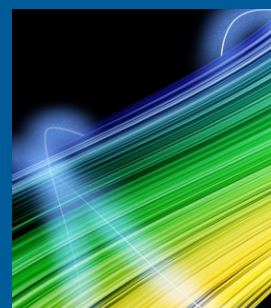


BULLETIN
OF
INDUSTRIAL CONJUNCTURE

MARCH 2012





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The Brazilian Agency for Industrial Development – ABDI

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INTRODUCTION

The Brazilian Agency of Industrial Development (*Agência Brasileira de Desenvolvimento Industrial, ABDI*), an organization under the Ministry of Development, Industry and Foreign Trade (*Ministério do Desenvolvimento, Indústria e Comércio Exterior, MDIC*), was established in December 2004 with the mission to promote the implementation of Industrial Policy in Brazil, in line with Foreign Trade and Science and Technology policies (Law 8/11/2004). The agency's main focus is on programs and projects established by Brazilian industrial policy. The agency is also part of the Executive Group of *Brasil Maior* Plan, with the responsibility for the coordination and consolidation of its programs and actions, as well as its follow-up.

In order to monitor the evolution of Brazilian industry, the ABDI develops a set of studies and research of industrial intelligence that guides their work and assists the Brazilian government in defining and developing activities within the industrial policy. Among these studies is the Industrial Conjunction Bulletin which provides information and analysis on the evolution of Brazilian industry, highlighting problems faced and opportunities for accelerating their development.

The Industrial Conjunction Bulletin, published quarterly, has been developed in partnership with the Center of Industrial and Technological Economics (*Núcleo de Economia Industrial e Tecnologia, NEIT*) of the State University of Campinas Economics Department. This edition of the Bulletin points out, primarily, the deceleration in the growth of the Brazilian economy and industrial activity in 2011. The slowdown in growth of the Gross Domestic Product (GDP) last year took place not only because of a fall in the growth rate in all components of domestic demand, but also in exports, that reflected, among other factors, uncertainty and slow recovery in external demand and maintenance of the national currency's appreciation. The slowdown in economic expansion and the main

components of aggregate demand (gross fixed capital formation and household consumption) were accompanied by a loss of momentum for the service and industrial sectors. The industrial sector also ended up showing contraction in the last quarter of 2011 compared to same period in 2010.

The quarterly growth rate of gross fixed capital formation was historically above that of household consumption, as noted during the recovery period after the global economic crisis. However, in the third and fourth quarter of 2011, when comparing values of the same period of 2010, the roles were reversed and the growth rate of household consumption exceeded that of gross capital formation. There was a reduction in the investment rate in the fourth quarter, which acted as a warning sign to the favorable performance of the economy and industry in Brazil in the current year. The aforementioned trends have contributed to the lower growth in industrial employment in 2011, including generating a net loss of jobs in Brazilian industry in the last quarter of the year.

The second part of this Bulletin highlights some important changes in the direct flow of investments received and held by Brazil, as well as remittances of profits and dividends. The case of investments highlights the importance of intra-firm loans in total direct investment, in particular those made by Brazilian companies. Moreover, it emphasizes the increase in profits sent abroad by subsidiaries located here. Thus, policies aimed at encouraging investments with the objective of increasing production, and avoiding investments attracted by purely financial reasons that have a negative impact on exchange rates, are fundamental. Likewise, policies to stimulate the transformation of the largest possible share of profits generated within the country into productive investments that contribute to the resumption of economic growth, as well as to structural changes aimed at raising the level of competitiveness of Brazilian industry, are important.

The Brazilian Agency of Industrial Development

BRAZILIAN ECONOMY AND INDUSTRY IN THE FOURTH QUARTER OF 2011

The Brazilian economy experienced modest growth of 2.7% in 2011, which contrasted with its robust performance of 2010 (7.5%). National Accounts System (*Sistema de Contas Nacionais, SCN/IBGE*) data show that the Brazilian Gross Domestic Product (GDP) at market prices increased only 1.4% in the fourth quarter of 2011 compared to the same period in 2010 (Table 1). This confirmed the slowdown in

the growth of Brazilian production in contrast to the increase of 4.2% in the first quarter, 3.3% in the second quarter and 2.1% in the third quarter of 2011, always compared to the same periods of 2010 (Bulletin of Industrial Conjecture, December 2011). The data does show, however, slight recovery of Brazilian production in the fourth quarter compared to the third quarter of 2011 (0.3%) with seasonal adjustments.

Table 1 - GDP Variation Rate by Activities and Components of Demand (%)

	Accumulated rate in the year		Quarterly rate versus the same quarter of previous year		Quarterly rate versus previous quarter (*)	
	2010	2011	3Q 2011	4Q 2011	3Q 2011	4Q 2011
Agriculture and Stock Raising	6.3	3.9	6.9	8.4	2.5	0.9
Industry	10.4	1.6	1.0	(0.4)	(1.1)	(0.5)
Mining	13.6	3.2	2.7	3.8	-	-
Manufacturing	10.1	0.1	(0.6)	(3.1)	-	-
Civil Construction	11.6	3.6	3.8	3.1	-	-
Electricity, Gas and Water Supply	8.1	3.8	4.0	3.0	-	-
Services	5.5	2.7	2.0	1.4	(0.2)	0.6
GDP at basic prices	6.9	2.5	2.0	1.2	(0.1)	0.1
GDP at market prices	7.5	2.7	2.1	1.4	(0.1)	0.3
Household consumption expenditure	6.9	4.1	2.8	2.1	(0.1)	1.1
Government consumption expenditure	4.2	1.9	1.2	1.3	(0.8)	0.4
Gross fixed capital formation	21.3	4.7	2.5	2.0	(0.4)	0.2
Goods and services exports	11.5	4.5	4.1	3.7	1.9	1.8
Goods and services imports (-)	35.8	9.7	5.8	6.4	(0.5)	2.6

(*) Seasonally adjusted. Note: Data includes the revision of the historical series executed and distributed by the IBGE. There may be, therefore, differences in relation to the data analyzed in previous editions of the Industrial Conjecture Bulletin. Data from the 4th quarter of 2011 are preliminary.

Source: National Accounts System (SCN)/IBGE.

The performance of the Brazilian industry has become a significant source of concern of the government and industrial business community in Brazil, notably with regard to the difficulty to recover the dynamism observed in the period prior to the international financial crisis. Brazilian industry showed

reduced growth of 1.6% in 2011, partly as a result of the stagnation of the manufacturing industry (0.1%) in the same period (Table 1). Agriculture and stock raising and services sectors more effectively participated in the growth of Brazilian production last year, presenting an increase of 3.9% and 2.7%,

respectively. This data contrasts with those presented in 2010, when the industrial sector led the growth of Brazilian production.

This data confirmed the fall in the growth rate of Brazilian industry over the four quarters of 2011 compared to same periods in 2010 (Table 1). There was a contraction of Brazilian industry in the fourth quarter of 2011 in relation to the same period last year (-0.4%), which was significantly influenced by the negative results of the manufacturing industry (-3.1%) that managed to overshadow the growth of other industrial activities, such as mining (3.8%) and civil construction (3.1%) in the same quarter. The performance of the services sector also showed a trend of decreasing growth in recent quarters, with an increase of 1.4% in the fourth quarter of 2011 compared to the same period of 2010. The highlight was agriculture and stock raising, which confirmed its recovery in the last quarter of 2011 compared to same period in 2010 (to 8.4%).

Comparing data from the fourth quarter with the third quarter of 2011, considering the seasonal adjustment, it can be said that agriculture and stock raising and services continued to stimulate Brazilian production from the supply side, as observed for the entire year of 2011, while industry declined at worrying levels, thus contributing negatively to output. Since the second quarter of 2011, the rates of growth in relation to previous quarters have been negative for the industrial sector.

Measures to control demand, such as raising interest rates and credit restraint, adopted by the government to slow the Brazilian economy after the intense growth rate in early 2010, undoubtedly contributed to the unfavorable performance of Brazilian industry, especially in the manufacturing sector, last year. An increase in competition from imported products, at a time of uncertainty in the recovery of global demand, idle capacity in world production, appreciation of the national currency and aggressive strategies by international competitors have also adversely affected Brazil's industrial activity. It is hoped that the recent review of macroprudential measures adopted will help reverse the negative performance of

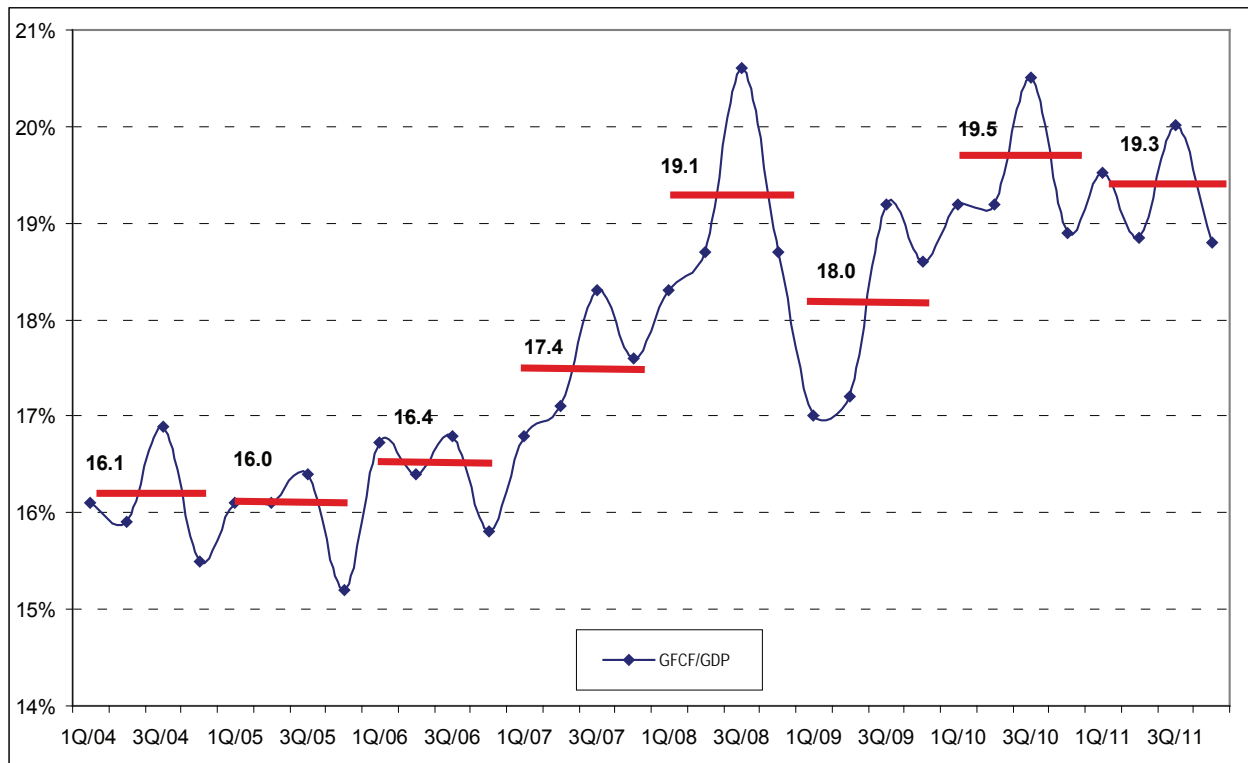
Brazilian industry. It is therefore important to keep an eye on industrial performance, in view of its important role to stimulate other economic sectors with significant linkage effects on the rest of the Brazilian economy.

In 2011, gross fixed capital formation (4.7%) and household consumption (4.1%) continued to lead the growth of Brazilian GDP (2.7%) from the internal demand side, an important base of support for Brazil's economic performance in the post-financial crisis (Table 1). Government consumption, compared to other components of domestic demand, contributed less significantly to the growth of Brazil's domestic product in 2011, despite its positive gains (1.9%). All components of domestic demand (including imports), however, failed to maintain significant growth rates achieved during the recovery of the Brazilian economy in 2010.

More worrying is the very rapid deceleration of gross fixed capital formation, considering the quarterly rates. In the period of post-crisis recovery, gross fixed capital formation was maintained well above the growth in household consumption. This difference was reduced gradually during the period of slowing growth and investment was eventually overcome by the increase in household consumption in the third and fourth quarters of 2011 compared to the same periods in 2010.

As a result, the investment rate in Brazil further contracted to 18.8% in the fourth quarter of 2011, mirroring the results found in last year's second quarter. The average quarterly investment rate for 2011 was 19.3%, a slight reduction when compared to 2010 (Graph 1). This decreasing investment rate could become an obstacle toward recovery of Brazil's economy. As highlighted in the December 2011 edition of the Industrial Conjunction Bulletin, investments, however, could be stimulated by new factors in the near future, such as maintaining the policy of cutting interest rates, which recently fell to one digit levels, as well as the measures included in the Brasil Maior Plan (MDIC 2011-2014 Plan), which are generating expectations of recovery for the economy and industry in Brazil.

Graph 1- Investment Rate
(1Q/2004 to 4Q/2011) (%)



Note: Data includes the revision of the historical series executed and distributed by the IBGE. Therefore, there may be differences in relation to the data analyzed in previous editions of The Industrial Conjunction Bulletin. Data from the 4th quarter of 2011 is preliminary. Source: National Accounts System (SCN)/IBGE.

Government consumption showed a slight recovery in the fourth quarter of 2011 compared to the same period of 2010 (1.3%), but failed to reach the growth observed in the other components of domestic demand. The same results were found for imports, which also saw accelerated growth in the last quarter compared to the same period last year (to 6.4%). Imports have stood out compared to other areas of domestic demand. This explains the growing concern about the effects on domestic production by intense international competition and the rise in entry of foreign products into Brazil's markets.

The comparison of data from the fourth to the third quarter of 2011, when adjusted seasonally, highlights the marginal recovery, although limited, of all components of domestic demand that showed contraction in the third quarter in relation to the second quarter of last year (Table 1). One concerning aspect is the relatively increased vigorous marginal recovery of imports in the last quarter analyzed (2.6%), which surpassed both the modest growth of other components of domestic demand and rising exports (1.8%), thereby contributing to reduced and marginal growth of the Brazilian economy during the same period.

A difficult recovery remains for external demand represented by exports, illustrating the slow and uncertain recovery in demand from those developed countries that had the highest levels of consumption. Brazilian exports grew 4.5% in 2011, well below the 11.5% growth shown in 2010 (Table 1). The growth rate fell to 3.7% in the fourth quarter of 2011 compared to the same period in 2010. This followed a growth rate of 4.1% reached in the third quarter of 2011, with the growth trajectory continuing at less than the increasing level of imports since the first quarter of 2010. Exports also showed a limited marginal growth in the third (1.9%) and fourth quarters (1.8%) of 2011 compared to the previous quarters, with the seasonal adjustment.

Looking in more detail at industrial performance, the fall in the growth rate of Brazilian industry in the fourth quarter of 2011, based on data from the Monthly Industrial Research – Physical Production (*Pesquisa Industrial Mensal – Produção Física, PIM-PF/IBGE*) can be confirmed. Analyzing the changes in growth rates accumulated in the last twelve months, calculated at the end of each quarter last year, it can be seen that the fall in the growth of Brazilian industrial physical production intensified. At the end of 2011, accumulated growth rates reached 2.1% in mining, 0.1% in manufacturing and 0.3%

in general industry (Table 2). The comparison of data from the fourth quarter of 2011 with the same quarter of 2010 shows a contraction of physical production (-2.1%) due to the shrinkage found specifically in the manufacturing industry (-2.4%) that overshadowed the growth of the mining industry (2.5%) in the same period. This contraction worsened the stagnation observed in the third quarter of 2011 compared to same period in 2010. There was also a reduction in the physical production of the manufacturing industry (-1.9%) and, consequently general industry (-1.8%) in the fourth compared to the third quarter of 2011, (with seasonal adjustments) and thereby increasing marginal contraction that has been observed since the second quarter of 2011.

Looking at the last available data for January 2012, there is a reduction in overall industrial output (-3.4%), the manufacturing industry (-3.3%) and even the mining industry (-5.7%), compared to January 2011 (PIM-PF/IBGE). Industrial production also shrank in January 2012 compared to December 2011 (-2.1%), with the seasonal adjustment. Thus, the movement towards contraction in industrial production can undoubtedly be confirmed when analyzing the latest rates available for monthly variation of industrial physical production in Brazil.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2011 to 4Q/2011) (%)

Sectors	1Q 2011	2Q 2011	3Q 2011	4Q 2011
Accumulated variation rate over the past four quarters				
General Industry	6.9	3.7	2.5	0.3
Mining	9.6	6.8	5.1	2.1
Manufacturing	6.8	3.5	2.3	0.1
Quarterly variation rate over the same quarter of the previous year				
General Industry	2.8	0.6	0.0	(2.1)
Mining	3.3	2.8	0.2	2.5
Manufacturing	2.7	0.5	(0.1)	(2.4)
Quarterly variation rate over the previous quarter (seasonally adjusted)				
General Industry	1.0	(0.5)	(1.0)	(1.8)
Mining	(1.4)	1.2	0.5	2.0
Manufacturing	1.9	(1.0)	(1.2)	(1.9)

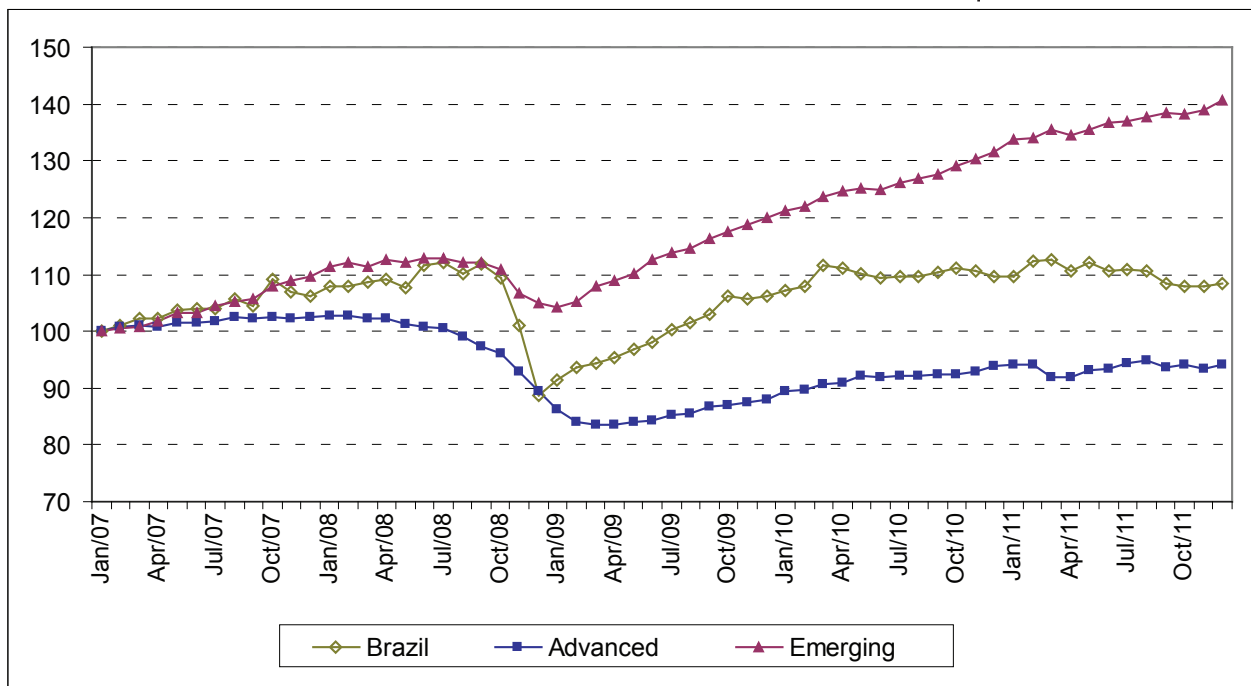
Note: Data includes the revision of the historical series executed and distributed by the IBGE. There may be, therefore, differences in relation to the data analyzed in previous editions of the Industrial Conjecture Bulletin.

Source: Monthly Industrial Research-Physical Production (PIM-PF)/IBGE.

In fact, it can be said that since the beginning of the second quarter of 2010 the Brazilian industrial sector has been struggling to expand their activity level. A comparison of indices of industrial production between Brazil and emerging countries and advanced countries shows that the pace of industrial activity in Brazil until September 2008 was very similar to that of the group of emerging

countries (Graph 2). Although the effects on the production level were much greater in Brazil, one can also see that the pace of recovery of the country from January 2009 was similar to that observed in other emerging markets. However, from April 2010, Brazilian industrial production showed clear stagnation, failing to reach the pace of emerging countries, nearing the stagnation observed in the developed countries.

Graph 2 - Brazil, Emerging and Developed Countries:
Industrial production indices
(Jan/2007 to Dec/2011) (2007 = 100)



Source: CPB Netherlands Bureau for Economic Policy Analysis and IBGE.

In part, as already noted, the control measures to contain inflation and economic activity undoubtedly contributed to industrial production performance. Still, as it became clear that the recovery of the international scene would not be as fast as previously thought and that the low growth in advanced countries would be extended, competition was intensified brutally in international markets. As highlighted in the September 2011 *Industrial Conjunction Bulletin*, since mid-2010 the displacement of domestic industrial activity by imports has become more evident, reflecting a troubled international scene.

Returning to the results of Brazilian industry in recent times, on analyzing the changes of industrial production by each category of use, a negative performance in the sectors of consumer durable goods and capital goods can

be seen, with both categories reacting more intensely to a deceleration of economic activity.

With regard to the physical production of durable goods, the deceleration of its growth, aggravated by the recent contraction, could be observed in the accumulated variation in the last twelve months (Table 3). In 2011, the retraction of physical production of durable consumer goods (-2.0%) stood out among the other categories of use. Furthermore, a significant reduction in the production of durable goods in the fourth quarter of 2011 compared to the same period in 2010 (-9.5%) was noted, accentuating the downward movement observed since the second and third quarters of 2011 when compared to the same periods of 2010. In January 2012, there was a significant contraction in the production of durable goods compared to January 2011 (-7.6%) (PIM-PF/IBGE).

Comparing the fourth quarter to the third quarter of 2011, with the seasonal adjustment, once again the contraction of physical production of durable consumer goods stands out negatively (-3.9%), perpetuating the marginal shrinkage observed since last year's second quarter (Table 3). In January 2012 compared to December 2011, seasonally adjusted, the production of durable goods suffered a retraction (-1.9%) also

observed for the other categories of use (PIM-PF/IBGE). Expecting to produce positive results, the Brazilian government has taken measures in the form of tax cuts on domestic appliances and loans to individuals – encouraging, for example, loans for car purchases – which could contribute in the future to a better performance of consumer durable goods production.

Table 3 - Variation Rate of Brazilian Industrial Production by Categories of Use (1Q/2011 to 4Q/2011) (%)

Categories of Use	1Q 2011	2Q 2011	3Q 2011	4Q 2011
Accumulated rate over the past four quarters				
Capital Goods	16.6	9.5	5.4	3.3
Intermediate Goods	7.3	3.7	1.4	0.3
Durable Consumer Goods	5.5	1.9	0.8	(2.0)
Semi-durable and non-durable consumer goods	3.4	1.9	0.6	(0.3)
Quarterly variation rate in relation to the same quarter of the previous year				
Capital Goods	8.6	2.5	3.9	(1.4)
Intermediate Goods	1.8	0.5	(0.4)	(0.8)
Durable Consumer Goods	5.1	(1.0)	(2.2)	(9.5)
Semi-durable and non-durable consumer goods	1.1	(0.1)	(0.2)	(1.6)
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)				
Capital Goods	4.0	(1.3)	0.8	(3.7)
Intermediate Goods	0.7	0.0	(1.2)	(0.6)
Durable Consumer Goods	3.8	(6.6)	(2.0)	(3.9)
Semi-durable and non-durable consumer goods	1.3	(1.2)	0.1	(1.2)

Note: This data incorporates a revision of the figures previously released by the IBGE. Therefore, it's possible that differences exist with respect to the data analyzed in previous editions of The Industrial Conjunction Bulletin.

Source: Monthly Industrial Research-Physical Production (PIM-PF)/IBGE.

The outlook for the physical production of capital goods does not seem to be promising, also reflecting a weakening of economic activity and exchange rate appreciation. In 2011, the slowdown in growth of production of capital goods (to 3.3%) that presented itself gradually in the evolution of variation rates accumulated in twelve months, calculated at the end of each quarter last year, was confirmed (Table 3). Capital goods suffered a drop in physical production in the fourth quarter of 2011 compared to same quarter of 2010 (-1.4%), following the pattern of the other categories of use. These results from 2011, when compared to 2010, relegated the positive performance differential between the production of capital goods and other categories of use to a thing of the past, when growth could

be noted, even when the other categories of use had suffered losses when comparing to 2010 data. The latest figures for January 2012 show a significant contraction in production of capital goods in comparison with January 2011 (-13.0%), even surpassing the fall in the production of durable goods in the same period (PIM-PF/IBGE).

The difficulties faced by capital goods production are also evident when analyzing its performance in the third quarter of 2011 compared to the fourth quarter (-3.7%), when it neared the decreased rate of durable goods production in the same period (Table 3), with the seasonal adjustment. Comparing January 2012 to December 2011, also with the seasonal adjustment, the remarkable reduction in the production of capital goods

(-16.0%) stood out alarmingly, only surpassed by the sharp fall that occurred from November to December 2008 (over 20%) at the outbreak of the global financial crisis (PIM-PF/IBGE).

Therefore, the growing concern about the slowdown/contraction of consumer durables and capital goods production is justified. Undoubtedly, this continues to reflect the perpetuation of the difficulties facing economic recovery and investment and the obvious increase in competition from imported products, which are becoming more of a force in competing with domestic production for the domestic market share.

In turn, the physical production of intermediate goods has also felt the slowdown in domestic activity, aggravated by the difficulties in sustaining external demand for primary goods and basic inputs, which are a result of uncertainty in the international context. The apparent loss of pace of production of intermediate goods in the variation rate accumulated over four quarters is worth noting (Table 3). Moreover, the intensification of the declining rate of intermediate goods physical production in the fourth quarter of 2011 compared to the same period in 2010 (to -0.8%) was verified. Intermediate goods followed the behavior of marginal contraction of the other categories of use, despite the lower pullback in the fourth quarter in comparison to the third quarter of 2011 (-0.6%), taking into consideration seasonal fluctuations. The monthly data also confirms the negative performance of intermediate goods production both in January 2012 compared to January 2011 (-3.6%), as had occurred in most months of 2011, compared to the same periods of 2010, as well as in January 2012 in relation to December 2011 (-2.9%), with the seasonal adjustment (PIM-PF/IBGE).

Production of semi-durable and non-durable consumer goods withstood less marked variations over time because they were not as strongly affected by the credit crunch related to the global crisis. However, some industries included in this category of use have suffered more directly from the effects of international

competition. The variation rate in physical production of semi-durable and nondurable goods accumulated in twelve months also showed a deceleration trend, followed by contraction, as in the case of durable goods. The category of use analyzed, after facing the stagnation of production in the second and third quarters of 2011, showed another reduction in the fourth quarter (-1.6%) when compared to the same periods in 2010, following the negative performance of other use categories (Table 3). Compared to the third quarter of 2011, considering the seasonal adjustments, the last available quarterly data also pointed to a path of contraction (-1.2%), with the other categories of use following the same trend. However, it should be noted that the physical production of semi-durable and non-durable goods differed in January 2012 by experiencing growth, when compared to January 2011 (1.9%) and December 2011 (0.7%), with the seasonal adjustment. This revealed the importance of their dependence on domestic demand, which has sustained economic activity, even presenting a falling tendency (PIM-PF/IBGE).

The analysis of physical production for categories of use highlighted the negative behavior of the production of consumer durables and capital goods, even in the context of continued, albeit very modest, growth in household expenditures and investment. This again highlights the imbalance between, on one hand, consumption and domestic investment, and, on the other hand, Brazilian industrial production of consumer and capital goods. As discussed in previous documents, these results are closely related to the intense competition of imported products, particularly from Asia (Industrial Conjunction Bulletin, September 2011). These results confirm the legitimate concern of the government and various institutions involved in Brazilian industry regarding the transfer from domestic demand to imported products justifying the adoption of emergency measures (for example, tax and credit measures) to protect the domestic production of certain industrial sectors in Brazil.

Looking at the behavior of industrial activity's physical production in the fourth quarter of 2011 over the same period of 2010, it can be affirmed that most of the sectors analyzed by the IBGE survey (18 of 27 sectors) suffered contraction or stagnation of physical production. There was an intensification of contraction in the previous period, or even a reversal/stagnation of previously positive performance for many of the industries included in this group. The sectors that stood out for their negative results in the group mentioned were: footwear and leather goods (-14.8%), apparel and accessories (-10.9%), machinery, equipment and electronic material (-10.4%), and appliances and communication equipment (-8.2%). The production of motor vehicles and machinery and equipment, formerly leaders of growth in physical production, also shrank, although less intensely (-3.1% and -3.6% respectively). Only three (3) sectors of the group above managed to lessen the reduction of their respective production, but overall still had negative results in the last quarter analyzed. The sector with the worst results was the textile sector, which, despite having reduced the fall in production in the last quarter of 2011 compared to the same period in 2010 (to -15.2%), clearly had the highest drop in physical production among the industrial sectors analyzed (PIM-PF/IBGE).

The other industries included in the IBGE survey (9 out of 27 sectors) were able to enjoy growth in their physical production in the same period. Virtually all of them, however, achieved very low growth rates (from 0.5% to 4%): metal products – except machinery and equipment (0.5%), other transportation equipment (0.6%), food (1.0%), perfumes and cleaning products (1.3%), mining (2.5%), tobacco (2.7%), cellulose and paper (2.7%) and beverages (3.6%). In the period analyzed, only one industrial sector showed a significant expansion in production: medical and optics instruments and equipment (11.0%) (PIM-PF/IBGE).

The analysis of physical production for industrial sectors in the fourth compared to third quarter of 2011, taking into consideration the seasonal adjustments, shows some growth in only seven (7) sectors of the IBGE survey. The

only groups that enjoyed significant growth were the medical-hospital instrument equipment and optics (13.4%) and pharmaceuticals (7.2%) (PIM-PF/IBGE). The other industries included in the survey (20 sectors) suffered a contraction in their respective physical production in the last quarter compared to the third quarter of 2011, seasonally adjusted. There was a significant drop in production in the sectors that stood out for their marginal growth in the previous quarter, such as tobacco (-20.8%) and editing, printing and reproduction of recorded media (-13.8%), as well as in industries that had already suffered contraction in production, such as electronics and communications equipment and devices (-17.9%). Although milder, there was also a marginal reduction in production of motor vehicles and machinery and equipment (-2.6% and -3.1% respectively).

The difficulties faced by Brazilian industry was reflected in the decrease in growth rate in industrial employment last year, which generated around 40% of the jobs created in 2010 (Table 4). The slower generation of jobs in the first three quarters of the year and the high number of net dismissals and resignees in the last quarter of 2011 contributed to this result. The only period with higher net dismissals and resignees was in 2008, when the global crisis had its greatest impact on industrial employment. The General Database of Employed and Unemployed (*Cadastro Geral de Empregados e Desempregados, CAGED/MTE*)¹ showed a net loss of slightly more than 188,000 jobs between October and December 2011. As discussed in previous editions of the Industrial Conjunction Bulletin, the results show a significant seasonal component, since it is common for industrial employment to decline in the last quarter of each year. Even with this

¹ CAGED/MTE presents the results of all companies that hired/dismissed people from formal jobs in the period analyzed, thus achieving census coverage, while the PIMES/IBGE analyzes samples, including companies with five or more employees. Therefore there may be divergent trends regarding the two sources of data used, principally in the sectors that have predominantly small and medium-sized companies.

result, 2011 exceeded 2008 and 2009 (periods marked by the effects of the global financial crisis) in terms of industrial jobs generation.

The industries with the highest number of net dismissals and resignees (minus the number hired) in the last quarter of 2011 were some of the largest employers, especially food manufacturers (49,000 jobs lost) and the manufacturing/production of leather and leather goods, travel items and shoes (with 36,000 jobs lost, surpassing the number of net dismissals and resignees in the last three months of 2010 by 8,000). Apparel manufacturing

also experienced a significant increase in net jobs lost (24,000 in the last quarter of 2011 compared to 11,000 in the same period of 2010). The industry sectors that stood out in terms of net job creation are not representative in absolute numbers, for example beverages manufacturing, other transportation equipment manufacturing (excluding automobiles) and non-metallic mineral extraction. Regarding the first of these industries 2,400 jobs were created, with just over 1,000 jobs being created in the other two mentioned.

**Table 4 - Job Creation and Net Hiring
Wages in Brazilian Industry
(1Q/2008 to 4Q/2011)**

Year	Jobs Created					Wages (Net Hiring) (R\$ thousand - dec./2010*)				
	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter	Total	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter	Total
2008	153.090	167.668	193.793	(348.295)	166.256	69.627	63.471	67.494	(372.616)	(172.023)
2009	(146.761)	2.578	203.323	(52.009)	7.131	(308.501)	(153.828)	37.893	(105.773)	(530.209)
2010	199.187	186.139	203.873	(111.408)	477.791	104.290	76.794	92.038	(147.372)	125.750
2011	127.798	117.211	128.704	(188.217)	185.496	46.400	41.794	26.054	(228.229)	(113.981)

* Data deflated by IPCA (IBGE)
Source: CAGED/MTE

According to data from the Annual Report of Social Information (*Relação Anual de Informações Sociais, RAIS/MTE*), 7.72 million total workers were employed in the mining and manufacturing industries in Brazil in December 2010, increasing to 7.91 million in December 2011, with RAIS's numbers updated through CAGED's findings.

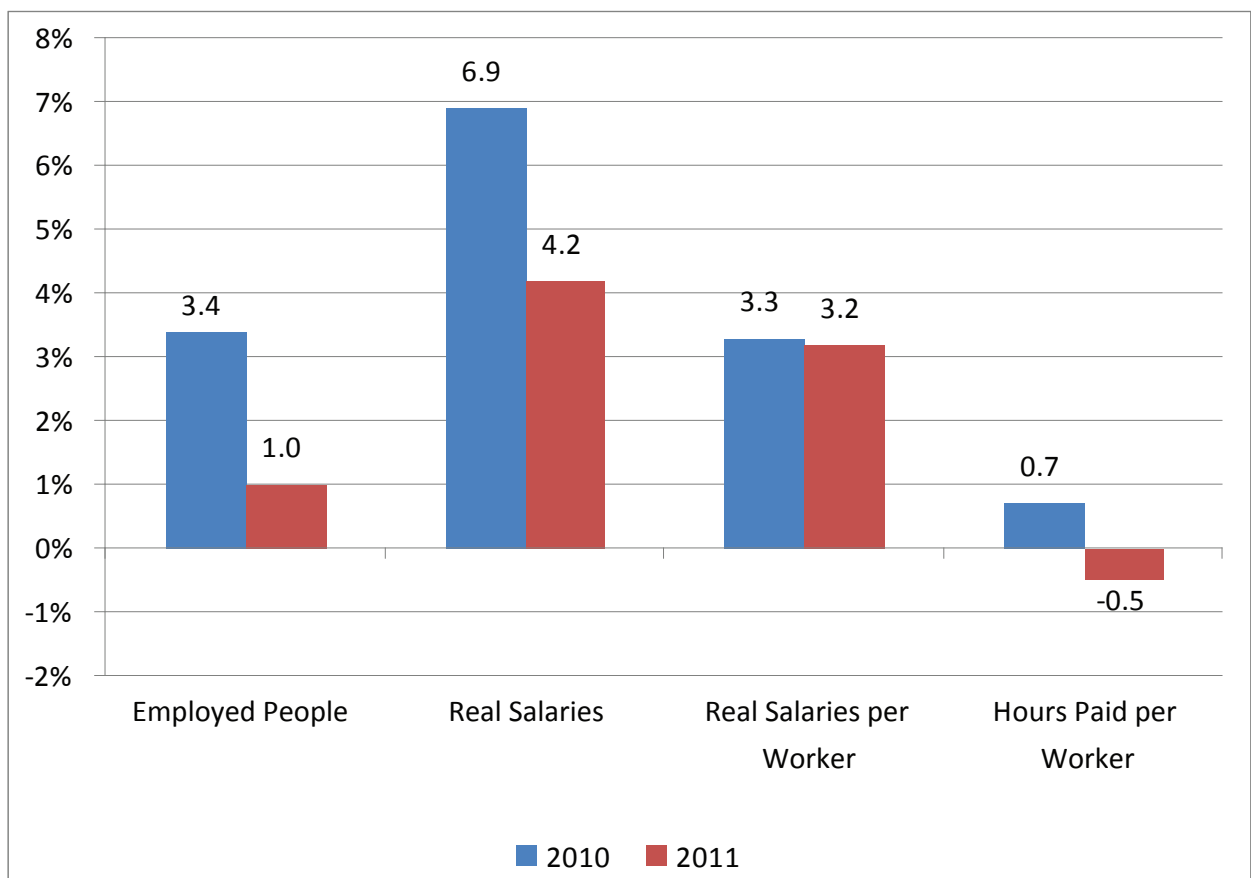
Taking into consideration net wages of industrial workers (wages of hired workers minus wages of those dismissed and resignees) the balance was negative in 2011 (a net loss of more than R\$113 million) after achieving a positive

result of more than R\$125 million in 2010. For the the third time in the last four years wages decreased, with 2010 being the exception. In 2008, 2009 and 2011, there was a fall in wages, while job creation was positive. This is a result of employees with higher salaries being laid off in favor of lower paid workers. Regarding wages, the net loss in the fourth quarter of 2011 (almost R\$230 million) was second only to the loss noted in the same period in 2008, when companies made heavy layoffs in response to the crisis.

The poor performance of Brazil's industrial labor market last year can also be verified by data analyzed from the Industrial Monthly Research on Employment and Wages (*Pesquisa Industrial Mensal de Emprego e Salário, PIMES/IBGE*). The employment rate, which grew by 3.4% in 2010, increased by just 1% in 2011 (Graph 3). The employment rates for all other categories analyzed presented similar results. The increase

in the net payroll of 4.2% in 2011 was well below that of 2010 at 6.9%. Looking at salary per worker, the numbers are still falling, but the difference is much lower (3.3% to 3.2%). The data shows a greater loss of performance in new job development compared to payroll. Evaluating paid hours per worker, 2011 saw a slight decrease of 0.5% against a small increase of 0.7% in 2010.

Graph 3 - Variation Rate in Employment and Wages in Brazilian Industry (2010 and 2011)



Source: Industrial Monthly Research on Employment and Wages (PIMES) / IBGE.

PIMES and CAGED data, therefore, verified the slowdown in new jobs creation in Brazilian industry in 2011, following what happened to physical production. This trend had already been observed throughout the year, and was even greater in the fourth

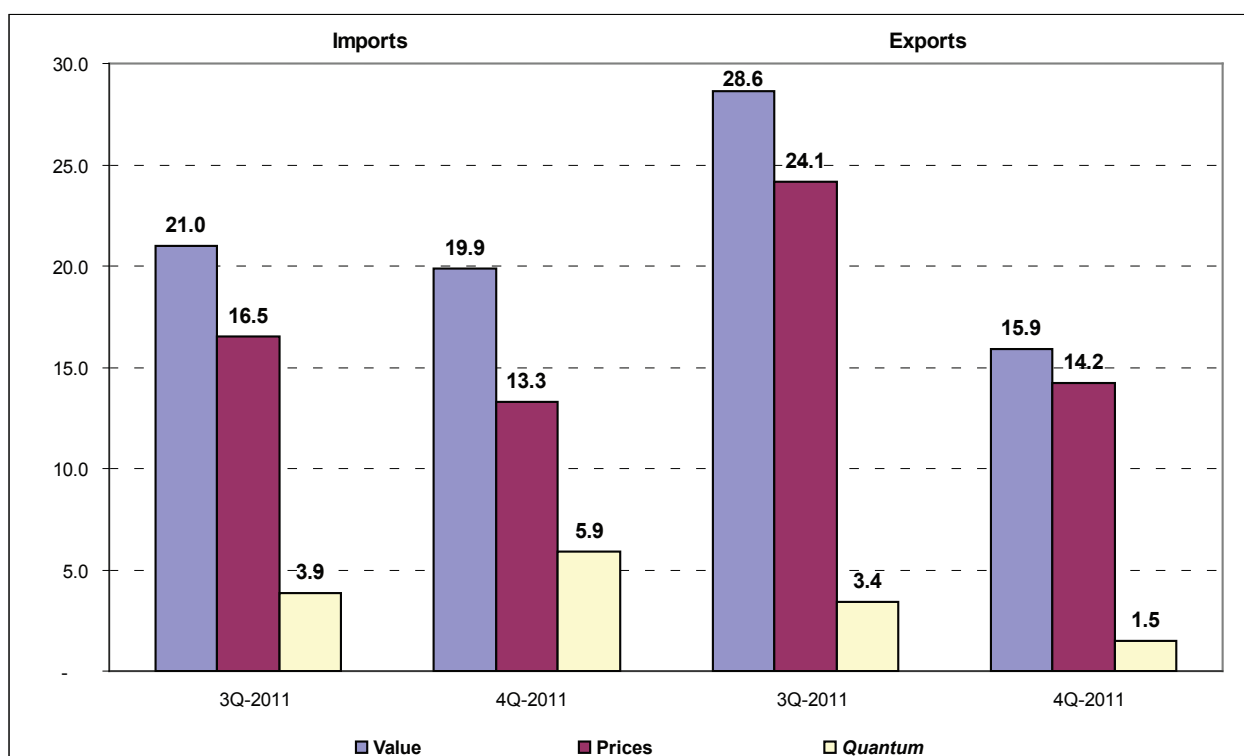
quarter of 2011 which experienced a larger net loss of jobs than the same period of 2010. As a result of this loss of momentum, salaries again fell, although the net loss was significantly lower than that caused by the effects of the global crisis (2008 and 2009).

As for foreign trade, the Brazilian trade surplus was US\$6.7 billion in the fourth quarter of 2011, lower than the surplus achieved in the last quarter of 2010 and in the third quarter of 2011 (US\$ 10 billion – FUNCEX). The difference in 2011's and 2010's fourth quarter results is due to the higher growth of imports (19.9%) compared to the positive performance, albeit insufficient, of exports (15.9%) in the same period (Graph 4).

The increase in export values was led by higher prices of exported products (14.2%) but actual weight of the *quantum* exported was lower (1.5%) in the fourth quarter of 2011 compared to the same quarter of 2010.

When compared with 2011's third quarter results, both prices of exported goods and the amount exported in the fourth quarter were lower (Graph 4). All categories of use experienced growth in exports in the fourth quarter of 2011, highlighted by energy (23.7%), non-durable consumer goods (17.6%) and intermediate goods (15.4%). However, this was a result of higher prices of exported products (FUNCEX). The increase of fuel prices was responsible for the total increase in exports, considering the decrease in the quantities exported. The same fact has been observed for capital goods, but on a smaller scale.

Graph 4 - Quarterly Variation Rate of Brazilian Exports and Imports:
value, *quantum* and price
(compared to the same quarter of the previous year) (%)



Source: FUNCEX with data from SECEX

The increase of imported values in the last quarter of 2011 was also stimulated by higher prices of imports (13.3%) with the quantity of imports being lower (5.9%). Imports' *quantum* index grew despite the drop in price indices in relation to rates in the third quarter, differing from the results of exports (Graph 4). Considering the

categories of use, the increase in import values were not only led by fuel (59.1%), which enjoyed a significant increase in its import prices (35.0%), but also by consumer durable goods (28.7%) and non-durable goods (17.8%). Worryingly, this significant increase was stimulated by the rise in the quantity of imports in the fourth quarter of 2011

compared to same period of 2010 (FUNCEX). Importantly, import values of capital goods increased during the time frame analyzed (14.5%), with the amount of imports increasing (10.7%) given the smaller rise in import prices (3.4%).

The concern over imports replacing domestic production must be emphasized, supported by the aforementioned significant increase in import volume of consumer and capital goods. Signs of this occurring are evident, especially for consumer goods, given the contraction of physical production in the fourth quarter of 2011 compared to same period in 2010. The respective trends of lower domestic production and higher imports of consumer goods confirm the stimulus of domestic demand, even at a decelerating rate, to foreign production, thereby creating more difficulties for Brazilian production already facing intense international competition in a context of currency valuation.

Brazilian imports are expected to remain at high levels even in the backdrop of slowing growth in domestic demand, given the aggressive behavior of international trade, especially from Asia, at a time of economic slowdown in developed countries, particularly if Brazil's currency appreciation, related to a significant influx of foreign capital, persists.

Data and supporting information analyzed so far indicate the widespread decrease in growth of the different components of domestic and foreign demand, adversely affecting the performance of Brazil's economy, especially in the fourth quarter of 2011. Moreover, this analysis highlighted the poor performance of Brazilian industry, and consequently of industrial employment, when compared to the other economic sectors. Although the slowdown in economic growth in comparison with 2010 data is confirmed, the relevance of household expenditure and investment in Brazil's economy and domestic industry are still valid. The descending rate of investment, however, is a worrying roadblock along the path of recovery of Brazil's industrial production, employment, and economy as a whole. Other factors previously noted such as strong imports and Brazil's difficulties with

foreign trade accompanied the deceleration of Brazil's economy. It is important to emphasize the continued displacement of Brazilian products by imports, stimulated by intense international competition and an overvalued exchange rate.

Even considering the pessimistic outlook of the global economy, certain factors may contribute to resuming Brazil's economic and industrial growth: recently adopted measures aimed at easing consumer credit restrictions; the intervention, albeit sporadic, in the collection of sales tax on certain domestically produced consumer goods (e.g. reducing IPI on sales of household appliances) and on imported consumer goods (e.g. raising IPI on imported vehicles); and cutting interest rates.

To return to a level of sustainable activity in the long run, investments must return to positive territory. To encourage favorable conditions for investments in a time of international turbulence is challenging given the intense global competition and the increasing willingness of countries to stimulate exports and protect their domestic markets.

Interest rate cuts and the recent adoption of measures to differentiate foreign investment from those just seeking financial gain may lead to an environment better suited to industry and productive investment by creating a better balance between exchange and interest rates. The measures that strengthen protectionism and establish a preference for products with a certain percentage of domestic parts and technology, as determined by the *Brasil Maior* Plan, can also assure the resumption of industry activity, reducing the gap between industrial domestic supply and domestic demand. It's imperative that this recovery be accompanied by investments to succeed. Such investments could contribute to growth in domestic demand under more favorable conditions and are key to ensuring that structural changes are realized. These changes can contribute to developing competitiveness, based on gains from innovation and increased productivity, in infrastructure or in Brazilian industry itself.

NOTES ON RECENT CHANGES IN THE FLOW OF DIRECT INVESTMENT AND REMITTANCES OF PROFITS

The last Industrial Conjunction Bulletin (December 2011) highlighted that despite the international crisis and slow recovery of foreign direct investment (FDI) globally, the Brazilian economy continued to receive substantial investment flows. It was also argued that *greenfield* investments have maintained a much wider participation than those aimed for mergers and acquisitions, which could indicate a potentially larger impact on the formation of gross capital in the recent FDI cycle when compared to the one that took place in the late 1990s and early 2000s.

In this current edition of the Bulletin, a deeper investigation of the recent developments of direct investments is shown, including information on Brazilian foreign direct investments and remittances of profits overseas. It is important to highlight that the international financial crisis has caused significant changes to the inflows of foreign direct investments, and the subsequent revenue, to Brazil's economy, as well as direct investment from Brazil into other countries. Largely, such changes reflect dynamism and the potential for growth in the internal Brazilian market, taking into consideration an international context where developed countries are growing at a much slower pace with an expected prolonged stagnation. Moreover, it is important to point out that Brazil still has high interest levels *vis-à-vis* other countries, despite the recent rate reductions. This fact is aggravated by the high liquidity in the international market due to the measures taken to combat the global crisis.

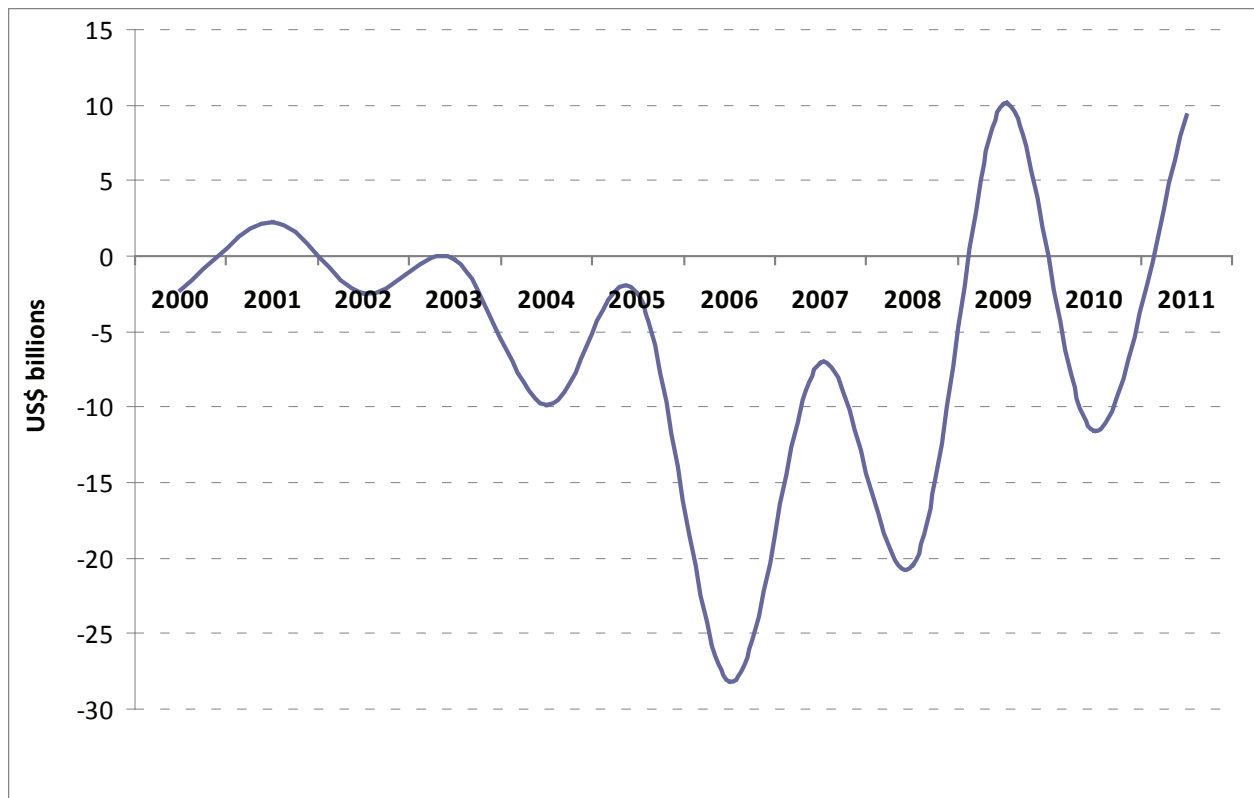
Several analysts consider that recent direct investment flows into the Brazilian economy could be associated with this interest rate differential and the possibility of arbitrary gains. It is believed that there was a migration of flows, once accounted for as stock market investments, to direct investments, taking place in particular after the Central Bank started charging the Financial Operations Tax (IOF) on fixed-rate bonds.

Such a phenomenon may have indeed taken place mainly through inter-firm loans, which are well known for being a more liquid and volatile type of investment than capital participation, directly responding to not only different economic growth perspectives of other countries but also interest rate differentials. However, as pointed out in the previous issue of the Bulletin, the investments in capital participation have also substantially increased, claiming the largest share of foreign direct investments.

Despite this, it is important to provide more detail on the most recent trends, particularly the flow of inter-firm loans. One aspect that draws attention is the prevalence of inter-firm loans linked to Brazilian companies with foreign investment, rather than to foreign companies.

Firstly, it is worth highlighting the reversal of the increased tendency of Brazilian direct investments abroad which begun in 2006, including the net entrance of capital in 2009 and 2011 (Graph 1).

Graph 1 - Brazilian Direct Investment Abroad
(2000 to 2011) (US\$ billions)



Source: Brazilian Central Bank.

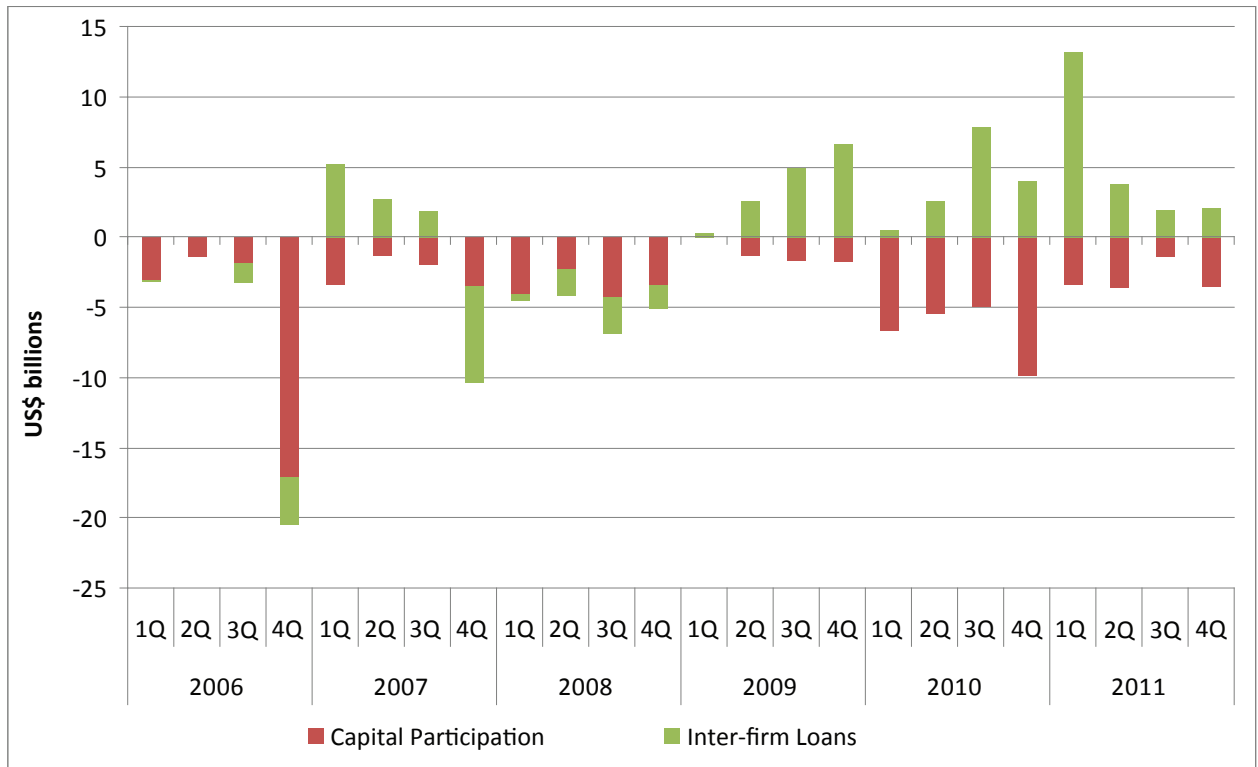
Secondly, breaking down the information by type of direct investment, it is noticeable that inter-firm loans inverted from 2009, meaning that company branches abroad began lending more to their Brazilian headquarters than vice-versa, showing a positive account balance that more than compensated the investment outflows through capital participation in 2009 and 2011 (Graph 2). By analyzing the flow of capital participation, it is possible to see that investments made by Brazilian companies abroad show no strong signs of changing direction. Capital inflow has occurred more for financial reasons that are tied to inter-firm loans.

Looking at inter-firm loans of both foreign and Brazilian multinationals, growth in both cases can be seen, notably since the third

quarter of 2010, but with greater contributions from Brazilian companies (Graph 3).

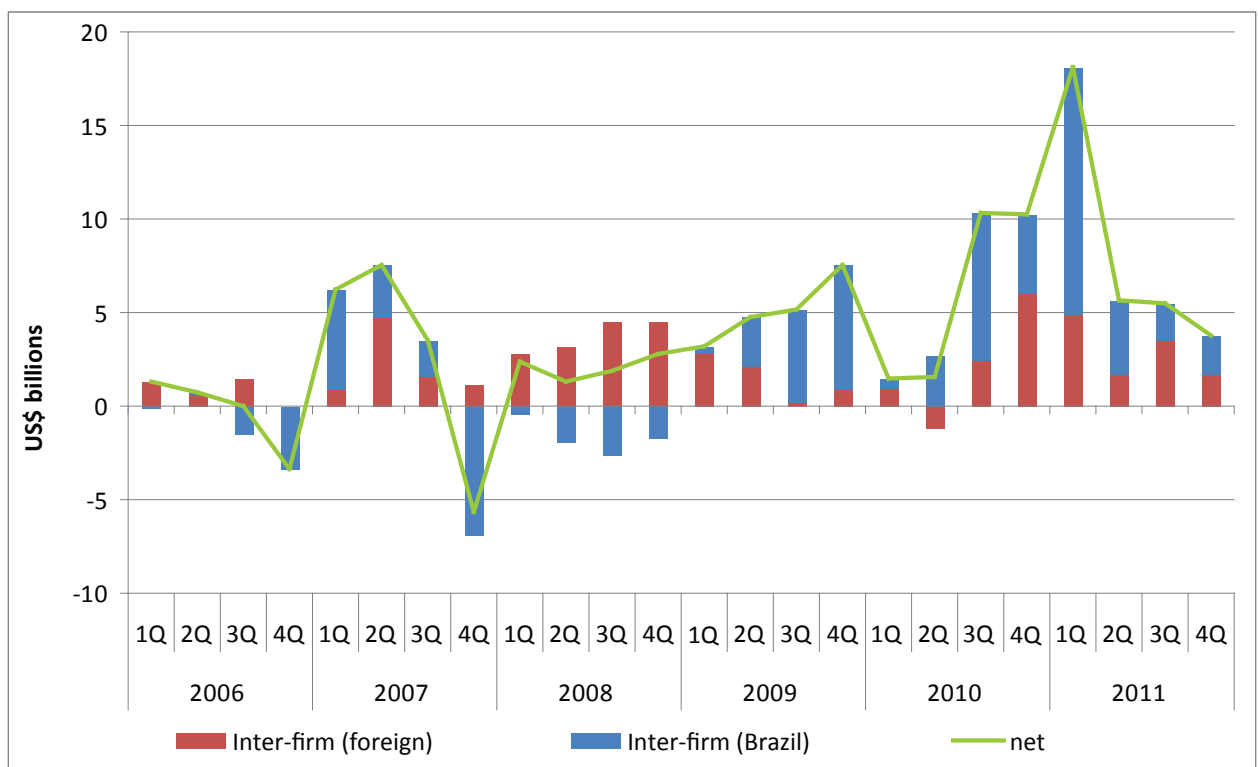
It is important to point out that the IOF taxation on 2-year long external loans assigned in 2011, and its recent extension to longer-term loans, indiscriminately afflicts the two groups of companies. This could lead to the avoidance of excessive use of foreign loans to obtain short-term financial gains. With massive injections of liquidity by developed countries, in addition to increased competition for markets that can offset stagnant demand in core countries, key measures that can discriminate between productive investments versus those just seeking financial gains are required. This is particularly valid when considering the negative effects the latter has on exchange rates.

Graph 2 – Types of Brazilian Direct Investment Abroad (1Q/2006 to 4Q/2011) (US\$ billions)



Source: Brazilian Central Bank.

Graph 3 – Inter-firm Loans of Brazilian and Foreign Firms (1Q/2006 to 4Q/2011) (US\$ billions)



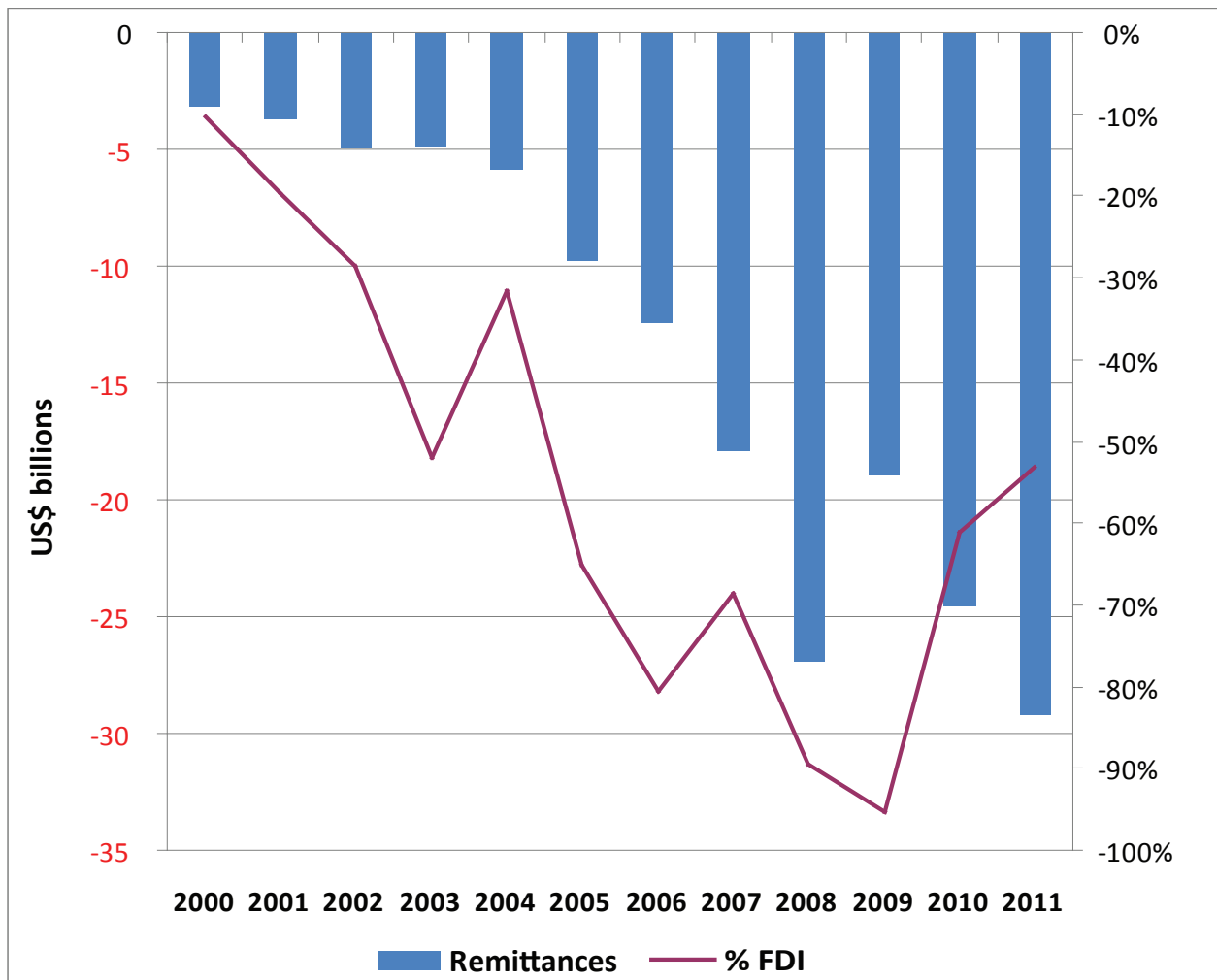
Source: Brazilian Central Bank..

Another important change recently observed is the increase in remittances of profits by branches of foreign companies established in Brazil. Since 2004, the volume of remittances has been increasing at a faster pace than at the beginning of the decade, a result of both the rebound of Brazil's economy that increased profits generated by foreign companies, and the currency appreciation that lead to an increase in the value in dollars of remittances sent abroad (Graph 4). The economic slowdown in countries with companies operating in Brazil from 2007 onwards,

and the financial crisis from September 2008, further stimulated remittances of profits, increasing again in 2010 and 2011 after decreasing in 2009.

There was also a marked tendency to increase the value of remittances of foreign affiliates in relation to inward FDI (only including equity participation). At the beginning of the decade, remittances accounted for less than 5% of FDI, in 2009 they had reached almost 100%. Due to the increase in FDI, this ratio fell again in 2010 and 2011, to about 50% in 2011.

Graph 4- Remittances of Profits and Dividends and Total Value Sent/FDI (2000-2011) (US\$ billions and %)



Note: The FDI only includes equity participation.
Source: Brazilian Central Bank.

In such a case, the increase in reallocated capital from foreign companies to their countries of origin to alleviate internal corporate financial problems is a cause for concern. This could result in these companies abandoning viable investment projects that contribute to increases in gross fixed capital formation rates and sector production capacity and the upgrading of plants located in Brazil.

The total value of remittances sent between 2005 and 2011 amounts to almost \$134 billion, mainly coming from the industrial sector. Considering the sectors, the remittance flows sent by the automotive, food and beverage and chemical and pharmaceutical industries are highlighted. In the service sector, financial services, electricity, telecommunications and trade all stood out (Table 1).

Table 1 - Remittance of Profits and Dividends by Business Sector
(2005-2011) (US\$ billions)

	2005	2006	2007	2008	2009	2010	2011	2005 – 2011
Total	9.066	11.535	16.706	25.959	18.009	23.449	29.183	133.907
Agriculture and stock raising and mining	505	280	406	598	470	537	819	3.615
Mining of metallic minerals	408	189	384	545	346	384	722	2.977
Other	97	91	22	53	124	153	98	638
Industry	4.593	5.959	10.204	17.179	11.124	14.200	16.099	79.358
Automotive vehicles	498	1.318	2.702	5.614	2.727	4.056	5.581	22.496
Food and beverage	1.032	1.018	1.525	2.075	1.853	2.928	3.480	13.911
Basic metallurgy	692	815	1.901	3.827	1.667	1.311	395	10.608
Chemicals and pharmaceuticals	648	1.004	1.330	2.006	1.767	2.350	2.909	12.014
Cellulose, paper and paper products	515	473	611	580	498	622	589	3.888
Other	1.208	1.331	2.135	3.078	2.612	2.933	3.144	16.441
Services	3.969	5.296	6.096	8.182	6.415	8.712	12.264	50.934
Financial services ⁽¹⁾	1.200	1.404	1.808	3.063	1.577	2.147	3.150	14.349
Electricity, gas and hot water supply	337	1.378	1.230	1.042	1.312	1.719	1.961	8.980
Telecommunications ⁽²⁾	440	545	461	881	500	1.052	2.447	6.326
Trade	692	619	1.127	1.037	859	1.221	1.275	6.830
Insurance and health plans	140	205	209	181	259	420	550	1.965
Other	1.160	1.145	1.260	1.979	1.908	2.153	2.880	12.484

(1) Referring to the category of financial intermediation before 2007.

(2) Includes post offices before 2007.

Source: Brazilian Central Bank.

Considering the relationship between profit remittances and received investments by industrial sector, the automotive industry stood out again showing higher remittances to investments in several years of the

timeframe analyzed, including 2011 (Table 2). The food and beverages, chemicals and pharmaceuticals, electricity and gas and financial services all showed high levels of remittances in relation to investments.

Table 2 - Remittances of Profits and Dividends in Relation to Inward FDI by Sector of Activity (2005-2011) (%)

	2005	2006	2007	2008	2009	2010	2011	2005 – 2011
Total	41.9	51.9	48.7	58.4	56.8	44.6	42.0	48.4
Agriculture and stock raising and mining	23.0	18.2	8.5	4.6	10.2	3.3	8.0	6.9
Mining of metallic minerals	41.0	48.1	11.8	5.1	26.5	8.0	30.2	12.5
Other	8.1	7.9	1.5	2.3	3.8	1.3	1.2	2.2
Industry	70.3	69.6	75.7	122.6	82.5	66.8	60.0	76.2
Automotive vehicles	47.7	458.2	313.8	582.3	126.0	761.4	400.1	310.4
Food and beverage	49.7	137.9	83.8	92.7	326.9	140.6	47.5	82.6
Basic metallurgy	223.0	47.4	40.4	76.8	44.4	23.6	5.5	37.6
Chemicals and pharmaceuticals	84.9	89.1	86.5	174.6	78.7	30.0	115.1	69.9
Cellulose, paper and paper products	309.1	29.2	128.2	289.4	64.6	794.1	-	-
Other	55.7	15.5	15.8	22.0	19.4	13.8	11.7	16.5
Services	30.7	43.7	37.9	46.9	47.2	59.3	38.3	42.8
Financial services ⁽¹⁾	92.7	46.9	40.0	59.9	54.6	115.9	98.9	65.7
Electricity, gas and hot water supply	21.5	59.1	116.6	114.6	135.3	147.5	58.7	79.2
Telecommunications ⁽²⁾	11.1	44.8	83.6	197.3	161.4	159.6	36.7	45.8
Trade	24.4	41.7	39.7	40.4	35.8	46.6	22.4	33.4
Insurance and health plans	16.3	81.3	40.6	38.3	19.6	183.1	22.9	32.5
Other	48.4	9.4	7.8	11.3	14.0	14.6	9.0	11.5

(1) Referring to the category of financial intermediation before 2007.

(2) Includes post offices before 2007.

Source: Brazilian Central Bank.

As a reflection of the global crisis scenario, important changes were observed in both the flow of direct investments and the associated returns. Likewise, changes were also observed in the relatively improved positive condition for the Brazilian economy, the international liquidity and the high differential of interest rates. From an investment flow viewpoint, it is necessary to differentiate between productive investments and those related to financial gain, in particular because of effects on the exchange rate. The policies recently adopted by the Central Bank are along these lines.

In contrast, the brutal increase in the income deficit associated with foreign direct investment is concerning because it suggests that a substantial part of the

income earned by foreign companies in Brazil is rapidly being sent abroad to cover the poor performance of their headquarters. This may reflect less FDI involvement with long-term economic activities in Brazil.

As analyzed in the first section of this Bulletin, when recovery of investment is crucial to the recuperation and sustainability of Brazilian economic growth, it is fundamental to guarantee FDI involvement with long-term economic activities. This is a huge challenge for Brazil's industrial development policy given that the reduction of remittances, and, even more importantly, their transformation into productive and technological investments in Brazil depends on incentivizing private investment of companies that operate globally.

REFERENCES AND INFORMATION SOURCES

The Brazilian Agency for Industrial Development (ABDI)/Center of Industrial and Technological Economics (NEIT) / State University of Campinas (UNICAMP). **The Industrial Conjunction Bulletin**. September and December, 2011.

Brazilian Central Bank. **Balance of Payments**.

CPB Netherlands Bureau for Economic Policy Analysis and IBGE. **World Trade Monitor**. Available at: <<http://www.cpb.nl/en/data>>. Accessed on: 12/03/2012.

Foundation Center for the Study of Foreign Trade (*Fundação Centro de Estudos para o Comércio Exterior/FUNCEX*). **Foreign Trade Bulletin**. Several editions.

Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística/IBGE*). **Monthly Industrial Research - Physical Production (PIM-PF)/IBGE**.

Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística/IBGE*). **National Accounts System**. Quarterly Accounts.

Ministry of Development, Industry and Foreign Trade (*Ministério do Desenvolvimento, Indústria e Comércio Exterior/MDIC*). **Bureau of Foreign Trade (Secretaria de Comércio Exterior /SECEX)**. **Statistics on Foreign Trade**. Several years.

Ministry of Development, Industry and Foreign Trade (*Ministério do Desenvolvimento, Indústria e Comércio Exterior/MDIC*). **Brasil Maior. Innovating to compete. Competing for growth. Plan 2011/2014. Brazil's Innovation Plan (Plano de Inovação do Brasil/PIB)**. Available at: <<http://www.brasilmaior.mdic.gov.br>>. Accessed on: 02-09-2011.

Ministry of Labor and Employment (*Ministério do Trabalho e do Emprego/MTE*). **General Database of Employed and Unemployed (Cadastro Geral de Empregados e Desempregados/CAGED)**.

Ministry of Labor and Employment (*Ministério do Trabalho e do Emprego/MTE*). **Annual Report of Social Information (Relatório Anual de Informações Sociais/RAIS)**. Several years.

Projeto Gráfico

Marina Proni

Tradução / Diagramação

Vernaculum Comunicações Internacionais

Projeto da Capa

Marcos Barros

