

DEVELOPMENT OF THE LATIN AMERICAN METAL-MECHANICAL INDUSTRY



Germano Mendes De Paula, Dr.

Outline

- 1. General concepts**
- 2. Empirical evidences for Latin America**
- 3. Additional risks from 12th 5-Year Chinese Development Plan**
- 4. Conclusions and recommendations**

Coordinators of the national studies

- **Argentina: Bernardo Kosacoff**
- **Brazil: Regis Bonelli**
- **Colombia: Juan Manuel Lesmes Patino**
- **Mexico: Ernesto Cervera**

General concepts

De-industrialization, primarization and Dutch disease

- **The de-industrialization (or, to be more precise, the de-manufacturing) can be associated with a higher proportion of primary products (“primarization”) of the export mix**
 - ✓ This can be a symptom of the so-called “Dutch disease”: the de-industrialization was caused by the exchange rate appreciation, as an outcome of discovery of scarce natural resources in a given country or region
 - ✓ The Dutch disease provokes side effects, because the exchange rate appreciation impacts a set of factors, fostering substantial money inflows and a spiral of prices, wages and costs

De-industrialization, primarization and Dutch disease

- **The de-industrialization is not necessarily associated with primarization of exports**
 - ✓ The industrial share concerning employment and added value can diminish as a consequence of losing competitiveness in comparison with other countries (regressive process)
 - ✓ The industrial share regarding employment and added value can drop because of re-localization towards other nations of labor intense or lower added value manufacturing activities (progressive process). The de-industrialization is not bad *per se*, after the country is already rich.

Metal-mechanical's value chain

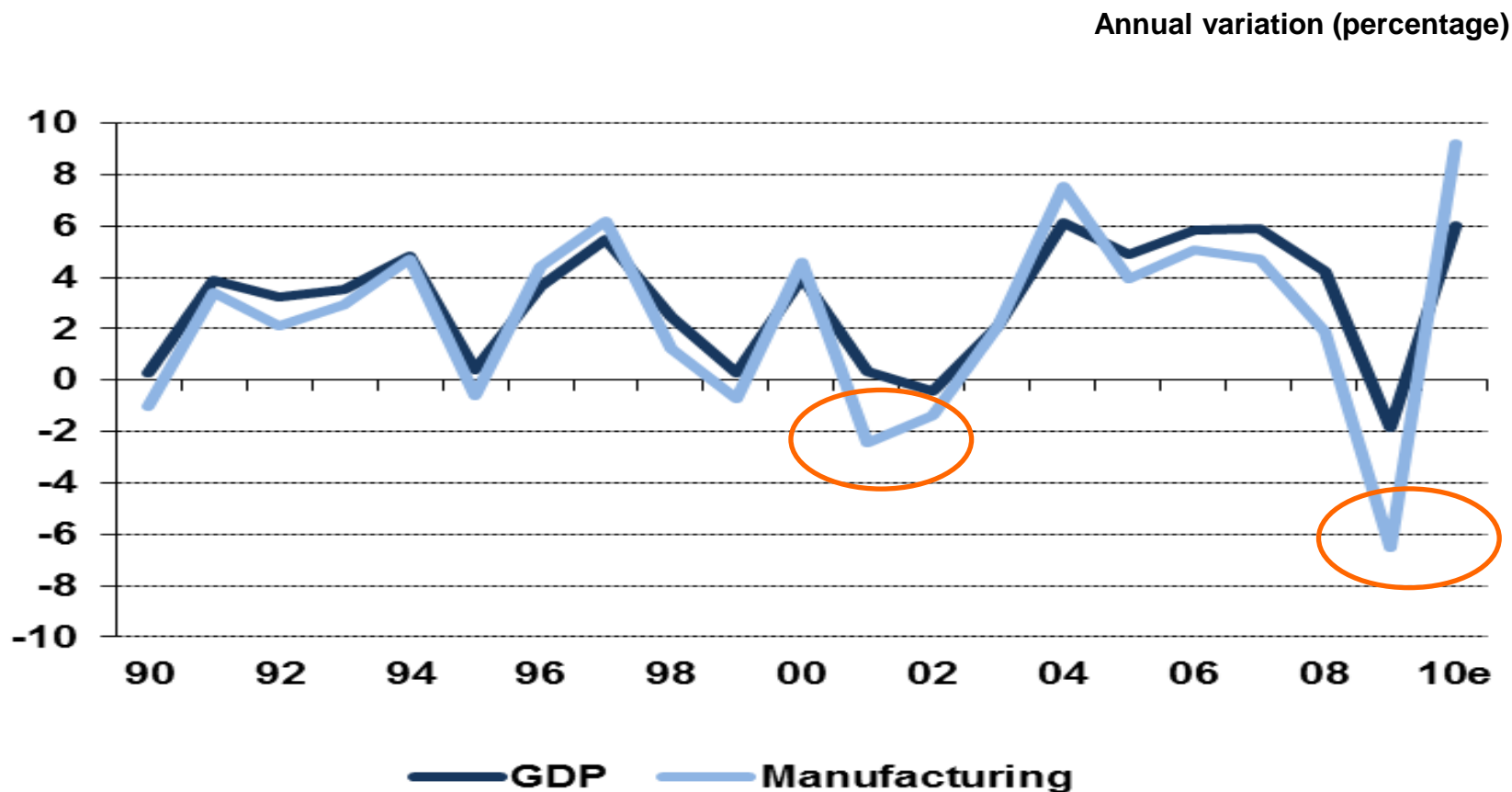
- **Metal-mechanical, as defined in our report, excludes steel production as well as its primary processed goods. Summing up, this value chain consists of four large industrial activities:**
 - ✓ Automobile industry and transport material in general
 - ✓ Sectors linked to construction and infrastructure
 - ✓ Investments carried by various sectors, which require the purchase of machineries and equipment
 - ✓ The fabrication of goods to attend the final costumer, typically the durable consumer goods

The economical and strategic importance of the metal-mechanical's value chain

- **Various experiences of development have stressed the relevance of integrating value chains, based on high degree of industrialization and transformation of primary goods, in which the metallurgical production have played a prominent and strategic role**
- **This value chain generates, more than others, substantial synergies, taking advantage of dynamic economies of scale (in which the learning processes are particular important), underpinning higher productivity and income level. The outcome is higher wages and profits and also growing research and development efforts**

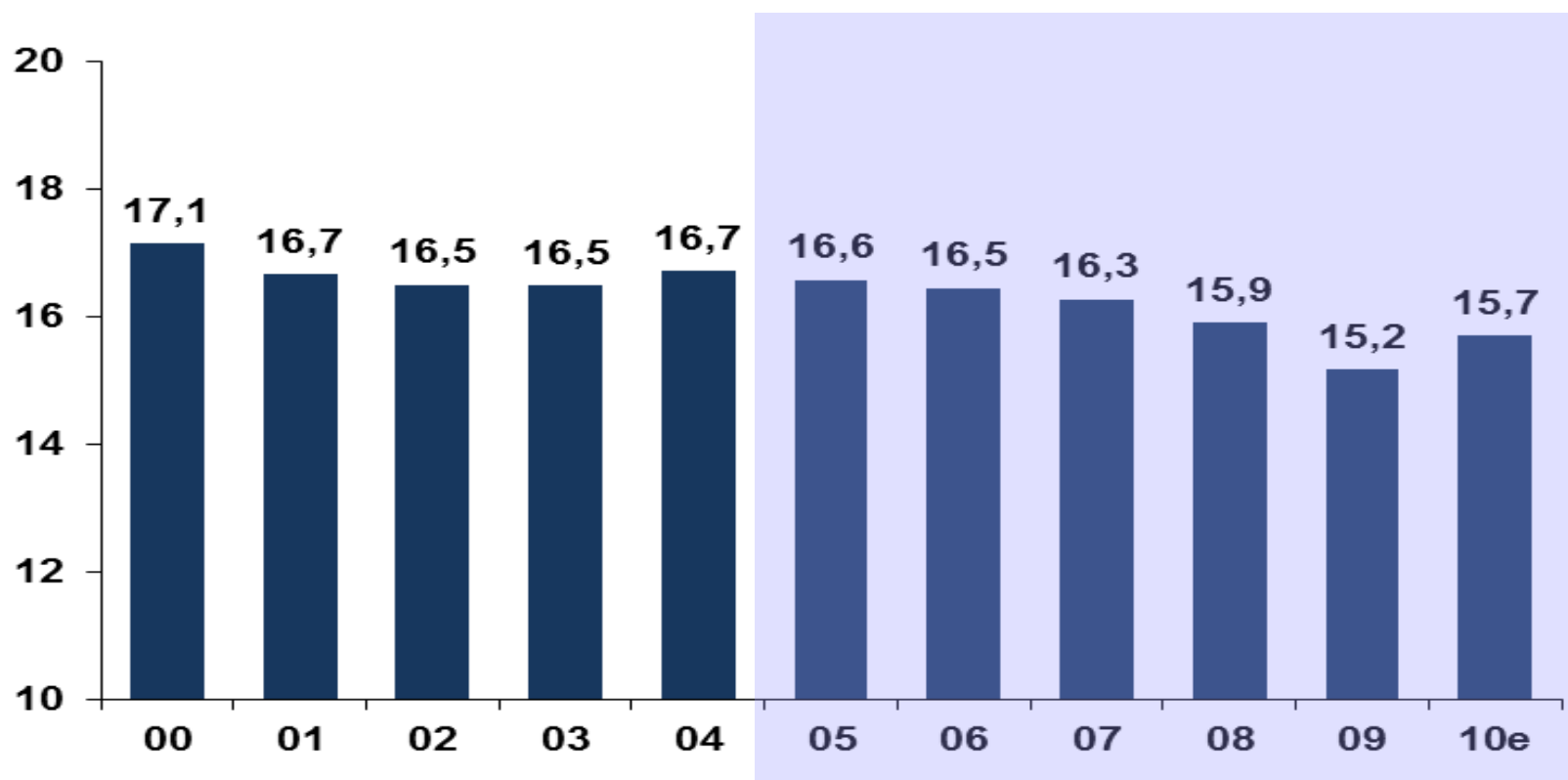
Empirical evidences for Latin America

The manufacturing performance in Latin America is relatively weak during crisis



The de-manufacturing in Latin America has intensified in the last years, harming the generation of high quality jobs

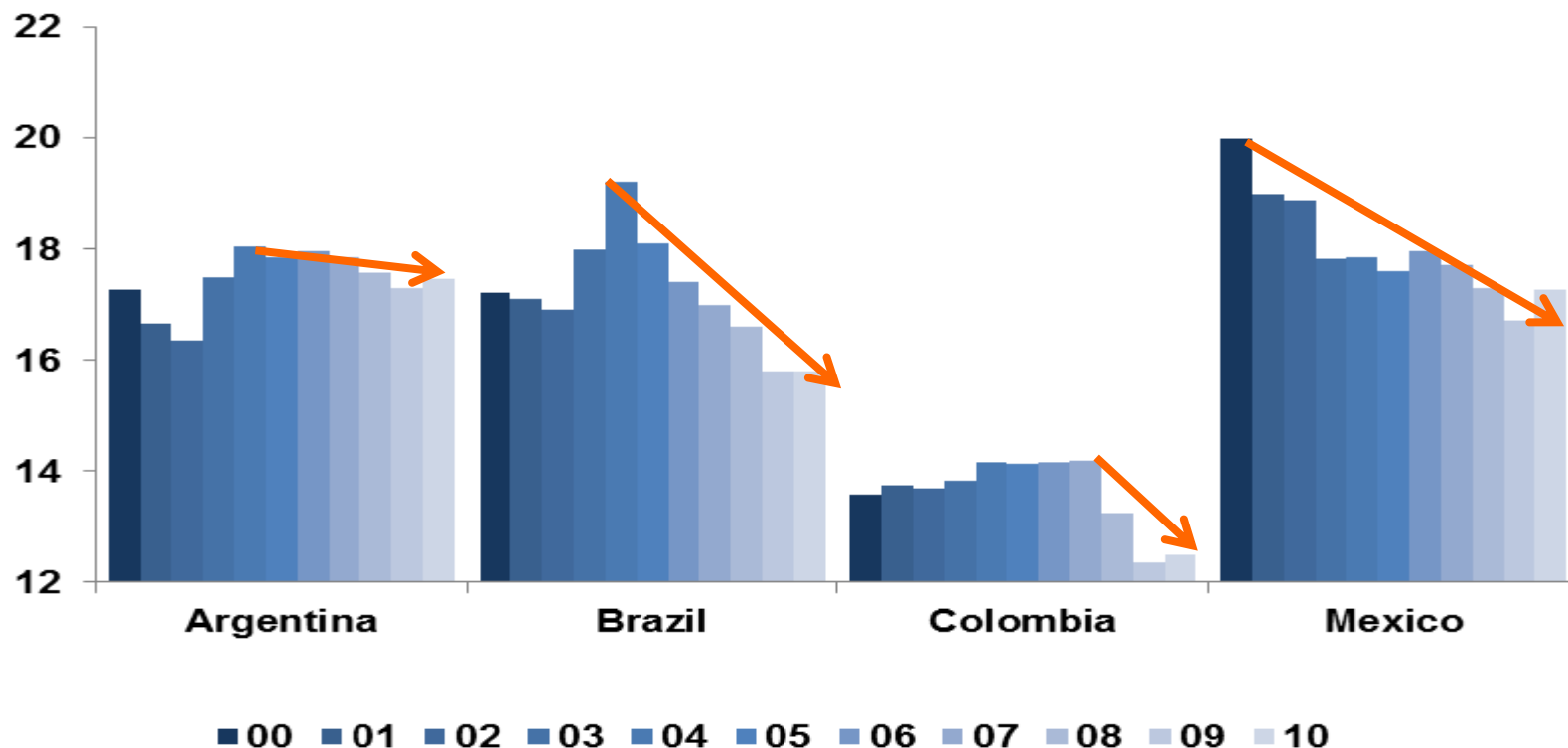
Share of manufacturing in the value added (percentage)



Source: ECLAC, own estimation

In Mexico, the manufacturing lost almost three percentage points in relation to GDP during last decade

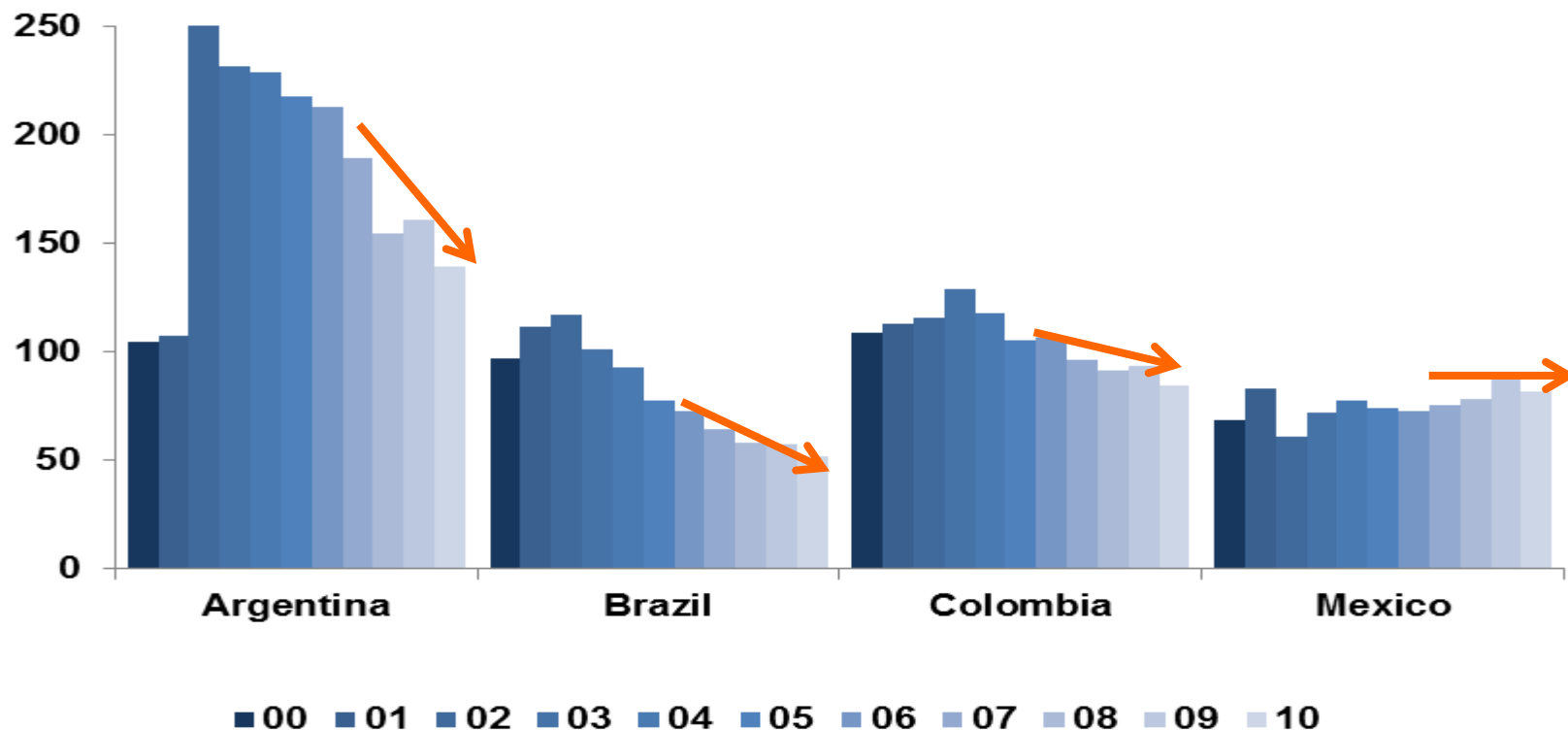
Share of manufacturing in the value added (percentage)



Source: National Institute of Statistics

Brazil and Colombia have accumulated strong exchange rate appreciation since 2005 in comparison with US dollar

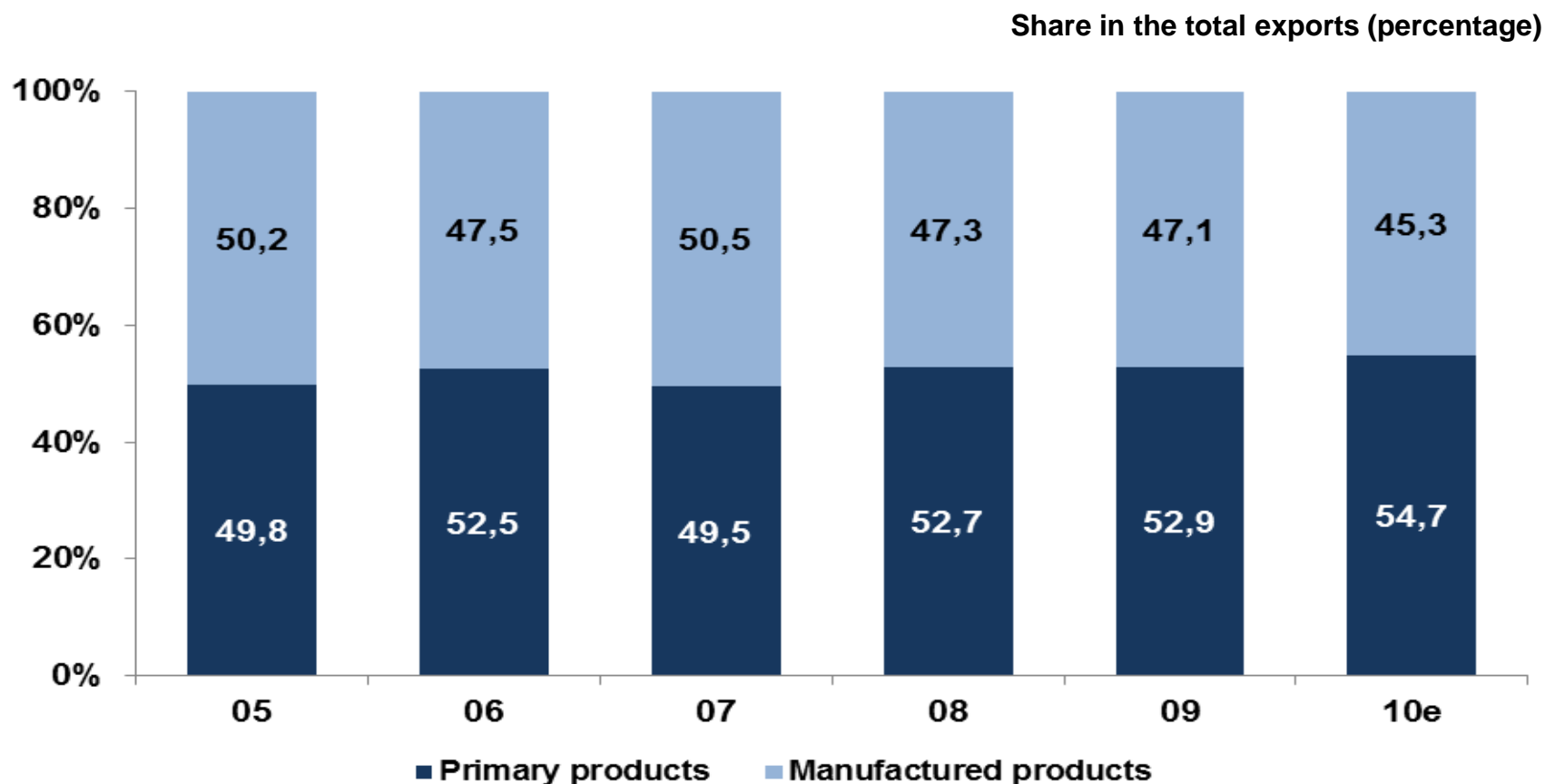
Real exchange rate (1999=100)



Source: own elaboration based on various sources.

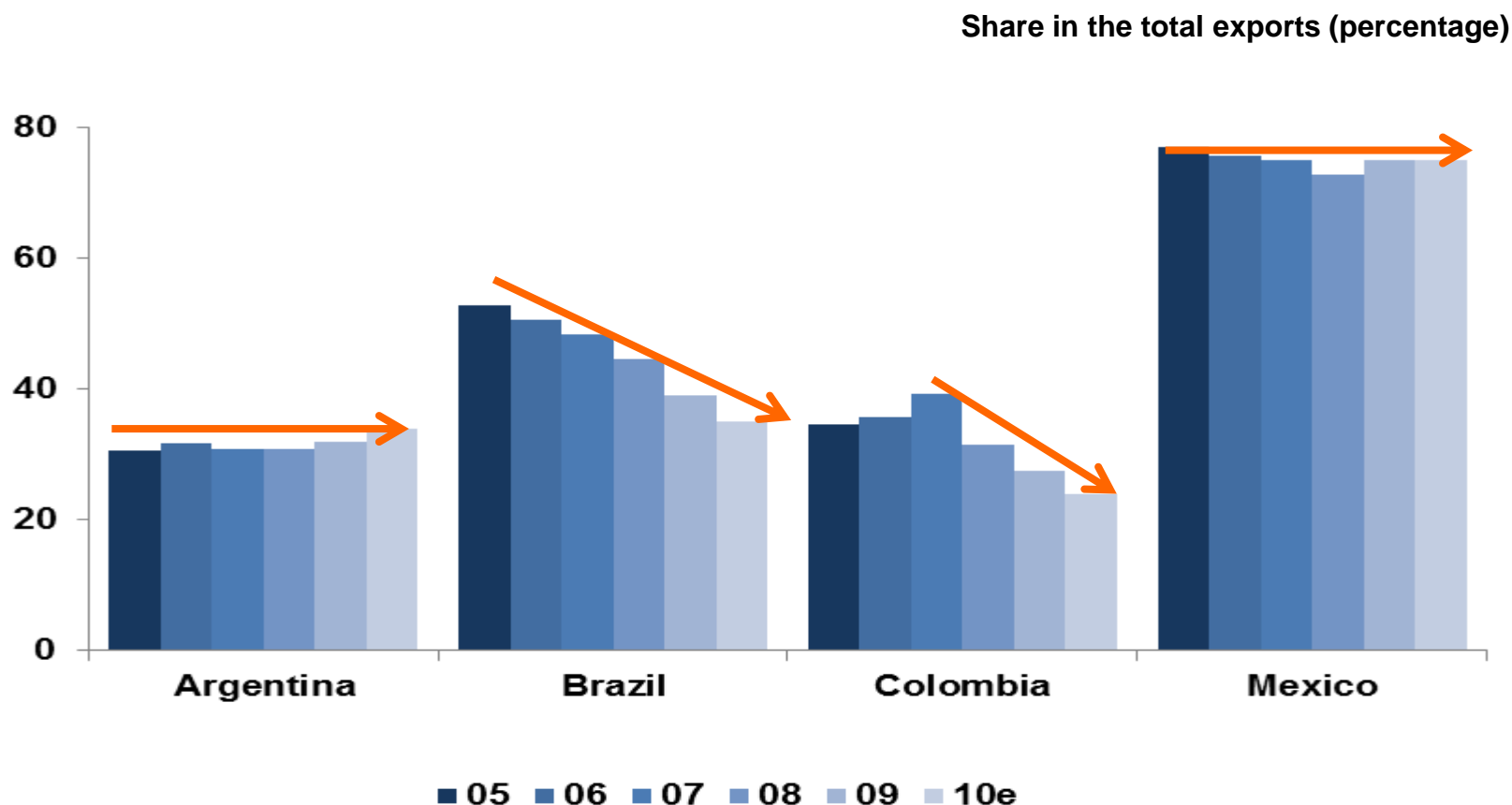
Note: Argentina and México (1999 = 100), Brazil and Colombia (January 1999 = 100). For Colombia, it was utilized the concept of real effective exchange rate

The primary products have been enlarging its share in terms of Latin American exports



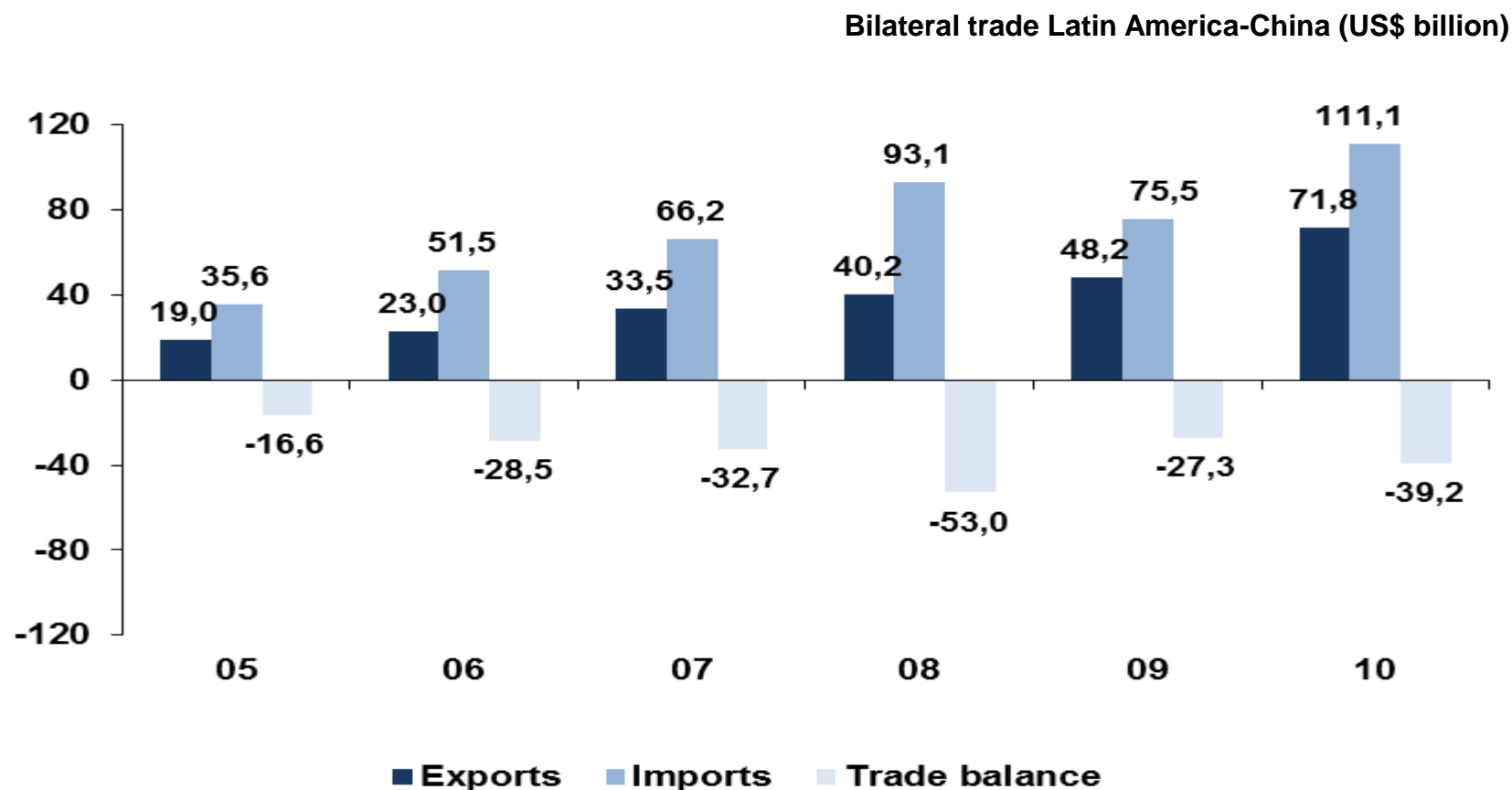
Source: ECLAC, own estimation

In Brazil and Colombia, it is clearly verified the primarization of exports



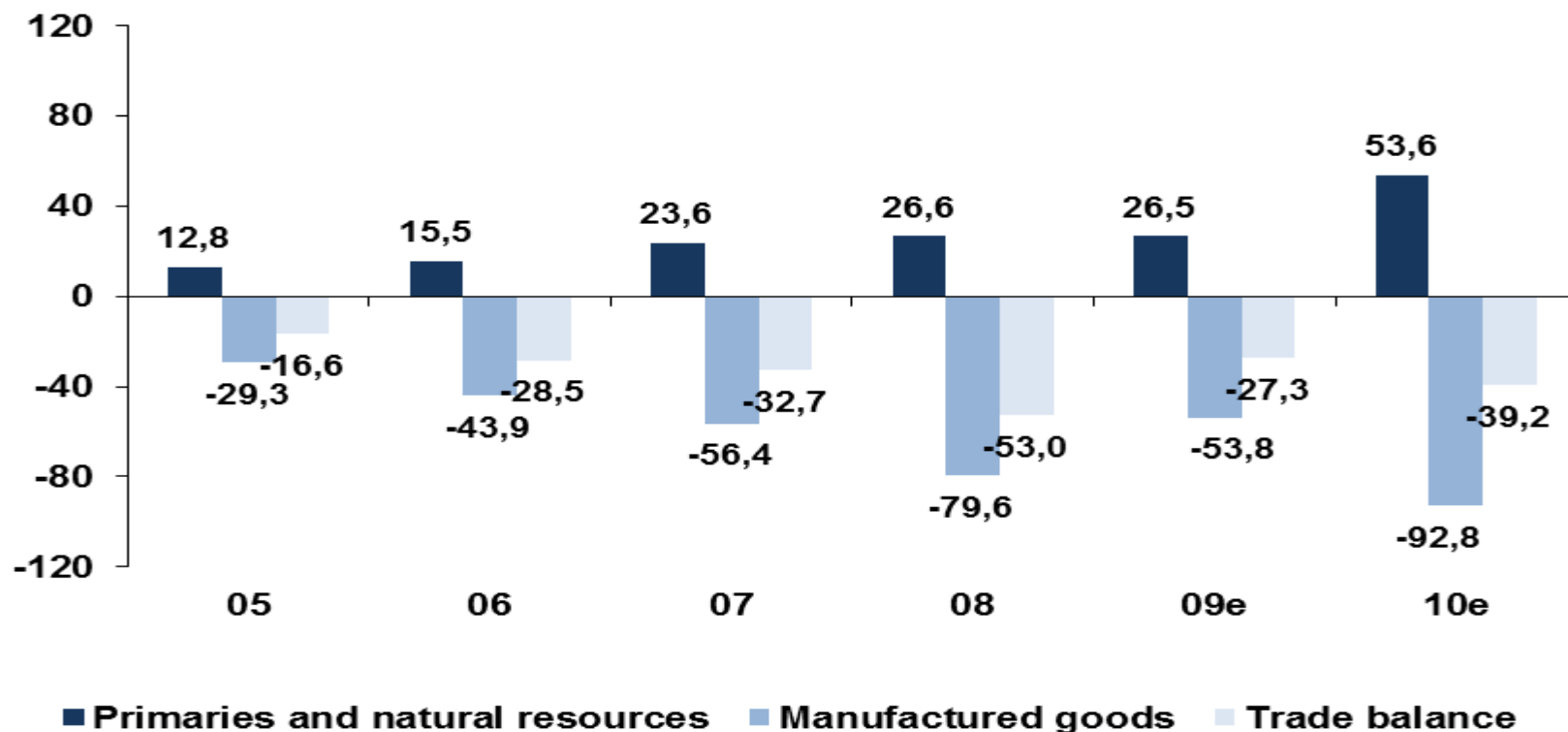
Source: ECLAC, own estimation

Latin American has experienced large trade balance deficits with China



Latin America exports primary products and natural resources based goods and imports manufactured products from China

Net exports from Latin America to China (US\$ billion)



Source: ECLAC, own estimation. Primary products include intense natural resources and manufactured goods.

Regarding metal-mechanical value chain, the flow is unidirectional. China exported almost 30 times more for the four selected countries

Bilateral trade Latin America-China of metal-mechanical products, 2005-2010 (US\$ billion)



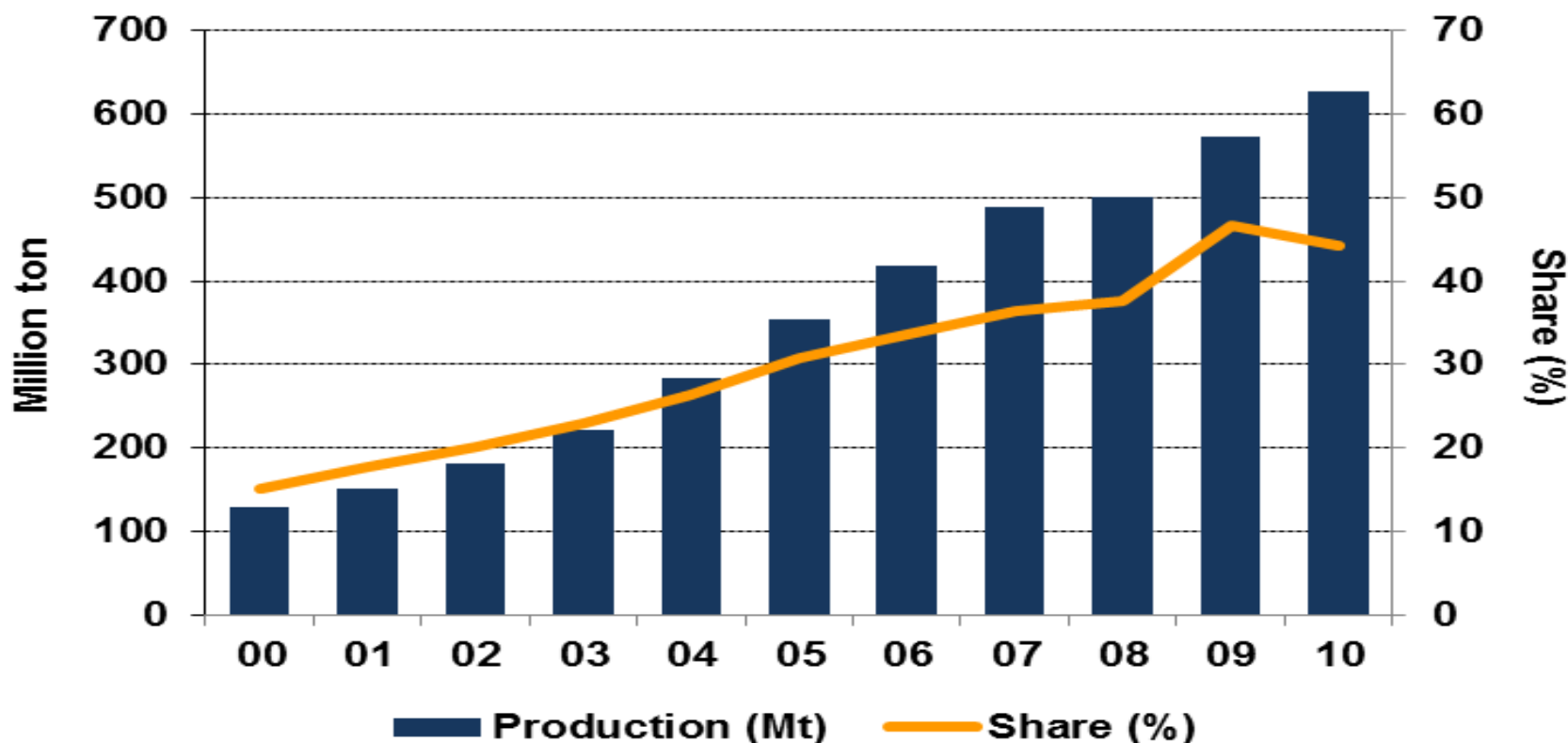
Source: ADIMRA, Funcex, ALADI, World Trade Atlas

Note: Latin America = Argentina, Brazil, Colombia and Mexico.

Additional risks from 12th 5-Year Chinese Development Plan

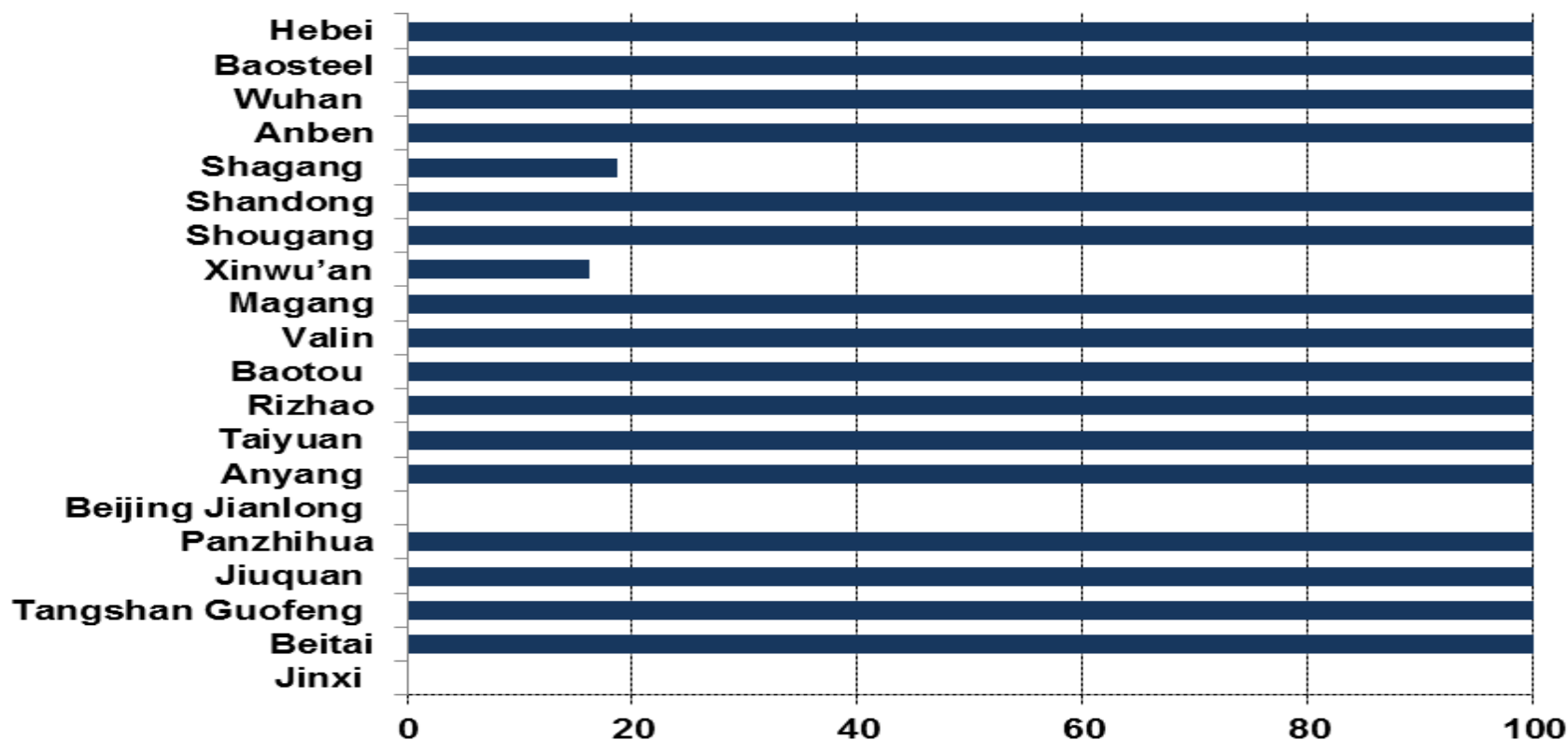
The Chinese share in the world steel production increased from 31% to 44% in the period 2005-2010

Chinese crude steel production (million ton) and its share in the global steel industry (percentage)



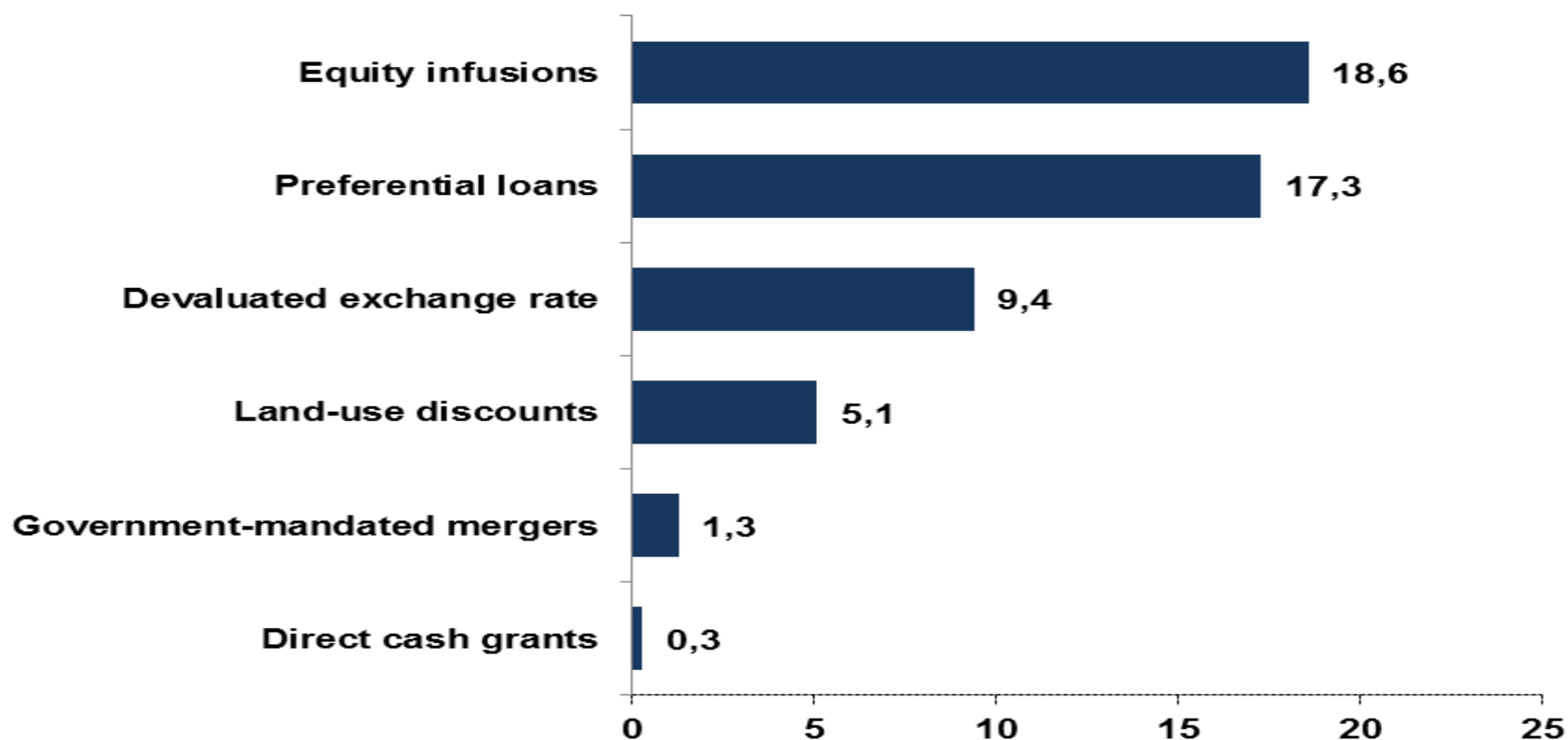
Among the Top 20 Chinese steel companies, 16 are 100% SOEs, 2 have minority governmental shareholders and 2 are totally private-owned

Governmental share in the Chinese Top 20 steelmakers in 2009 (percentage)



At least US\$ 52 billion of subsidies have been given to the Chinese steelmakers up to 2007

Estimation of subsidies earned by Chinese steel companies (US\$ billion)

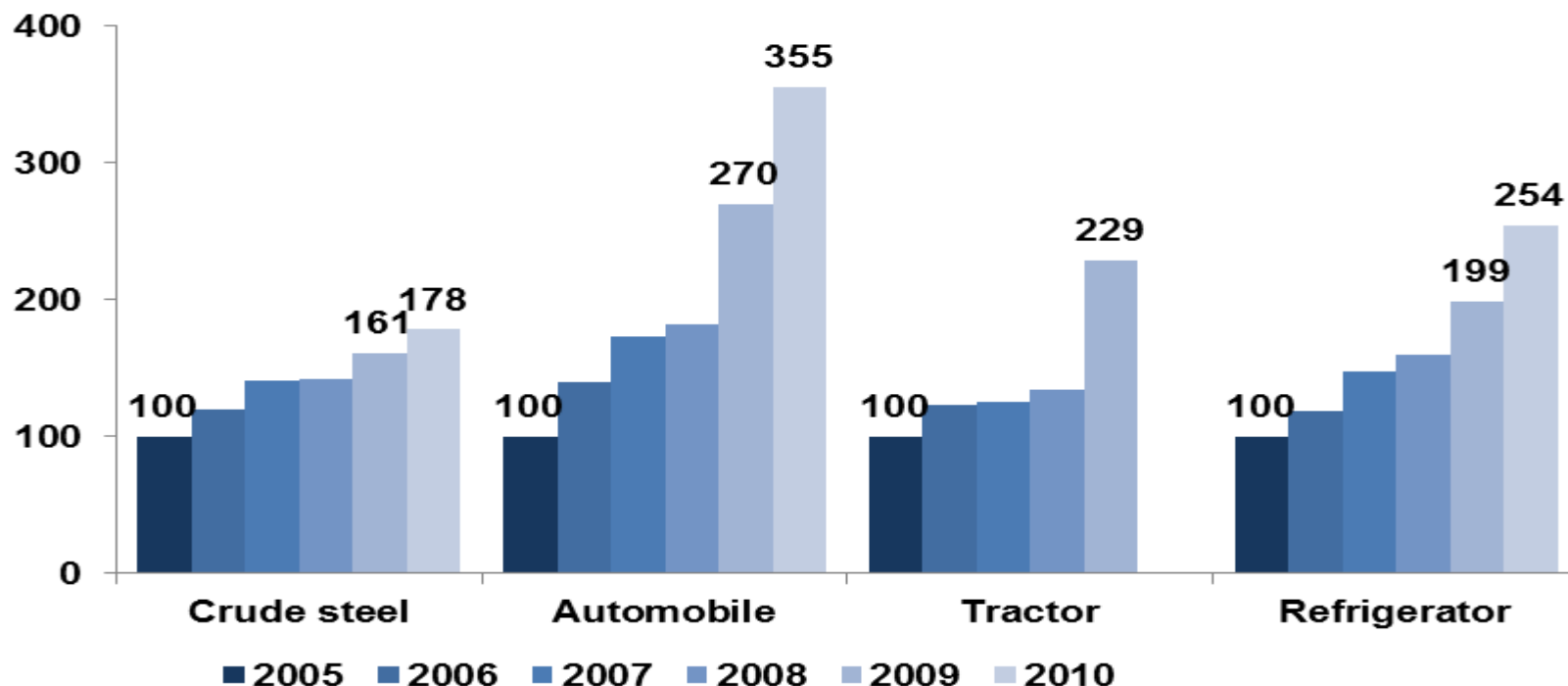


The indirect exports of steel is a goal determined by the Chinese government at least since the Steel Industrial Policy 2005

- **Article 20: “Export of highly energy consuming and pollution generating primary products and processed products such as coke, ferroalloy, pig iron, ferrous scrap, steel ingot, semi-finished steel product (billet) will be controlled, while refund of export taxes on these products will be reduced in rate or revoked”.**
- **Article 27: “Steelmaking and metallurgical equipment manufacturing companies are encouraged to export advanced technologies and metallurgical equipment by means of industrial trade or technological trade. Such exports shall be encouraged with bank loans etc.”**

The fabrication of important metal-mechanical products have amplified more intensively rather than the crude steel

Annual production in China (2005 = 100)



Other goal of the same Industrial Policy was to invest in natural resources abroad

- **Article 30: “International alliances aiming at mining resources abroad will be strengthened based on a mutually complementary, mutually beneficial and ‘win-win’ principles. Supports will be extended to such major qualified entrepreneurs as will propose to establish production and supply bases overseas for iron ore, chromium ore, manganese ore, nickel ore, ferrous scrap and coking coal by way of 100% ownership venture, joint venture, or resource acquisition. Enterprises operating in coastal regions that need key raw materials and supplementary materials including mineral ores and coking coal will be encouraged to procure them on the overseas markets”.**

Conclusions and recommendations

De-manufacturing and primarization of exports in Latin America

- The de-manufacturing is a key feature of the Latin American economies. The exchange rate appreciation is quite important to understand the Argentine, Brazilian and Colombian experiences, but the de-manufacturing is also verified other situations.
- In Brazil and Colombia, the primarization of exports is a strong trend. At least in the case of Brazil, this trajectory was not only a consequence of commodities price escalation, but also because the quantum of manufactured products decreased.
- According to Mr. Fernando Pimentel, Brazilian Ministry of Industry, Commerce and Trade (August 30th, 2011):

“If the government let the market acts alone, the South America will become the farm and the mine of the world, while the Asia, the plant of the world”.

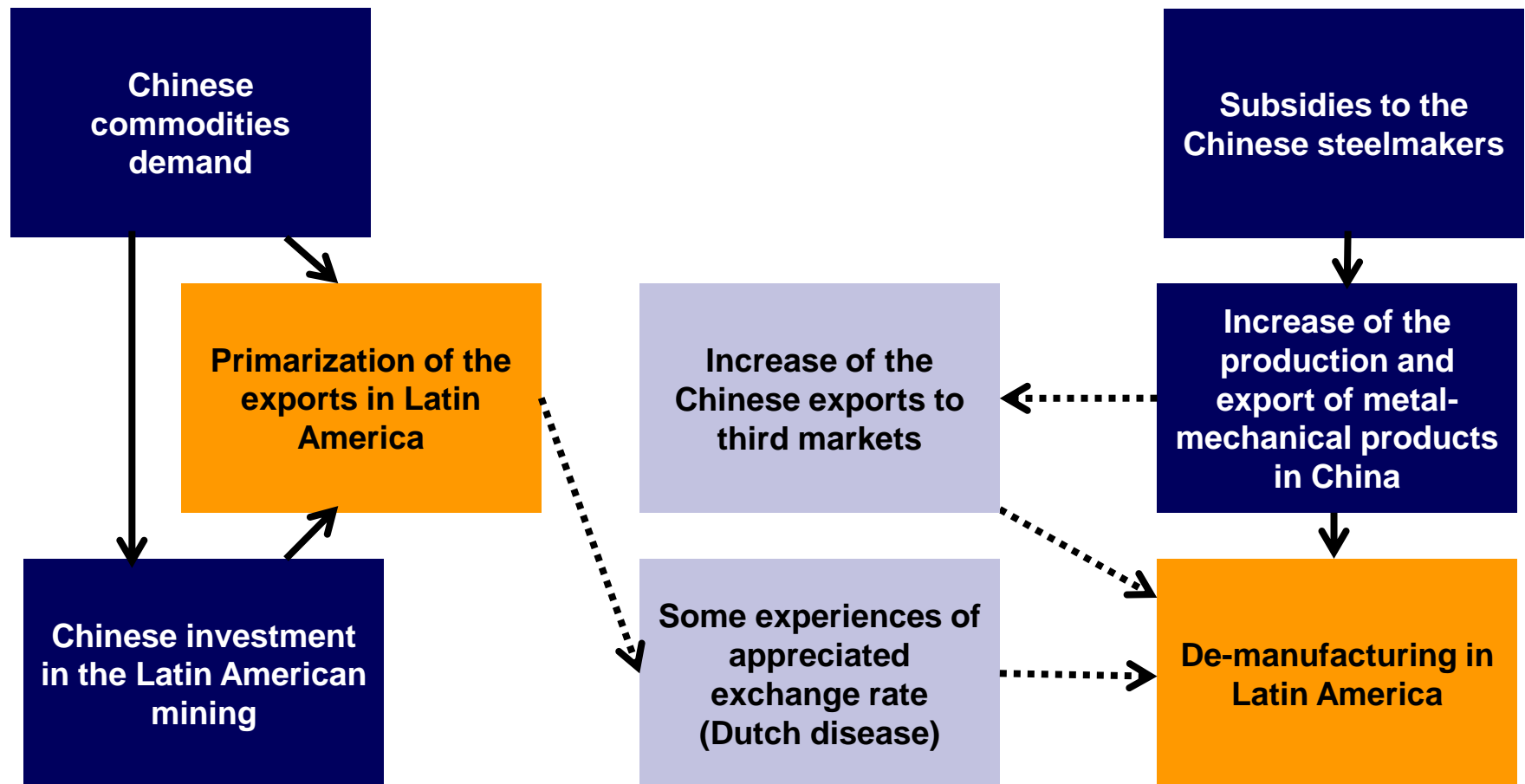
The Chinese investments in Latin America reinforce the exports of primary goods

- **The improvement of Chinese foreign direct investment in Latin America is obviously motivated by resource-seeking.**
- **The main goal – explicitly shown in the Steel Industrial Policy 2005 and 12th 5-Year Development Plan – is to increase the control of mineral resources abroad. However, in some transactions, the governments determined some (implicit or explicit) restrictions.**
- **If the Chinese investments in Latin America goes ahead, the tendency towards the primarization of exports will be more intense.**

The Chinese threat to the Latin American metal-mechanical value chain

- **The metal-mechanical products were responsible for 71% of the imports from China, for the four Latin American selected countries, in 2010.**
- **The asymmetry concerning the trade balance for metal-mechanical products will amplify in the coming years, as an outcome of the goal determined by Chinese Industrial Policy, underpinned by subsidies received by its steelmakers.**
- **Considering that the fabrication of product with high content of steel has been growing faster than the crude steel output, it is wise to expect the enlargement of the Chinese exports of manufactured goods, in general, and to Latin America, in particular.**

The impacts of China for the primarization of exports and the de-manufacturing in Latin America



What does Latin American manufacturing urgently need?

- **Positive agenda towards competitiveness, innovation, value added products, high quality jobs**
- **Selective trade defense measures**

Thank you!
Muchas Gracias!
Obrigado!

germano@ufu.br
gmpaula@uol.com.br