

# BULLETIN

OF INDUSTRIAL CONJUNCTURE

JUNE 2012







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## INTRODUCTION

The Brazilian Industrial Development Agency (Agência Brasileira de Desenvolvimento Industrial – ABDI), an organization under the Brazilian 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 the Brasil Maior Plan, which is responsible for the coordination and consolidation of the Plan's programs and actions, as well as its monitoring.

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

The Conjecture Bulletin, published quarterly, has been developed in partnership with the Industrial Economics and Technology Center (Núcleo de Economia Industrial e da Tecnologia – NEIT) of the State University of Campinas Economics Department. The first part of this Bulletin points out the modest performance of the Brazilian economy in the first quarter of 2012. The trend of a slowdown in Brazilian Gross Domestic Product (GDP) growth continued, and the reduction in gross fixed capital formation was especially notable. A reduction in the investment rate has made it difficult for the Brazilian economy and Brazilian industry to recover in the current year. Household and government consumption continued to expand, though at reduced levels,

in addition to the growth in exports in the period under analysis. Brazilian industry ended up standing out in a positive way when compared to the last quarter of 2011 and also considering both the reduced economic activity involving services and the contraction in agricultural and livestock activity. The aforementioned trends have contributed to the lower growth in industrial employment, which itself was accompanied by a reduction in the total amount of wages from net hirings in the first quarter of 2012.

The second part of this Bulletin highlights the evolution of the regional distribution of Brazilian exports in the most recent period. The analysis shows the growing importance of developing countries as foreign destination markets, particularly China and other Asian countries. It also notes the difficulty in increasing Brazilian exports to core countries because of the continued stagnation/recession situation in these countries.

## BRAZILIAN ECONOMIC AND INDUSTRIAL PERFORMANCE IN THE FIRST QUARTER OF 2012

The Brazilian economy experienced disappointing growth in the first quarter of 2012. Gross Domestic Product (GDP) at market prices increased only 0.2% compared to the last quarter of 2011, with seasonal adjustments (Table 1). Compared to the first quarter of 2011, the increase was 0.8%, which confirms the trend of a slowdown in Brazilian GDP growth that has been seen since the second quarter of 2010, compared to the same quarters of previous years. Over the twelve months ending in March 2012, accumulated growth reached 1.9%, result which also shows a slowdown compared to the modest increase in Brazilian GDP of 2.7% in 2011.

On the supply side, Brazilian industry stood out in a positive way. It once again experienced

growth in the first quarter of 2012 compared to the last quarter of 2011 (1.7%, seasonally adjusted), after a few quarters of worrisome reduction. Brazilian industry remained almost completely stagnant, however, when compared to the first quarter of 2011 (0.1%) and in the accumulated rate over twelve months ending in March 2012 (0.7%). There were negative contributions from the manufacturing industry, which overshadowed growth in the other industrial activities, such as mining and civil construction, during the same periods. The slightly more promising performance of Brazilian industry, therefore, was restricted to the comparison between the first quarter of 2012 and the previous quarter, taking into account the fact that the analysis of the accumulated data revealed

**Table 1 - GDP Variation Rate by Activities and Components of Demand (4Q/2011 and 1Q/2012) (in %)**

	Quarterly rate versus previous quarter (*)		Quarterly rate versus same quarter of previous year		Accumulated rate over the past four quarters	
	4Q/2011	1Q/2012	4Q/2011	1Q/2012	4Q/2011	1Q/2012
Agriculture and Livestock	(0.1)	(7.3)	8.4	(8.5)	3.9	0.8
Industry	(0.5)	1.7	(0.4)	0.1	1.6	0.7
Mining	-	-	3.8	2.2	3.2	2.9
Manufacturing	-	-	(3.1)	(2.6)	0.1	(1.1)
Civil Construction	-	-	3.1	3.3	3.6	3.1
Electricity, Gas, and Water Supply	-	-	3.0	3.6	3.8	3.5
Services	0.4	0.6	1.4	1.6	2.7	2.2
GDP at basic price	0.2	0.2	1.2	0.6	2.5	1.7
GDP at market prices	0.2	0.2	1.4	0.8	2.7	1.9
Household consumption expenditure	1.0	1.0	2.1	2.5	4.1	3.2
Government consumption expenditure	0.5	1.5	1.3	3.4	1.9	2.3
Gross fixed capital formation	(0.6)	(1.8)	2.0	(2.1)	4.7	2.1
Goods and Services Exports	1.8	0.2	3.7	6.6	4.5	5.1
Goods and Services Imports (-)	2.1	1.1	6.4	6.3	9.7	8.2

(\*) Seasonally adjusted. 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 Conjuncture Bulletin. Data from the 1st quarter of 2012 is preliminary.

Source: National Accounts System (SCN/IBGE).



modest industrial growth. Thus, the data justifies the government's and the business community's continued concern over the performance of Brazilian industry, particularly in terms of its capacity for recovering the levels of economic activity that occurred in the period that preceded the international financial crisis. Certain factors continue to negatively affect Brazilian industrial activity, such as the weakening of the international economic situation and the increased competition from imported products, at a time of idle capacity in world production, of the aggressive strategies of international competitors, and of appreciation of Brazil's currency. Therefore, the commitment to Brazilian industry needs to be strengthened, especially considering that industrial activity certainly presents a higher potential of stimulus to other economic activities, resulting in a chain reaction for the rest of the Brazilian economy.

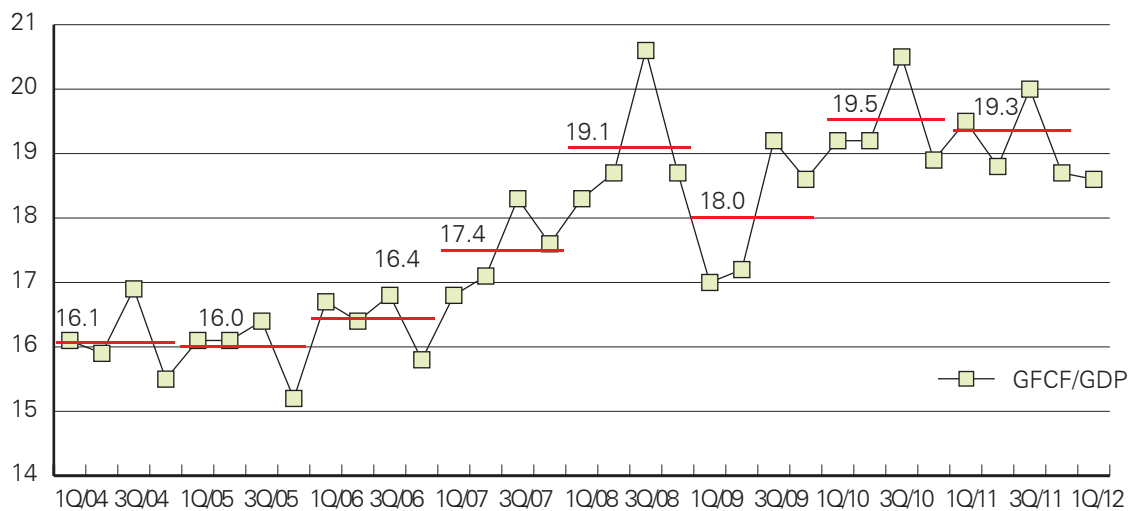
On the other hand, the agricultural and livestock sector experienced very negative performance in the first quarter of 2012: production shrank by 7.3% compared to the last quarter of 2011 (seasonally adjusted) and by 8.5% compared to the first quarter of 2011 (Table 1). This drop represented a reversal in the process of significant growth in agricultural activity over the last years. In the accumulated rate over four quarters ending in March 2012, agricultural production increased only 0.8%. Negative results from soy, rice, and tobacco harvests, which were affected by droughts in the southern and northeastern regions of the country, contributed to the overall negative results in Brazilian agricultural activity.

Regarding internal demand, household consumption continued to serve as an important base of support for Brazil's economic performance. This reflects a continuation of the trends seen in the post-crisis period. In the comparison between the first quarter of 2012 and the last quarter of 2011 (with seasonal adjustment), household consumption and government consumption led modest Brazilian production growth, with variations of 1.0% and 1.5%, respectively. When compared to the first quarter of 2011, both household consumption and government consumption were able to maintain positive rates of growth of 2.5% and 3.4%, respectively. Household consumption reached eight and a half years of consecutive quarterly growth, according to this comparison. Additionally, government consumption was more significantly involved in sustaining internal de-

mand in the first quarter of 2012.

The reduction in investments stood out in a negative way and became one of the most worrisome characteristics of the first quarter of the year. Gross fixed capital formation suffered a drop of 1.8% in the first quarter of 2012 compared to the last quarter of 2011 (with seasonal adjustment), even despite the abundant supply of public credit. This was the worst marginal investment performance since the negative variations that were seen in the last quarter of 2008 and in the first quarter of 2009, immediately after the outbreak of the international financial crisis. This decrease in investments was even more accentuated when the first quarter of 2012 was compared to the first quarter of 2011 (-2.1%). This value was surpassed only by the drops seen in the first quarters of 2009 when they were compared to the same quarters in 2008. Therefore, the rapid deterioration of gross fixed capital formation is cause for concern. In the period of post-crisis recovery, investments maintained a level of growth well above that of household consumption. This difference decreased gradually and levels of household consumption eventually surpassed those of investment in the third and fourth quarters of 2011 when compared to the same periods in 2010. Finally, the decrease in gross fixed capital formation in the first quarter of 2012 stood out as a reason for significant concern.

Brazil's investment rate reduced slightly to 18.7% in the first quarter of 2012, a result which reaffirms the lower figure seen in the last quarter of 2011 (Graph 1). The confirmation of the investment rate's downward trajectory puts limits upon the future performance of the Brazilian economy. Investments have been negatively affected by the continued international crisis and also by the reduced expectation of domestic growth. However, the continued implementation of the policy of reduced interest rates and the efforts toward executing and increasing the measures included in the second version of the Brasil Maior Plan (from the Brazilian Ministry of Development, Industry, and Foreign Trade – MDIC, Plano 2011-2014) may help to create an environment that will favor investment and, as a consequence, stimulate the recovery of Brazil's economy and industry. The acceleration of infrastructure investment projects, which are coordinated by the public sector, may also have an important effect on the rate of recovery for investments.

**Graph 1 - Investment Rate Growth (1Q/2004 to 1Q/2012) (in %)**

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 Conjecture Bulletin. Data from the 1st quarter of 2012 is preliminary.

Source: National Accounts System (SCN)/IBGE.

At the end of 2011, imports stood out compared to the other components of internal demand, and they were found to have limited growth in the first quarter of 2012 compared to the last quarter of 2011 (1.1%), with seasonal adjustments. However, foreign purchases maintained high rates of growth in the first quarter of 2012 compared to the first quarter of 2011 (6.3%), surpassing the increases of other components of internal demand. In the accumulated rate over twelve months ending in March 2012, imports experienced a higher rate of growth of 8.2%. Therefore, the data justifies the concern over the effects that increased international competition and the entry of foreign products into the Brazilian market have on domestic production.

The beginning of the year revealed the difficult recovery of demand originating from the principle consuming countries in the developed world, which had adverse effects on the figures for Brazilian exports. Growth in exports slowed down to a modest rate of 0.2% in the first quarter of 2012 compared to the last quarter of 2011, with seasonal adjustments (Table 1). As for the first quarter of last year, growth in exports was found to be more extensive (6.6%), and it even surpassed rates from imports in the same period (albeit modestly). The rate of Brazilian exports grew 5.1% over the twelve months ending in March 2012, surpassing the rate of 4.5% calcu-

lated in 2011, but much lower than the rate of 11.5% from 2010 (The Industrial Conjecture Bulletin, March 2012).

Data from Brazilian industry in the first quarter of 2012 is available in more detail from the Brazilian Monthly Industrial Survey – Physical Production (Pesquisa Industrial Mensal-Produção Física – PIM-PF/IBGE). There was a drop in physical production in the mining industry (-3.3%), in the manufacturing industry (-0.3%), and in overall industry (-0.7%) in the first quarter of 2012 compared to the fourth quarter of 2011 (with seasonal adjustments) (Table 2). In the case of the manufacturing industry and, consequently, of industry overall, there was a lower marginal contraction, which had intensified in the third and fourth quarters of 2011. However, the negative results of physical production from industry overall were more negative than those of the manufacturing industry in the first quarter of the year due to the significant reduction in mining production during the same period. In the specific case of the mining industry, there was a worrisome reversal of the positive figures seen in the three quarters prior, results which further contributed to the negative performance of Brazilian industrial production.

In the comparison between the first quarter of 2012 and the same quarter in 2001, there was a greater decrease in industrial physical production (to -2.8%) that was associated with the greater

**Table 2 - Variation Rates of Brazilian Industrial Production (1Q/2011 to 1Q/2012) (in %)**

Sectors	1Q 2011	2Q 2011	3Q 2011	4Q 2011	1Q 2012
<b>Quarterly variation rate over the previous quarter (seasonally adjusted)</b>					
<b>Overall Industry</b>	<b>0.8</b>	<b>(0.2)</b>	<b>(0.7)</b>	<b>(1.6)</b>	<b>(0.7)</b>
Mining	(1.1)	1.3	0.2	1.6	(3.3)
Manufacturing	1.5	(0.6)	(0.8)	(1.8)	(0.3)
<b>Quarterly variation rate over the same quarter of the previous year</b>					
<b>Overall Industry</b>	<b>2.8</b>	<b>0.6</b>	<b>0.1</b>	<b>(1.9)</b>	<b>(2.8)</b>
Mining	3.3	2.8	0.2	2.5	(0.2)
Manufacturing	2.7	0.5	0.1	(2.1)	(3.0)
<b>Accumulated variation rate over the past four quarters</b>					
<b>Overall Industry</b>	<b>6.9</b>	<b>3.7</b>	<b>2.5</b>	<b>0.4</b>	<b>(1.0)</b>
Mining	9.6	6.8	5.1	2.1	1.3
Manufacturing	6.8	3.5	2.3	0.2	(1.1)

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 Industrial Conjecture Bulletins.

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

decrease seen in the manufacturing industry (to -3.0%) compared to the decrease seen in mining production (-0.2%) during the same period (Table 2). The rate over twelve months ending in March 2012 also revealed a drop in industrial physical production (-1.0%). The drop in production from the manufacturing industry was higher (-1.1%), and it canceled out the modest growth in mining production (1.3%). This negative performance in the first quarter of 2012 reflected a continuing trend of slower growth in physical production from Brazilian industry, a trend which has been occurring since the last quarter of 2010, according to the evaluation of the accumulated rates in twelve months, which were calculated at the end of each quarter of the year.

Therefore, despite the lower marginal contraction in Brazil's levels of industrial production in the first quarter of 2012 compared to the last quarter of 2011 and with seasonal adjustments, there was still a trend toward continued decreases, whether based on the comparison to the first quarter of the last year or whether based on the analysis of the data from the previous twelve months. This fact reinforces the idea that Brazilian industry has experienced better performance only when the analysis is restricted to the comparison of marginal data (each quarter versus the previous quarter), because the analysis of the accumulated data reveals a worrisome decrease during the last quarters.

The comparison between the most recent data available on the month of April 2012 and April 2011 revealed reductions in physical production from industry overall (-2.9%) and from the manufacturing industry (-3.1%), and it also revealed modest growth in the mining industry (0.4%) (PIM-PF/IBGE). Both overall industry and the manufacturing industry were found to have reductions in April 2012 compared to March 2012, with seasonal adjustments (-0.2% and -0.4%, respectively). Thus, the trend toward decreases in industrial production is confirmed by analyzing the latest rates available for monthly variations of physical production in Brazil.

As explained in the Industrial Conjecture Bulletin from March 2012, Brazilian industry has faced difficulties in expanding its level of activity since the beginning of the second quarter of 2010. The document showed that, since January 2009, the speed of recovery for Brazilian industrial activity has been very similar to that seen among the set of emerging economies, but that Brazil's levels of industrial production have shown clear signs of stagnation since April 2010, which distinguishes the country from the recovery trends seen in emerging countries and reveals its conditions to be more similar to the stagnation seen in developed countries. This trend was confirmed in the first quarter of 2012, and it contributed to the uncertainty and the sluggish recover of core developed countries and also to the increased

competition in international markets.

In the analysis of industrial production performance by categories of use, the negative figures for capital goods in the first quarter of 2012 compared to the last quarter of 2011 (considering seasonal adjustment) stand out at -9.3% (Table 3). Such figures for the physical production of capital goods have reflected a reduction in gross fixed capital formation and also a period of currency appreciation. The production of capital goods experienced an even more accentuated drop in the first quarter of 2012 compared to the same quarter in 2011 (-11.6%), which was surpassed only by the decreases seen in the first three quarters of 2009, when the effects of the international crisis were most intense. This fact significantly increased the drop seen in the last quarter of 2011 compared to the same period in 2010 (-1.4%), leaving behind positive and relatively differentiated performance that the production of capital goods had experienced in the other quarters of 2011 compared to the other categories of use. For such a downward trend in the first quarter of 2012, we should consider the contribution of the significant drops in January (-13.1%) and in February (-16%) compared to the same months last year. The most recent data available from March and April 2012 confirm (albeit in a less accentuated way) the reduced production of capital goods compared to the same months of 2011 (-6.2%

and 4.1%, respectively) (PIM-PF/IBGE).

The physical production of durable consumer goods also decreased in the first quarter of 2012 compared to the previous quarter (-1.6%), with seasonal adjustments (Table 3). This decrease was less than that which was observed in the comparison between the fourth quarter and the third quarter of 2011 (-3.8%), with seasonal adjustments. However, there was a significant drop in the production of durable goods in the first quarter of 2012 compared to the same period in 2011 (-11.6%), continuing the downward trend that has been seen since the second quarter of 2011. This reduced production of durable goods revealed the persistent difficulties that are being faced, particularly by the producers of motor vehicles, who have witnessed an increase in stocked inventory and standstills in factory production. In April 2012, a decrease in the production of durable goods compared to April 2011 (-6.1%) was confirmed (PIM-PF/IBGE). An improved performance by the production of durable goods may occur more immediately as a result of stronger tax and credit measures led by the Brazilian government toward some durable goods sectors, such as white goods (household appliances). However, a more long-term stimulus is expected once the new Brazilian automobile system is put into place next year.

In a time of uncertainty over the future of the world economies, difficulties persist insustaining

**Table 3 - Variation Rate of Industrial Production by Category of Use**  
(1Q/2011 to 1Q/2012) (in %)

Category of Use	1Q 2011	2Q 2011	3Q 2011	4Q 2011	1Q 2012
<b>Quarterly variation rate over the previous quarter (seasonally adjusted)</b>					
Capital Goods	3.8	(0.9)	0.7	(3.9)	(9.3)
Intermediate Goods	0.5	0.3	(1.1)	(0.5)	(1.0)
Durable Consumer Goods	3.8	(6.5)	(2.1)	(3.8)	(1.6)
Semi-Durable and Non-Durable Consumer Goods	0.9	(0.9)	0.6	(1.0)	1.6
<b>Quarterly variation rate over the same quarter of the previous year</b>					
Capital Goods	8.6	2.5	4.0	(1.4)	(11.6)
Intermediate Goods	1.8	0.5	(0.4)	(0.8)	(1.3)
Durable Consumer Goods	5.1	(1.0)	(2.2)	(9.5)	(11.6)
Semi-Durable and Non-Durable Consumer Goods	1.1	(0.2)	0.3	(1.1)	1.3

Note: This data incorporates a revision of the figures previously released by the IBGE. Therefore, it's possible that there are differences in the data analyzed in previous Industrial Conjuncture Bulletins.

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

external demand for raw materials and primary products and in recovering internal economic activity, difficulties which affect the country's production of intermediate goods. In the comparison between the first quarter of 2012 and the last quarter of 2011, there was a decrease in the production of intermediate goods (-1.0%, with seasonal adjustments), a result which follows the marginal downward trend seen in the case of the physical production of capital goods and durable goods, though less so (Table 3). Additionally, there was an even greater decrease in the physical production of intermediate goods in the first quarter of 2012 compared to the same period in 2011 (to -1.3%). The negative performance of intermediate goods production can also be confirmed by the changes in March and April 2012 compared to those same months in 2011 (both -2.0%), the same as occurred from October 2011 to January 2012 compared to the same periods in the previous years (PIM-PF/IBGE).

Among the categories of use that were analyzed, semi-durable goods and non-durable goods, which are more dependent on current internal income trends, had the only positive figures in physical production from industry in the first quarter of 2012. The production of these goods was able to experience growth (albeit modest growth) in the first quarter of 2012 compared both to the last quarter of 2011 (1.6%), with seasonal adjustments, and to the first quarter of 2011 (1.3%). In both cases, the downward trend that had been seen at the end of 2011 was reversed (Table 3). These results distinguish the positive performance of the semi-durable goods and non-durable goods sectors from the negative performance seen in other categories of use in the first quarter of 2012. It is important to note that certain sectors that were included in this category of use have more directly suffered the effects of competition from imported products. However, measures that were recently enacted by the Brazilian government may contribute to a more successful performance from the production of semi-durable and non-durable goods in the near future. These measures include increasing the scope of tax breaks on payrolls, as well as postponing tax collection from certain sectors that are included in this category of use, such as the textile sector and the footwear sector.

Therefore, the analysis of physical production by category of use highlighted the decreased

physical production of capital goods, of durable consumer goods, and of intermediate goods at a time when Brazil is facing a reduction in gross fixed capital formation, despite the continued (though reduced) growth of household spending and government consumption. These results undoubtedly accentuate concern over the difficulties faced in the country's attempt to recover investments and economic activity during a time of uncertainty over the future of main production and consumption centers in the world and of increased international competition, both of which generate, among other effects, a growing dispute between imported products and domestic products within the Brazilian market. This competition affects local production in an important way. In an attempt to overcome these difficulties, the Brazilian government has guided its efforts toward increasing and diversifying tax incentives and credit incentives to improve investment and production in Brazilian industry.

Most of the industrial sectors that were included in the PIM-PF/IBGE report (17 of the 27 sectors) experienced a decrease in or stagnation of physical production in the first quarter of 2012 compared to the same period in 2011. Only three (3) sectors in this group managed to minimize reductions in their physical production, though they still continued to experience negative performance in the first quarter of 2012. Motor vehicles experienced the worst performance in the period that was analyzed (-20.3%) as a result of a more restrictive environment for auto loans and stocked inventory that reached critical levels. This environment led to some interruptions in production at the assembly level. The other negative results that stood out included those from the following sectors: clothing and accessories (-14.1%), office machines and IT equipment (-13.5%); communication equipment, electronic material, and devices (-13.1%), electric machines, devices, and materials (-12.0%). The machines and equipment sector, which had been an important leader in expanding post-crisis economic activity in Brazil, experienced a slight decrease in physical production (-0.8%) during the period under analysis (PIM-PF/IBGE).

There was growth in physical production in the first quarter of 2012 in the other industrial sectors that were included in the IBGE's research (it occurred in 10 of 27 sectors). However, four (4) sectors from this group experienced very small

rates of growth (from 1.5% to 3.0%): paper and cellulose (1.5%); foods (1.6%); furniture (2.4%); and non-metallic minerals (2.6%). Another five (5) sectors reached relatively higher rates of growth, though the results were still modest (between 3.0% and 6.5%). In results that were consistent with previous figures, the only industrial sector with significant growth in physical production in the first quarter of 2012 (compared to the first quarter of 2011) was the medical, precision and optical instruments sector, which saw 14.7% growth (PIM-PF/IBGE).

The results of formal job creation in Brazilian industry from the first quarter of 2012 reflect these trends from the economy as a whole and, more specifically, from the increase in industrial activity. In agreement with Brazil's General Employment and Unemployment Database (Cadastro Geral de Empregados e Desempregados, CAGED/MTE),<sup>1</sup> there was a net creation of 53,742 jobs between January and March of 2012. Compared to the same period in recent years, the research reveals a net reduction in jobs that was centered around the first quarter of 2009, the peak of the crisis (Table 4). In the first three months of 2010 and 2011, more than 100,000 jobs were created in Brazil's industrial sector, a figure which came very close to 200,000 in 2010, but which presented a slowdown in 2011. In relative terms, 36% fewer industrial jobs were created between January and March of 2011 compared to the same period in 2010. In the comparison between the first quarters of 2012 and 2011,

there was a 58% decrease in the rate of job creation; that is to say, there was a substantially greater slowdown than that which was seen in 2011.

In the case of total net wages of industrial workers (wages of hired workers minus wages of resignees and those who were dismissed), there was a loss in the first quarter of 2012, a result which had not occurred since the first quarter of 2009 (Table 4). As was seen in formal job creation, there was a slowdown in the increase of total wages in Brazilian industry between 2010 and 2011 (considering the first three months of each year). However, unlike the behavior seen in the case of formal job creation, there was a decrease in total wages between January and March of 2012. This fact reflects the trend of companies firing workers with higher salaries and hiring workers with lower salaries as a way to reduce costs. For this reason, reduction trends seem much more dramatic for total wages than for levels of employment.

The trend of a slowdown in job creation becomes even clearer in the analysis of moving averages (over twelve months) of net hirings (Graph 2). The data reveals the dramatic drop in the moving average from the end of 2008 through the second quarter of 2009, a period which was marked by the peak impacts of the international crisis on Brazil. It was followed by a recovery that continued until August 2010. From that point on, the trend of a decrease in the moving average of net hirings continued, though at slower rates than those which occurred after the outbreak of the crisis. In March 2012, the moving average from the last twelve months reached 9,000 jobs.

As for the sectors represented by this formal

<sup>1</sup> Brazil's CAGED/MTE database presents the census results of all businesses that experienced hirings/layoffs in the formal sector during the period under analysis.

**Table 4 - Job Creation and Net Hiring Wages in Brazilian Industry (1Q/2009 to 1Q/2012)**

Year	Jobs Created					Wages (Net Hiring) (R\$ thousand – Dec./2010*)				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
<b>2009</b>	(146,761)	2,578	203,323	(52,009)	<b>7,131</b>	(308,501)	(153,828)	37,893	(105,773)	<b>(530,209)</b>
<b>2010</b>	199,187	186,139	203,873	(111,408)	<b>477,791</b>	104,290	76,794	92,038	(147,372)	<b>125,750</b>
<b>2011</b>	127,798	117,211	128,704	(188,217)	<b>185,496</b>	46,400	41,794	26,054	(228,229)	<b>(113,981)</b>
<b>2012</b>	53,742	-	-	-	-	(28,420)	-	-	-	-

\* Data deflated using Brazil's official inflation index: the IPCA (IBGE).

Source: CAGED/MTE.

job creation in Brazilian industry, the data confirms that almost all manufacturing sectors lost the capacity for job creation in the first quarters of 2010, 2011, and 2012 (Table 5). (This loss is not as pronounced in mining, however.)

It is important to highlight figures from certain sectors that are responsible for high levels of employment. To begin with, the performance in the food production sector stands out. It registered a loss of more than 20,000 jobs at the beginning of 2012 – four times more than the losses in 2010 (in 2011, there was a small positive variation). Both the textile sector and the clothing and garment sector experienced positive job creation, though it was clearly slower than previous years. Between January and March of 2010, 8,000 jobs were generated in textile production, and 17,000 were created in clothing and accessories manufacturing. However, just over 3,000 jobs were created in each of these sectors during the same period in 2012. In the footwear and leather sector, a similar trend was observed. Thirty thousand jobs were generated in 2010, and this figure fell to 18,000 in 2011 and 17,000 in 2012. Among the more capital-intensive sectors, the drop from 21,000 to 6,000 new jobs in metal products manufacturing, not including machines and equipment, stands out. In the case of machines and equipment, the drop was from 11,000 to less than 5,000, and in the automobile

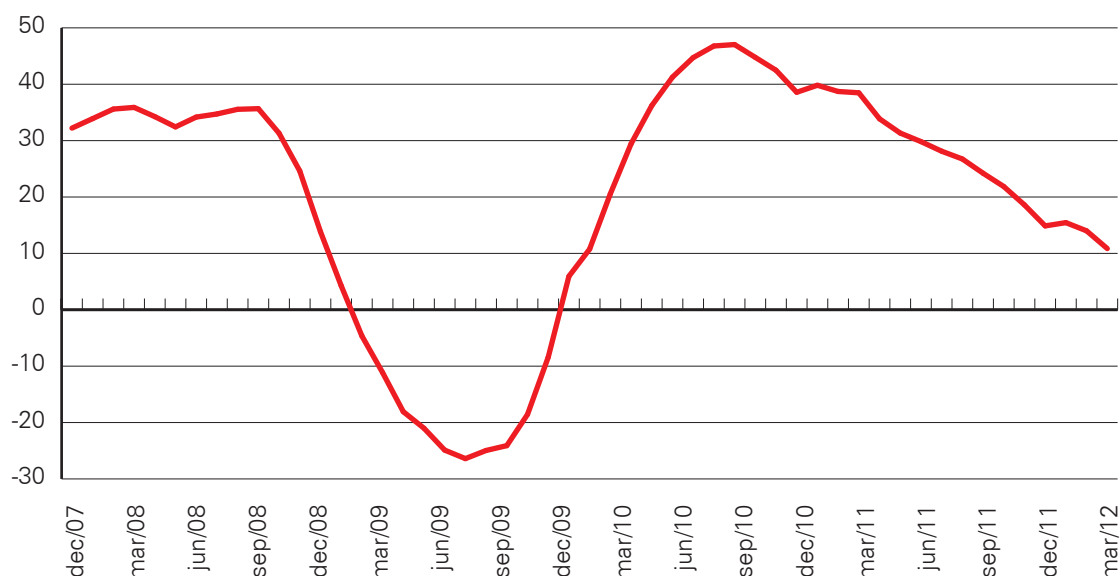
industry, the drop was from almost 17,000 to just over 200 new jobs. In the manufacturing industry, there were no sectors that increased their formal job creation capacities in the first quarter of each year under analysis. There were only a few sub-sectors that demonstrated a certain level of stability, such as biofuels and petroleum derivatives, which are natural-resource intensive.

The CAGED database points to a significant loss in the capacity for job creation in Brazilian industry, a fact which was seen in 2011 and which has been intensifying in the beginning of 2012. It has affected almost all sectors of the manufacturing industry. This trend has proven to be long-lasting and hard to reverse without the help of adequate public policy.

In the case of foreign trade, there has been a gradual decrease in Brazil's trade balance, from US\$ 10.1 billion in the third quarter of 2011 to US\$ 6.7 billion in the fourth quarter of 2011, and then to US\$ 2.4 billion in the first quarter of 2012. This most recent balance was less than the trade surplus reached in the first quarter of 2011 (FUNCEX). The reduced trade surplus in the first quarter of 2012 compared to the first quarter of 2011 was due to the lower expansion of exports (7.5%) in relation to the more significant growth of imports (9.5%) during the same period (Graph 3).

The expansion of exports (7.5%) was leveraged by the increased volume of exports (5.6%), with

**Graph 2 - Moving Averages<sup>(1)</sup> of Net Hirings in Brazilian Industry**  
(Dec/2007 to Mar/2012) (in thousands of jobs)



(1) Moving average over twelve months. Source: CAGED/MTE.

**Table 5 - Job Creation by Industrial Sectors  
in First Quarters (2010 - 2012)**

<b>Industrial Sector</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Coal Mining	38	(32)	107
Petroleum and Natural Gas	(240)	253	331
Ore Mining	2,767	3,561	2,935
Non-Metallic Mineral Mining	1,528	1,320	854
Activities to Support Mining	567	609	754
Food Products	(5,836)	610	(20,913)
Beverages	(1,811)	(1,081)	(2,287)
Tobacco Products	13,137	12,160	9,935
Textiles	8,389	2,490	3,310
Clothing and Accessories Manufacturing	17,019	7,746	3,281
Leather and Footwear	29,037	18,709	17,137
Wood Products	2,592	(1,243)	(1,155)
Paper and Cellulose	2,104	780	(498)
Printing and Recorded Productions	1,189	385	(78)
Coke, Biofuels, and Petroleum Derivatives	6,049	5,038	5,802
Chemicals	4,007	955	1,213
Pharma Chemicals and Pharmaceuticals	2,717	1,951	1,376
Rubber and Plastics	13,511	5,054	2,748
Non-Metallic Minerals	8,212	6,239	2,548
Metallurgy	9,808	5,780	1,069
Metal Products (excluding Machines and Equipment)	21,574	9,332	6,127
IT Equipment, Electronics, and Optics	7,549	4,171	(980)
Electric Machines, Devices, and Materials	7,637	5,453	3,100
Machines and Equipment	10,931	10,848	4,824
Automotive	16,930	11,876	219
Other Transportation Equipment (excluding Motor Vehicles)	1,419	2,509	1,563
Furniture	6,851	3,534	4,038
Others	3,976	1,899	2,074
Machine and Equipment Maintenance, Repairs, and Installation	7,536	6,892	4,308

Source: CAGED/MTE.

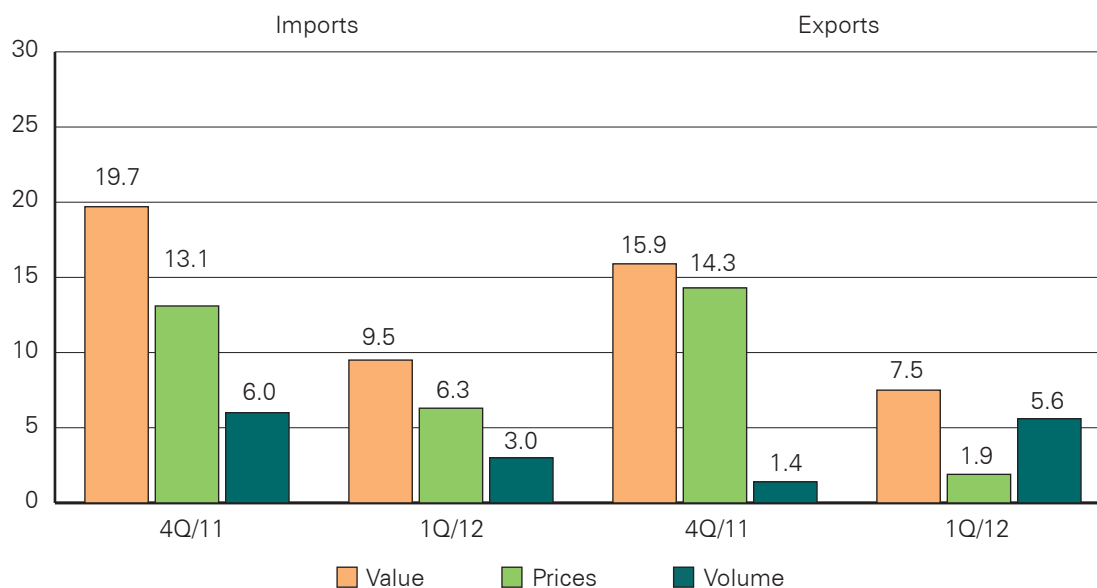
fewer effects from the prices of exports (1.9%) in the first quarter of 2012 compared to the same quarter in 2011. The rates seen in the fourth quarter of 2011 compared to the same period in 2010 were very different, considering the superiority of increased prices of exports at the time (14.3%) compared to the expansion of the volume of exports (1.4%), which led to a significant increase in the amount of exports (15.9%) (Graph 3).

There was a general expansion of exports in

all categories of use in the first quarter of 2012, especially of fuels (33.1%) and capital goods (26.3%). In the case of fuels, price increases were the main cause of variation in export values in the period under analysis (17.1%), and the volume of exports carried less (though not irrelevant) weight (14.7%). These figures differ from those of the last quarter of 2011, when export prices were responsible for the total increase in exports, considering the reduction in export vol-



**Graph 3 - Quarterly Variation Rate of Brazilian Exports and Imports:**  
Value, Volume and Price (compared to the same quarter  
of the previous year) (in %)



Source: FUNCEX with data from SECEX.

ume during the period (FUNCEX). In the case of capital goods, the volume of exports (18.9%) led the increase of exports in the first quarter of 2012, and prices of exports carried less weight (6.5%). These figures also differed from those seen in the last quarter of 2011, when there was a decrease in the volume of exports of capital goods (-2.1%). This decrease was more than made up for by an increase in prices of exports (11.0%), and it led to a modest growth in exports overall (8.6%).

The increase in imports (9.5%) was more affected by higher prices (6.3%) than by higher volume of imports (3.0%) in the first quarter of 2012 compared to the same period in 2011. In the case of imports, there was a drop in both price and volume indexes when these rates were compared to the rates from the fourth quarter of 2011. These figures differed from those of exports, which increased in quantity (Graph 3). A detailed analysis of imports by categories of use confirmed that the increase in imports was led not only by fuels (27.2%), the higher prices of which increased this product's import prices (17.2%), but also by non-durable goods (22.5%), a change which resulted from the worrisome increase in import volume (18.1%) in the first quarter of 2012 compared to the same period in 2011 (FUNCEX). It is important to point out the positive loss of momentum of the imports of durable consumer goods in the first

quarter of 2012 (it grew only 5.3%). These imports were exclusively due to higher prices (10.8%), considering the drop in imports volume (-5.2%) during the period under analysis. This data revealed a reversal of the trends seen in the last quarter of 2011, when durable goods accompanied fuel as fellow leaders of imports.

Therefore, there is still concern over the continued process of substituting domestic products with imports, which were recently led by a significant increase in the quantity of imports of non-durable goods, despite the positive figures seen for their physical production in the first quarter of 2012 compared to the same period in 2011. The performance of imports and of domestic production of non-durable consumer goods reveal the incentive that internal demand can supply for both foreign and domestic production, as long as the difficulties faced by domestic production can be mitigated in the face of growing international competition and during a time of currency appreciation.

There are still expectations that the momentum of Brazilian imports will continue, though in a scenario with less growth of internal demand, especially considering the aggressive behavior of foreign producers in international commercial transactions during a time of uncertainty toward developed countries' abilities to recover economic expansion.

The previously analyzed information shows the worsening expectations that have been seen in recent months, the large majority of which is due to the international scenario, and there are no clear signs of recovery. This uncertainty is reflected in the worrisome reduction in internal investments. Despite the adverse international scenario and the cyclical downturn, the structural conditions for growth of internal demand in Brazil (whether in consumption or investment) continue to be favorable relative to those around the world. It is expected that the reinforcement of actions to reduce the cost of investments (which, accompanied by lower interest rates and by adequate currency relationships) will contribute to an increase in industrial production specifically and economic production as a whole by the end of the current year.

## ANALYSIS OF BRAZILIAN EXPORTS BY REGION OF DESTINATION (2007-2011)

This section of the Bulletin seeks to briefly evaluate the changes seen to the pattern of Brazilian exports over the last five years in terms of the main regions of destination. It is important to remember that this period was marked by strong turbulence in the world economic area, which will likely continue to affect the global economy in the years to follow.

Rates of growth of Brazilian exports were significantly accelerated between 2007 and 2011: close to 60% overall and an annual average of almost 10%. However, it is important to highlight the fact that the impact of the international crisis was very strong. It resulted in an accentuated reduction in exports (-22.8%) in 2009. Recovery was rapid, and growth in exports reached 32% in 2010 and 27% in 2011. The record value of US\$ 256 billion that was reached by Brazilian exports in 2011 corresponded to almost twice the value of exports in 2006. When compared to 2008, however, the 2011 value was 29% higher.

Despite the rapid recovery in the post-crisis period, it is important to note certain changes regarding the exported goods, in terms of both the destination of exports and the categories of the products being exported. An analysis of these changes may provide relevant information to help clarify the perspectives on Brazilian exports, especially during a time marked by the difficulties faced by developed countries in establishing economic recovery (the European Union in particular). On the other hand, there is also increased uncertainty over the possibilities of sustaining accelerated growth in developing countries.

To begin with, in terms of the regions of destination<sup>2</sup>, NAFTA and the EU received 44.8% of Bra-

zilian exports in 2007 (Graph 1). The involvement of these regions fell drastically during the period under analysis, and reached a level of 33.5% of Brazilian exports in 2011. NAFTA states received considerably lower levels of Brazilian exports in 2009, when the international crisis reached its peak. The fact that the United States was the epicenter of the international crisis caused the drop in Brazilian exports to NAFTA states to be the largest among all of the regions (-40.5%) in 2009 (Table 1). In the years that followed, this region was not able to recuperate its involvement. Despite the recovery seen in absolute values, the total reached in 2011 was still lower than that of 2008. The destination of Brazilian exports to countries in the region dropped from 19.7% in 2007 to 12.8% in 2011. There was a decrease in Brazilian exports to NAFTA states in the period between 2008 and 2011, when the effects of the crisis on international trade were the most negative. As for the European Union (EU), the relative drop in involvement progressed during the period, and went from 25.1% in 2007 to 20.7% in 2011. Brazilian exports to the EU were only 14% higher in 2011 compared to 2008.

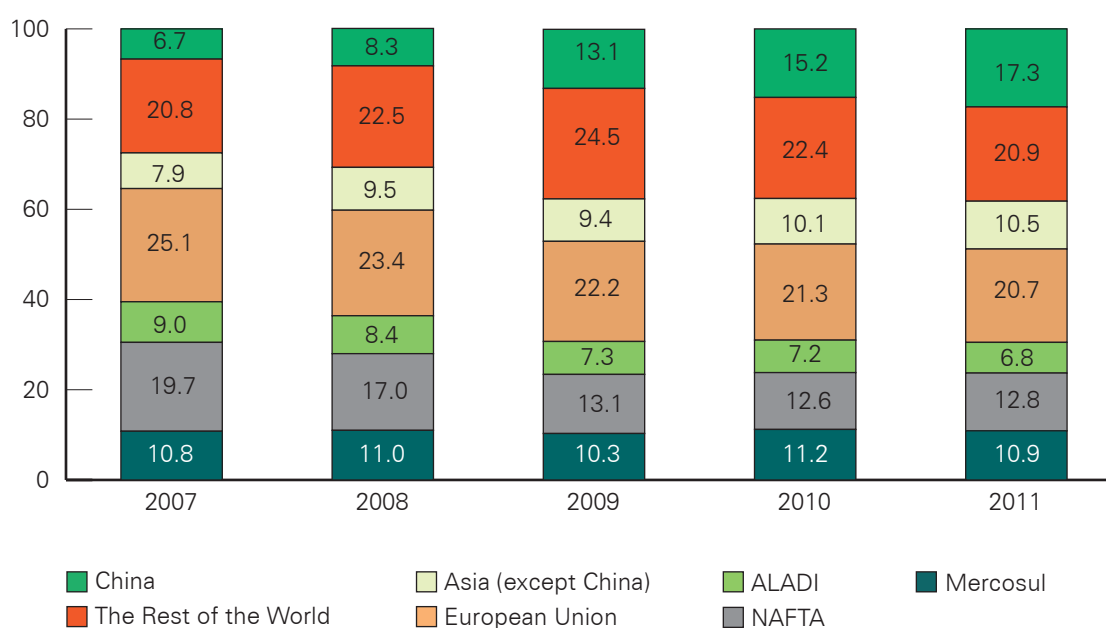
Another region that experienced lower involvement in Brazilian exports during this period was the ALADI, which reversed the ascending trend seen at the beginning of the 2000s. It was also the only developing region considered that suffered a systematic reduction in relative involvement. The registered value of Brazilian exports to this region in 2011 was only 4.3% higher than the value from 2008.

In contrast to the decreased involvement of NAFTA states, the EU, and the ALADI, there was a considerable increase in China's involvement in Brazilian exports. China corresponded to 6.7% of Brazilian exports in 2007, and rose to 17.3% in 2011 (Graph 1). This result reflects the growth in

<sup>2</sup> In the definition of these regions, the ALADI did not include Mercosul states or Mexico, which was included in NAFTA. The region of Asia, excluding China, is comprised of the following countries: Japan, South Korea, Singapore, Hong Kong, Taiwan, Malaysia, Thailand, Indonesia, and the Philippines. The European Union corresponds to the 27 countries that

make up the confederation.

**Graph 1 - Involvement of Selected Regions in Total Brazilian Exports (2007-2011) (in %)**



Source: SECEX/MDIC.

exports to China, which was much higher than to other regions (Table 1). It is also important to note that, unlike in the other regions under analysis, Brazilian exports to China experienced significant growth in 2009. The value of exports to China in 2011 was 170% higher than the 2008 figure.

The other Asian countries were also significantly more involved, going from 7.9% in 2007 to 10.6% in 2011 (Graph 1). It is important to note that the increase of Brazilian exports to China has had significant impacts on growth to the entire region of Asia, which, in turn, has continued expanding imports from other countries, including

Brazil. When the figures from China were combined with those from the other Asian countries, the region represented close to 30% of Brazilian exports in 2011.

The broad set of countries represented by category entitled "The Rest of the World" assumes an important role in receiving Brazilian exports. There was growth in the involvement of Brazil's exports to this group until 2009 (Graph 1). After that, growth in Brazilian exports to this group remained below average and led to reduced involvement (Table 1). A large part of this group is composed of countries in Africa and the Middle

**Table 1 – Variation Rate of Brazilian Exports by Region (2008-2011) (in %)**

	2008	2009	2010	2011	2011/2008
Mercosul	25.4	(27.3)	42.8	23.2	28.0
NAFTA	6.1	(40.5)	26.8	29.8	(2.1)
ALADI	14.5	(33.0)	30.2	19.5	4.3
European Union	15.0	(26.7)	26.7	22.7	14.0
Asia (except China)	48.9	(23.3)	41.9	32.7	44.4
The Rest of the World	33.7	(15.9)	20.3	18.8	20.2
China	52.7	22.5	53.1	43.9	170.0
<b>Total</b>	<b>23.4</b>	<b>(22.8)</b>	<b>32.0</b>	<b>26.8</b>	<b>29.2</b>

Source: SECEX/MDIC.

East, for which petroleum exports carry significant weight on the country's import capacity. In 2011, these countries received approximately 21% of total Brazilian exports.

Finally, it is worth highlighting the stability seen in Mercosul. The region's involvement saw few changes during the period, and it remained at approximately 11% (Graph 1). In 2011, the value of exports was 28% higher than that of 2008.

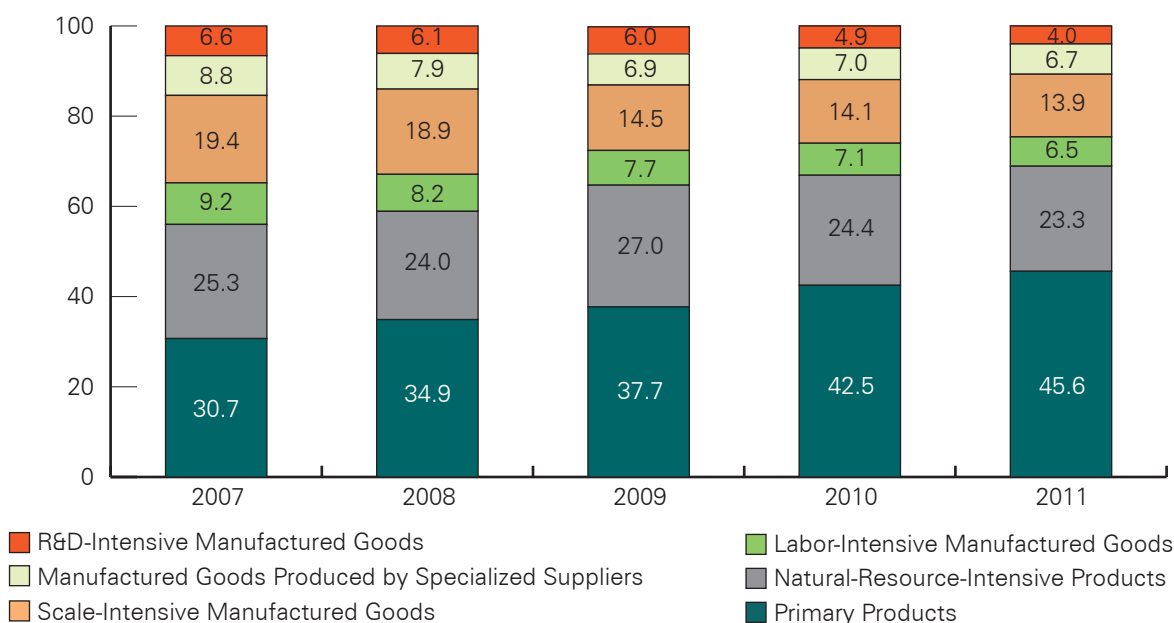
When one considers the changes to the makeup of exported products based on Commodity Trade Pattern (CTP) classifications, there was a clear increase in involvement of products from the primary sector within Brazil's export schedule (from 30.7% in 2007 to 45.6% in 2011), which was detrimental to all other categories of products (Graph 2). However, there was also a drop seen in scale-intensive products, which represented 19.4% of involvement in 2007 and 13.9% of involvement in 2011.

It is important to point out the existing direct correlation between the changes seen to relative participation of these regions and the categories of products. This correlation is much clearer in Table 2, which presents the contribution of each category of products in each region to total growth of Brazilian exports between 2008 and 2011 (i.e., between the year in which the international crisis began and the most recent data available).

To begin with, the fact that exports of primary sector products to China alone represented 42.2% of all growth in Brazilian exports during the period. As for the other regions (particularly Asia and the Rest of the World), primary sector products reached 82.6% of contribution to variations in Brazilian exports during the period. Natural-resource-intensive products reached 20.5% of this contribution, many of which went to the Rest of the World (8.4%), but there was also significant involvement from China and the rest of Asia.

In the other categories of products, the contribution to growth decreased significantly and was even negative in some cases (such as scale-intensive products and R&D-intensive products, which saw rates of -3.5% and -3.4%, respectively). In the case of scale-intensive products, the only reason the contribution was not more negative was because of the exports to Mercosul. Additionally, it is important to point out that Mercosul was the only region in which the most relevant part of contribution to growth was associated with manufactured products with a greater technological complexity. The ALADI, which has traditionally been the more common destination of these Brazilian exports, made zero or negative contributions in the period, a change which certainly reflected the increase in foreign competition and Brazil's difficulty in competing against exports of products manufactured in Asian countries.

**Graph 2 - Involvement of Product Categories in Total Brazilian Exports (2007-2011) (in %)**



Source: SECEX/MDIC.

**Table 2** – Contribution to Growth in Brazilian Exports by Region and by Product Category (2008-2011) (in %)

	Primary Products	Natural-Resource Intensive Products	Labor-Intensive Products	Scale-Intensive Products	Specialized Suppliers	R&D-Intensive Products	Total
Mercosul	1.9	1.4	0.8	4.5	1.5	0.4	<b>10.5</b>
NAFTA	5.7	(0.3)	(1.1)	(2.6)	0.1	(3.0)	<b>(1.2)</b>
ALADI	1.6	1.0	0.5	(0.6)	0.0	(1.3)	<b>1.2</b>
European Union	8.8	1.6	(0.1)	(1.3)	1.2	1.1	<b>11.2</b>
Ásia (except China)	10.9	4.2	0.1	(0.8)	0.2	(0.1)	<b>14.4</b>
The Rest of the World	11.6	8.4	0.2	(3.1)	(0.5)	(1.0)	<b>15.6</b>
China	42.2	4.4	0.6	0.3	0.0	0.7	<b>48.2</b>
<b>Total</b>	<b>82.6</b>	<b>20.8</b>	<b>1.0</b>	<b>(3.5)</b>	<b>2.5</b>	<b>(3.4)</b>	<b>100.0</b>

Source: SECEX/MDIC.

Thus, developed regions have reduced their contributions to the growth of Brazilian exports in the post-crisis period. This situation is likely to continue for a long period of time, and it means that the growth of Brazilian exports will depend more on developing countries.

However, the growth of Brazilian exports to developing countries has been concentrated in primary sector products and natural-resource-intensive products, which have been both directly and indirectly important in the case of China. Thus, the continued growth of China or a slowdown in its economic growth to slightly reduced levels has become a fundamental element in the continued positive performance of Brazilian exports.

Another point of concern is the difficulty Brazil has experienced in expanding exports with a greater degree of elaboration to Latin American markets, particularly to countries in the ALADI, where Brazil has traditionally maintained a more sophisticated export schedule. The region's contribution to the growth of the manufacturing sector was significantly lower, and this result creates the need for increased efforts to form bonds with countries within the region. The performance seen within Mercosul shows the importance of regional integration in attempts to mitigate part of the trend toward lower involvement of manufactured products in Brazil's export schedule.

This fact becomes even more important when one considers that, because of the crisis in developed countries, China and many other com-

petitors are looking for new markets to which they can export their more elaborate goods. Developing countries in Latin America have become a potential market, now that they are also experiencing economic growth. Brazil, which has maintained an appreciated exchange rate, may continue to lose ground in the sale of its exports to developing countries. China has kept costs of production low based on their scale of production, and has taken advantage of the low cost of labor in the country, and also of various types of government incentives. In addition, the country has adopted a strategy of keeping its currency depreciated. Therefore, it is essential that Brazil reconsider its stimuli for exports and its commitment to regional integration in order to reverse the process of increased concentration of exports of primary sector products, as well as to reduce its vulnerability to variations in international prices of commodities.

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