# The Decoupling of Economic Growth in World Economy in the Last Decade and Development Strategies[•]

**(First Draft)**

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A new stylized fact occurred in the last decade: the contribution of China and other developing countries to the global GDP was bigger than that explained by the US and other industrialized countries (Arceo; Urturi, 2010). Between 2000 and 2008, almost 60% of global GDP growth took place in developing countries (The Economist, 2009).

This faster economic growth in China and countries like Brazil, India, Russia, South Africa – 30% of the global GDP growth between 2000 and 2008 (The Economist, 2009)- was strongly diffused among other less developed countries in Africa and Latin America. Associated with this transformation the South-South trade had a huge expansion.

> "Developing countries' participation in world trade has dramatically increased in the last two decades. Exports from the South to the world in 2005 amounted to $3.7 trillion, which accounted for 36 per cent of total world exports. While the share of exports to developed countries declined in the period 1995–2005 from 56 per cent to 48 per cent, the share of exports to other developing countries in the same period rose from 40 per cent to 45 per cent, with the volume of exports in 2005 showing a three-fold increase from the level in 1995. This phenomenon of dynamic growth in trade among developing countries (or South–South trade) has been coined as the "new geography of international trade" (Unctad, 2008. pg 53)

The US and other industrialized countries that historically formed the main engine of world economic growth, the "major cyclical center" as put by Prebisch (1949) were replaced in this role by other autonomous poles, especially by China. Despite its lower autonomy and less influence on world economy, the Indian expansion that occurred in the last decades was also a real new fact. As observed by Singh (2007)

"China has undoubtedly been the fastest growing country in the world over the last quarter

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of a century, achieving historically unprecedented, almost double-digit, growth rates since 1980. Similarly, although not as fast as China, India's economic growth has nevertheless also been one of the highest in the world since 1980, its per capita growth rate tripling between 1950-80 and 1980-2005 … India was among the ten fastest growing countries in the world over each of the two decades 1980-90 and 1990-2000. This record is not matched by any country other than China. Indeed, the acceleration of growth in India and China in the last quarter century is particularly remarkable, as it has taken place at a time of deceleration in world economic growth." (pg 6)

The 2008 global financial crisis centered in US reinforced this structural change initiated in the beginning of the decade (Serrano, 2008). The Chinese economy answered to the global crisis with a vast public investment recovering its high growth performance; the Indian economy kept as well its high economic growth, the same happened in Brazil and several Latin American and African countries. But even before that an important change took place in economic policies in many countries. Different from the neoliberal strategy that predominated in the nineties in large number of developing countries, the growth of exports generated large trade surplus, positive current account and strong reserves. Coupled with the formation of sovereign funds this new reality decreased the external vulnerability that constraint their internal markets. The ratio between international reserves and short term debt strongly enlarged in Africa, America and Asia (UNCTAD, 2008). This new reality where some large developing country achieved higher conditions for an autonomous growth is nowadays object of great political repercussions in international relations (like the creation of the BRICS group) and on the analysis of the main perspectives of the world economy (World Bank, 2011)[1].

This transformation was the outcome of several processes in world economy and different economic strategies followed by national economies.

## II

As we can observe in Table 1 the GDP growth differential of developing countries with OCDE became bigger from 2004 to 2010. For the first time since the seventies in a great number of African and Latin America countries the rate of economic

[1] Based on data from The World Factbook , WTO, last year China imported $1,307 billion, only US imported a large amount ($1,903 billion). India was the 11th bigger importer with $359 billion, Russia imported $237 billion and Brazil, $187 billion. Together these 4 countries imported more than US or European Union (minus internal trade)

growth was much higher than OCDE and in some cases they were similar to that followed by East Asian countries.

**Table 1: Catch-Up by Developing Countries**

| GDP growth Differential with OCDE | 1960-1973* | 1973-1990* | 1991-2003** | 2004-2008** | 2010** |
|---|---|---|---|---|---|
| More than 3% | Singapure, Hong- Kong | Hong Kong, Idonesia, South Korea, Taiwan, Singapure | East Asia, China, India | East Europe, Russia, North Africa, Sub-Saharan Africa, South Africa . Central America exc México; South America; East Asia; China; India | Sub- Saharan Africa ; South America; Brazil; East Asia; China; Índia |
| From 1 to 3% | South Korea, Taiwan, Botswan, Gabon, Lesotho, Namibia, Swazilanda, Barbados | Botswan, Cape Verde, Mauricio, Seychelles, Bangladesh, China, Malasia | Central America, exc Mexico | Brazil, Mexico | East Europe. Rússia, North of África, Central America, México |
| Memo:OCDE and developed countries GDP growth | 4.4 | 2.2 | 2.5 | 2.2 | 2.2 |

Source: UNCTAD, TDR, 1997, TDR, 2010
* Excess of average annual real GDP over the OECD average in percentage points
** Excess of average real GDP over developed countries (Japan, US, European Union). These data don't show a catch-up in per capita income, in general given the higher population growth in developing countries this only occurred in countries and regions that exceeded a growth differential over 3%.

This fast and wide economic growth brought upward the Human Development Index of many least developed countries. (Table 2)

**Table 2 Average Annual HDI Growth Rate (%) in Regions and Countries**

| Regions and Selected Countries | 1990- 2010 | 2000-2010 |
|---|---|---|
| OECD | 0.48 | 0.31 |
| Arab States | 1.12 | 1.14 |
| East Asia and the Pacific | 1.61 | 1.40 |
| Europe and Central Asia | 0.31 | 0.80 |
| Latin America and the Caribbean | 0.68 | 0.64 |

| | | |
|---|---|---|
| South Asia | 1.44 | 1.61 |
| Sub-Saharan African | 0.46 | 2.10 |
| Brazil | … | 0.73 |
| China | 1.83 | 1.57 |
| India | 1.44 | 1.66 |
| Indonesia | 1.35 | 1.82 |
| Mexico | 0.83 | 0.73 |
| Russia | 0.19 | 0.82 |
| South Africa | -0.03 | … |

Source: UNDP, Human Development Índex Trends, 1980-2010

In a remarkable contrast with the prevailing reality characterized by a huge gap between the small fraction of the world population with high income per person and the vast majority of the world population with an average income barely above subsistence, the rise of China and India that have together a population of 2.5 billions of inhabitants extended dramatically, despite the huge income concentration that took place in both countries, the purchasing power of a vast part of the world population.

This meaningful change can be considered when one realizes the observation made, a long time ago by Kuznets (1973), that historically no country that entered in modern industrialization had a size similar to China, India or even Indonesia.

In 1979, in his Nobel award lecture Arthur Lewis (1980) discussed the feasibility for less industrialized countries to form an autonomous pole of growth. This possibility would change the historical circumstance shaped by the strong dependency of peripheral countries on industrialized countries economic growth. According to him,

> "If a sufficient number of LDCs reach self-sustaining growth, we are into a new world. For this will mean that instead of trade determining the rate of growth of LDC production, it will be the growth of LDC production that determines LDC trade, and internal forces that will determine the rate of growth of production". (pg 562)

This change on the growth pattern was not possible in many peripheral countries, only in the countries with more diversified economic structure this possibility could occur – Lewis particularly considered positively the case of India- but the main point was that this change was not supposed to occur simultaneously in all less developed countries. The necessary condition was that some leader country had an autonomous growth and high demand from other developing exporters. These countries could base their growth on internal markets. This change would be greater if the countries were

"… specially linked to each other by preferential trade and currency arrangements, one may speak of the creation of a new center consisting of former peripheral nations that have built a new engine of growth together" (idem, pg 562)

And it would be more necessary if the developed countries refused to yield to developing countries a higher share in their internal market.

During the 1980s and 1990s this change started in Asia where the regional division of labor and the China's rise enhanced the regional economic growth but could not reach other regions and countries. The external debt crisis and the unilateral trade and financial opening adopted in many countries reinforced the dependency of these economies to the industrialized markets and aborted the domestic sources of economic growth. Therefore, the changes that took place in the last decade, made this transformation more feasible.

As observed by Singh,

" The significance of China's and India's catch up is its much greater impact on the world economy in view of the sheer size of these countries' populations and GDP. The two countries jointly constitute about 20 percent of the world's output and could therefore comprise in principle a new engine of world economic growth. The two countries already provide a sizable share of world demand for consumer goods as well as commodities and capital goods." Op. cit pg 6)

In this particular analysis on South-South trade, Lewis did not consider the problem of the terms of trade between developed and developing countries. But in its known theory of barter terms of trade (Lewis, 1977) the most important point of his analysis was the tendency to the terms of trade remain low for the less developed countries[2] until

"... the labor reservoirs of India and China might be exhausted" (1977:pg 19)

In his theory the main difference in terms of trade between North and South was not between industrial and primary exports as in the classical Prebisch-Singer thesis but between the country/region level of productivity and wages in production of food and on the surplus labor. The low wages paid in India and China kept down the prices of the commodities produced directly or affected indirectly by them, irrespective of its material composition, and in this circumstance only the rise of productivity and wages

[2] For a discussion of this point see Serrano (2010)

in Chinese and Indian agriculture could disrupt this tendency of terms of trade to deteriorate.

In his analysis the typical South production was the agriculture crops and mineral raw material and Lewis could not observe the emergence of a new situation that was nevertheless fully considered in his analysis: the fast industrialization and absorption of vast reserves of surplus labor in China in a process of vast urbanization brought a pronounced decline in prices of labor intensive industrial goods. This brought about a substantial reversion in terms of trade favoring tropical agriculture, ore and other primary products[3].

The ingress of millions of Chinese and Indians in the industrial labor force with hourly wages less than 10% in current dollars the effective level paid in the United States (BLS, 2011) caused a substantial and persistent drop in the prices of all non-skilled labor intensive products. As observed by Glyn (2006),

"What makes China (and India) fundamentally different is the presence of vast reserves of labour previously isolated from the world economy by economic backwardness and autarky.Total employment in China is estimated at around 750 million, or about one and a half times that of the whole of the OECD and nearly ten times the combined employment of Japan and Korea. About one half of China's employment is still in agriculture. This represents an enormous potential labour supply. Estimates of the numbers who may be pulled out of agriculture, where their incomes are very low, into industrial and service jobs in the towns range as high as 150^300 million depending on the time scale. These, together with tens of millions of urban underemployed, constitute a reserve army of labour of quite unprecedented magnitude" (p.14)

Considering the wide distance between productivity in modern export industry and the average wage paid, there was in both countries a pronounced fall in the labor share, an outcome with important consequences for these countries and for the world economy. The influence of this change over the income distribution in industrialized countries aroused important controversies (Singh, 2007). For the US, the formation of global commodities chains and the offshoring of industrial activities in a context of declining unionization of labor force was an important factor underlining the observed fall in the wage share and for the sluggish growth in industrial wages in US (Milberg,

[3] "The changes in the terms of trade lead to significant gains or losses in the real income of trading countries. In fact, between 2004 and 2006, developing manufactures exporters suffered losses from changes in their terms of trade equivalent to 1.2 per cent of GDP per year. On the other hand, oil exporters and exporters of mining products obtained windfall revenues from improving terms of trade, exceeding 7 and 5 per cent of GDP per year, respectively. In some cases, however, the windfall profits accruing from terms of trade changes have been offset by increased profit remittances by transnational corporations (TNCs) involved in the exploitation of natural resources. In those cases, gross national income (GNI) has grown less than gross domestic income. This can be observed, in particular, for a number of mineral exporters between 2004 and 2006." (Unctad, 2008: 17)

2006, Serrano, 2008). The persistence of this gap between productivity and wages in China- much higher than that occurred during the rise of the first generation of Asian NIEs countries – and the low bargain power in US had a great impact in the world industrial prices and on non-skilled labor.

The other coin of the Chinese and Indian rise was its effect on primary commodities. The peculiarity of the Chinese rise (enlarged with India) in comparison with the previous Japanese and Korean rise is the magnitude of its imports of raw material specially petroleum, soybeans, ores and concentrates of non-ferrous base metals and iron ore. (UNCTAD, 2005). This rise induced by the Chinese urbanization contributed to the formation since 2003 of high level of commodity prices – for some analysts this change generated a "commodity hyper –cycle" (Cuddington J. ; Jerrett, D. 2008) - widening the impact of Chinese rise to others developing countries. The hypotheses associated with this interpretation have some analytical problems but the current situation does not depend on their likelihood[4]. As observed by Serrano (2008), the novelty of this price cycle was its low influence on world inflation. The decline of the union and labor power in developed countries and the strong competition from China and other low wage producers were the main reason for this change contributing for the perseverance of the high commodities prices and for the tendency in the barter terms of trade between industrial and primary products[5]. For some metals, mainly exported by Africa and Latin America countries, the influence of China on their rising prices was significant (Jenkins, 2011).

The South-South trade grew very fast. Different from the period examined by Lewis, one great driver of this trade between developing countries was the multinational

[4] As observed by Unctad (2008) However, even though the nominal price indices for all non-fuel commodity groups have been above their declining long-term trend in real terms in recent years, most real commodity prices – resulting from deflating nominal prices by the export unit value of manufactured goods of developed countries – are still far below their levels of the 1970s and early 1980s. Only the real prices for mineral, ores and metals group and for crude petroleum have exceeded those levels. In particular, the nominal price of crude petroleum has reached historical record highs, hitting the $100 per barrel level early in January 2008"

[5] "Over the past few years, rising energy prices and in particular rising oil prices have had a strong influence on consumer prices. The price and wage impact of a rise in oil prices is often separated into first- and second round effects. Regarding first-round effects, consumer prices normally rise (or stop falling) immediately after petroleum products become more expensive because the elasticity of demand is relatively low at most stages of the production chain. This leads to a loss in real income of labour. Second-round effects occur when workers try to compensate their real income loss by bargaining for higher nominal wages. They are more likely to succeed in obtaining nominal wage increases the larger the impact of a rise in oil prices on the overall price level. However, if workers successfully bargain for higher nominal wages in order to compensate for real income losses, unit labour costs will rise." (UNCTAD, 2008:27). The novelty was the workers incapacity to bargain for higher wages.

corporations creating vast trade chains of vertical trade and offshoring processes. This happened mainly in Asia, but besides this intra-firm trade, the trade between countries and national companies grew as well. Particularly important in this trade was the flows of primary exports from large countries as India, Russia, Brazil and South Africa to China and the exports of Chinese industrial goods to these countries.

Although India has a positive role as an autonomous force in world economy, is China with a GDP bigger than the sum of Brazil, India and Russia and with much bigger trade flows (WTO, 2010) that exerts major influence as engine of growth. With a big surplus in currency balance in its relation with US, China can define autonomously the parameters of its economic growth.

III

In Chinese industrial production there are three autonomous dimensions that must be distinguished. The first is the "intra-manufacture vertical specialization" (Feenstra, R., C.; Wei, S-J. (2009); the second is the "inter industry vertical specialization" and the third is the "size of domestic market". The base of the first process was the great spurt of Asian direct investment and offshoring operations in China (Medeiros, 2006). The coastal area in China became the assembly center of the Asian industrial commodity chain vertically integrated. This dimension responds for the bulk of the Chinese exports of consumer electronic goods and machinery, and for the great part of its imports of parts and components of these goods. This chain explains the huge expansion of China trade. Considering the fast growth of Chinese exports – an average of 20% in the last years- some authors (Akyus, 2010) consider that exports led the Chinese growth. However, as argued in Medeiros ( 2010a) not only the value added in this production is very low but also the huge investment that pushes Chinese growth is led by the heavy industry less dependent on exports.

The present growth cycle in China is geared by the huge urbanization process and by heavy industry associated to this demand. The steel production is its main driver. This investment cycle explains the second dimension above observed. The "inter industry vertical specialization" is caused by the great Chinese dependency of external supply of raw material, food and energy. From being self-sufficiency China became a huge importer of iron ore, soy and oil. The third dimension of Chinese industrial production is the "size of domestic market". This big market is the basis for the comprehensive industrial policy, import substitution and developing of indigenous technology that is changing the composition of production and exports.

Before explore the different impacts on developing countries associated with the evolution of this structure, let's consider briefly the Chinese and other Asian development strategy followed in the last decades.

IV

The emergence of new challenges to the strategies of industrialization and development resulting from new information and telecommunications technologies (ITT) and from the formation of global and regional production chains placed new demands on national industrial policies. The construction of a new transport and communications infrastructure, the dissemination of new technologies and the pursuit of specialization in specific production segments became part of the ordinary agenda of national projects of industrial up-grading. As a later comer China entered in the world industrial export markets trough the possibilities opened by modularized production, outsourcing technologies and high imports of parts and components. This strategy was very different from the path followed by Japan and South Korea based on local chain of industrial suppliers and technological catch up (Amsden, 2001) and had huge implications for Asian trade.

The rise of China as the center of Asian manufacture production – the first dimension above considered- had a strong and positive effect on the main Asian suppliers of intermediary goods, mainly Japan and South Korea, but also Singapore, Malaysia, Thailand in a triangular trade toward the final consumer market in US and other industrialized goods. Thus, for some Asian countries, the Chinese rise exerted a high demand for exports with relative high skill content (UNCTAD, 2005, Klinger, 2009) and positive learning effect. Besides a growth inducement from the net export to China, some developing Asian countries had higher skill content in this South-South trade than the composition observed in the exports to Northern countries.

But this positive effect induced by Chinese imports was in some countries counterbalanced by a growing competition for export market of these countries[6].

China combined this export strategy with an overall development strategy of structural change and industrialization. This was induced by public investment in infra-structure- the main inducer of overall growth productivity – high investment in heavy

[6] Considering the competitiveness of the integrated industrial production, Chinese exports dislocated many competitors in large markets mainly in US. For instance, Indonesia, Filipinas or other developing countries like Brazil and México have lost market share to China's exports (Saslavsky, D. ; Rozemberg; R. 2009)

industry with a selective industrial policy focused in several strategic industries, mainly those relate with national security in an expansionist macroeconomics. This included a low rate of interest, an expansionist fiscal policy and the maintenance of a competitive rate of exchange. The subordination of finance and enterprises to the development goals defined by State was achieved trough the maintenance of political centralization, and by the leadership state enterprises in the "commanding heights" of the economy[7].

In India, a much more fragmented society, different strategy took place. Despite the process of trade liberalization occurred in the nineties some of old regulations instruments were also preserved including capital controls favoring a less ambitious but nevertheless active industrial policy. As observed by Singh (2007) the internal liberalization was not followed by an external liberalization. A competitive exchange rate prevailed. Although the most dynamic export activity was in the service sector led by offshore activities in US and industrialized countries, the main source of Indian growth was the internal demand. The expansion of Indian industry was crucial for her high performance.

Given the Chinese position in the global commodity chain, the industrial exports are much bigger than her contribution in the global manufacture value added that is still led by the US. Although, as we can see in Table 3, mainly in China but in India as well, the manufacture value added growth rate in the last decade far exceeded the growth observed in industrialized countries and the rate prevailed in other developing countries. But only in China the manufacture growth rate exceeded the rate of non manufacturing GDP. As observed by Kaldor (1996), the rate of GDP growth would be faster the greater the excess of industrial growth relative to GDP growth. This role of the manufacture, a particular sector, as "engine of growth" (Palma, 2004) could not be exaggerated in explaining Chinese superior growth performance[8].

Thus despite the different model followed in China, there is a great similarity with other East Asian country during their early rise: in last decade what distinguished China was a strong connection between a combined growing share of MVA in the GDP with growing investment share and growing share of manufacture exports. In no Latin America country this "engine of high growth" was present. In Mexico, the only country

[7] One peculiar fact of the State leadership is that only in the last years a Chinese capitalist class emerged with some autonomy from the State exercising a moderate influence on Communist Party.

[8] Kaldor based his observation on manufacture leadership on external economies associated to this sector. This same stylized fact can be alternatively explained considering the higher effect that the expansion of demand exerts on industrial production through new demands on capital goods. I thank Franklin Serrano for this remark.

that had a substantial rise in the share of manufacturing exports has a declining share in the MVA and low investment rate. (UNCTAD, 2003)

**Table 3: International Comparison of Industrial Performance**

| | MVA Average Annual Real Growth Rate (in %) (1) | | Non-manufacturing GDP Growth Rate (in %) (2) | | (1)-(2)* |
|---|---|---|---|---|---|
| | 2000-2005 | 2005-2009 | 2000-2005 | 2005-2009 | 2005-2009 |
| Argentina | 3.75 | 5.16 | 1.83 | 6.71 | -1.55 |
| Brazil | 3.21 | 1.82 | 2.77 | 4.32 | -2.5 |
| China | 11.11 | 12.25 | 8.90 | 9.92 | 2.33 |
| India | 6.88 | 6.55 | 6.97 | 7.79 | -1.24 |
| Indonesia | 5.16 | 4.55 | 4.58 | 6.15 | -1.6 |
| Mexico | 0.05 | -1.11 | 2.25 | 1.54 | -2.64 |
| Russian Federation | 5.93 | -0.26 | 6.31 | 4.77 | -5.03 |
| South Africa | 2.49 | 1.82 | 4.14 | 3.34 | -1.52 |
| Developing Countries (exc.China) | 4.32 | 3.83 | 4.09 | 5.03 | -1.2 |
| Industrialized Countries | 1.87 | -0.03 | 2.21 | 1.09 | -1.12 |

*excess of MVA growth rate over non manufacturing GDP growth

Source: UNIDO International Comparisons of Industrial Performance

The MVA growth in China became higher in the last years in response to some new strategies. In fact, despite its success in export promotion, the low added value appropriated by Chinese firms in the producer commodity chain, stimulated new strategies as established since the 11 Five Year Plan, based on increasing the proximity of production to proprietary activities and activities related to product innovation (Liu, 2005).

In China (as early in Korea and Taiwan), a "second phase of catching-up" (Chang, 2006), based on innovation and the construction of proprietary national technologies formed the basic challenge of industrial up-grading. If the process of growth was hitherto led by structural change and industrialization, the new challenges are to upward the productive structure to activities more intense in skilled labor. Greatest efforts on R&D in order to create new physical and human capabilities are needed.

But before consider this strategy and its implication on trade; let's consider briefly the other dimension of Chinese growth.

## V

If the United States are the "cyclical center" for the Chinese exports vertically integrated, is the growth of its internal market that became in the last years the new cyclical center for the producers of raw material. It is this second dimension of the Chinese industrial production (enlarged by the Indian demand) that induced the exports of natural resources geographically dispersed all over the world.

China became the principal engine of growth of these exports mainly during the period 2003-2008 when the prices of raw material reached a very high level, but this tendency still continues. Russia and Central Asia countries, Indonesia, Philippines and India, Argentine, Brazil, Chile, Peru in South America, Angola, Sudan and South Africa had a very fast growth in their exports to China. For the other members of BRICS countries, China became a huge export market. Along with trade, the Chinese investments in transport and infrastructure in these exporters' countries grew very fast. No less spectacular was the Chinese exports of machines and electronic goods in these markets.

Due to the demand effect caused by this increase in exports in small economies in Africa or Latin America, or its positive effect on balance of payment in larger economies like Brazil and Russia, an in general for exporter of primary commodities the rise of Chinese imports though its effect on prices and on demand became a central drive for the expansion of the natural resources exporters.

In this commodity cycle, the composition of exports from primary export countries to China became less sophisticated and more concentrated in raw material than the composition of their exports to North countries (Klinger, 2009). For some more industrialized countries besides this specialization – a classical complementarity- a growing rivalry with Chinese exports in third markets took place.

The manufacture competitiveness fell down in these countries but in this time, at least in some of them, other expansionary measure was taken supporting higher employment and higher wages.

Let's consider this pattern of growth in the last decade.

## VI

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The main effect of above transformation in terms of trade and demand for raw material for several peripheral countries was the possibility to achieve higher rates of

growth and simultaneously a surplus in current account balance in a remarkable contrast with the other decades. Besides this structural fact, since the Asian crisis the influence of the IMF and World Bank on economic policy in developing countries declined opening more space for pragmatic policies. In addition to these changes on trade the last decade brought about also a strong expansion of international liquidity and FDI mainly in export activities. In fact, during 2004-2007 the capital flows for developing countries were high and as observed, different from the nineties, many natural resource exporter countries built large international reserves and sovereign funds. In this new circumstance of higher growth in many countries, mainly in those that remained financially opened, the real exchange rate (RER) appreciated as historically happened in other financial and commodities boom (Ffrench Davis, 2010; Medeiros 2011b)[9].

In South America after the evident failure of the Washington Consensus strategies, various nationalist movements spread from Patagonia to Andes countries as a backlash from these radical liberal experiments. In Russia as well a similar situation occurred reverting the tragic 1990s' decade enabling the new Government to follow a strategy based on natural resource nationalism building significant sovereign reserves[10]. Countries as diverse as Argentina, Brazil or Russia could achieve a higher growth pushed by the internal markets released from the external constraints that blocked the use of industrial capacity along the nineties.

In South American countries, one positive outcome of this new condition was the reduction of the high level of inequality. The expansion of formal employment,

[9] Argentina avoided this tendency but not Brazil or Russia. For them the high prices of exports coupled with capital inflows brought about substantial exchange rate appreciation. "By contrast, both Brazil and the Russian Federation have recently experienced a strong appreciation of their REER. The fact that primary commodities are of key importance for both these countries' exports and the sizeable improvement of their current-account position since 2002 indicates that strong foreign exchange inflows associated with the current commodity price boom may have had adverse effects on these countries' international price competitiveness (an effect known as "Dutch disease"). However, part of the recent appreciation of the REER in these countries probably also stems from financial speculation. Floating exchange rates and high capital mobility can move the nominal and real exchange rates in the wrong direction from a balance-of-payments point of view, thereby temporarily hindering the usual adjustment process of current account imbalances". (Unctad, 2008: 31)

[10] With the end of radical strategy of liberalism of the 1990s, Russia resumed under Putin government national developmental strategy based, however, on natural resources. Thanks to its geopolitical position and greater state control over oil and natural gas exports, transfers to other sectors of the economy increased substantially; however, they did not result in greater export diversification. "Old-fashioned" policies, that is, policies based on direct state intervention, have been thriving not only, and above all, in the industrial exports of the "military industrial complex," but also in the aeronautics field. However, so far the results were very limited (Medeiros, 2011a).

minimum wages and cash transferences to poor families were the main causes (ECLAC, 2010).

Thus, various countries began constructing new development strategies situated between neo-developmental strategy based on "a second catching-up phase" and a passive and integrationist strategy that prevailed in the nineties.

Without the particular conditions that support a "high road" that we observed in some Asian countries the State in this third way found less power to induce structural change[11]. The major private economic groups became strongly associate to international commodity chains in asymmetrical regional agreements (as in case of Mexico or Central America countries) or assumed strong positions in non tradable activities or have dislocated to sectors based on natural resources and its support activities in services and construction (Brazil or Russia).

In these and other developing countries there are large segments of national manufacture industry not connected to global chains that have resisted and survived the unilateral liberalization of the nineties. In the last decade higher domestic demand was matched by larger industrial production and in some countries as Argentina the manufacturing added value increased substantially. But despite this, the forward and backward linkages became weaker since the 1990s and given the tendency of the RER to appreciate (Bresser, 2010), the import penetration strongly increased[12]. The industrial sector lost and has less power to exert a leadership in economic policy; on the other hand the commodity dependency has enlarged. The fear of a second round of deindustrialization, after the downgrade shifted occurred in the nineties, became real.

Thus, despite the fact that today there are more possibilities for many larger developing countries to sustain higher economic growth led by internal markets (and by export markets in the case of small countries) and even to spread it to larger social groups trough income transferences and higher wages, an overall strategy aimed to exploit this opportunity to faster structural change technological upgrading is missing.

VII

Industrial policy in China assumes today that the world economy is facing an accelerated pace of technological development and the capacity to acquire and develop technological application is of the utmost necessity.

[11] The economic and social cohesiveness for this developmental and technological catch-up road was missing. (Medeiros, 2011c)

[12] For a structural analysis of the different sources of des-industrialization and the problem of "Dutch Disease" in developing countries and particularly in Latin America see Palma (2004)

In fact, structural change and industrial up grading in China are very fast. Today they are led by the expansion of internal market and by a comprehensive industrial strategy towards indigenous technology in microelectronic, biotechnology, green technology and new materials. These transformations contain important challenges and dilemmas for others developed and developing countries

The rise in wage rate that has been occurring in the last years is no longer limited to the formal sector of the economy. Some authors (Cai, F.; Wang, M, 2010) consider that China is crossing a "turning point" on surplus labor reserves[13]. This rise and the progressive appreciation in exchange rate will push its labor costs at the same time that other low wage competitors as Vietnam are getting market share (Yang, T. V.; Chen, V; Monarch, R 2010). This evolution will reinforce the present tendency of industrial re-localization towards the countryside and at the same time will change China´ position in the division of labor[14].

The debate about the "middle income trap" is common in modern China. The broad idea is that once the labor surplus is fully absorbed the labor market becomes tighter and the increase in wages undermines the competitiveness in low skill labor activities. In these circumstances if the specialization does not move upwards towards more skilled activities the country looses its position on industrial exports, the penetration of imports is higher and consequently the country looses its capacity to sustain higher wages. Although the exchange rate can compensate this trap, this solution is only temporary. Liberalized trade and new technologies have shortened the period of time in which countries can grow with low costs and low skills. One suggestive example can be the industry of semiconductors in Malaysia stuck ate some downstream stages of production based on assembly activities or Thailand that lost position in labor intensive manufacture goods to new low-wage competitors such as China, Indonesia, Philippines and Vietnam (Doner, 2009)

Although there are many Asian examples of the "middle income trap" the most conspicuous examples in Chinese literature are not the Asian but the Latin American countries economies with a labor cost very much higher than China and India. The

[13] This change is normally associated with the "exhaustion" of surplus labor in agriculture. This thesis can not be plainly assumed given the segmentation of labor markets – the *hukou* system in China- and the influence of institutions regulating labor wages. Despite of that the idea of a structural change on the wage setting can be considered based on urbanization and on policies on minimum wages and labor standards that are now in place in China.

[14] Although there is an undisputable tendency for a higher wages the cost of labor in China grows slower due to the productivity growth but in many new competitors this same modern technology can be combined with lower wages.

exports of both countries are closing some opportunities for (not) so low wage countries[15].

The priorities consecrated in the 12 Five-Year Plan (China Government, 2011) were centered on two different areas, on indigenous technology and on enlargement and diffusion of development through public investment and higher wages. The main purpose in the former area is to faster the speed of technical change by Chinese enterprises and Chinese brands in new areas in microelectronic, biotechnology, and green energy considered strategic areas for the technological catch-up.

How these transformations will impact the pattern of the relationship between China and others developing countries we have considered?

## VII

The impact of Chinese industrial up-grading efforts centered on indigenous technology and domestic inputs on South-South trade will be stronger on suppliers of intermediary goods that will face more competition on Chinese markets. The competition in new technological applications with industrialized countries will be strong in their markets and in the access to the other developing countries markets.

The second priority, the diffusion of technical progress and the enlargement of internal market will maintain the Chinese demand for raw material in a high level despite the likelihood reduction in the unitary coefficients.

The exporters of resource-based goods will be challenged by a circumstance of high prices of the basic raw materials – the present situation- high rents and investment in export infrastructure[16]. This circumstance can stay for a considerable time ahead and keep the possibilities for a high export growth rate and overall economic growth. It will be higher in the countries that exert control of the rent-seeking financial flows and on RER level. If the external finance does not interrupt the present circumstance of growth

[15] "The entry of China and India into the world economy turned many developing countries from the low-wage competitors of advanced countries to the high-wage competitors of China and India. Countries such as Peru, El Salvador, Mexico, and South Africa can no longer develop by producing generic low-wage goods and services for the global marketplace that the World Bank/International Monetary Fund model of development envisaged that they would do. The backlash against this orthodox form of globalization in Latin America reflects this failure" Freeman, 2008:3

[16] Although, as argued by Unctad (2008), "…Supply may eventually react to the higher prices, while developed countries retain a dominant part of demand, and China and India may move to less energy and commodity-intensive types of growth. Therefore, developing countries and the international community should avoid complacency on the current commodity bonanza and seize this opportunity to increase investment in infrastructure, education and productive capacity in order to achieve higher productivity and greater diversification, industrialization and structural change. Pg 15

the main developmental challenge is twofold. The first is to enlarge the current process of capital accumulation and channeled public and private investment in infrastructure and other activities of large external economies to spurt productivity in overall economy and create modern employment. The second is how to induce a process of structural change and industrial up-grading. By this we mean the enlargement of the complementarities between domestic activities, export diversification for higher value' activities and import substitution decreasing the high dependency and propensity to import.

Although these challenges are connected and for the larger developing countries the first one is a necessary condition to successfully overcome the second challenge, we argue here that this is not enough since the institutions and incentives required for this are different. There are powerful technological and institutional obstacles to change this pattern of specialization. For the least developed countries these barriers are pervasive and there are few options besides the specialized exports of raw material. For more developed countries, human and physical infrastructure allow much more possibilities for the development and implement of new technological applications but the barriers derived from the structure of economic incentives and group of interests for a necessary industrial policy are great.

In many Latin America countries, the industrialization of natural resources as an alternative industrial strategy has been in discussion. The broad idea is that due to the high technological gap created by new technologies and low wages in labor intensive manufacture (textile, garment or electronic goods) located in China and Asian countries, Latin America countries faced hard conditions and obstacles to compete in these industries. Nevertheless, as argued by Perez (2010) there are some possibilities to add more value to their production. The idea is to introduce more intensively general purpose technology (basically ITT and biotechnology) and adapt it to the processing industry (steel, paper, plastic, oil) widening the demands for R&D and skilled labor (ECLAC, 2008). The idea is to up-grading some products introducing new and adapted varieties of resource-base industry. These industries could be the new "engine of growth" (Perez, 20010). Given the fact that the processing industry is not labor intensive, this strategy has to be coupled with a strategy of investment towards social and economic activities of high employment (health, education, and housing) in an "integrated dual model".

This discussion also occurs in Brazil instigated by the recent discover of oil in deep waters (Pre-Salt) and the protagonist rule played by PETROBRAS, a state owned company. As a matter of fact partially this strategy has being in place in Brazil since the second half of last decade. Thus besides oil, the incorporation of new lands for crop production using new seeds, the huge expansion of all extractive and some downstream industries were the main "export machine" and the public and private investments in non tradable sectors coupled with household consumption the main "engine of overall growth".

The problem of this strategy is that although the dynamic export sectors can have important industrial and modern services linkages as in the case of Brazilian high tech and capital-intensive oil extraction, the role of these sectors as engine of growth depends not only of their size (that is normally small and limited in the long run) but on other economic and industrial policies. Without these policies (on exchange rate, national content, indigenous technology, e.g.) hardly the positive effects of these exports will foster technological capacities of domestic producers. The export of primary activities in countries with low level of sector integration with the downstream industries and low efforts in P&D channel its basic inducement to large multinational firms in new varieties of crops and mineral production with few impacts on national economy. In fact, in "most commodity chains –particularly agriculture-based- are increasingly becoming "buyer-driven" with downstream player such as distributors and retailers capturing the highest share of value-added and controlling the flow of technology and knowledge along the chain." (Farfan, 2005: 17)[17]. But as a matter of fact, for a middle income country few other resource-base activities have the size (that compares to oil) or a diversified industry (as still id in Brazil) to induce new opportunities for real change in export specialization, that is, exports that do not depend on the prices of natural resources.

The dilemma is that if the natural resource export can be a driver for some technological application and base for industrialization (like the exploit of oil in deep

[17] In general the idea to replace industrialization strategy for a upgrading movement in commodity global chain is hardly a feasible alternative. As put by Milberg (2006) "The endogenous asymmetry of these supply chains is an obstacle to such industrial upgrading. ..Supplier firms face enormous competitive pressure from other suppliers to keep costs low, keep quality consistently high, and to keep delivering on schedule or risk losing the contract. They must bare much of the risk of carrying inventory in the face of volatile demand. They are sometimes limited in the technologies they can adapt. And they are limited in moving to the top of the supply chain by the expensive and successful branding strategies of the lead firms".

waters, or rural wireless communication, or organic foods, or GM crops), hardly its spill over on other activities can be a growth driver unless their effects on prices, rents and business incentives were neutralized and unless there is an wider alternative and strategy that can capture some benefit from it[18]. But the political cohesiveness and institutions to circumvent the veto from vested interests to a more active and discretionary industrial policy is very difficult to achieve. While there are possibilities to follow the current way based on the expansion of commodity exports and non tradable activities, a pattern of growth that was benefited by a kind of a "rebound effect" from the previous crisis and stagnation, there is no pressure to change the current pattern of growth and trade specialization. As historically happens in these countries only external crisis has the capacity to disrupt the prevailing regime of growth and open political space for other development strategy required to change the present pattern of specialization and commodity dependency. Given the speed of modern technological progress in few countries and the time taken by the developing countries that follow this "easy road" to change their economic structures and institutions, technological catch-up is not a frequent process but a rare national phenomenon normally guided by political decisions.

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[18] It is important to consider that in Thailand and Malaysia, two resource rich Asian countries, the process of diversification and industrialization that occurred in the last decades was not based on resources. The exports of metals, timber crops were however, important sources for investments in labor intensive industry. Although both countries had a fast growth led by this industry presently they face the "middle income trap" we mentioned above.

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