

BRAZIL IN SOUTH AMERICAN INTEGRATION AND GLOBAL AND REGIONAL POLITICS OF CLIMATE (*)

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ABSTRACT

This paper is driven by two major questions: Why there is a big gap between the strong rhetoric of all South countries supporting regional integration and the poor outcomes achieved so far?; and, Why Brazil, having a low carbon intensive energy matrix, has not taken a leading global and regional role in climate change mitigation and adaptation?

The paper has two parts. The first one “Integration and Fragmentation in South America” analyses the dynamic of the South American countries and consider the attempts of economic and political integration. The second one “Brazil in the global and regional politics of climate” analyses the evolving of Brazilian policy in the global arena of the Kyoto Protocol and the failed efforts of the country to produce governance of energy and climate in South America. The final remarks talks about the key Brazilian role in the current negotiations of a post-Kyoto architecture for climate change mitigation and adaptation.

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1- INTEGRATION AND FRAGMENTATION IN SOUTH AMERICA

The concept of regional integration has gotten a very positive connotation in international politics in the last decades and for this reason is used a lot by South American policy makers with a strong normative bias that frequently is distant from the effective reality of the integration process. South America is a region of the world with good potential for economic integration for the following reasons: continental geography, commonality or proximity among cultures and languages, very low inter-state rivalry (minimum amount of wars during the last century, when compared with other regions) and abundance of energy resources (particularly natural gas, oil, hydropower and bio-fuels). For that reason Brazilian foreign policy has build up, in the last two decades, a strategy oriented to an incremental effort for the integration of the region, starting with Argentina, the traditional geopolitical rival since Independence. The outcome of these efforts have been mixed, with many ups and downs but with a general trend of success in the creation and development of Mercosur from 1991 to 1999, an stagnation of the Union from 1999 to 2002 and a renewed and more extended Brazilian diplomatic effort – the leading of an integration of the whole South America - since the beginning of the Lula administration in 2003. The process is still in course and open ending, but the initial year's shows that obstacles are very strong and success is far away (Viola & Leis 2007).

In spite of the strong discourse in favor of integration of South America, the economic and political realities show a process of fragmentation with most countries trying to maximize, through a short term approach, their vision of their national interests, which is frequently contradictory with progress in the process of integration. South American economic and political realities are mostly divergent because political leaders and their respective national projects are very diverse and strongly attached to their respective national traditions (Whitehead 2006). In spite of economic recovery and certain growth in the trade and investment flows within the region in the last years, there is not awareness or agreement in most of the elites and mass public about what would be a consistent plan for integration, including the costs each country should pay for that goal. Actually, each country have been looking for dealing with their immediate economic and social problems with ad hoc solutions, shaped and defined through an exclusive national framework.

Many analysts are simplifying about the major trend in terms of South American politics, like the turn to the left of the sub-continent and the division of this political force in two tendencies, one modern reformist and other traditional populist. However, if we look in a more detailed way we will see strong differences in the dynamics of most countries (Viola & Leis 2007). The most important common trends in South America in the last decade have been the following eight, positive the first three and negative the last five:

- a- Subordination of the military to civilian power, this expanded the rule law.
- b- Erosion of traditional political forces based in local economic power.
- c- Consolidation of elections as a mechanism for accessing political power, as society became more used to free or relatively free elections is very the possibility of suppressing elections like in the past.
- d- Obstacles for the consolidation of a modern political party system that creates clear differentiation and responsibilities for the functions of government and opposition (Mainwaring 2005).
- e- Failure by leaders from a wide political spectrum to complete the market friendly reforms crucial for integrating the countries in the global economy.
- f- Continuous growth of organized crime and transnational illicit, even with capacity of influence on political parties; this process undermine the gains in terms of rule of law in the less developed areas of the countries (O'Donnell 1999).
- g- Disseminated corruption among politicians at national at sub-national levels of governance.
- h- Failure in assuming responsibility in global efforts to mitigate global warming and in designing policies for adapting their societies to climate change and slow progress in environmental protection (Viola & Leis 2007 and Hochstetler 2003).

The only clear exception in relation to the last five major trends has been Chile, where economic reforms have been completed and crime is controlled. If we look in more detail it will be verified that those eight trends materialize in very heterogeneous way across the countries. In order to have a clear picture I will summarize the situation of South American countries, in an order that match the ranking of the countries in terms of market economy development, rule of law and representative democracy modernization. This paper uses a criterion that combine eight variables: effectiveness of the state, rule of law (including the dissonance between the law and the enforcement), representative democracy, per capita income, modern economic institutions, competitiveness of the enterprises, level of corruption, and, level of organized crime and social violence (Viola & Leis 2007). Combining these variables it will give three categories of states: modern states, weak states and fragile states. Brazil, Chile and Uruguay are modern states though Chile is more advanced than Brazil and Uruguay. Argentina, Peru, Colombia, Venezuela and Ecuador are weak states with very different profile and intensity of vulnerabilities. Paraguay, Bolivia, Suriname and Guyana are fragile states, also with different profile of vulnerabilities, being Surinam the closest to a failed state.

In order to have appropriate parameters of South America it is very important do describe the basics of each country. Brazil is the by far the most important country in South America, though is second to Chile in degree of modernization. The key parameters of Brazil in 2007 are: population, 192 millions people; GDP, 1.3 trillion dollars; GDP per head 6,800 dollars; inflation 4.1%. Because of the size in population, gross national product and natural resources Brazil is central to any

attempt of integration in the scale of the sub-continent. Fiscal constraints of Brazil have been severe because of public spending is very high producing a dissonance between the political will of leading the regional integration and the lack of capacity of financing the process.

The key parameters of Chile in 2007 are: population, 16.8 million people; GDP, 180 billion dollars; GDP per head, 10,600 dollars; inflation 3.8%. Chile is the only country that has accomplished dramatic progress in the region, having risen strongly in the international system with a rate of 6% a year economic growth in the last two decades. Democracy, started with the first free elections in 1990, has been consolidating gradually, with revitalization of a functional party system and more recently reaching the full subordination of the military to the civilian. Economic institutions are highly modern and functional and the economy is very open and competitive in the global economy. Because of its giant progress Chile has a dynamic of economic integration that is much more global than regional. On the other side the relatively small size of the Chilean economy restrict its role in promoting regional integration (Talavera 2004).

The key parameters of Argentina in 2007 are: population, 39.8 million people; GDP, 270 billion dollars; GDP per head 6,700 dollars; inflation 16.5%. Argentina, the second largest economy, has had a cyclic performance: progress in economic reform and openness to the world in 1991-1996, dramatic economic and political decline from 1999 to 2003 and economic recovery with institutional stagnation since 2004. The default in public debt and breaking of contracts in 2002 combined with economic neo-protectionism and the centralization of political power by President Kirchner since 2005 undermines the possibility of Argentina to have a leadership role in promoting regional integration (Leis & Viola 2008).

The key parameters of Uruguay in 2007 are: population, 3.3 million people; GDP, 24 billion dollars; GDP per head 7,300 dollars; inflation 7.2%. Uruguay has remained somehow stagnated in relation to needed economic institutions upgrade but has a relatively functional party system that allows clear differentiation and responsibility between government and opposition. Because it is a very small country doesn't have influence in regional integration.

The key parameters of Peru in 2007 are: population, 29.2 million people; GDP, 110 billion dollars; GDP per head 3,800 dollars; inflation 2.3%. Peru has had modernization of economic institutions and strong economic growth in the last 15 years, but is still a poor country and its severe problems of political corruption block possibilities of having a significant role in pushing for regional integration. The large Peruvian diaspora in United States and Europe is an engine for the economic modernization of the country (Tanaka 2005).

The key parameters of Colombia in 2007 are: population, 47.6 million people; GDP, 170 billion dollars; GDP per head 3,600 dollars; inflation 4.5%. Colombia has been more stable economically than most South American countries but has severe problems of narco-traffic and political violence associated with the FARC guerrilla, a former communist insurgence that degraded in combination with organized crime. A close alliance with United States since the end of the 1990's has put the country as strong support of hemispheric integration instead of South American regionalism (Bejarano & Pizarro 2005). Colombia and Peru follow Chile in having free trade agreements with United States. They perceive as countries more interested in hemispheric integration contradictory with the Brazilian efforts of southern regionalism.

The key parameters of Venezuela in 2007 are: population, 27.8 million people; GDP, 270 billion dollars; GDP per head 9,700 dollars; inflation 21.5%. Venezuela is a case of deep political declining in the last two decades: systemic corruption based in party oligarchies in the 1980's and 1990's and authoritarian populism with Chavez since 1999 combined with extreme dependence upon the State of large sectors of the population (Coppedge 2005). Since the consolidation of Chavez after the referendum in 2004 Venezuela became one stronger contender of the statu-quo in the international system. The combination of continued high price of oil with strong political centralization has given Chavez a unique capacity of intervention in Latin American politics, trying to export the so called Bolivarian revolution. Chavez re-election in 2006 produced the conditions for more restriction in the market economy and progress to a more dictatorial political regime, but this process was stopped for a while after the victory of the opposition on a referendum to approve the new constitution in late 2007 and the dramatic decline in oil prices since September 2008. Venezuela under Chavez has been a champion of South American integration, but almost in the opposite direction than Mercosur and the Andean Community. In 2006 Venezuela, Cuba and Bolivia created the Bolivarian Alternative for Latin America.

The key parameters of Ecuador in 2007 are: population, 13.8 million people; GDP, 45 billion dollars; GDP per head 3,200 dollars; inflation 3.5%. Ecuador has been a poor, socially asymmetric and highly unstable country. Ethnic politics have had an important role in the last years. Populism has been structural in the country and president Correa has established a strong alliance with the Chavez regime. At the end of 2008 Ecuador became the first South American country to enter in default of its foreign debt because of the global financial crisis.

The key parameters of Bolivia in 2007 are: population, 9.7 million people; GDP, 15 billion dollars; GDP per head 1,500 dollars; inflation 7.3%. Bolivia is one of the poorest countries in Latin America in spite of being very rich in natural resources. Socio-political polarization, strong revolutionary left, national irredentism, regional heterogeneity and ethnic politics are at the foundation of the failure of development (Mayorga 2005). Historically confronted with Chile and

Paraguay, Bolivia has been always, even with ups and downs, in the sphere of influence of Brazil and Argentina. A dramatic acceleration of Bolivia historical decline happened in 2003 when the project of President Gonzales de Losada oriented toward the capitalistic activation of the energy resources of the country was defeated by an obsolete combination of national irredentism, indigenous politics, and narco-traffic and community collectivism. With the election of Evo Morales and subsequent political and economic radicalization, the country is on the brink of disintegration. The new constitution approved in referendum in January 2009 puts the economy in a strong state oriented course.

The key parameters of Paraguay in 2007 are: population, 6.2 million people; GDP, 13 billion dollars; GDP per head 2,100 dollars; inflation 8.8%. The Paraguayan economy is strongly based on transnational illicit: smuggling, stealing of industrial and intellectual property, traffic of narcotics and weapons and money laundry. Actually, Paraguay has been the first economy in Latin America based on organized crime since President Stroessner and his Colorado Party established in power in the 1950's. Brazilians have had a modernizer role through Itaipu Bi-national and immigrant farmers. The strong presence of Shiite communities related to Hezbollah and Iran in Ciudad del Este and the triple border area is a reason from concern for the United States. Paraguay has had a historical tradition of leveraging its national interest playing with the rivalry of bigger powers, Brazil and Argentina until the 1990's and Brazil and the U.S. at the beginning of the 21st century. The election of Lugo in 2008 challenges the domination of main stream economic and political elites and could modernize the country. But also risks a radicalization based in extremist collectivist ideas and nationalism irredentism against Brazil.

Guyana and Surinam are very small countries, with extended poverty and where the rule of law is very limited. The second one is a failed state, unstable politically and a strong base for global transnational illicit (Chinese and Russian mafias operate easily, including big weapons smuggling coming from China, Russia and Libya). In the other extreme is remarkable the presence of French Guyana that, even not being a sovereign country, has one of the best per capita incomes in the region. Among the territories of the Amazonian ecosystem, under sovereignty of nine countries, the one which is under control of French Guyana shows the best rule of law.

In the last couple of years the dynamic of South American politics has been dominated by centripetal trends in spite of an integrationist rhetoric. Realities are divergent because political leaderships and political cultures are highly diverse and in many respect contradictories. Also, the dynamic of South American economies shows a contradiction between the stated goals of regional integration - not only the more humble and already existing Mercosur and Andean Treaty but also the more ambitious South American Union formally established in 2008 - and the reality of economic fragmentation. In this

economic reality each country is trying to solve their economic problems according to responses shaped by their national histories and far away from the stated goals of regional economic integration (Malamud 2005). The outcome, by early 2009, shows four relevant groups of countries: first the countries oriented toward trade and economic integration with United States (Chile, Colombia and Peru), second, in the opposite direction, countries confronting United States and generally the market democracy model and trying to integrate according to a command and control economic model (Venezuela, Bolivia and Ecuador); third, Argentina with strong economic economy imbalances - aggravated since the rebellion of agribusiness against president Kirchner in March-July 2008 and the deepening of global financial crisis in September 2008 that put the country close to a new default of its public debt – and further erosion of institutions by the low popularity and isolationist course of the Kirchner government; and fourth, Brazil in an economic and political modernization course - with high popularity of President Lula and governors of very important states and low credibility of Congress - and trying to achieve regional integration, facing growing contestation of its economic influence in the region by Bolivia, Ecuador and Paraguay. Uruguay continues in a modernization course, but has been severely affected by the global financial crisis and the protracted conflict with Argentina and is disappointed, as very small economy, with the outcome of Mercosur.

A structural component of the fragility of the Mercosur is given by the fact that particular national interests are still strongly entrenched in all the countries and Brazil represents 70% of the total economy (Guilhon Albuquerque 1999, Vaz 1999). With that weight is the natural block leader, but as such should pay almost all the costs of the integration process, in a ratio, higher than the 70% of its relative economic weight according to the European example. These costs include, among others, compensation for development unevenness in relation to poorer countries and paying the cost for the functioning of regional institutions. The contradiction is that Brazil can not pay the cost of the integration – because of its strong fiscal constraints - and the other members have expectations of large benefits, but they reject proportionality in decision making. A second structural fragility is the opposite course in the global system that has been followed by Brazil and Argentina in the first decade of the 21st century. The first one continuously increasing the globalization of its economy and the second one going the protectionist way. Another fragility of Mercosur is given by the divergences in the attitudes of Congresses and High Courts (Vigevani 2005). Argentina has clear acceptance of supranational jurisdiction (once ratified the treaties have constitutional validity, abolishing, therefore, the national laws that are contradictory with them). On the opposite side, Brazil considers the national constitution and laws superior to the ratified treaties and therefore, any norm and regulation derived from these need to be internalized in the national legislation. Because it exist a strong consensus among Brazilian judiciary operators in favor of the current situation it will be difficult to build up supranational institutions for solving and

adjudicating controversies among private and public economic agents. This is important for a free trade area and crucial for a customs union. Uruguay is close to Argentina in this issue.

Also important as an obstacle for Mercosur consolidation is the historical rivalry between Brazil and Argentina in relation to the reform of the U.N. Security Council. For its weight in the world, the only representative of Mercosur with chances to be chosen as permanent member would be Brazil. However, Brazilian diplomacy made a mistake when entering the G4 (Germany, Japan, India and Brazil) without previously negotiating the support of Argentina, that would have meant Brazil granting some type of economic benefits to its partner. Argentina finished supporting another proposal opposes to the G4, making several statements against the Brazilian pretensions. These indirectly contributed to the diminishment of Mercosur credibility in the world.

The Mercosur Parliament was established in 2007 in Asuncion, with 16 parliamentarians for each country member (to be chosen for the respective national parliaments). This gesture is utopian because of fundamental fragilities of Mercosur as Custom Union, related to deep contradictions and diverse national rationalities. These have been aggravated with the entrance of Venezuela as full member (for the time being, with voice, but without vote), in July of 2006. The fast track of the negotiation that led to the entrance of Venezuela explains part of the existing contradictions. Argentina pushed for immediate Venezuelan entrance in order to diminish the centrality of Brazil in Mercosur. Brazilian goal is to be the leader of an integration process that will encompass the whole South America, though it exist a debate in the Brazilian government around two visions of the integration, one more market friendly and the other more state friendly. From the latter point of view the access of Venezuela can be interpreted as a Brazilian success. However, the interests and calculations of Chavez to enter Mercosur (to expand the Bolivarian Revolution, understood as state driven economy, authoritarian populism and anti-American continental integration) are not functional to the objectives of Brazil. Anyway, the more state oriented sectors of the Brazilian government believe Venezuela accession, independently of Chavez politics, will finish converging with Brazilian interest. As Venezuela is still a trade open economy, many Brazilian businessmen have interest in the integration with Venezuela (with a GDP equivalent to the one of Argentina) since will strongly extend the market for their products. Most analysts believe that a definitive Venezuela incorporation to Mercosur – pending of vote in the Brazilian Senate where face strong opposition - will increase the fragility of the block and will be a major failure of Itamaraty.

The strengths of the Brazilian state are related to the size and stability of the economy, the competitiveness of sectors of its economy, the high integration into the global economy and the capabilities of the military (Grondona 1999). The

vulnerabilities of the Brazilian state are related to the low quality of education of average population, the extension and power of organized crime, the inefficiency of the political system and the pervasiveness of corruption.

Because of its dimensions and relatively strength the Brazilian state has been always a crucial stabilizer and reference in South America. However, Brazil has been behind its potentialities in terms of pro-active promotion of effective states and better governance in the region in the last years. Several situations show the failures, the underachievement and the successes of Brazil:

- Brazil has been reluctant to support the government of Colombia in its fight against narco-guerrilla, avoiding the cooperation with United States in this matter that would have foster the rule of law in the country. In the incident between Colombia and Ecuador in March 2008 - Colombian military prosecuted FARC guerrilla in Ecuadorian territory used as sanctuary by the insurgents - Brazil assumed an ambiguous position, avoiding condemnation of FARC and the aggressive reaction of the Chavez government.
- Brazil has had a tolerant behavior with relation to the very strong presence of organized crime in the whole region and eight out of its nine triple border regions are porous to transnational illicit. They are growing pervasively and very fast in most South American countries. All dimensions of organized crime activities are present: illicit traffic of narcotics, small weapons, gold, migrants, human organs and sex; money laundering; smuggling; and, violations of intellectual and industrial property rights. Weak states are further undermined by transnational illicit. In all countries, except Chile, organized crime has built up political machines that penetrate the state structures, particularly the police and the courts. In some countries transnational illicit is connected with terrorism of local reach (Colombia and Ecuador) and some countries are sensitive to some connections between Muslim communities established in the region and global terrorism linked to Radical Islam. In this respect it is appointed the Triple Border among Brazil, Argentina and Paraguay. Argentina has suffered two major terrorist attacks in 1992 and 1994 against the Israel Embassy and the most important Jews charity in the country, with hundreds of death and wounded. A global effort to fight transnational illicit is crucial for the national/regional security and quality of governance in South America.
- Brazil has being negative in relation to promoting the lowering of Mercosur common tariff and Chile becoming full member of Mercosur, making the mistake of not considering that the entrance of Chile (with the best governance in the continent) would have foster good governance in Mercosur, including Brazil.

- Brazil was tolerant with relation to social unrest that promoted the collapse of the constitutional government of Sanchez de Lozada in Bolivia in 2003 and it supported the rise of Evo Morales in Bolivia in 2005, which increased economic and political instability in the country and later turned against Brazilian economic interests.
- Brazil supported the Chavez government in 2002-03, in a moment in which most economic agents and a half of the population were claiming its substitution through constitutional means. Brazilian support during 2002-2004 has been important for the consolidation of the authoritarian path of the Chavez administration that is having a deleterious impact in the political stability of South America because of its policy of strong promotion of the so called “Bolivarian Revolution”. This wrong policy was derived from an approach that supposed it would be good for the Brazilian national interest to have Chavez’ Venezuela as a radical contestor of American hegemony in the region because it would open more space for Brazilian leadership in the region. Actually, the U.S. has been interested since the 1990’s - when Brazil consolidated the market economy and political democracy and systemically converged with USA - in having Brazil as a partner regional power and stabilizer of South America. The American policy became more or less clear for the Brazilian government more recently, though there are still some niches of reluctances among diplomats and militaries.
- Brazil has a defined interest in financing investments in infrastructure for promoting the integration of South America, both in transportation and energy. Brazilian National Bank for Economic and Social Development (the largest development bank in the world) has made decisions allocating loans for some important infrastructure projects. With better infrastructural connection there will be more incentives for Brazil to promote the strengthening of weak and fragile South American states.
- Because of the radicalization of the Morales government in 2006 contrary to Brazilian interests, there was a shift in the Lula administration toward a less tolerant policy with Morales and more distance from leftist political forces with radical economic and political agendas.
- There is an increasing awareness in the Brazilian defense and foreign policy Establishment and the public opinion about the threat derived from Chavez radicalism and the continuous expansion of transnational organized crime.
- There is growing convergence between Brazil and Chile in relation to the need of promoting the strengthening of weak states in South America.

The most important Brazilian achievement in promoting peace in South America in the recent period was as leader of the groups of countries that build up the truce during the short war between Peru and Ecuador in 1994 and afterward was a crucial mediator in settling the peace treaty (Herz 2004). Nowadays, the most important Brazilian role in promoting peace and security is the leading of the United Nations Peacekeeping Force in Haiti. Brazil, together with other South American

countries troops (Argentina, Chile and Uruguay particularly), has master with relative success the process of disengagement among fighting factions and the building up of an electoral process that was completed with the election and take over of a new president in a free and competitive election, in 2006. However, the situation in Haiti continuous being delicate because of combined problems derived from extreme poverty, dissemination of small weapons, strong organized crime, very poor health and education, ecological devastation and absence of civic culture.

The successful completion of this mission, though difficult, is crucial not only for Haiti but also for consolidating a more assertive Brazilian role in the promotion of international security. The Brazilian leading role in Haiti has still weak domestic legitimacy among economic elites and mass public and for this reason; a lack of success of the mission will undermine the future availability of the Brazilian government for having more active role in international security. The success of the Brazilian mission in Haiti would strongly encourage the government and public opinion in having a more assertive role in South America on issues of peace and security.

Brazilian role in the integration of South America has been much poor than the stated goal of the Lula administration because two major reason. The first, structural and contextual to Brazilian political willing being that national/industry interests and short term approach have prevailed over regional and long term approaches in the real behavior elites of all South American countries. No enthusiastic and inflamed rhetoric could hide this deep reality. The second one is derived specifically from Brazil fiscal situation that has been poor even if it has improved in the last years. No political will of the president and Itamaraty could overcome the hard fact that Brazil doesn't have financial resources to pay for promoting the process of integration in an effective way. The unrealistic goal became a functional marketing tool for the administration but it has already fade and could became some a boomerang to assess the effectiveness of the administration foreign policy.

2- BRAZIL IN THE GLOBAL AND SOUTH AMERICAN POLITICS OF CLIMATE CHANGE

Climate change mitigation and adaptation has become one of central issues of the international agenda in the last years since scientific uncertainties about human driven climate change have almost disappeared since the publication of the Fourth Report of the International Climate Change in 2007 (Stern 2006, Gore 2006, Lee 2007, IPCC 2007, Aldy and Stavins 2007 and Lynas 2008). The prevailing view in Western elites has shifted to the need of strong effort for immediate stabilization and later decline of greenhouses concentration gases in order to avoid that incremental climate change will be transformed in dangerous climate change, defined as more than 2 degrees centigrade increase in global average

temperature. At the same time there is growing optimism in the scientific community that it would be possible to deploy new clean energy technologies on time (Socolow and Pacala 2004, World Resources Institute & Goldman Sachs 2007 and Holdren 2008). Climate change was central in the G7 Annual Meetings of 2007 and 2008 and there was the first meeting of the UN Security Council dedicated to Climate Security, convened by the UK, in April 2007. The European Union - particularly Germany, UK, Sweden and Denmark - Japan, Norway and now USA - considering the first days of the Obama administration - points in the course of an agenda relating global economical and global environmental governance (Friedman 2008, Brown 2008 and Worldwatch Institute 2009). There is also, in most Western elites, a recognition that issues of historic responsibilities and global fairness should be clearly present in a moderate way in a future agreement and developed countries must do a bigger and more immediate effort in effectively reducing carbon emissions in order to have legitimacy for demanding strong stabilization efforts from emergent countries (Stern 2008 and Timmons Roberts & Parks 2008).

In terms of the global carbon cycle, South America has a unique profile in the world for two reasons. It is the only region in the world in which electricity production is not derived mostly from fossil fuels and it is one of the two regions (the other is Africa) in which most carbon emissions are derived from deforestation and land use change. South America shares one fourth of global deforestation emissions that constitutes around 18% of global carbon emissions.

South America produces around 7% of the global carbon emissions. Considering the size of the carbons emissions, only three countries in South America are relevant: Brazil with around 1 billion tons equivalent to 4% of the total, Venezuela and Argentina with around 250.000 million tons each one, equivalent to 1% of the global carbon emissions. Per capita emissions are high in Venezuela, Brazil, Ecuador, Argentina, Chile and Uruguay (between 5 and 7 tons of carbon per capita), middle in Colombia and Peru, (between 3 and 5 tons of carbon) and low in Bolivia and Paraguay (between 1 and 3 tons). According to global parameters, the first two groups are in the middle category of per capita emissions and the last group belongs to the low category. In terms of carbon intensity, the economy of the countries distribute in high intense, more than 0.8 tons per 1.000 dollars of GDP (Venezuela, Ecuador, Colombia, Peru and Bolivia) and middle intense, between 0.4 and 0.8 tons per 1000 dollars of GDP (Brazil, Argentina, Chile, Uruguay and Paraguay). The distribution of emissions by sectors of the economy is strongly differentiated: in Argentina, Chile, Uruguay and Venezuela, emissions comes mostly from energy, industry and transportation; but in Brazil, Colombia, Peru, Ecuador, Bolivia and Paraguay between one third and two thirds of the emissions comes from deforestation. In all countries electricity is derived more than 50% from hydropower and in some is very high – Uruguay and Paraguay almost 100% and Brazil 85%. The only exception is Argentina in which 38% of emissions come from hydropower. Anyway, it has a higher hydropower share than most countries in the world. South America has had over the last decade two major concerns in relation to climate change: the region is among the most vulnerable in the world and a new architecture effective for mitigation could be shaped in a way

unfair or non-correspondent with the differentiated historic responsibilities in the cause of global warming (Viola, Barros-Plataiu & Leis 2008).

Considering industry, energy, transportation, land use/land change and cattle ranching Brazil produces around 1 billion tons of carbon dioxide and equivalent (methane and nitrous oxide) which represents around 4% of the world carbon emissions in 2007. It is the seventh emitter in the world after USA, China, European Union, India, Russia and Indonesia and produces 5 tons per capita, lower than the previous seven with exception of India. The carbon intensity of the Brazilian economy is around 0.8 tons of carbon per 1000 dollars of GDP, compared with 0.4 for USA, 0.3 for the EU, 1.0 for Russia, 1.3 for India and 1.5 for China (Viola 2008).

Carbon emissions coming from the modern sector of the economy (industry, energy, transportation, housing and agribusiness) are very low because the energy matrix for electricity is strongly based in hydropower (85%) and ethanol represents one fourth of the liquid fuels used in transportation. Consequently carbon intensity of the modern sector is well below the average of middle income countries and similar to the less carbon intense developed countries. The only modern sector that is high in equivalent carbon emissions is cattle rising because Brazilian herd is the largest commercial herd in the world with significant methane emissions. Carbon emissions coming from land change and traditional land use are extremely high. 50% of Brazilian emissions come from deforestation in the Amazon and Cerrado and 80% of that deforestation is illegal. Most deforestation in the Amazon is very inefficient in terms of economic conversion: destructive logging for timber, extremely extensive cattle ranching and poor annual cropping. A small part of deforestation is related to efficient economic conversion: modern annual cropping and reservoirs for hydropower (MCT 2004, NAE 2005).

Approximately 80% of the Brazilian population is related to productive activities that don't depend on high carbon emissions and consequently has per capita emissions and per unit of GDP emissions very inferior to the emerging countries. Approximately 20% of the Brazilian population is tied (direct or indirectly) to traditional agriculture, to land use conversion in the agricultural frontier and to inefficient timber industry, and consequently, it is responsible for higher per capita carbon emissions than the average of emerging countries and higher intensity of carbon emissions per GDP unit than the average of emerging countries. The deforestation rate in the Amazon has been above 15.000 Km² between 1985 and 2004 (with peaks above 25.000 Km² in 1988 and 1995), when a rational use of the forest would dispute less than 5.000 Km² a year. In the period 2005-2008 deforestation has dramatically declined to an average of 13.000Km² a year as a product of intensive institutional effort of law enforcement and declining prices of meet and soybean (Viola & Leis 2007).

In terms of carbon emissions modern Brazil is hostage of traditional Brazil. In terms of energy efficiency, modern Brazilian economy is doing much better than most middle income countries, and traditional Brazilian economy is doing much worse than most middle income countries. For now and the foreseeable future the most important impact of the Brazilian economy in the Earth system is caused by carbon emissions derived from deforestation.

For a better understanding of Brazilian participation in the negotiations of the Kyoto Protocol is necessary to point out that in referring to carbon emissions the country has three great advantages and one major disadvantage. The three great advantages are: to be an intermediate country (being out of the mandatory commitments for reduction of carbon emissions corresponding to the developed countries), to have an energy matrix with strong weight of hydroelectricity and consequently very clean from the point of view of greenhouse emissions, and, to possess in his territory 16% of the world forests (having great importance in the global carbon cycle). The great disadvantage is to have big carbon emissions derived from the use of burning in traditional agriculture and from deforestation in the Amazon.

The Brazilian performance in the Kyoto negotiation process (1996-2001) was guided by a definition of the national interest based in five main dimensions (that were more committed with global governance than the definition of national interest at the time of the Stockholm Conference): 1 - to affirm the right to development as a fundamental component of the world order, in continuity with a classic pillar of the Brazilian foreign policy; 2 - to promote a world vision of development associated with environmental sustainability, in correspondence with the strong growth of public awareness on the environment in Brazil and its translation in national and state public policies; 3- to promote some funding from developed countries for climate mitigation related projects in developing countries; 4 - to promote a leadership role for Brazil in the world in correspondence with the growth in international prestige for the country during the Cardoso administration; and, 5 - to block international regulation in the use of forests in order to avoid the risks of international questioning to Amazonian deforestation (Viola 2004).

The launching of Clean Development Mechanism proposal in 1997 implied a moment of remarkable collaboration between the American and Brazilian diplomacies. Both could claim great achievement because through it the emerging and poor countries begun to accept flexibility market mechanisms to complement the reduction commitments of developed countries.

Regarding the carbon sinks, the Brazilian national interest was always defined in a defensive way: the Amazonian forest was noticed as a burden because of deforestation and it was not considered as a trump card because of the global service of

carbon sequestration. The Brazilian negotiators' implicit assumption was that the country would not get to put a significant brake in Amazonian deforestation. That carried Brazil out to stand against the inclusion of the whole carbon cycle in the Protocol, fearing that in the future, when they settle down commitments for emerging countries, Brazil could come to have a liability derived from high deforestation in the Amazon.

In spite of being an emerging country with a clean energy matrix, Brazil assumed a general alliance with emerging countries with energy matrix heavy dependent upon fossil fuels (China, India and South Africa).(NAE 2005) The advantage of the energy matrix was always subordinated to the disadvantage of Amazonian deforestation in the formation of the Brazilian position. The limited disposition and capacity to restraint deforestation in the Amazonian demonstrated by the federal and most state governments has implied a limitation on the potentialities of Brazilian leadership at the Kyoto Protocol. The deforestation Establishment, predominant in the Amazon and with great power in Congress, has been conditioning the performance of Center-South modern Brazil (Viola 2004).

Therefore, Brazil allied in general with the European Union against forest countries (USA, Canada, Australia, Russia, Colombia, Peru, Chile and Costa Rica) in the subject of the inclusion of carbon sinks in the accounting of emissions. Brazil did not worth the global service rendered by forests as carbon sinks (Viola 2005). A positive alternative view on the Amazon would have taken Brazil to an inverse alliance what may have had significant influences on the final profile of the Protocol. In the last two years of the negotiations of the Kyoto Protocol (2000-2001), the Ministry of the Environment and the governments of some Amazonian states questioned the historical positioning of Brazil that had always contradicted the inclusion of the whole carbon cycle in the Protocol (carbon sinks derived from forest and soil management). Several NGOs, particularly the ones that have strong performance in the Amazon, have actively demanded that Brazil supported the inclusion of projects related to the protection of primary forests (avoided deforestation) in the Clean Development Mechanism (Barros-Platiau 2007) and now being framed as READ, Reduction of Emissions through Avoided Deforestation and Degradation. However, the historical positions of the Ministry of Science and Technology and Itamaraty prevailed as the national standing.

Since 1997 Brazil has always had as a contextual discourse a radical principle position according to which carbon emission should be calculated in its historical accumulation since the mid 19th century and not just with the baseline of 1990. Although this position has been counting with support from most Non annex 1 countries (and it has been one of the pillars of the Brazilian leadership among them), it has not been considered seriously by the annex 1 countries and consequently it has not had impact in the negotiating process. The Brazilian proposal has legitimacy from a historical and equity point of

view and it is shaped by a theoretical approach based in universal rights of the world population to the use of the atmosphere as a global public good. At the same time the Brazilian proposal goes too far in terms of accounting historical emissions producing inconsistency both in terms of the science of greenhouse gases concentration in the atmosphere and in how previous historical periods could shape international treaties. From this point of view to consider emissions since 1960 or 1970 would have been a much more consistent standing.

From the American withdrawal from the Protocol (March 2001) until the conclusion of the negotiations (November 2001) Brazil had an outstanding performance, so much in the critic of the American position as in the promotion of negotiations among the several blocks of countries. Brazil was a prominent country in articulating the alliance between the European Union, Japan and emerging countries that made possible the success in the final negotiation of the Protocol. In several international speeches president Cardoso criticized incisively the unilateral policy of the Bush administration in relation to climate change. If we compared the relative positions of Brazil and USA regarding global environmental problems between 1989 and 2001, it is fair to say that there was an inversion of roles, that shows the positive evolution happened in Brazil (even with all the limitations still existent): in 1989 the Bush administration allied with other developed countries criticized the government Sarney for the Brazilian contribution to climate change coming from of the high deforestation in the Amazon; in 2001 the Cardoso administration allied with the developed countries criticized the Bush administration for the lack of a responsible attitude in relation to the global climate.

During the preparation of the Johannesburg Conference on Sustainable Development (2002), Brazil was the leader in two major initiatives for the reduction of carbon emissions. The first initiative, in cooperation with the European Union, was to promote enough national ratifications of the Protocol (the Brazilian Senate ratified Kyoto very fast, far away from the traditional slow pace of international ratifications) in order to it become legally binding for the signing countries in August 2002. The second one was to get the support of the whole Latin America for an initiative establishing a goal for all the world countries to have at least 10% of their electricity produced by new renewable sources in 2010. In both initiatives Brazil was defeated (Lago 2004).

During the 7th Conference of the Parties of the UNFCCC in New Delhi (October 2002), Brazil as leader of the G77 confronted the European Union in its attempt of settling commitments for developing countries for the period 2013-2016. In this confrontation the G77 received the support of the United States what revealed other face of the deep arena of the climate regime: emerging countries were favorable to Kyoto as far it didn't implied obligations for them but when the question of commitments for emergent countries appear there is a new trend in cleavages.

The Lula administration, started in January 2003, establish a deep division inside the government, something that is usual in Brazilian governance due to the complexity of the federative arrangements. The core of the Lula administration showed low interest in the climate regime, but other sector lead by the Ministries of the Environment and Science and Technology kept alive the Brazilian involvement with the Treaty. When in February 2005 the Kyoto Protocol became a legally binding mechanism there was a strong revival in the activities of the Brazilian climate community. Many projects of carbon emission in the framework of the Clean Development Mechanism had entered in the cycle of approval.

At the 11th Conference of the Parts of the Climate Treaty in Nairobi, December 2006, Brazil started to change its historical position, proposing the creation of a global fund for slowing down deforestation. According to the Brazilian proposal, Annex 1 countries and corporations would contribute to a fund that it would distribute financial resources according to the performance of countries in slowing down deforestation. This was the first time that Brazil accepted to link curving deforestation with global financial tools. On the other side the Brazilian proposal keeps its traditional reluctance in relation to fully acceptance of carbon markets. The new proposition was produced by the Brazilian Ministry of the Environment and was lunched only after overcoming entrenched opposition in the diplomatic mind set. The Brazilian initiative came too late in terms of the global negotiations - when it was clear that a new global architecture pos-Kyoto was deeply needed – but it was a strong indication of the process of transformation in the Brazilian government and public opinion.

At the 12th COP in Bali, December 2007, Brazil started to take distance from the Chinese and Indian standing with relation to commitment for reduction of carbon emissions for emerging countries. This was a product of both international and domestic dynamics: the Brazilian historical standing was severely criticized from different societal sectors during 2007. Though the Bali road-map is mostly the product of an incisive position of the European Union, confronting the Americans, Brazil makes a contribution to the final outcome. The prospective of a shift in American climate policy after the election of the new president and the Bali road-map have opened new horizons for the negotiation of an effective global architecture for mitigating climate change, though the way is still full of obstacles and success is far from guarantee (Ott, Sterk & Watanabe 2008).

In relation to regional cooperation for diminishing deforestation in the Amazon, Brazil has already a positive impact through the sharing (with other Amazonian countries) of data from the System for Amazonian Monitoring (SIVAN). A new

opportunity for cooperation would be related to the effective development of the Treaty for Amazonian Cooperation (TCA). The Treaty was signed in 1978 but without practical consequences until 2003, this year a formal structure and a Secretariat were established in Brasilia. The pace of TCA development is clearly behind its potentialities in terms of promoting better governance (regional, national and sub-national), fighting transnational illicit, diminishing deforestation and adapting to climate change.

One area where the role of Brazil is highly promising is bio-fuels. The ethanol program launched with high subsidies in the 1970's - with motivations of energy security within the old import-substitution/self-reliance framework - has transformed over the years in an economically competitive and cutting edge development for tackling with climate change at the global level. Without the ethanol program Brazilian carbon emissions would be Today around 15% higher and its relative importance is nowadays growing by the year. The markets for renewable electricity (from the burning of sugar cane residues) is developing as mutually supported with ethanol production, and new "flexfuel" vehicle technology makes ethanol more appealing to consumers. The production of ethanol from sugar cane is six times more efficient than from corn, which is the raw material used in the U.S., that share with Brazil the world largest production of ethanol. Ethanol production in the U.S. is highly subsidized.

More recently, in 2004, Brazil started a program for producing bio-diesel, extremely important if we consider that the consumption of diesel is 30% higher than gasoline in the country. Nowadays there is a mandatory addition of 3% of bio-diesel (produced mostly from soybean) to the diesel consumed in Brazil and the goal is to achieve 6% by 2010. There are around 20 countries in the world with good potentialities for producing bio-fuels in large scale. Brazil is already helping some of these countries with support in settling programs in a range of issues from exchange of information to easier access to relevant technologies. Many environmentalists are afraid that the expansion of bio-diesel will increase Amazonian devastation because of the conversion of forest to soy cropping but this should not necessarily be the case. It is possible to use for soy crops many areas of degraded lands or even in the case of forest conversion this could be done in a much more efficient way that it has been the pattern until now.

During 2006 and 2007 there was a boom of investments in bio-fuels production in Brazil (both domestic and foreign capitals) and the environment favorable to bio-fuels is becoming so disseminated in the mass public that it could help in the overcoming of resistances to curving emissions coming from deforestation. Something crucial for the potentialities of bio-fuels in the world is the openness of markets in developed countries, promoting global efficient allocation of resources and avoiding the repetition of the irrational high subsidies that has plagued previous history of agriculture international trade.

Because most of the countries with potentialities for bio-fuels are in the tropical world and are developing countries the development of bio-fuels will simultaneously contribute to deal with climate change and poverty reduction.

In early 2007 was launched a “New alternative for hemispheric security in the America’s”. The initiative was a product of the convergence between the American and Brazilian bio-fuel complexes with the support of vast sectors of the American elites included the Bush administration. The idea was to build up an energy integration of the Americas in order to diminish the American dependence on foreign oil, increase the growing rate of bio-fuels as a tool against climate change, and form an alliance of Latin American countries capable of containing the expansion of Chavez. It combined the building up of gas pipeline between Mexico and Central America with the promotion of bio-fuel production in Brazil and other countries with land and climate conditions favorable for that. The initiative did not develop because of different constrains, among the most important, the Bush administration very low popularity and the starting of the global financial crisis. The Obama administration, with a dramatic change in energy and climate policy, could retake the initiative in the middle term.

In all the energy resources in which there are potential for integration of South America (natural gas, hydropower, bio-fuels and oil) Brazil is globally competitive in terms of capital and technology, though less in gas. The efficient exploitation of those resources depends on transportation integration, infrastructure development and policy coordination. The potential of the region includes: Bolivian natural gas for Argentina, Brazil and Chile; Venezuelan and Peruvian liquid gas for Argentina, Paraguay, Uruguay, Chile, Brazil and other continents; Brazilian bio-fuels and hydropower for several South American countries and other continents.

This potential of energy integration could be made possible with realistic and gradual policies, implying attraction and guarantees for foreign direct investment and strong cooperation among the states. But this is not happening in the region. The politics of the continent, both domestic and foreign, have a strong mark of short term opportunism and lack of guarantees and predictability for contracts, both consequences of the low quality of the political culture. The examples of lost historical chances in the region are numerous. The indigenous population of the Bolivian high lands knocked down in 2003 the project of president Gonzalez de Lozada to transform the country on an exporter of natural gas to Chile and liquid gas to the U.S. Argentina broke in 2002 contracts with foreign companies which had blocked the development of gas and oil production and had reverberated in the diminished supply of natural gas to Chile in 2004. Chavez severely undermined PDVSA whose productive capacity fell 20% in the period 2000-2007 and drove away highly needed foreign investments in energy. Bolivia nationalized gas and oil industries in 2006 driving away precious capital in a country where it is badly needed.

Brazil role in the global politics of climate change mitigation and adaptation has been behind its potentialities so far, because of two major driving forces. First, entrenched traditional ideas and attitudes about short term use of natural resources had remained strong in the whole society and prevailing in the frontier society. Public opinion and economic agents has been changing but at a slow pace compared with the challenges. Second, a traditional conception of national sovereignty poorly adapted to the challenges of the global information society has remained very strong among vast sectors of decision makers, particularly among the military and diplomats, and this approach has undermined most efforts for achieving the necessary convergence between the Brazilian national interest and the universal interest in relation to deforestation in the Amazon. In this trend there was also some progress, but very slow until very recently. Very relevant new events during the last year open the possibility of a shift.

3- FINAL REMARKS

Brazil is a key country in the world in terms of the carbon cycle and natural and environmental resources. It has:

- 1- the most important carbon stock in forests in the world (together with Indonesia);
- 2- the largest stock of biodiversity in the world (together with Indonesia, Colombia and Congo);
- 3- the largest reserve of agricultural land and the most competitive agribusiness in the world;
- 4- the third stock of fresh water in the world (after Russia and Canada);
- 5- the most efficient and second largest (after USA) production of ethanol in the world;
- 6- the largest reserve of hydropower in the world that could be easily used because it has a globally competitive industry in the field; and,
- 7- The largest underexploited fisheries in national territorial sea in the world.
- 8- One of the largest and most competitive paper and cellulose industries in the world.

In the last decade the country became an agribusiness super-power dramatically increasing productivity and efficiency and the carbon intensity of Brazilian modern agriculture has declined in the last decade. As the leading and most efficient bio-fuels producer in the world Brazil has a strong stake in turning ethanol in a global commodity. This standing is strongly supported by Colombia that has become in the last three years an important and very efficient producer of ethanol from sugar cane. Venezuela confronts the Brazilian/Colombian position because, as a narrow oriented major oil exporter, doesn't have any interest in substituting bio-fuels for oil.

Brazilian production of timber and cellulose and paper pulp also has increased dramatically in the last two decades, massively using reforestation and forestation in the Center and South of the country and consequently not having negative impacts on the carbon balance. But a growing part of the timber produced in Brazil comes from the Amazon and most of this is harvested in a non sustainable way, with massive carbon emissions. In terms of biodiversity Brazil is sitting on it, mostly through excessive regulation restricting the access of foreign corporations. Up to now the country has taken limited benefit of that natural asset, also because global markets don't reflect their value yet, to the point that some analyst wonder if the time Brazil wakes up for the activation of that natural capital could be too late, because other tropical countries are well in advance. Fisheries are clearly underexploited in Brazil, particularly considering that has an eight thousand kilometers coast very rich in fishes.

In the case of fresh water still prevails a culture of wasting, but rational pricing is gradually being developed in the densely populated areas of the country. Some Brazilian strategist believes that fresh water will be a major Brazilian export in the future. The combination among the abundance of water, forest and biodiversity is also very strong in creating competitive advantages for international ecological tourism but the materialization of that advantage requires security, appropriate legal framework and specific entrepreneurship and up to now Brazil has been rather poor in them.

The long term viability of the climate regime depends strongly on the engagement - in some kind of meaningful commitment to improve the profile of their carbon emissions - by the most important carbon emitters (at present and in the next decades): USA, European Union, Japan, Canada, Australia, South Korea, Russia, China, India, Brazil, Mexico, Indonesia and South Africa (Chambers 2005, World Resources Institute & Goldman Sachs 2007, Viola 2008, Stern 2008, Sachs 2008, Worldwatch Institute 2009). Among all these countries only the European Union and Japan have already internalized carbon constraints in their legal framework, though their goals are still rather modest compared what is needed to effectively mitigate climate change. Within the European Union, only Sweden, the U.K., Germany and Denmark are performing relatively well in terms of reducing carbon emissions. 2009 will be a crucial year for climate change for two reasons: 1- the 15th United Nations Framework Convention on Climate Conference of Parties (UNFCCC-COP15) will be held in Copenhagen - it is expected to produce a first version of a new global treaty for climate change mitigation and adaptation that will substitute Kyoto in 2013'; and, 2- the platform and the first days of the Obama administration shows a dramatic shift in energy and climate policy that will certainly have a powerful global impact.

In order to have a breakthrough in international cooperation for climate change the Brazilian stance could be very relevant since it is the best positioned among the key emerging countries for moving forward in the direction of assuming commitments. Brazil carbon emissions profile is the most irrational among the major players of climate change because a half of them are derived from deforestation and this is not a significant driver of economic growth. The reduction of carbon emissions in Brazil would not have any impact in the rate of economic growth. Very different from China, India, Mexico and South Africa in which emissions reduction would slow down economic growth during some transitional period because carbon emissions are mostly derived from energy, industry and transportation. The Brazilian defense and foreign policy Establishments have always been very sensitive in relation to frequent statements - coming from leaders of developed countries – according to which deforestation in the Amazon is a global issue because is a major source of carbon emissions. Consequently, the Brazilian military and most diplomats have feared that an international treaty according to which Brazil would assume binding commitments for deforestation reduction could undermine national sovereignty over the Amazon. In the other side the environmental and NGO's communities have put emphasis that carbon emissions derived from deforestation in the Amazon are a global problem (beside being a major national shame) and pushed in the direction of a most responsible position of Brazil. In the last year this last position has become prevailing in opinion formers and most economic elites. In this new political and cultural environment Brazil announced, in December 2008, a new “National Plan for Climate Change” that implies a shift in its national and international standing on climate. The plan establishes national mandatory goals, including intermediate timetable, for dramatically reducing deforestation in the Amazon by 2017. Inside the divided Lula's cabinet, it was a victory of the Ministry of the Environment over the conservative Ministries of Agriculture and Mines and Energy and also a gradual moving away of the Ministries of Foreign Relations and Science and Technology from a traditional position in relation to reducing deforestation.

There is massive strong support in public opinion out of the Amazon for curving deforestation, but it is difficult to assess how deep that support could go if there is a need of strong confrontation with the coalition of interests supporting deforestation in the Amazon. The building of a winner regional coalition inside the Amazon for deepening the reduction of deforestation already happened in 2005-2008 is a major challenge. There are two key elements in the building of that framework: 1- a strong increase in law enforcement with more presence of the national government – IBAMA (the agency for environmental protection), the Federal Police, federal courts and a fast deploying of the recently created “National guard for Amazonian forest protection”; and, 2- a national program for paying services of local populations as forest protectors that would massively change loyalties among local people from supporting deforesters to supporting protection.

Immediately after the launching of the climate change plan, during the Poznan negotiations, the Minister of the Environment took, for the first time in the history of UNFCCC-COP, a leading position in the Brazilian delegation. This change in the Brazilian dynamic had a very relevant impact, being considered as the most important new event in the Conference. There is still uncertainty about the effective implementation of the Plan. If accomplished Brazil would reach, during the next decade, the largest reduction of greenhouse gases among all the countries of the world and this will certainly have a strong impact in upgrading its soft power.

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