Bolivia and Chile (1900); Uruguay (1910); Brazil and Peru (1930).

The present paper does not give a final answer, but a research agenda. If it is still believed that the Bolivian State has been a rentier one, at least two facts must be proved: *a)* that human capital expenditure has been neither equally neither rationally invested; *b)* that the low tax levels are explained by a rentier attitude, where the increase in natural resources rents disincentive the collection of other taxes. The first issue will be address looking at the allocation of the education expenditure, taking advantage of the approach suggested by Lindert (2010). The second issue will be tested using an already tested approach in oil dependent countries (Bornhorst, Gupta and Thorton, 2009). The present paper hypothesis stress that both ideas will be rejected.

Conclusions

The paper deals with one of the most fashionable explanations in the natural resources curse literature, the "*Rentier State*" (Ross, 1999). Empirical tests of this idea *in the long run* are scarce. The present paper searches to overcome this restriction. It does taking the Bolivian economy as a case study. The paper does not seek to define if the Bolivian State has been a rentier one or not. Instead, it seeks to evaluate the usefulness as the restrictions of this framework when long term economic development is analyzed. It does identifying where the Bolivian State took its revenues and where it allocated them (1883-2007). The paper shows that until recently, the Bolivian State has been relative small in relation to other Latin American countries. It also shows the critical role of natural resource rents in this process of State-building. This fiscal reliance is not as high as in some African or Asian countries, but neither negligible. The paper also stresses the growing fiscal priority of Social Public Expenditure since the 1930's; in particularly the fiscal priority of human capital investment -education and health. This fiscal priority is high relative to other Latin American countries. Then, if it is a priory, accepted that human capital investment is good for long term economic development, it must be clarified how this high fiscal priority fostered a rentier State.

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