

This version: May 29, 2010

**Recent Commodity Price Boom and Latin American Growth:
More than New Bottles for an Old Wine?**

*for: José Antonio Ocampo and Jaime Ros (eds.), Handbook of Latin
American Economics. Oxford University Press, 2010*

Albert Fishlow
Professor Emeritus, Columbia University, New York

Edmar Bacha
Director, Casa das Garças Institute, Rio de Janeiro

Abstract

The emergence of China, India, and other commodity-hungry Asian nations, and the heightened importance of financial markets in price determination are the new bottles of international commodity markets in the XXI Century. They raise new opportunities and challenges for economic policy making in Latin America: will the wine mature well this time, or will it spoil again as it was so often the case in the past? The paper reviews the literature on the “natural resource curse” and the “Dutch disease”, and considers the historical experience with commodity-related macroeconomic policy making in Argentina, Brazil, Chile and Venezuela. Resource wealth inevitably brings with it a greater susceptibility to volatility. The question is how to cope. The internal response determines whether natural resources translate into a blessing or a curse.

Introduction

After a twenty-five year decline starting in the early 1980s, commodity prices surged in the early XXI Century, only to collapse as a result of the 2008-09 financial crisis--thus seeming to confirm that the previous surge was just only one more example of the traditional stop-and-go long-term commodity price pattern. However, powered by the rapid recovery of the commodity-hungry Asian nations (and perhaps also by very low worldwide interest rates), commodity prices recovered their strength from mid-2009. At the point of writing, April

2010, every indication is that this upward price trend will continue--perhaps with less impetus than in the 2002-07 period, because of the weaker economic recovery in industrial nations.

Resource-rich Latin America benefited from this surge of commodity prices, and per capita GDP growth rates reached levels last seen in the 1970s. Rising commodity prices led to improved current account balances and induced large foreign capital inflows. Real exchange rates appreciated as a consequence, but the novelty of the cycle was a sizable accumulation of foreign reserves and a marked reduction in foreign indebtedness. Thus, when the international crisis hit in mid-2008, the region's policy-makers had the means to soften the impact of the external shocks through appropriate countercyclical macro policies.

In 2010, Latin America is growing again and commodity prices are strengthening. The combination is a fortunate one, but it is not one without its contradictions. The main tension is an old one, and it goes by the name of "deindustrialization" or "Dutch disease": as domestic resources are attracted to commodity-related sectors, there is a tendency for the real exchange rate to appreciate and, as a consequence, for non-commodity-related manufactures to lose competitiveness and risk being crowded-out both from international and domestic markets. Rather than exiting, the negatively-impacted manufacturing sectors often make recourse to voice--demanding government intervention to maintain them in business.

This is not the only tension raised by the recent commodity price boom, for the exchange rate may appreciate not as a direct consequence of commodity exports, but rather because of capital inflows that are attracted by the region's improved economic prospects. Hence, at stake is not only an old controversy on industrialization patterns but also a new one on capital inflows and concurrent current account deficits. Involved as well is a question of domestic interest rates, and their appropriate level.

We will delve more deeply into this question of appropriate policy instruments --domestic and international- to offset the regular volatility of commodity prices. In this process, it is essential to disaggregate. Agricultural, mineral and petroleum prices do not necessarily move in conjunction, let alone all of the products in the first two categories. Indexes can sometimes deceive.

But first, we wish to comment briefly upon the extensive literature devoted to this subject, well reflected in the content of this volume. Few other subjects in economics have as lengthy a tradition. Mercantilism and protectionism date far back. We begin with the post-WWII contributions of Raul Prebisch and Hans Singer. It is hardly an accident that Latin America--unengaged directly in the war and an initial supplier of exports to war-torn Europe--should become the focus of import substitution industrialization in the 1950s. Some countries in the region had achieved economic growth in the Great Depression, and sought to sustain it; others were motivated to try.

Then, we focus briefly upon four different country experiences within the region. Their selection relates back to their type of exports, as well as the distinctive policies being pursued. All had embarked upon import substitution in the 1950s. All benefited from gains in the terms of trade in the 2000s. But the results greatly diverged.

We start with Argentina, the only historic case of descent from a ranking in the top ten per capita incomes in 1900 to much lower placement more than a century later. Reliance upon exports of agricultural products--and their cyclical price variability--have much to do with this result, but equivalently, so does policy choice. Argentina moved from export of meat and wheat to concentration upon soybeans in the last two decades. But export taxes and import restrictions have continued as central features.

We follow with Chile, where copper production dominates since 1945. Subject to greater price volatility owing to the commodity concentration of its exports, Chile impresses by its polarization of policy. Despite size limitations, it first committed itself to industrialization behind high protective barriers. Then there was an attempt to accommodate fully to the market in the Pinochet period that proved equally mistaken. Finally, there has been the success under the Concertación. Natural resource exports, and rising copper prices, have not hindered, but much helped, in this transformation.

Venezuela is our third case, a classic petroleum exporter with the highest Latin American per capita income in the 1950s, and a failure in achieving sustained, and more diversified, economic development well before the arrival upon the scene of Hugo Chavez in the 1990s. In this instance, domestic and international policies

clearly interact, beginning with entry into OPEC in the 1970s. In more recent times, there has been the great increase in oil prices from 2003 to 2008, replicated again in 2010, but accompanied by increasingly inadequate policy interventions that cannot help but remind one of early responses to sudden export wealth that ended in the Lost Decade of the 1980s.

Brazil is the last example we consider. What differentiates this experience is the combination of agricultural, mineral and petroleum exports—including ethanol and bio-diesel fuels—in recent years. At the same time, its industrial sector has been large, and since the 1990s, without the great tariff protection characterizing earlier rapid expansion. The public sector has much expanded, and inflation has been tamed since the Plan Real in 1994. Moreover, the economy fully survived the Great Recession and will likely register in 2010 impressive recovery. Here the central issue becomes the magnitude and form of intervention compatible with resource wealth.

On the basis of this diverse history, we return in the final section to reconsider the appropriate policy mix adequate to avert the negative consequences of commodity price volatility and to proceed to sustainable development.

The curse and the disease

There are several strands in the development economics literature discussing natural resources and economic growth. Perhaps David Landes (1998) first coined the term “natural resource curse”, by which one means that countries well-endowed with natural resources would tend to grow less rapidly than countries not so well endowed. In the region, the Prebisch-Singer thesis (Prebisch, 1950; Singer, 1950) on the long-run trend for declining terms of trade of primary products had a strong prominence in the early post WW-II: it would be as a result of this trend that countries specializing in primary products exports would be condemned to grow more slowly.

Much ink has been spent on the logic and the empirics of this terms-of-trade proposition, but the final verdict of recent studies is that downward structural price-breaks are present but no long-run trend is discernible in the secular data (Cuddington, Ludeman, and Jayasuriya, 2007; Brahmabhatt and Canuto, 2010; Ocampo and Parra, 2010). This result is nonetheless consistent with cyclical swings of

great magnitude, such as that in 1919, in the 1970s, and almost certainly after 2004. Moreover, there are some individual commodities whose longer term experience may show a trend. Taken together, the relevant policy problem is the response to such volatility.

These earlier had taken two forms: international producer efforts to control supply like OPEC and others, and national stockpiles to dampen price swings.¹ Only in recent years has come another: Sovereign Wealth Funds. These have been accumulated during the upward phase of the cycle, with the intention of expenditure during the downward phase. As a consequence, governments can avoid the excesses of prosperity and the depths of depression. For some petroleum exporters with limited reserves, the intent is also to establish an endowment. Presently, such holdings constitute \$3.8 trillion--Chile is the only country in the region represented (IFSL Research, 2010).

Another popular strand of the natural resource curse argues that primary production is not as "dynamic" as industry, both because of lower total productivity growth and lower income-elasticity of final demand. Empirical results do not confirm the first proposition: productivity in agriculture or mining tends to grow as fast as or faster than in industry among efficient producers (Martin and Mitra, 2001; Wright and Czelusta, 2007)². It's however a well-known fact of development economics since Kuznets (1966) that as income grows population and income shares shift out of primary products into industry and then into services. But production structure does not need to be replicated in trade patterns. If a country is well-endowed with natural resources its exports can continue to be dominated by them, even as it develops and most of its population shifts into industry and then into services.

Norway has the highest income per capita in the world and oil dominates its exports. Other countries that developed on the basis of primary-product exports include Australia, Canada, Finland, and New

¹ There had been earlier attempts to incorporate consumers as well, such as the International Coffee Agreement involving Brazil and Colombia.

² Prebisch and Singer were concerned not with relative productivity growth rates, but with the proposition that technical progress would be appropriated as higher wages in the manufacturing Center and be dispersed as lower prices in the primary-producing Periphery. Their argument presumes that labor is fully-employed in the Center and in unlimited supply in the Periphery (Lewis, 1954). But in this case, it can be argued that what should matter to the Periphery is the growth of employment rather than the terms-of-trade trend (Bacha, 1983).

Zealand, not to mention Sweden and the United States well into the XX Century. Clearly, what characterizes (or historically characterized) these countries are high primary-product endowments per capita. As population grows, the relative abundance of natural resources decline and, as a consequence, export patterns tend to replicate domestic production patterns more closely, i.e., the share of industry and services in exports grow.

The example of the Nordic “old-world” and Anglo-Saxon “new world” countries notwithstanding, the fact remains that a very large number of primary-product exporters--in Africa and Latin America, notably--display a very poor growth performance³. If the export-share of primary products either in total exports or in GDP is used as a criterion, innumerable cross-section regressions since the well-known study of Sachs and Warner (1995) would seem to confirm the “resource curse”: developing countries rich in natural resources tend to grow less than those exporting manufactured products.

However, in a series of recent studies, Lederman and Maloney (2007, 2008) take issue with such a conclusion. They argue that the resource curse--apparent in the simple correlation between specialization and growth--disappears when a measure of export concentration is introduced in the regressions.⁴ They thus suggest that the curse is one of lack of diversification, not resources. This finding is consistent with the view of a resource drag on growth arising from the limited possibilities of variation among commodities, but then, as deFerranti et al. (2002) and Lederman and Xu (2007) argue, diversification into non-resource sectors from a strong resource base is feasible, as illustrated by the Nordic and New World Anglo-nations that are now well-developed countries.

From this perspective, the curse would derive not from the nature of the export good but from excessive export concentration and lack of flexibility to shift out of sectors as required by the evolution of world demand and the country’s comparative advantage. Specialization in commodities, however, would seem to have a definitive drawback, as their prices tend to much more volatile than manufacturing prices, making it difficult to disentangle temporary from permanent price changes, and thus reducing fixed investment and growth. Some authors have thus suggested that it is exactly the

³ Notable exceptions from the natural resource curse in the developing world include Malaysia, Thailand, Oman, Botswana, and Chile.

⁴ See the recent book of Ocampo, Rada and Taylor (2009), Chapter 4, demonstrating this proposition.

volatility of natural resource prices, rather than the trend that is bad for economic growth (Blattman, Hwang, and Williamson, 2007; Hausmann and Rigobon, 2003; and Poelhekke and van der Ploeg, 2007).

Furthermore, the volatility of prices and the relative magnitude of the natural resource sector for many countries imply huge swings in fiscal revenues, invoking all the attendant complexities of public decision-making. In the upswing, the question is whether these revenues will be put to good use, wasted, or allowed to become actively detrimental. Tornell and Lane (1999) document what they call a voracity effect, whereby a sudden influx of riches leads to a more than one-for-one increase in spending as interest groups demand their share of the windfall⁵. Because the process exhibits hysteresis, any ebb in the bonanza can lead to fiscal crises as expenditures remain high while revenues collapse.

Thus, of the various possible channels through which natural resources could be a curse to long-run development, the quality of institutions and governance is perhaps the most widely hypothesized. Isham et al (2005) find that the commodities that are damaging to institutional development, which they call “point source” resources are, in addition to oil: other minerals, plantation crops, and coffee and cocoa. Sala-I-Martin and Subramanian (2003) and Bulte, Damania, and Deacon (2005) also find that point-source resources such as oil and some particular minerals undermine institutional quality and thereby growth, but not agricultural resources. According to Collier and Goderis (2007), negative long-run growth effects are mostly related to oil and minerals, while there is little evidence of negative growth effects related to high prices for agricultural commodities, which are generally more open to competitive entry. But Collier and Goderis also find that high oil and mineral prices mostly have a negative impact on long-run growth in exporting countries with bad governance. They have a significant positive impact on growth in exporters with good governance.

This last finding, according to Brahmabhatt and Canuto (2010), suggest that continued high commodity prices in the next few years could provide valuable resources to accelerate economic and social

⁵ Contemplating with some despair the dispute in Brazil’s Congress for a share of future oil-revenues, President Lula aptly synthesized the voracity effect with the observation: “they are fighting for the chips (*pirão* in Portuguese) before catching the fish” (Interview for the newspaper *A Tarde* on March 26, 2010).

development in commodity exporting countries with good policies and governance. Lederman and Maloney (2008) argue that with new data, new econometric analyses provide (for them) definite evidence that there is no curse, not even indirectly through the political institutions that would most likely be affected by the curse-via-politics effects, which has been central in the literature on the point-source nature of natural resources⁶. Nonetheless, despite what they consider to be the unreliable evidence concerning the curse-through-politics hypothesis, they grant that institutional arrangements to smooth out the economic consequences of natural resource windfalls make a lot of sense.

Perhaps the main focus of such policy interventions relates to the so-called Dutch Disease⁷. The phenomenon arises when a strong, but perhaps temporary, upward swing in the world price of the export commodity causes a large appreciation of the currency, an increase in spending especially by the government, an increase in the price of non-traded goods, a resultant shift of inputs out of non-export-commodity traded goods, and a current account deficit (Frankel, 2010). When crowded-out non-commodity tradable goods are in the manufacturing sector, the feared effect is deindustrialization.

But what would make this movement a “disease”? One argument, particularly relevant if the complete cycle is not adequately foreseen, is that it is all painfully reversed when the world price of the export commodity goes back down. Capital outflows may occur, accelerating the need for devaluation in the midst of a balance of payments crisis. A second interpretation is that the crowding-out of non-commodity exports is judged undesirable, perhaps because the manufacturing sector has greater externalities for long-run growth. The second view is just another name for the natural resource curse, previously discussed, thus, it would seem appropriate to reserve the term Dutch Disease for the cyclical phenomenon.

⁶ Lederman and Maloney’s claim of a “resource blessing” is based on the measurement of a country’s natural resource abundance by its per capita net natural resource exports. This is equal to a country’s per capita income times its net natural resources exports over GDP. The latter is a frequent measure of natural resource abundance in previous studies that claimed to have identified a “resource curse” in the data. Lederman and Maloney’s abundance measure gives more weight to countries with higher per capita income and this may bias their results towards showing that resources are a blessing rather than a curse.

⁷ The name Dutch Disease was coined by The Economist magazine in 1977 and was originally inspired by side-effects of natural gas discoveries by the Netherlands in the late 1950s.

When viewed from this cyclical perspective, the term Dutch Disease applies as well to temporary surges in capital inflows leading to real appreciation and a shift into non-tradables, and away from non-booming tradables. Naturally, large capital inflows may result from a commodity boom itself, thus helping to magnify its Dutch Disease impacts. The sharpness of the commodity boom, on the other hand, may be magnified by destabilizing speculative demand in futures commodity markets, which have gained much prominence in recent years.

At stake here are a series of cumulative foreign shocks that generate volatility and hence lower growth in commodity-producing developing countries. These may be compounded by domestic macroeconomic and political instability: most developing countries are still subject to monetary and fiscal policies that are procyclical rather than countercyclical: they tend to be expansionary in booms and contractionary in recessions, thus exacerbating the magnitude of the swings.

We return to consideration of such matters in our concluding section. Before we do, it is necessary to examine in greater, if brief, detail the contrasting experiences of our four country cases.

Argentina

Argentina is perhaps the world's best case of the presumed natural resource curse: a rich and fertile country that went astray in the post-WWII period. Already by that time, the country had deviated from its previous participation in world trade. In the boom before 1914, the sum of imports and exports represented about 80 percent of national income; by 1950 that ratio was down to 20 percent. Import substitution had already been substantially underway during the Great Depression, where much of that decline was concentrated.

Slow then to devalue, the country had to rely instead upon direct currency controls, and other limits to trade, but the special relationship with Britain through the Roca Runciman Treaty produced a lesser response than shown by other large economies in the region. Argentina continued its debt payment; " a less well-behaved policy ... would have freed resources for the adoption of expansionary domestic policies by the federal government and for further consolidation of Argentine industry through the expansion of capital goods imports." (Thorp, 1998, p. 116)

After the war, politics entered powerfully, and has remained as the dominant element in Argentine economics since. Peron's ascent was significant as the basis for a new economics. That involved conscious redistribution of income from both agricultural and industrial interests--who had managed their differences in the midst of rising tariff protection--to the urban labor force. The extent of the shift is impressive. Union affiliation was only 10 percent of non-agricultural employment in 1936; by 1950, that ratio had increased to 49 percent. The consequence is equally impressive. Labor's share in national income went up by eight percentage points until the mid-1950s. Thereafter, while this gain was reversed, the struggle implicitly continues(Della Paolera and Taylor, p. 135).

Peron was overthrown by the military in the mid-1950s, but they ceded control to a civilian successor in 1958; in 1962, the military returned, again but briefly. Finally in 1966, as had already happened elsewhere in the region, the military returned more permanently --except for a brief elected interlude of Peron and his second wife, Isabela, until Alfonsin was elected at the end of 1983. Despite the macroeconomic problems associated with his term, and the failure of the Austral Plan, peaceful succession to Menem averted arbitrary intervention once again. A similar crisis occurred with the end of the fixed exchange rate and the forced resignation of de la Rúa at the end of 2001.

Argentina continues with political fragility and weak institutions down to the present. Menem's two terms, rooted in expansive foreign investment and favorable access to the Brazilian market, did not change the country as definitively as some expected. The subsequent succession of the Presidents Kirchner, and their attempt to define a different, non-IMF structuralist strategy, gives indication of a vain search. Policy has been a short-term strategic accommodation rather than a set of permanent rules enabling sustained productivity advance.

Over much of the period, external trade had remained at low levels, and tariffs high, along with other periodic interventions like export duties, until the 1990s. Thereafter, trade has taken on greater importance. Now exports and imports again account for something like 45 percent of income. There has been a dual role. On the one side, Mercosur opened new possibilities for exports of manufactured products to Brazil, especially of automobiles. On the other, Argentina remained an agricultural exporter to the rest of the

world, but specialized increasingly upon soybeans, as Chinese demand rapidly expanded. Unlike the case of Brazil until recently, there has been open commitment to new genetic varieties with consequent cost reductions.

Nonetheless, and in spite of more rapid growth of exports than product over the last two decades, few would choose Argentina as a case where natural resource richness has finally translated into a basis for successful development. Historically, while terms of trade have shown high volatility, government trade policy managed successfully to avert a corresponding impact upon income receipts of farmers. When foreign prices were high, they were taxed; when low, subsidies were implicitly granted. But seeming stabilization did not avoid internal struggles with industry, and a relative disadvantage that still persists in political terms (Paolera and Taylor, 2003, p. 107).

Import substitution has again intensified in Argentina, after the crisis of 2001. There is strong belief that domestic manufactures can become more productive, and a better source for development than reliance upon agriculture and free markets. Yet, real investment has fallen short, in no small part owing to the restrictions placed upon imports of capital goods elevating their cost, while savings continues relatively high. Foreign investment is quite leery of commitment, given its past experience, and a present where official price indexes report only half the inflation rate.

In sum, despite the favorable external environment for commodities that again has evolved, Argentina has not yet managed to resolve its fundamental internal problems. These weigh much more heavily upon satisfactory economic growth than variations in the terms of trade. Volatility there has been, but its origins are much more in "the instability of the 'rules of the game' (policy regimes, regulatory norms, property rights enforcement, and so on)." (Daniel Chudnofsky and Andrés Lopez, 2007, p. 27.) There is scope to take advantage of a favorable resource base, and, at the same time, to achieve the needed competitiveness and efficiency within the industrial sector. Continuity is a virtue that has been lacking.

Chile

Chile's long democratic tradition came to a violent turning point in 1973 with the ascent of the Pinochet dictatorship. Economic conditions, seemingly so positive in the 1960s when the Frei

government had benefited from Alliance for Progress resources and undertaken far reaching reforms, had equally turned negative in the early 1970s. Inflation was at the rate of 900 percent a year, and fiscal and balance of payments deficits were beyond salvation. Populist policies put into place by the Allende government were no solution.

The 'Chicago Boys' who led the economic ministries for the next decade sought to reverse entirely the previous commitment to import substitution industrialization and large state presence. Their efforts were only partially successful. Monetarism, with its attendant Law of One Price, did not work as a strategy to enforce an end to continuing inflation. Inflation fell, but with a considerable lag. A large current account deficit, and a domestic financial boom were not precursors of restored economic growth. The economy soon came crashing down again in 1982 with the preceding plunge in copper prices and US recession. The Chilean government guaranteed, rather than abandoned, the private debt that had been incurred, and the 'free market' experiment was effectively over.

New macroeconomic policies followed, less orthodox in character, and with variable exchange rates. Modest expansion resumed, but it was too late to save the dictatorship. Fundamental changes had occurred within the economy, however. Future tariffs were to remain low. Privatization, but not of the copper facilities, was again to recur. So were significant institutional changes involving government pensions, the role of the Central Bank and of private initiative more generally.

The Concertación took office in 1990. Subsequent Chilean growth became endemic. Inflation continuously fell, and along with it, real interest rates. Domestic industry, reassured, dramatically increased their savings rates and began to invest. New activities eschewed dependence on tariff protection. Firmer governmental rules were established to assure continuing fiscal regularity. Foreign investment returned. Copper production that had been 80 percent public reversed to 70 percent private by 2000, as facilities came online. As income continuously rose, domestic poverty rapidly fell, although income distribution inequality persisted at preceding high levels. Policies respected the primacy of the market for production signals, while insisting upon the legitimacy and importance of intervention for social ends.

Public expenditure contributed to better health, housing, and education. Revisions were made in the pension system, increasing coverage and benefits of the poorest. Collective bargaining rules were modernized. Research and development outlays increased.

Policy has continued to look outward from the region. Chile has been the most active country in the world in achieving free trade agreements. It has entered into NAFTA, and eschewed the higher tariffs, and problematic features of Mercosul. Its principal exports, beyond copper, include fruits and vegetables, forest products, fish, and wine. More than 40 percent of GDP consists of exports, of which copper represents about half. The reciprocal is access to a range of imported manufactured products of higher quality and lower price than could be produced domestically. While the United States has long yielded its position as the prime recipient of exports, it retains its leadership in Chilean imports.

In recent years, as the price of copper soared upwards after 2003, Chile has demonstrated the effectiveness of compensatory fiscal policy. The gain of an increased export surplus--equivalent to more than 5 percent of national product as the price went up to \$4 a pound--has been encapsulated within a Sovereign Wealth Fund, and invested in domestic (and, up to 30 percent, foreign) instruments. These resources, now involving more than \$15 billion dollars- were accessible to compensate for the dramatic fall in price back to \$1.40 in 2009. A fiscal deficit replaced the previous surplus. As a result, Chilean income fell only modestly in 2009, and averted the rapid decline felt by many other countries in the fourth quarter of 2008. Those funds are now available as Chile seeks to compensate for the massive earthquake of 2010 by undertaking a massive rebuilding effort.

More fundamentally, Chile has become the poster example for the very absence of a natural resource curse. That was hardly always so. The country has traversed an exceptional course from initial complete commitment to the Prebisch doctrine of an inevitable decline in the terms of trade in the 1950s to a Sovereign Wealth Fund, used to good advantage, in the twenty-first century. Domestic manufactures account for a relatively small percentage of national income. Mining is virtually comparable. The public sector remains relatively small, but efficient.

In that process, Chile has modernized politically as well. Election of conservative candidate Sebastian Piñera in 2010 symbolizes the trend. He replaces President Bachelet of the Concertación, who ended her term with popularity in the range of 70 percent. There is now a powerful political center in Chile, rejecting the magical irrationalism of the far left and the far right, both of which held sway in the past. That maturity is important for the economic policies to be pursued in the future.

Venezuela

This is the classic post-WWII Latin American case of natural resource wealth and its eventual accompanying curse. There was initially only great gain.

Petroleum exploitation began in the 1920s. By 1950, Venezuela stood next to Argentina in regional per capita income, and by 1970 exceeded it. With the rapid rise in oil price of the 1970s, orchestrated by OPEC, of which Venezuela was a member, gains further expanded.⁸ The country co-chaired the 1975 Paris meeting on International Economic Cooperation that sought--unsuccessfully--a North-South agreement.

Political advance occurred simultaneously. In 1958, through a power sharing agreement, Acción Democrática (AD) and the Christian Democrats (COPEI) agreed upon presidential alternation to replace the military government. That process continued unhindered until the 1990s, even while much of the rest of the region fell into military dictatorship. Immigrants became an important part of the rapidly growing population.

Import substitution industrialization was pursued during this interval and tariff and quota limitations were imposed. New industries were started. Imports grew only half as fast as total product. But a much larger percentage of them continued to consist of consumer goods, unlike the experience of other countries. Another difference was the importance of the state: the public sector dominated, receiving abundant revenues from petroleum exports, and expending some of them as subsidies. Some 20 percent of total employment was found in state-run activities. Not least, gasoline

⁸ Between 1920 and 1980, its economy grew faster than any other, according to data assembled by Angus Maddison (2003).

prices were kept low, providing gain to the middle and upper-income groups.

This happy situation dramatically altered in the 1980s. Venezuela too experienced a lost decade, less because of accumulated past indebtedness than to the rapid decline of the international petroleum price. In such circumstances, devaluation became necessary and occurred in 1983. Debt service began to absorb a large share of lesser export earnings. Government revenues, tied to oil, fell dramatically. By 1989, income per capita had returned to its 1973 level.

All of the many beneficiaries of the state suddenly were in an unusual competitive relationship: more for some translated into less for others. The civil service was corrupt and unwieldy. The military was bought off. Political power was centralized. The urban poor were largely excluded, and their benefits circumscribed. More than half had fallen below the poverty line (Reid, 2007, pp. 162ff).

Carlos Andrés Pérez was elected a second time in 1988. This time--as was the case elsewhere in the region--there was no alternative to internal reform. It never really happened. Instead, an early effort to raise the gasoline price resulted in a popular uprising, the *Caracazo*, with the deaths of more than 400. Although the administration continued with its policies, Congress, and the AD, was no longer amenable. Hugo Chávez attempted a coup in February 1993, but failed; in the same year, Pérez was impeached.

In 1998, Chávez was elected as President. That event, and the constituent assembly that followed, initiated the new Bolivarian Republic. It has continued and extended until today. Chavez remains as president until 2012, and perhaps beyond. The Venezuelan economy persists dependent upon oil, representing almost 90 percent of its export revenues, and much of its fiscal receipts. In between, there is more than a decade about which there are two very radically different, and irreconcilable, interpretations.

Partisans of the regime stress its high rate of expansion of close to 10 percent annually beginning in 2003, i.e., after the failure of the coup in the previous April assured control over PDVSA. Most of the growth is attributed by them to the non-oil sector, and indeed, to private activity. During the expansion, social spending went up, inequality dramatically declined, and education improved. Moreover,

they see an intent to diversify away from oil, and thus fully escape from the adverse incentives of the Dutch disease (Weisbrot, Ray and Sandoval, 2009).

Opponents contest virtually all of these consequences of what undeniably was a highly profitable increase in petroleum prices between 2002 and 2008, and that has begun to surge once again in the second half of 2009. They deny commitment to a pro-poor policy, and emphasize the limited advances attained in a variety of human development indicators. The results attained, moreover, are less than they should be, given the great rise in income that occurred (Rodriguez, 2008).

What is evident is intent. Chávez is committed to a new style of governance, and not merely within Venezuela itself. His bold ambitions, like those of Bolivar, are continent wide, and even go beyond. New institutions like the Missions are mechanisms for trying to reach out to the poor, not very differently than had been attempted in earlier populist ventures in the region. Nor are the results—despite the abundance forthcoming from the enormous rise in petroleum prices—entirely at variance. There has been progressively greater reliance upon rationing, rather than the market.

Much increased expenditures have resulted in persistent fiscal deficits, despite a great rise in governmental revenues. Inflation has threatened to get out of hand. An overvalued fixed exchange rate has had to be devalued, more than once. Multiple exchange rates have returned. Despite curbs on capital outflows, accumulated foreign exchange reserves are seemingly fewer than they should be. A presumed Sovereign Wealth Fund has been utilized elsewhere, in part for non-budgeted outlays, and resources are not available for compensatory fiscal policy.⁹

Full extent of the problem has been alleviated by a return to higher petroleum prices in the market. Chávez has recently agreed to participation of foreign oil firms, including Chevron of the United States, in developing the extensive shale oil deposits in the Orinoco river basin. There will even be a reduction of the royalty charge from 33.3 percent to 20 percent. Much greater publicity has been

⁹ The real extent of Venezuelan reserves is complicated by the inclusion of domestic resources, at the official exchange rate, in the accounting of some. But domestic money can be created without cost, as the past decade reveals. An implicit inflationary tax imposes costs on the poor that have not generally been part of the discussion.

given to agreements with China and Russia, whose starting dates are much farther off.

How Venezuela eventually emerges remains unknown. But natural resources have not been a clear gift. Indeed, recent reports indicate that the country now is ranked--by the price of credit default swaps--as most likely to default within the next five years. Venezuela's probability was 48.5 percent, while Greece was classified with a chance of 25.4 percent. Norway, on the other hand, led the list of the safest sovereign borrowers.¹⁰

Brazil

From the late XIX Century through the 1930s, Brazil was coffee and coffee was Brazil. The country has since successfully industrialized, on the basis of its large and growing domestic market, and has diversified its exports—coffee now is only a tiny fraction of its exports. Brazil took perhaps too long to move away from an import substitution strategy, but, thanks to market-oriented reforms implemented since the early 1990s, it became an active participant in the world economy¹¹. The country is an agriculture powerhouse (being a major world exporter not only of coffee, but of sugar, orange-juice, tobacco, soybeans, corn, beef, poultry, and pork). Its two biggest companies, Petrobras and Vale, are leading players in the international oil and iron-ore markets. It is a testimony to the abundance of Brazil's natural resources that commodities and commodity-related products comprise 2/3 of the country's product exports. The recent discovery of very large deep-sea oil deposits in Brazil's southeastern offshore will certainly solidify both the country's importance in world commodities markets and that of commodities in Brazil's export bill.

Brazil has been one of the main beneficiaries of the commodity price boom in the early XXI Century. The country's total exports grew to \$197 billion in 2008 from \$72 billion in 2003, and its GDP growth rate averaged -4.8% in the period, a considerable feat not only in comparison with the meager results in the previous decade, but also considering Brazil's low saving and investment rates. In this period, Brazil benefitted not only from high commodity prices but also from large inflows of foreign capital. The consequence was a significant appreciation of the *real* even while the Central Bank accumulated

¹⁰ Financial Times, April 8, 2010.

¹¹ See Fishlow (2010) for an analysis of Brazil's evolution since the end of authoritarian rule in 1985.

record-high levels of international reserves. As the share of commodities and commodity-related products in Brazil's exports increased, the preoccupation arose in several quarters within the country if Brazil was catching the Dutch disease or worse still becoming deindustrialized. But the academic studies that have looked into this question failed to find evidence either for the Dutch Disease of the deindustrialization thesis (See Puga, 2007; Barros and Pereira, 2008; Jank et al., 2008; Nassif, 2008; Souza, 2009; Bonelli and Pessoa, 2010). Non-commodity-related-industries are finding harder than before to maintain their exports growing, but they have plenty of room for expansion in a rapidly growing and still well-protected domestic market.

This evidence has not dissipated concerns with the valorization of the *real*, because at least part of it is being led by (short-term) capital inflows, attracted by high interest rates, rather than by commodity prices. The price-induced surge in imports and slowdown of non-commodity exports contribute to an enlarging current account deficit, which may not be so easily financeable in the future. The immediate issue here is Brazil's macroeconomic policy mix: floating exchange rates in the context of an open capital account and domestic interest rates maintained higher than abroad to keep inflation under control.

Academics point to the obvious, beyond the immediate policy-mix issue—Brazil's low savings rates and persistent government budget deficits. Were savings higher and deficits lower, interest rates could be reduced without risking higher inflation and providing room for a more competitive exchange rate. Without such austerity, however, the country seems condemned to a less-than-par potential GDP growth rate that may lead to increasing discomfort with current macroeconomic policies, and stronger appeal of long-abandoned populist policies. Strong recovery in 2009, after all, was enabled by expansionary fiscal and monetary policies. But persistently high interest rates and exchange rate volatility hamper growth.

The recently-discovered of apparently very large deep-sea oil-deposits in Brazil's southeastern offshore may offer some relief. In fact, the main test whether Brazil will fall prey of a 'resource curse' or instead will benefit from a 'resource blessing' may occur in the next few years, when the country starts drilling oil out of its sub-salt deposits. Recent events give little reason for hope. To deal with the new oil riches, President Lula sent to Congress a proposal with major

changes in the rules for oil exploration—a shift from a successful concessions-based regime to a still unproven profit-sharing regime, with the obligatory participation of the state-owned oil company Petrobras as the sole driller in all new oil-consortia. In addition, a new state-owned entity would have exclusive commercialization rights over the new oil finds. The government majority approved such changes in the Lower House, but sent to the Senate a bill with a totally new distribution of oil revenues between the union, states, and municipalities—and this has paralyzed deliberations on the new oil-exploration regime.

Industrial policy has emerged as another contentious issue. BNDES has played a central role in the rapid recovery in 2009, and its role in financing investment has been enhanced. The government's Programa de Aceleração do Crescimento, although only partially completed, has already been supplemented with another to take effect beginning in 2011, featuring Petrobras. Politics again is much involved, as the presidential election nears. Afterwards, the same rationality that has enabled Brazilian success in recent years should return.

Concluding Remarks

This essay's title gives hint of our conclusion. Commodity exports have been a continuing subject of attention and concern well before the contributions of Raul Prebisch and Hans Singer in the post-war period. The rise of commodity-hungry China and India, and Asia more generally, as well as the growing importance of internationally based finance for price determination are new bottles on the scene. "Encouragingly, during the course of the recent commodity boom, fiscal spending in resource-dependent developing nations has been much more prudent than during earlier booms" (World Bank, p. 9, 2009).

For Latin America's economies the question is if the wine has now finally arrived to maturity—and can be fully appreciated in the new bottles without provoking inebriation.

None of earlier generalizations offered as a guide to practical policies has held up over the last years. More sophisticated econometrics has substituted for the earlier attempts to establish a basis for policy decisions. Whereas the earlier danger was conviction

of inevitably falling terms of trade, now it seems increasingly to project rising gains that can finance all kinds of public interventions.

Countries will have to design their trade policies in accordance with a changing pattern of comparative advantage. Massive intervention designed to modify that reality runs the risk of repeating past import substituting industrialization all over again. International trade can be a powerful instrument underwriting economic growth, but not without domestic efforts to assure innovation and technological change over the longer run.

The four Latin American cases considered reinforce this conclusion.

Argentina has been unable to translate its resource richness into a source of continuous advance over the last fifty years. Advance and change has occurred within the export sector, without being able to stimulate parallel alteration in the rest of the economy. Policies have been even more volatile than product prices.

Chile has achieved impressive gains over the last two decades. Per capita income has increased quite steadily, as the external market has driven a transformation increasing the share of exports two-fold over this period. New primary exports have emerged, even while copper has retained its central role within them. A private sector has become innovative. Compensatory fiscal policy has made its positive effects felt, even in the midst of price increases much greater than in the past. Such price volatility has been dampened by effective public intervention.

Venezuela is our third case. Petroleum has not served to underwrite sustained economic growth. Instead, the cyclical heights and depths have reflected themselves in domestic economic instability. This has increasingly been manifest over the last decade. Interventionist public policy has not learned very much from the errors of the past. There has been an inability to take full advantage of the present cycle of price advance.

Brazil has managed a remarkable transition over this same period. Import substitution has worked to develop a domestic industrial base of significant magnitude and capable of international competition. Agricultural productivity has increased, enabling a premier market position. Mineral exploration has consolidated a growing role--marked by Brazilian foreign investment abroad. Most

recently, discovery of petroleum resources below the salt layer stand as a source of potential wealth.

In all of these cases, the dominating feature is domestic politics and its transformation over time. Resource wealth inevitably brings with it a greater susceptibility to volatility. The question is how to cope. That internal response determines whether natural resources translate into a virtue or a curse.

References:

Bacha, E. 1983. "An Interpretation of Unequal Exchange from Prebisch-Singer to Emmanuel." *Journal of Development Economics* 13(1/2), August-October.

Barros O. and Pereira, R., 2008, "Desmitificando a tese de desindustrialização: reestruturação da indústria brasileira em uma época de transformações globais", in O. Barros and F. Giambiagi (Eds.), *Brasil Globalizado: o Brasil em um Mundo Surpreendente*. Rio de Janeiro: Campus.

Blattman, C., J. Hwang, and J. Williamson. 2007. "Winners and Losers in the Commodity Lottery: The Impact of the Terms of Trade Growth and Volatility in the Periphery, 1870-1939." *Journal of Development Economics* 82(1): 156-179.

Bonelli, R. and S. Pessoa, 2010, "Desindustrialização no Brasil: Resumo da Evidência". *Texto para Discussão 7*, Centro de Desenvolvimento Econômico, Instituto Brasileiro de Economia, Fundação Getúlio Vargas, Rio de Janeiro, March. (Available at <http://portalibre.fgv.br>.)

Brahmbhatt. M. and O. Canuto, O. 2010. "Natural resources and development strategy after the crisis", *Economic Premise*, n. 1. Washington, DC: World Bank (available in www.worldbank.org/economicpremise).

Bulte E., R. Damania, and R. Deacon. 2005. "Resource Intensity, Institutions and Development". *World Development* 33(7): 1029-1044.

Chudnofsky, D. and A. Lopez, 2007. *The Elusive Quest for Growth in Argentina*. New York. Palgrave..

Collier, P. and B. Goderis. 2007. "Commodity prices, growth and natural resources curse: reconciling a conundrum." August. Working Paper 276. Centre for the Study of African Economies.

Cuddington, J., R. Ludeman, and S. Jayasuriya. 2007. "Prebisch-Singer Redux". In *Natural Resources: Neither Curse Nor Destiny*, Chapter 5.

deFerranti, D. et al. 2002. *From Natural Resources to the Knowledge Economy: Trade and Job Quality*. World Bank.

Fishlow, A. 2010. *O Novo Brasil*. São Paulo. Saint Paul Editora.

Frankel, J. (2010), "The natural resource curse", in *Azerbaijan Diplomatic Academy, Export Perils*. December 11, 2009, manuscript, revised January 19 and February 14.

Hausmann, R. and R. Rigobon. 2003. "An Alternative Interpretation of the Resource Curse: Theory and Policy Implications". In *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*. Edited by J. Davis (International Monetary Fund. Washington DC): 12-44.

IFSL Research. 2010. *Sovereign Wealth Funds 2010*. March.

Isham, J. et al. 2005. "The Varieties of Resource Experience: Natural Resource Export Structures and the Political Economy of Economic Growth." *World Bank Economic Review* 19(2):141-74.

Jank, M. et al., 2008, *Exportacoes: existe uma doenca holandesa*", in O. Barros and F. Giambiagi (Eds.), *Brasil Globalizado: o Brasil em um Mundo Surpreendente*. Rio de Janeiro. Campus.

Kuznets, S. 1966. *Modern Economic Growth*. New Haven, CT: Yale University Press.)

Landes, D. 1998. *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor*. New York and London: Norton.

Lederman, D. and W. Maloney. 2007. (eds.), *Natural Resources: Neither Curse nor Destiny*. World Bank and Stanford University Press.

Lederman, D. and W. Maloney. 2008. "In Search of the Missing Resource Curse". *Economía. Journal of the Latin American and Caribbean Economic Association*. 9(1): 1-39.

Lederman, D. and L. Xu. 2007. "Comparative Advantage and Trade Intensity: Are Traditional Endowments Destiny?". In *Natural Resources: Neither Curse nor Destiny*, chapter 10.

Lewis, A. 1954. "Economic development with unlimited supplies of labor". *Manchester School of Economics and Social Studies* 22(2), May.

Maddison, A. 2003. *The World Economy. A Millennial Perspective*. Paris. OECD

Martin, W. and D. Mitra. 2001. "Productivity Growth and convergence in Agriculture and Manufacturing." *Economic Development and Cultural Change* 49(2):403-22.

Nassif, A., 2008, "Ha evidencia de desindustrialização no Brasil?", *Revista de Economia Política*, 28 (1): 72-96.

Ocampo, J.A., C. Rada, and L. Taylor. 2009. *Growth and Policy in Developing Countries: A Structuralist Approach*. New York: Columbia University Press.

Ocampo J. and M. Parra. 2010. "The Terms of Trade for Commodities Since the Mid-Nineteenth Century". Forthcoming in *Revista de Historia Económica/ Journal of Iberian and Latin American Economic History*.

Paolera, G. della and A. Taylor. 2003. *A New Economic History of Argentina*. New York. Cambridge University Press.

Poelhekke, S. and F. van der Ploeg. 2007. "Volatility, Financial Development and the Natural Resource Curse". CEPR DP6513, October.

Prebisch, R. 1950. *The Economic Development of Latin America and its Principal Problems*. United Nations, Department of Economic Affairs, Lake Success, N.Y.; reproduced in *Economic Bulletin for Latin America*, 1962.

Puga, F. 2007, "Aumento das importações não geram desindustrialização", BNDES Visão do Desenvolvimento n. 26. Rio de Janeiro (available at www.bndes.gov.br).

Reid M. 2007, *Forgotten Continent*. Yale University Press.

Sachs, J. and A. Warner. 1995 (revised in 1997). "Natural Resource Abundance and Economic Growth." National Bureau of Economic Research Working Paper 5398, Cambridge, MA.

Sala-i-Martin, X. and A. Subramanian. 2003. "Addressing the Natural Resource Curse: An Illustration from Nigeria." IMF Working Paper WP/03/139.

Singer, H. 1950. "The distribution of gains between investing and borrowing countries", *American Economic Review*, 40 (2), May: 473-85.

Souza, C., 2009, *O Brasil Pegou a Doença Holandesa?*. Ph.D. Thesis for the Economics Department of the University of Sao Paulo. Sao Paulo (available at www.teses.usp.br).

Thorp, R. 1998. *Progress, Poverty and Exclusion*. IADB.

Tornell, A. and P. Lane. 1999. "The Voracity Effect." *American Economic Review* 89(1):22-46.

World Bank. 2009. *Global Economic Prospects and the Developing Countries*. Washington DC: World Bank.

Wright, G. and J. W. Czelusta. 2007. "Resource-Based Growth Past and Present." In *Natural Resources: Neither Curse nor Destiny*, chapter 7.