

BULLETIN

INDUSTRIAL CONJUNCTURE

JUNE 2011





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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

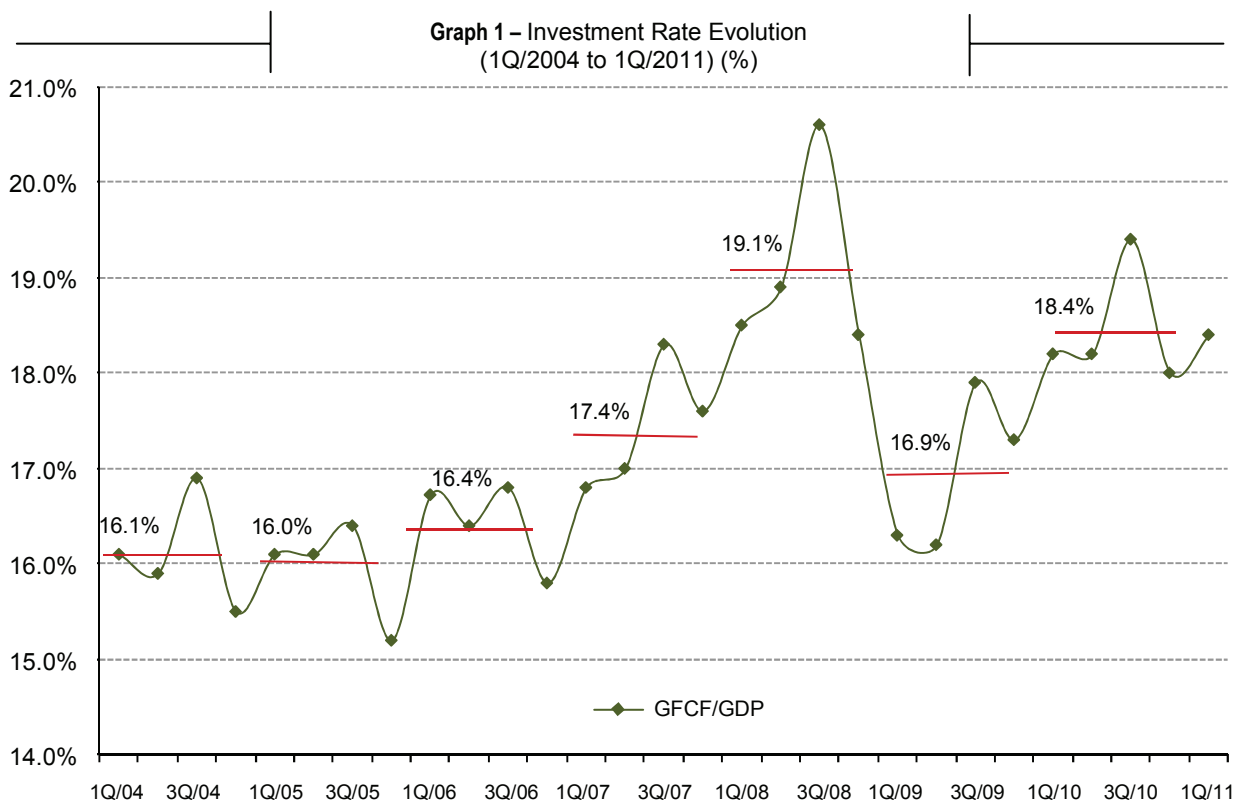
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

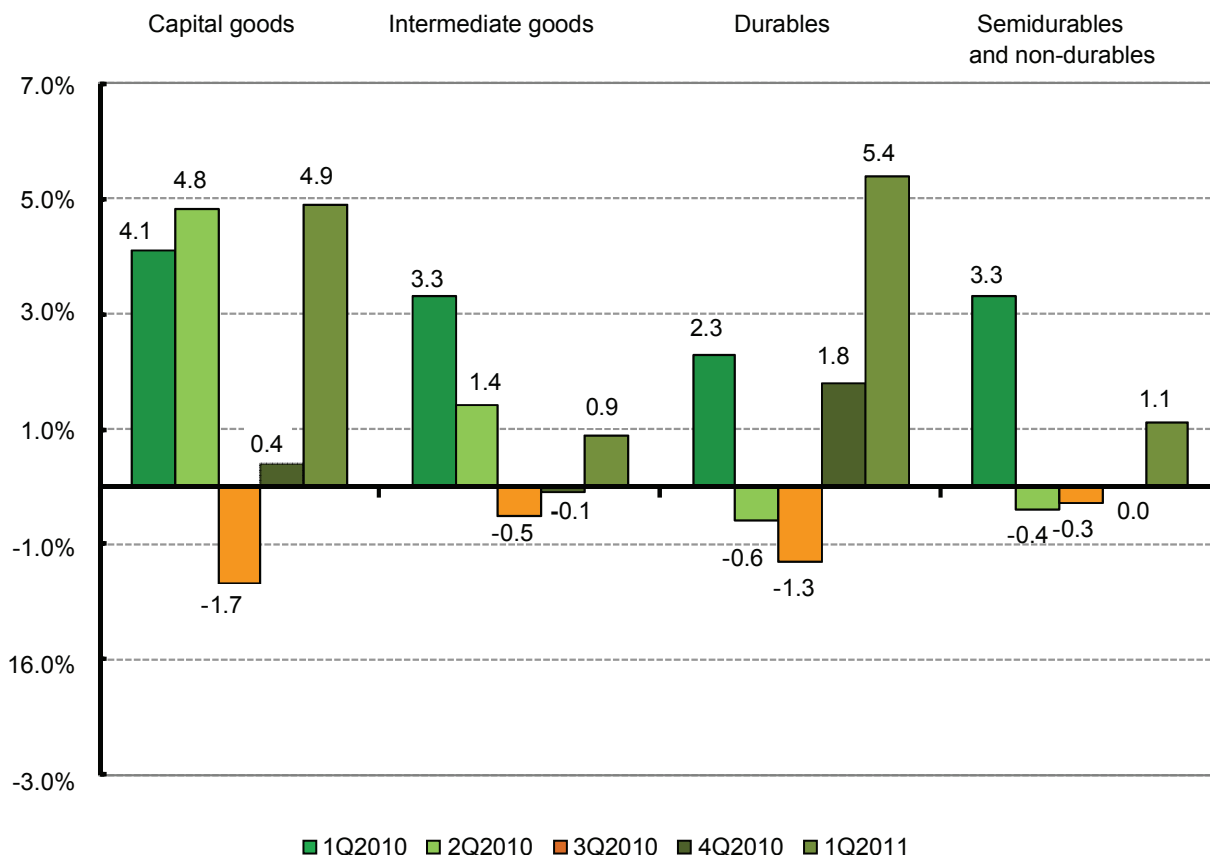
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjuncture Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

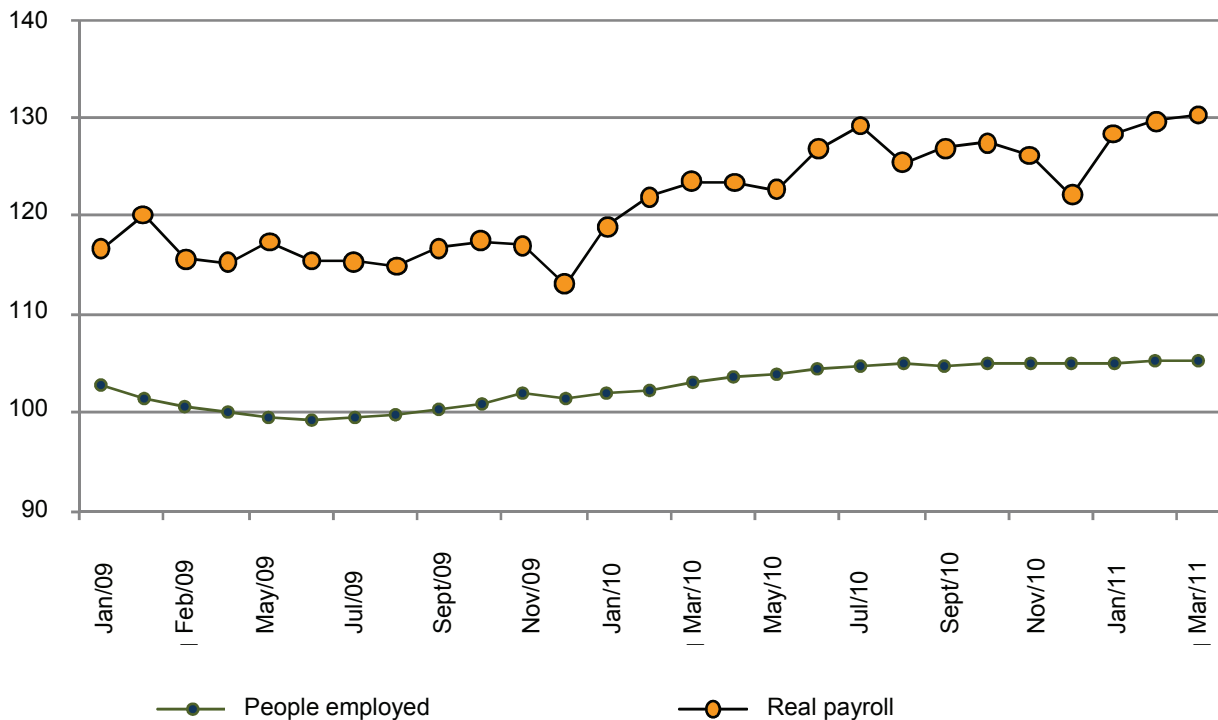
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

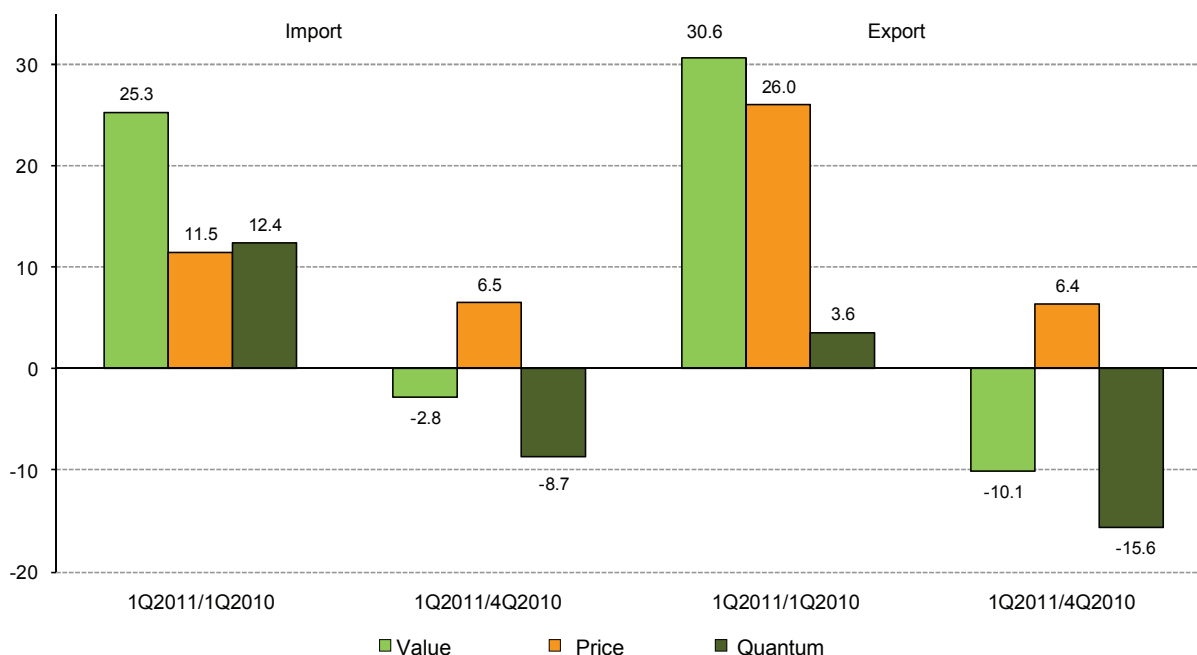
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been led by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

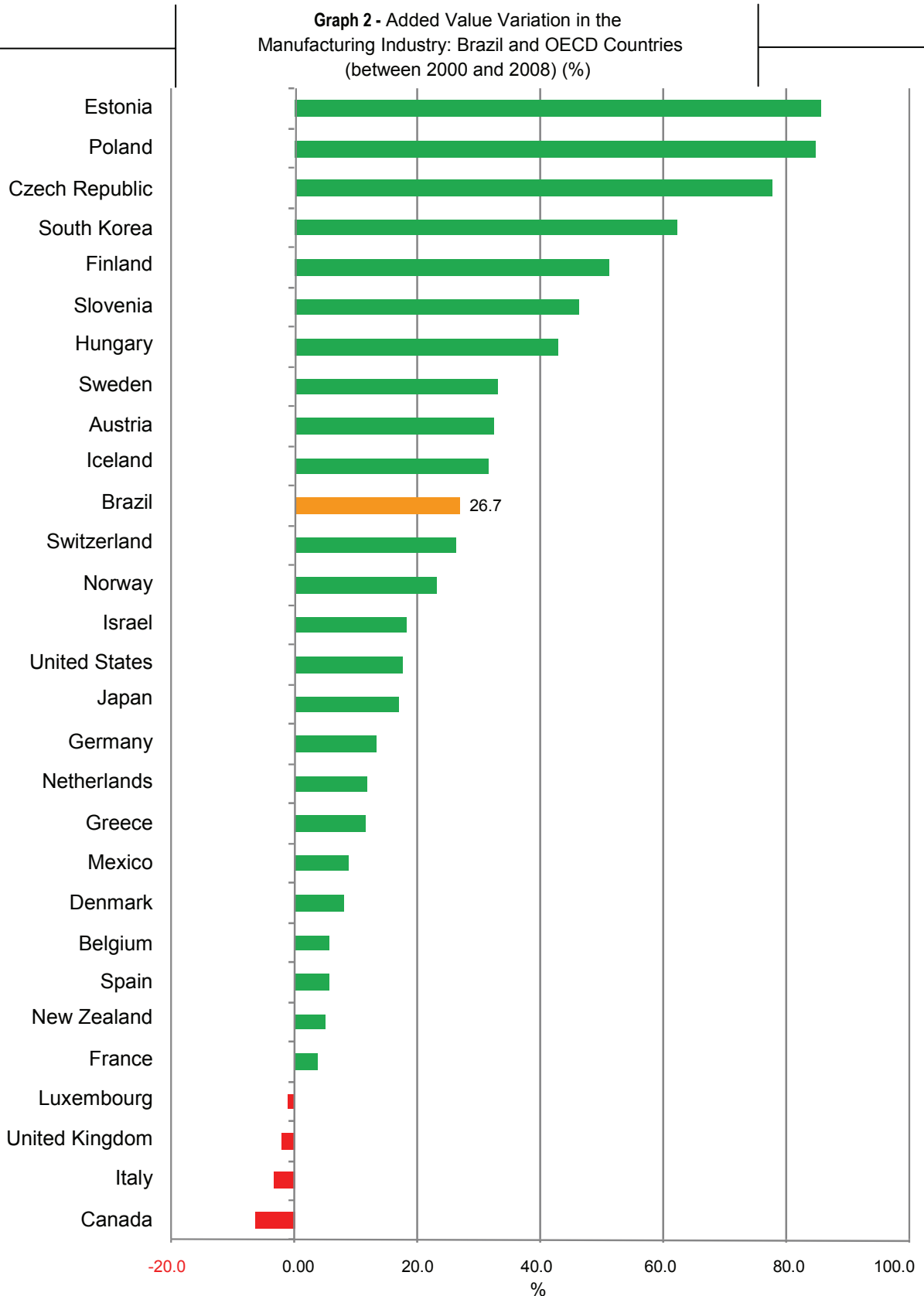
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

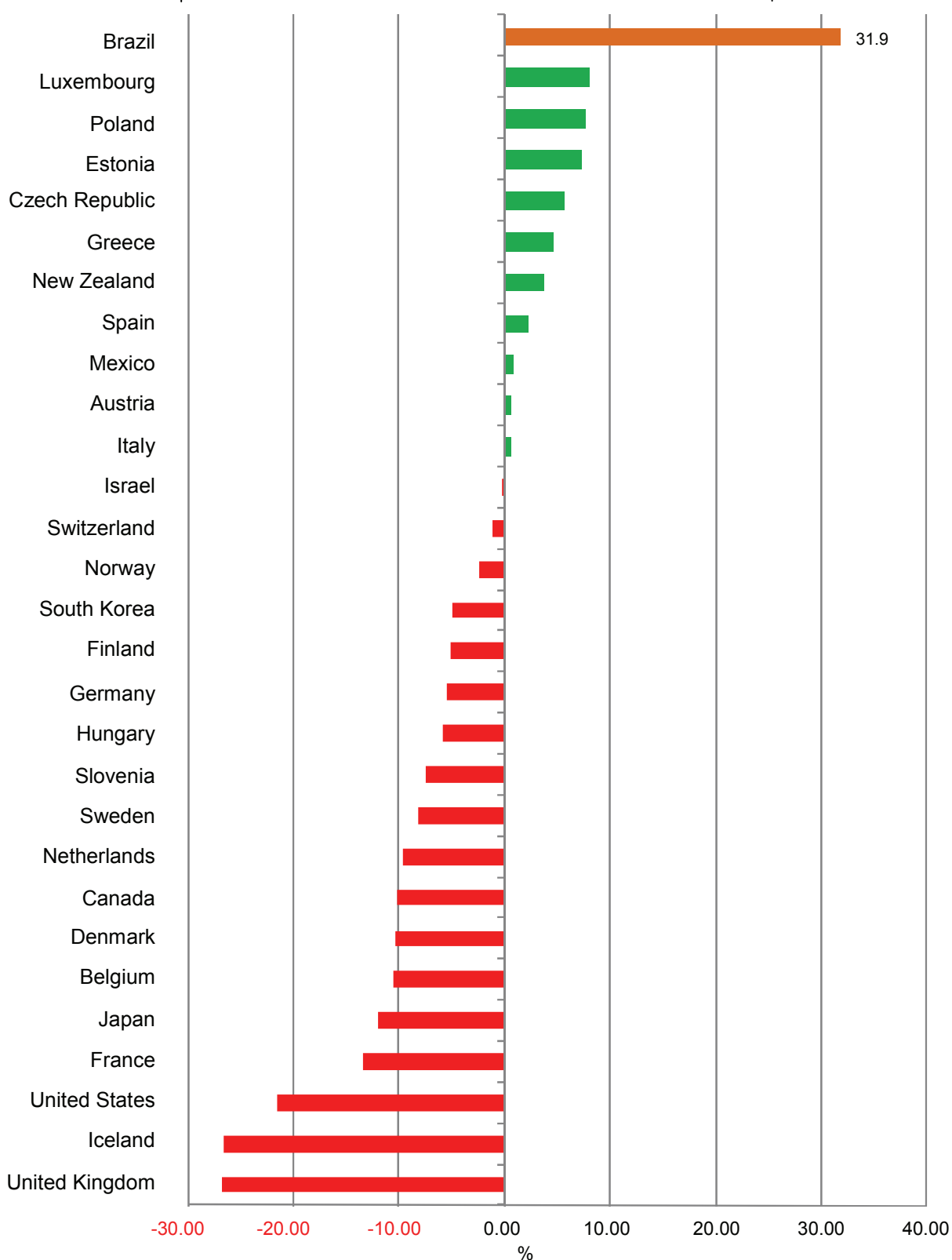


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

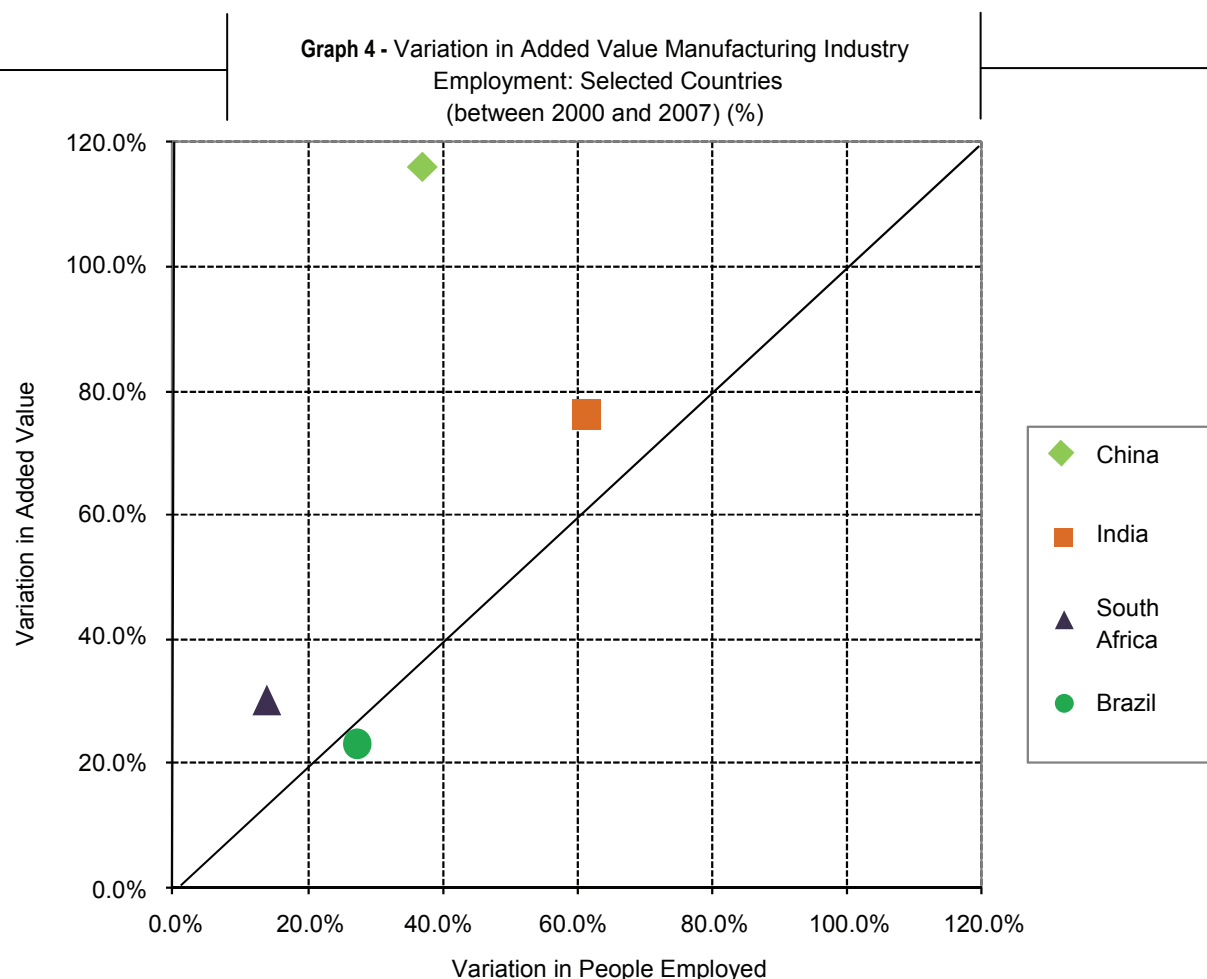
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

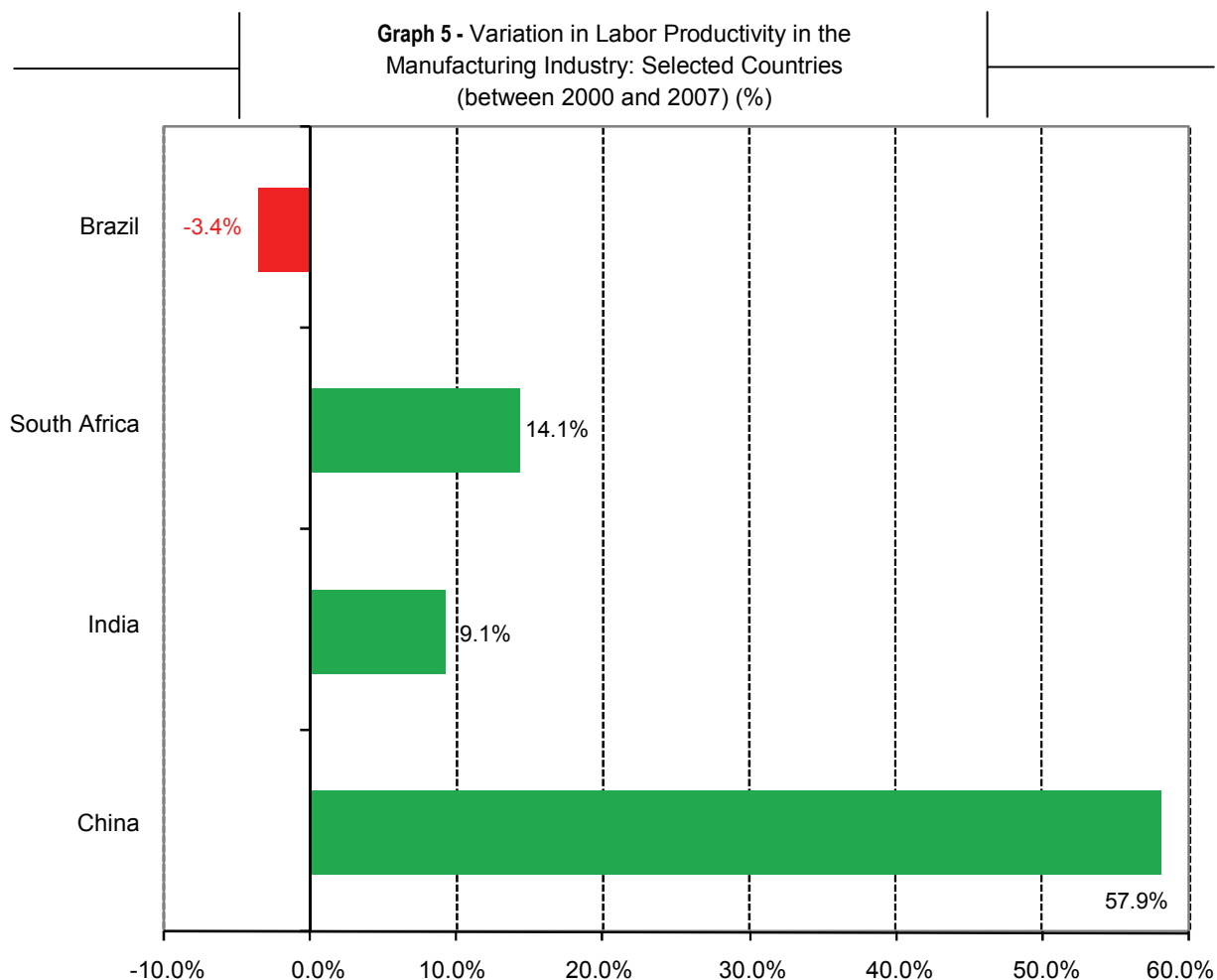
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

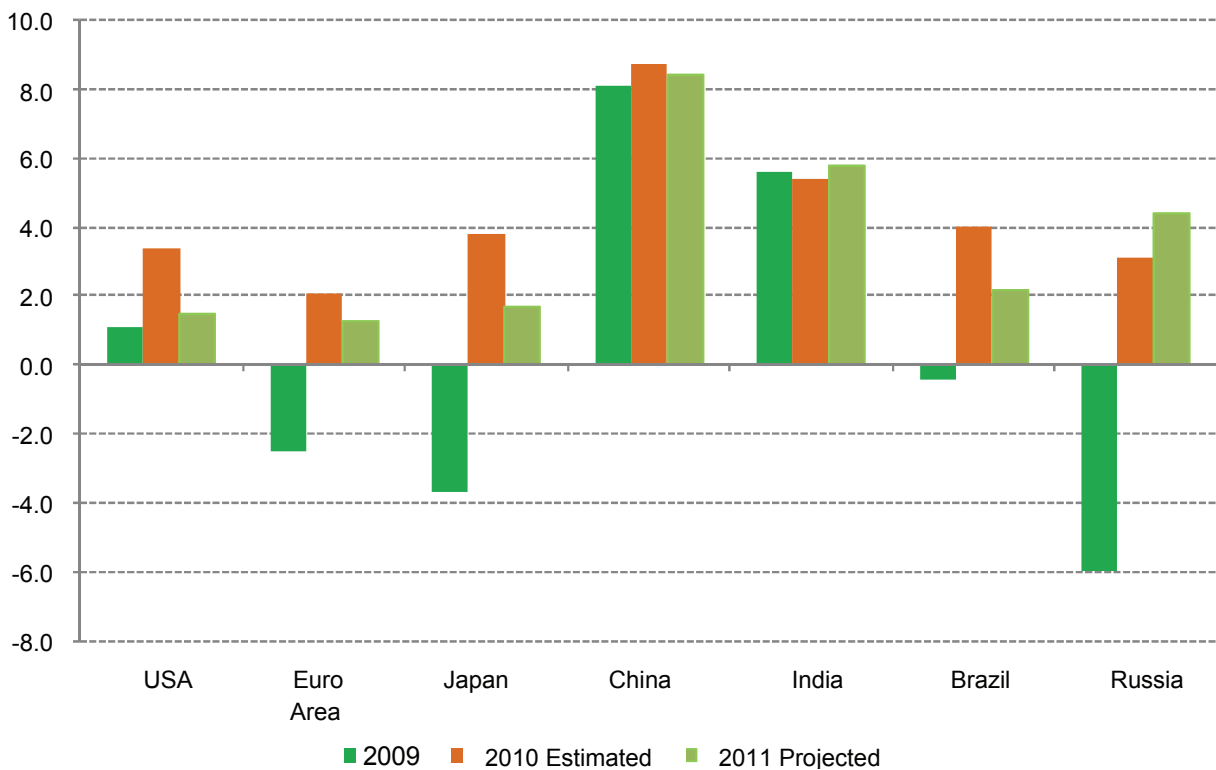
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

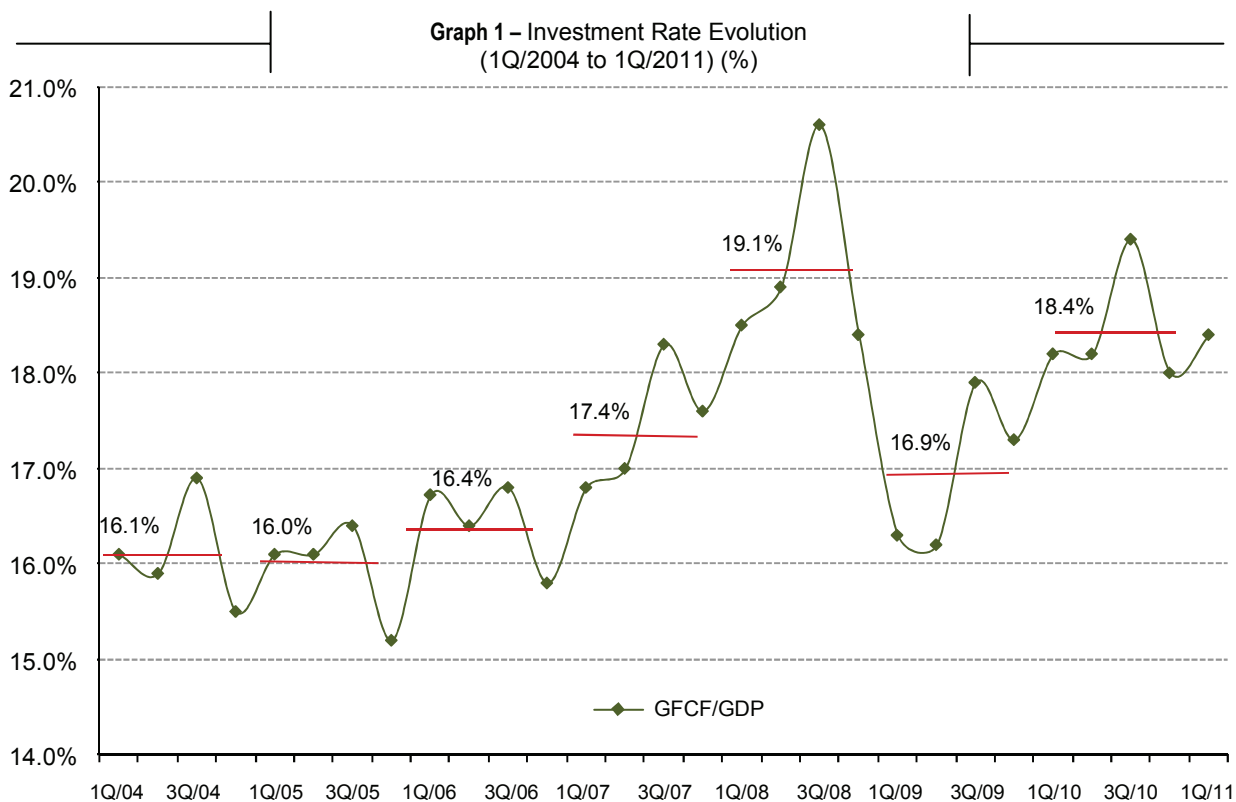
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

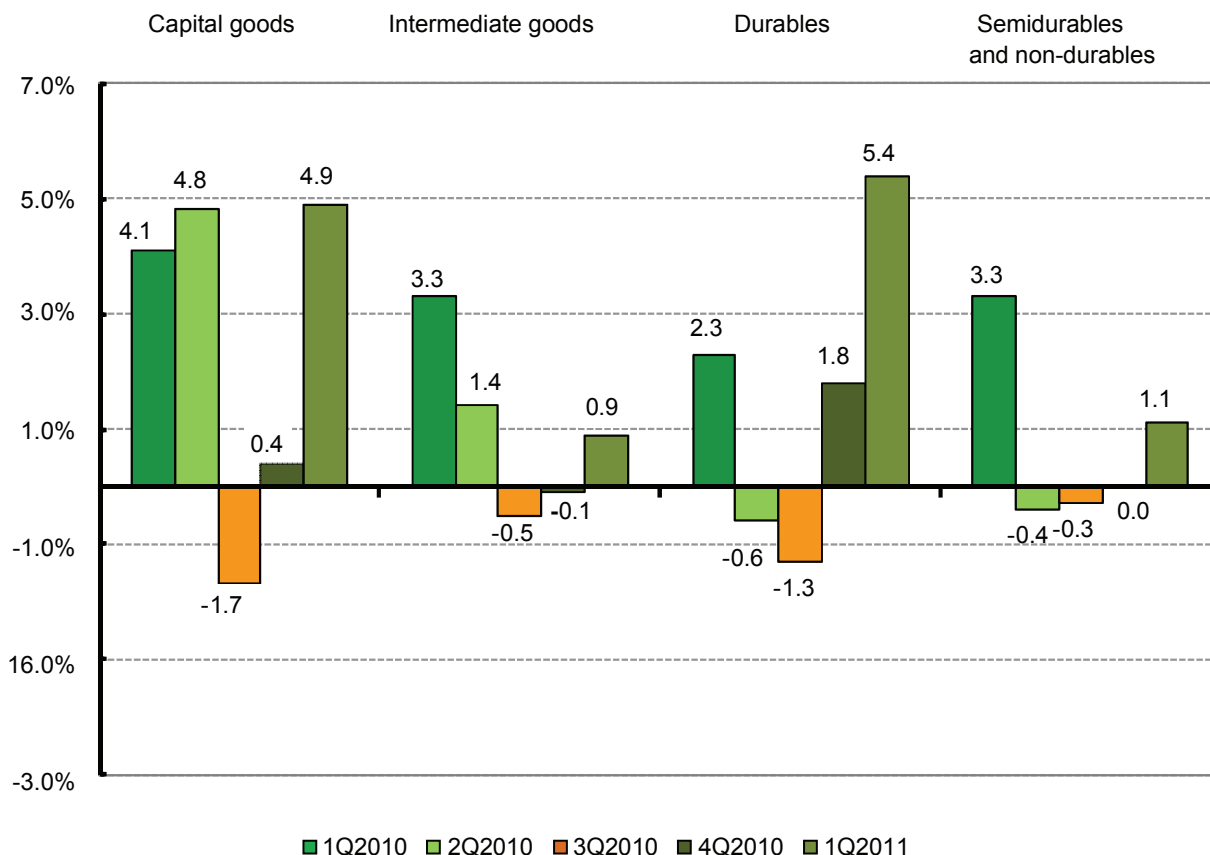
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjunction Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

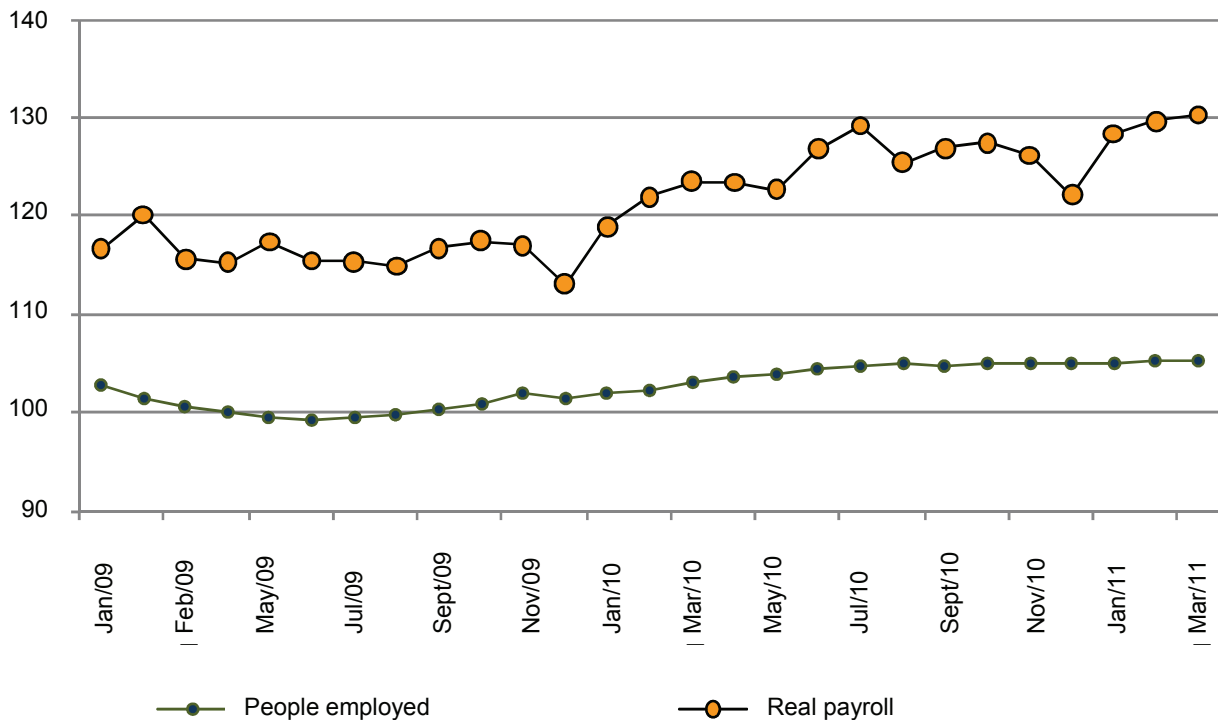
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

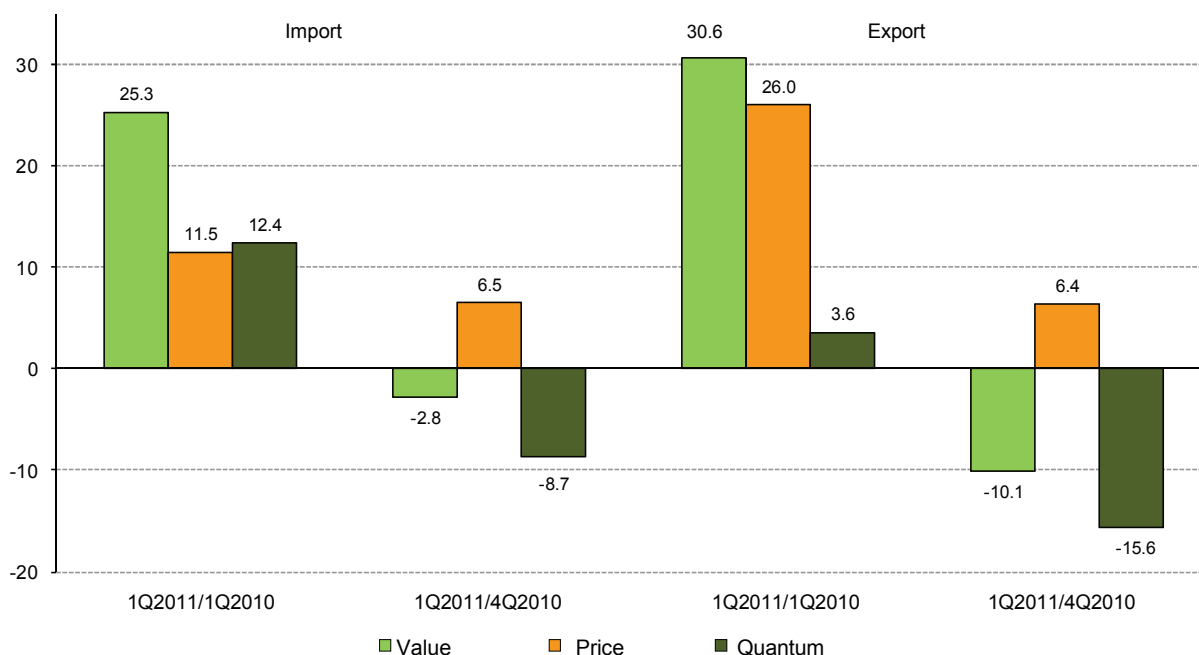
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been led by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjuncture Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

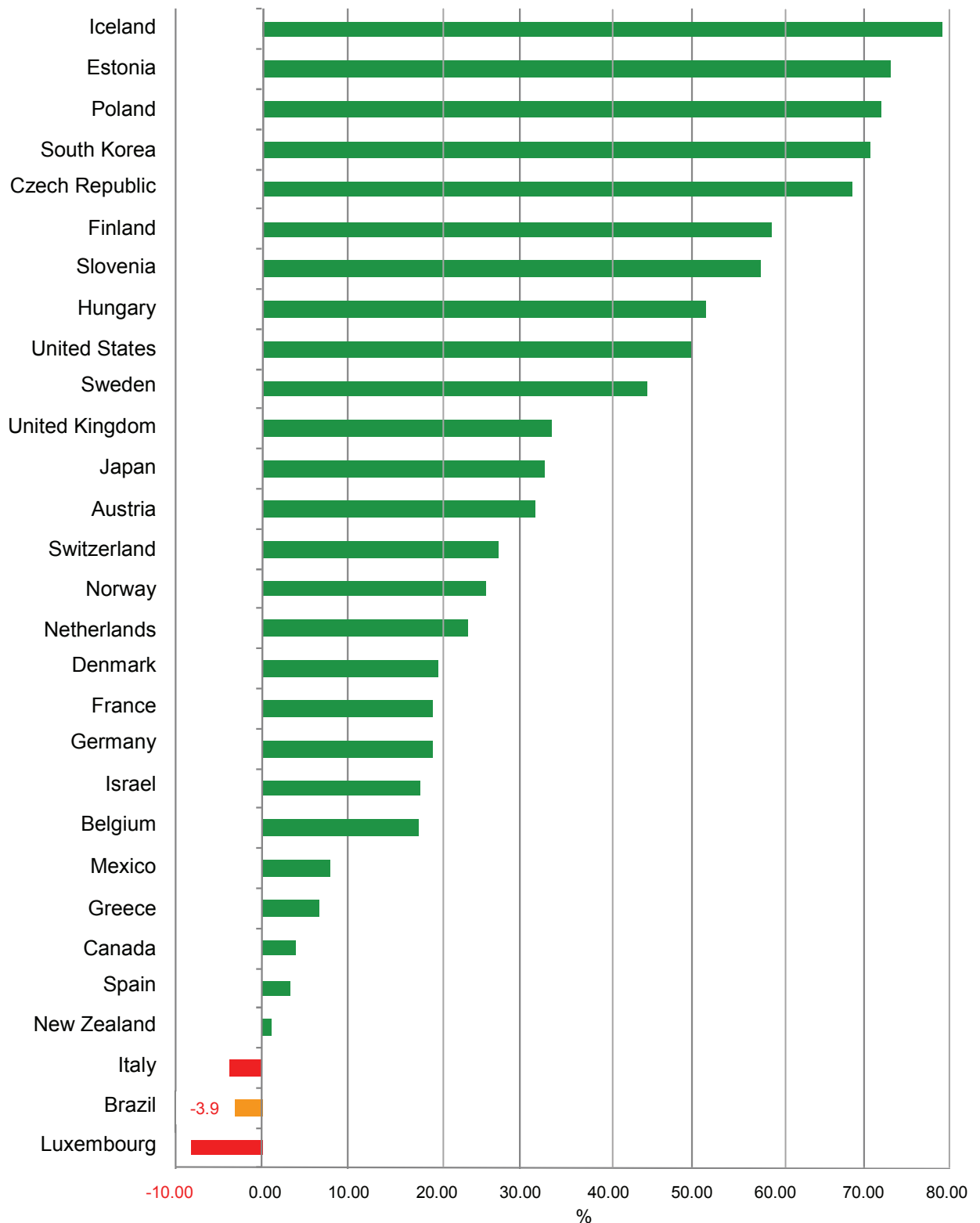
In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

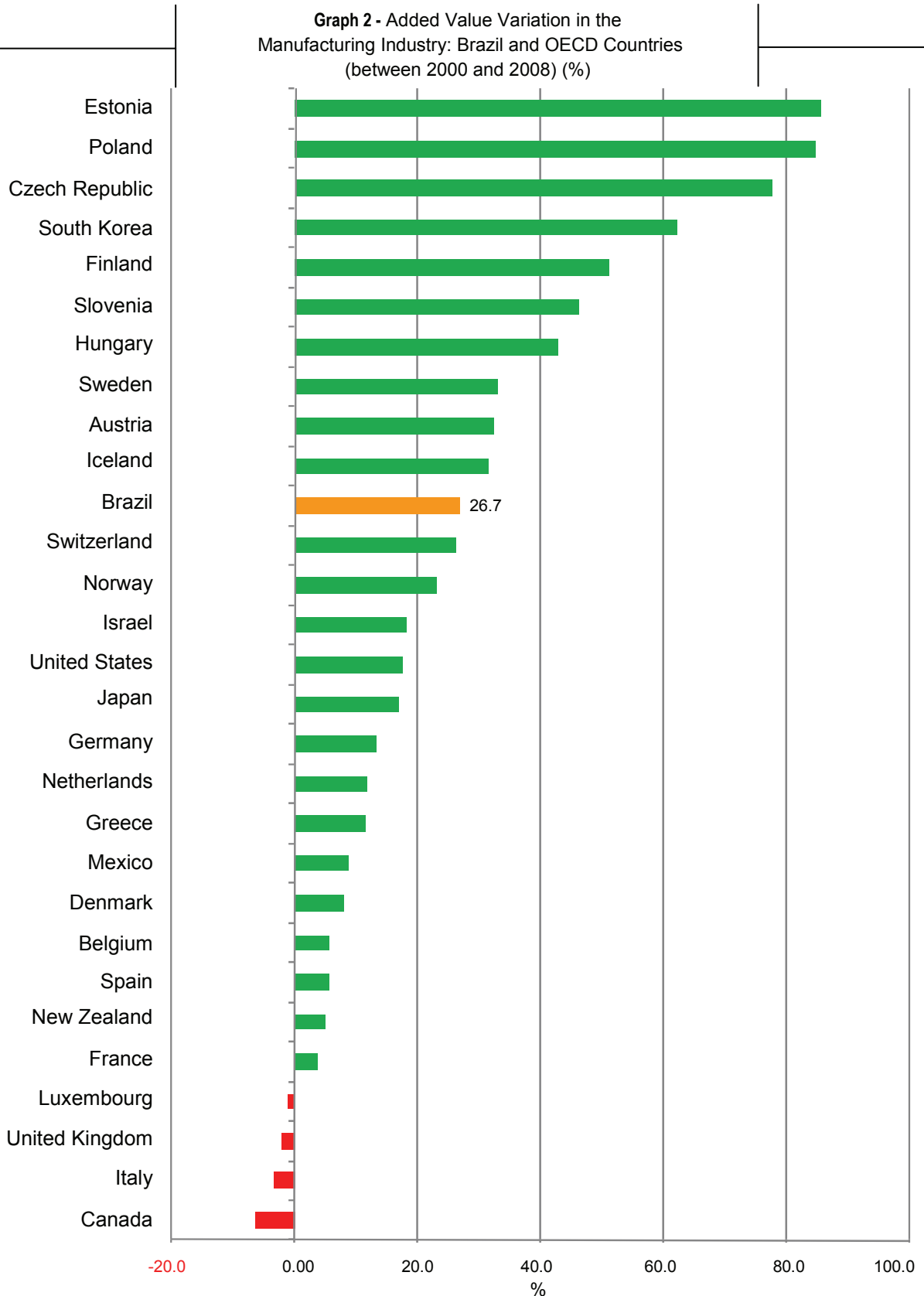
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

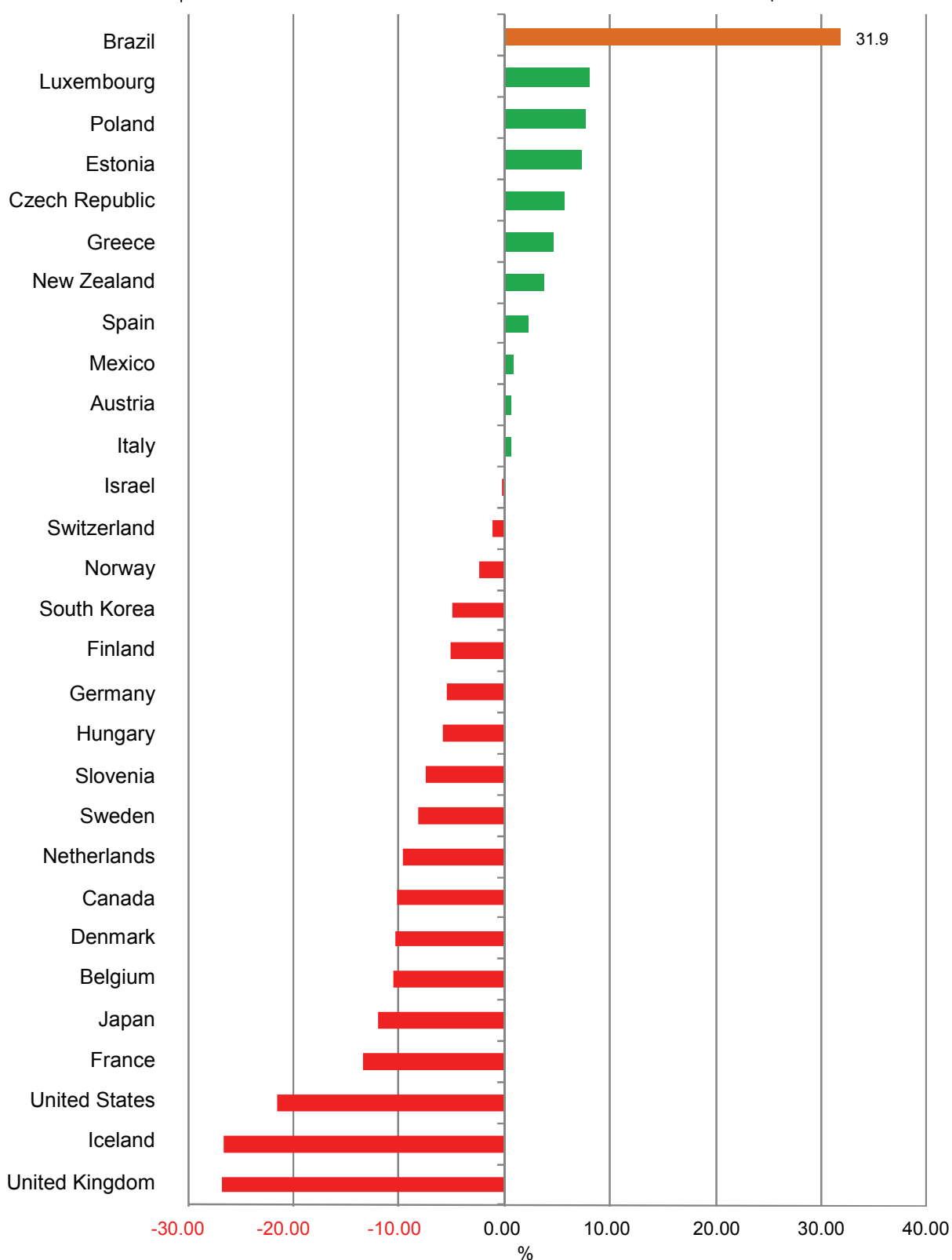


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

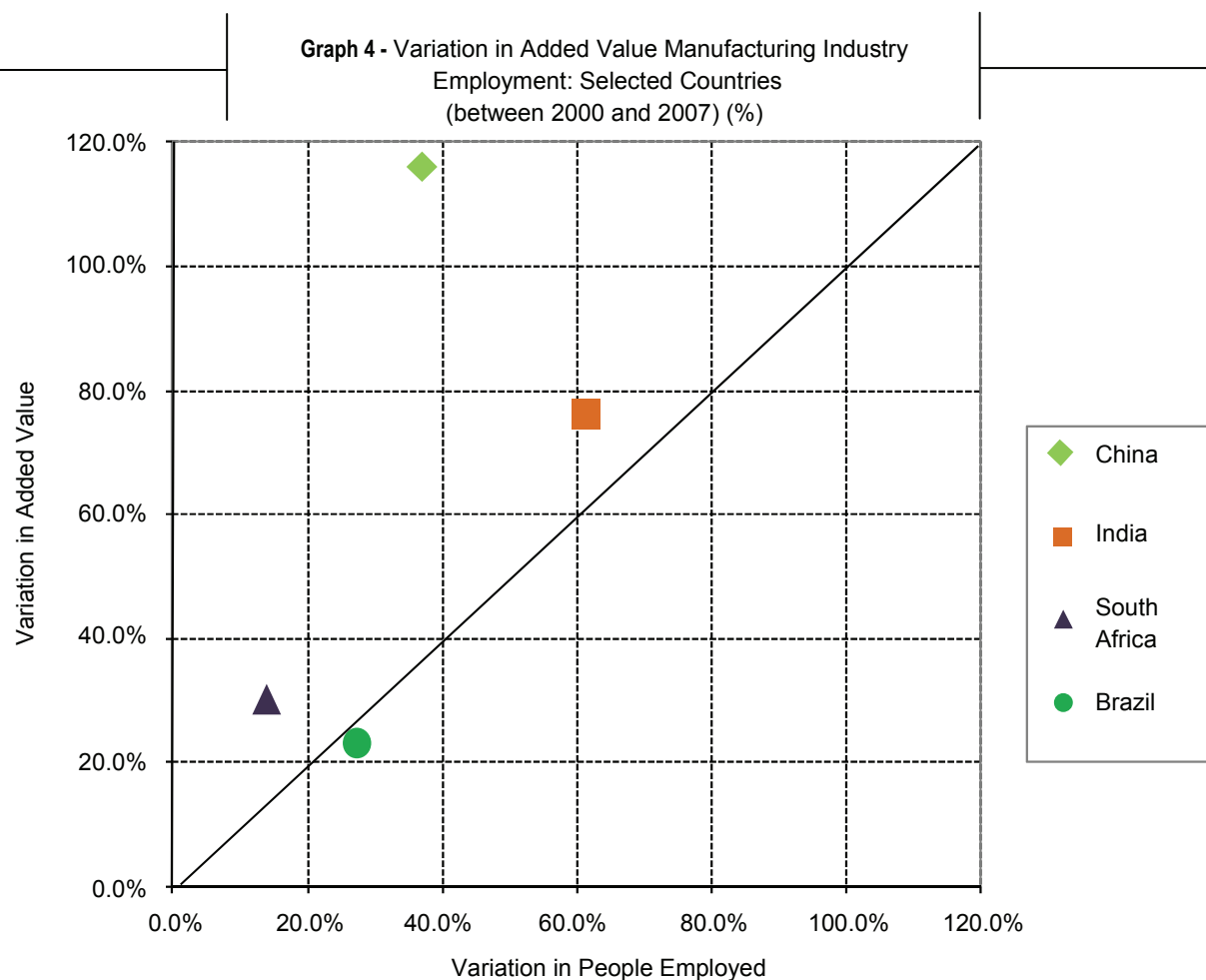
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

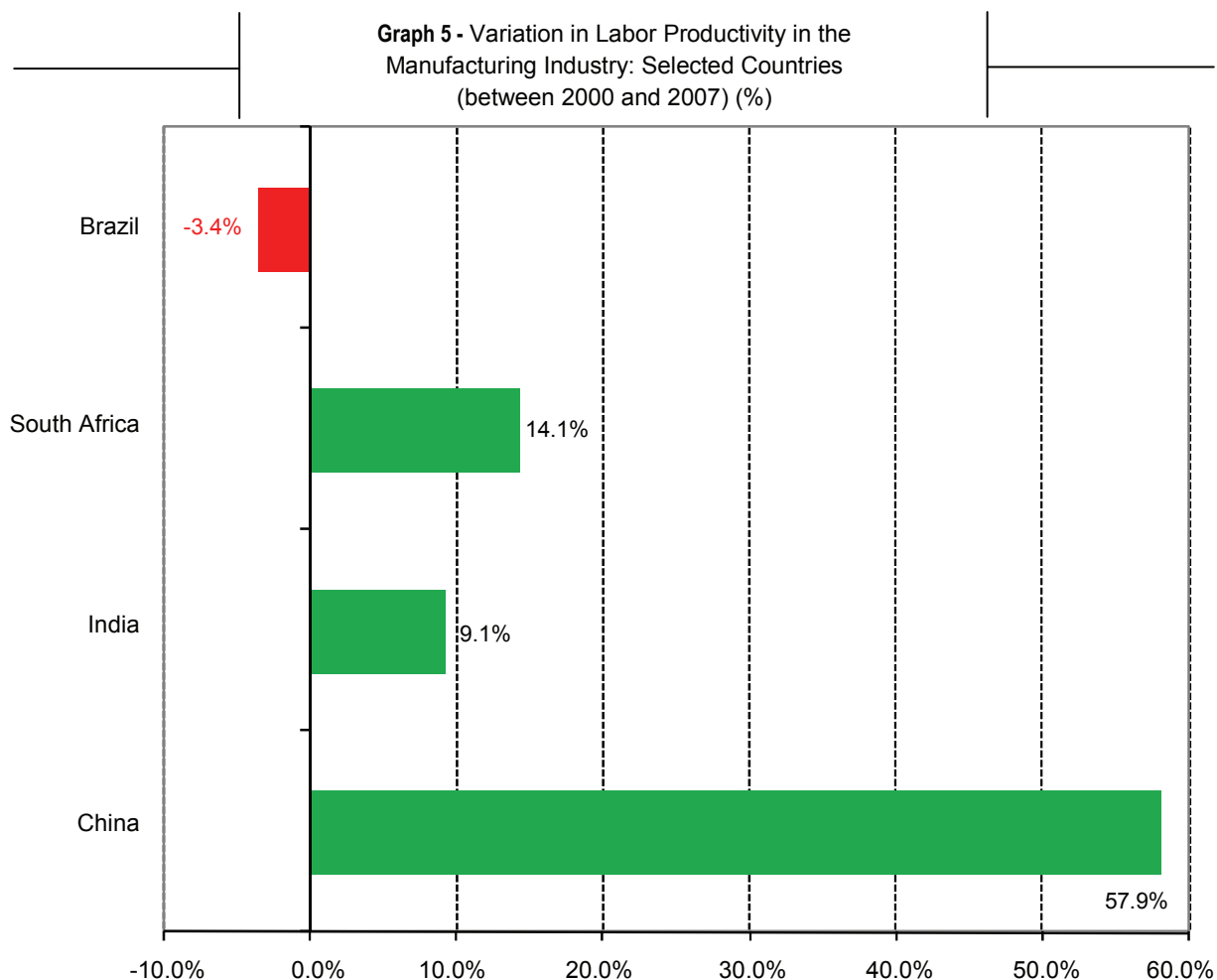
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

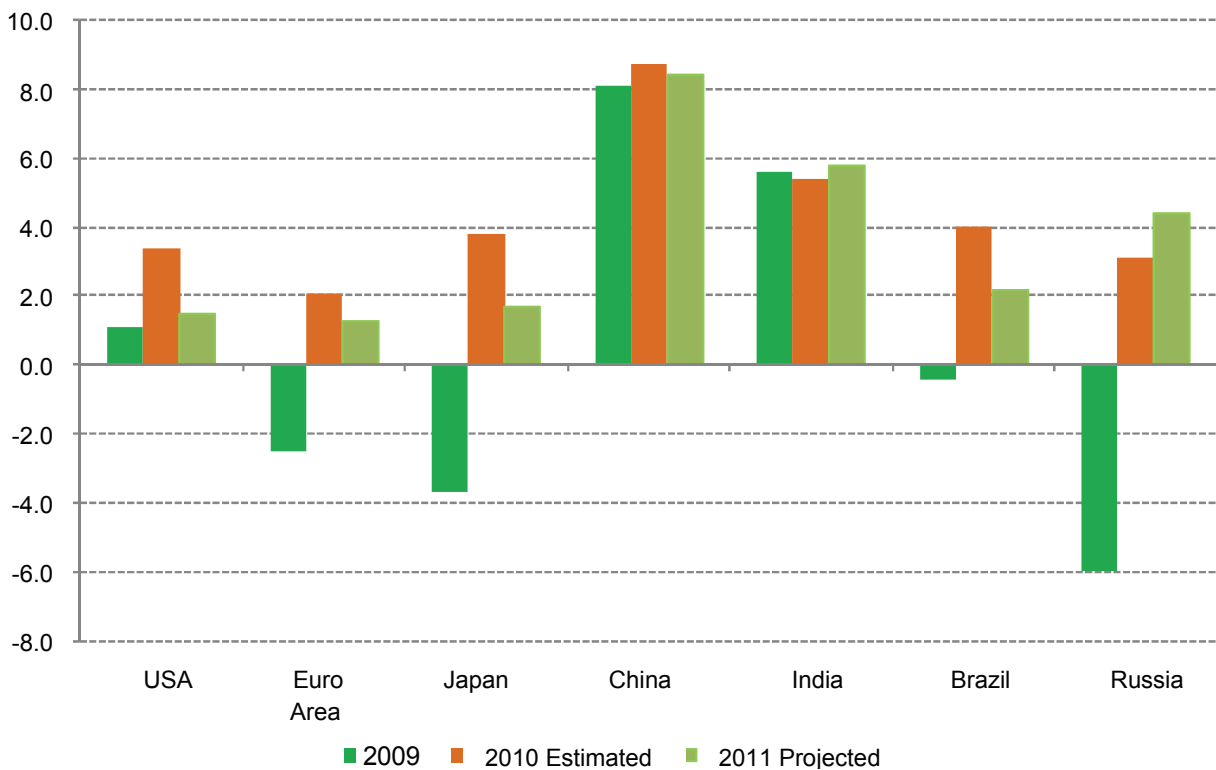
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

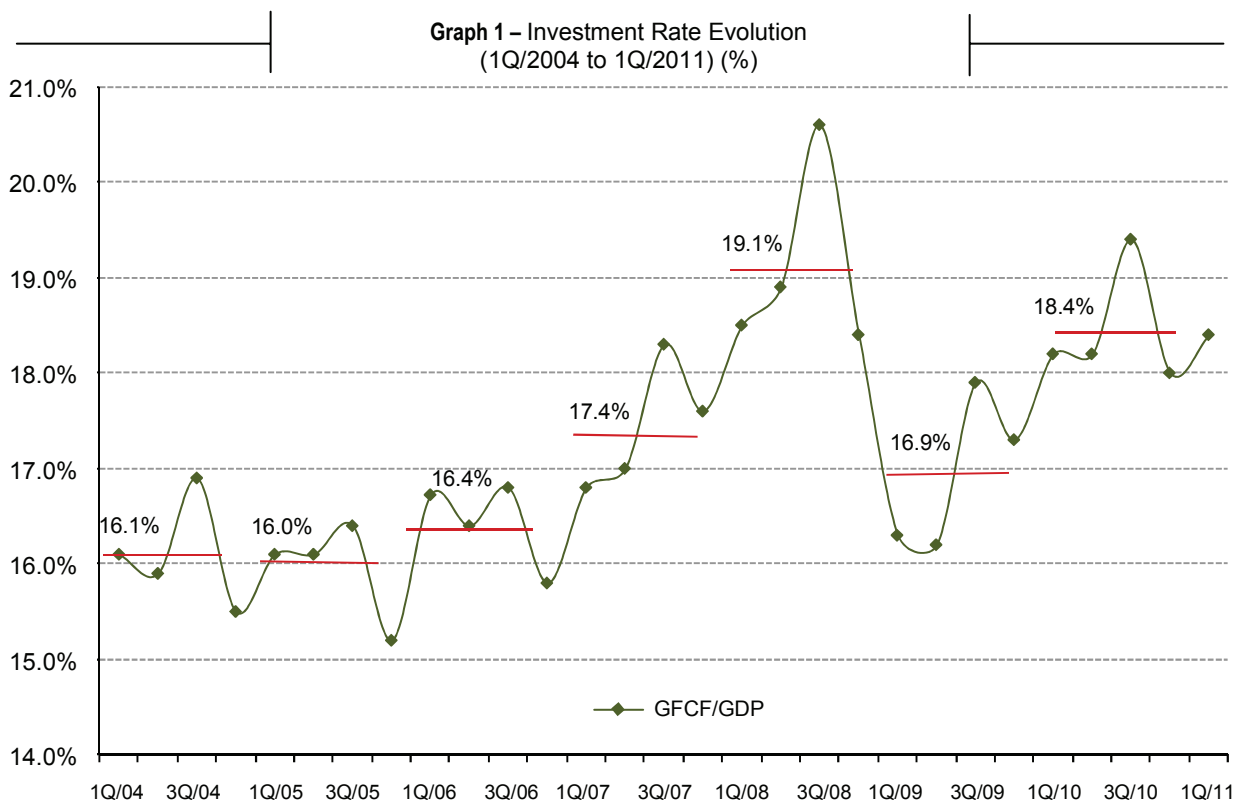
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

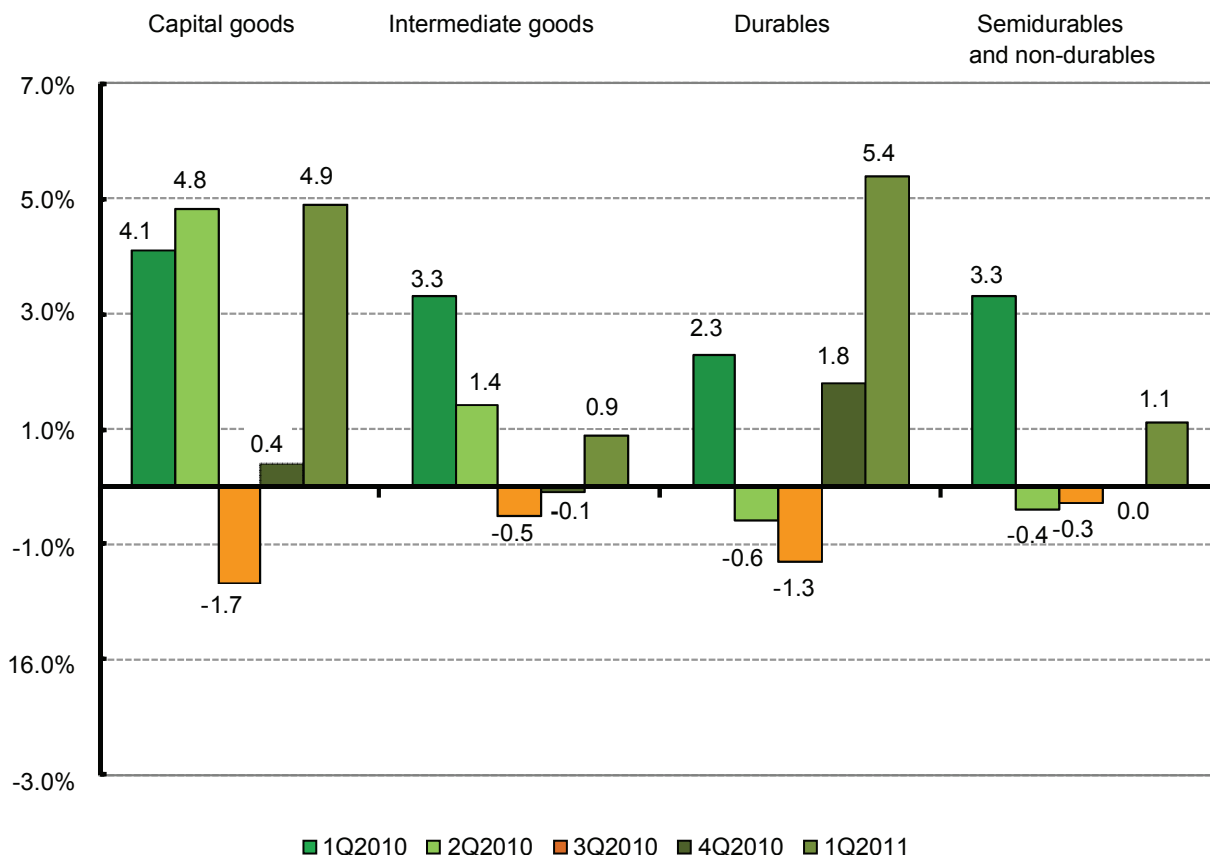
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjuncture Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

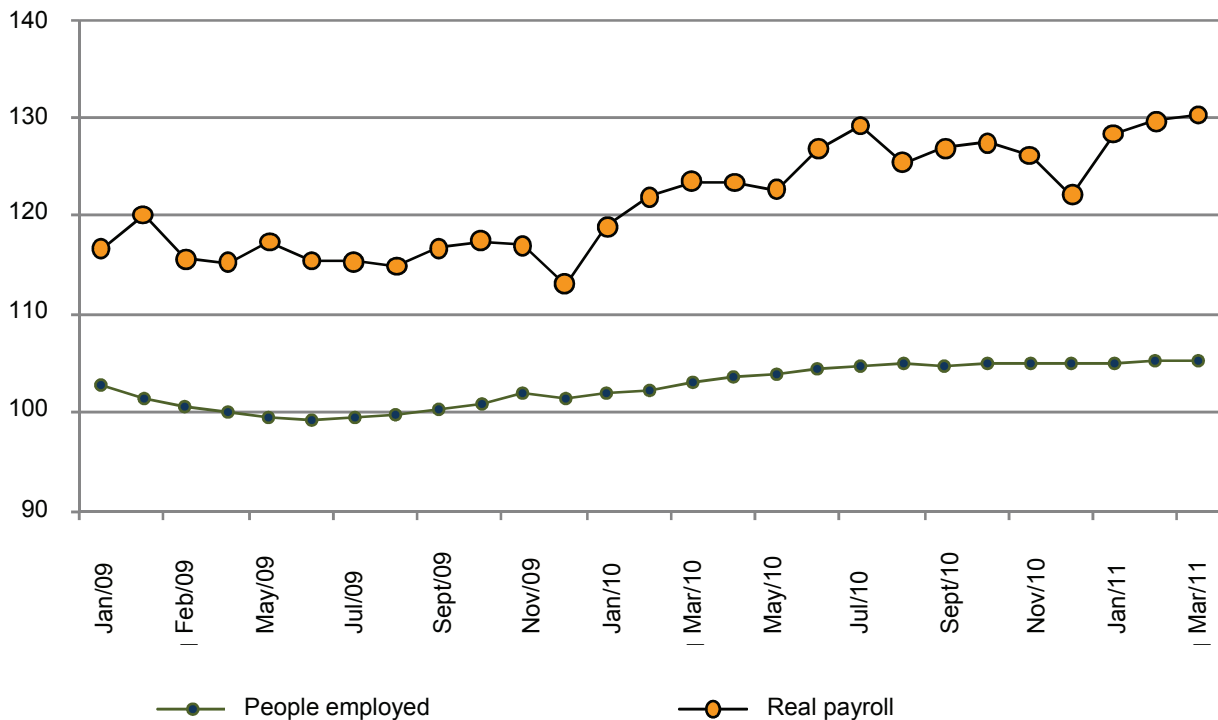
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

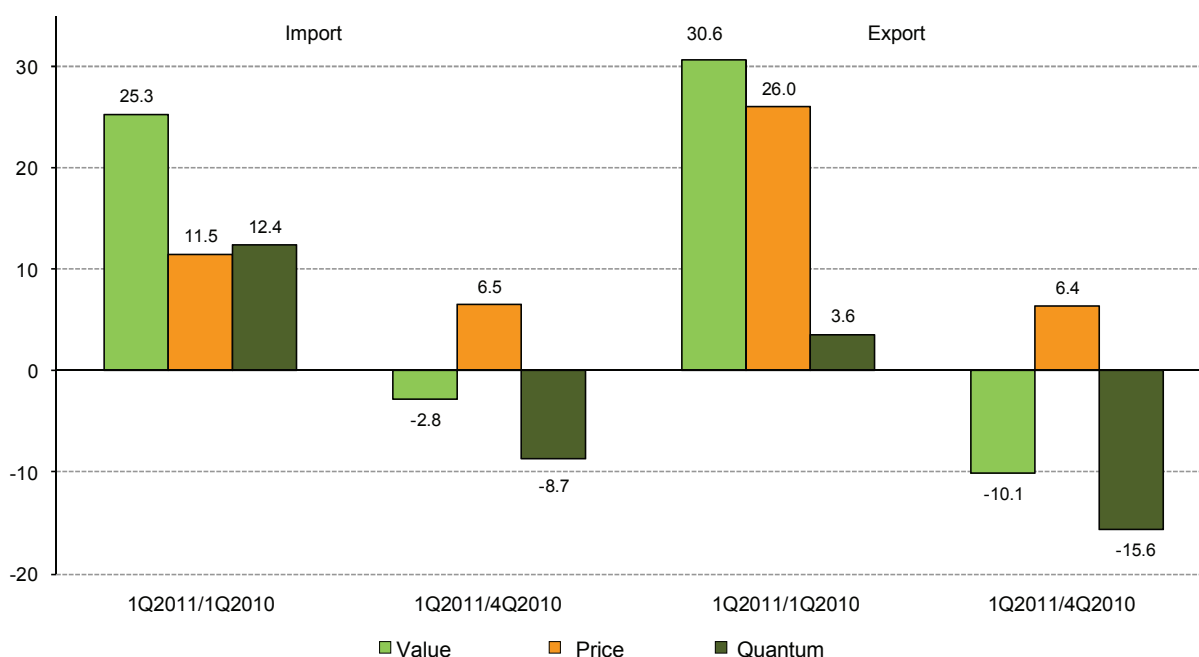
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

**Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)**



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been lead by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

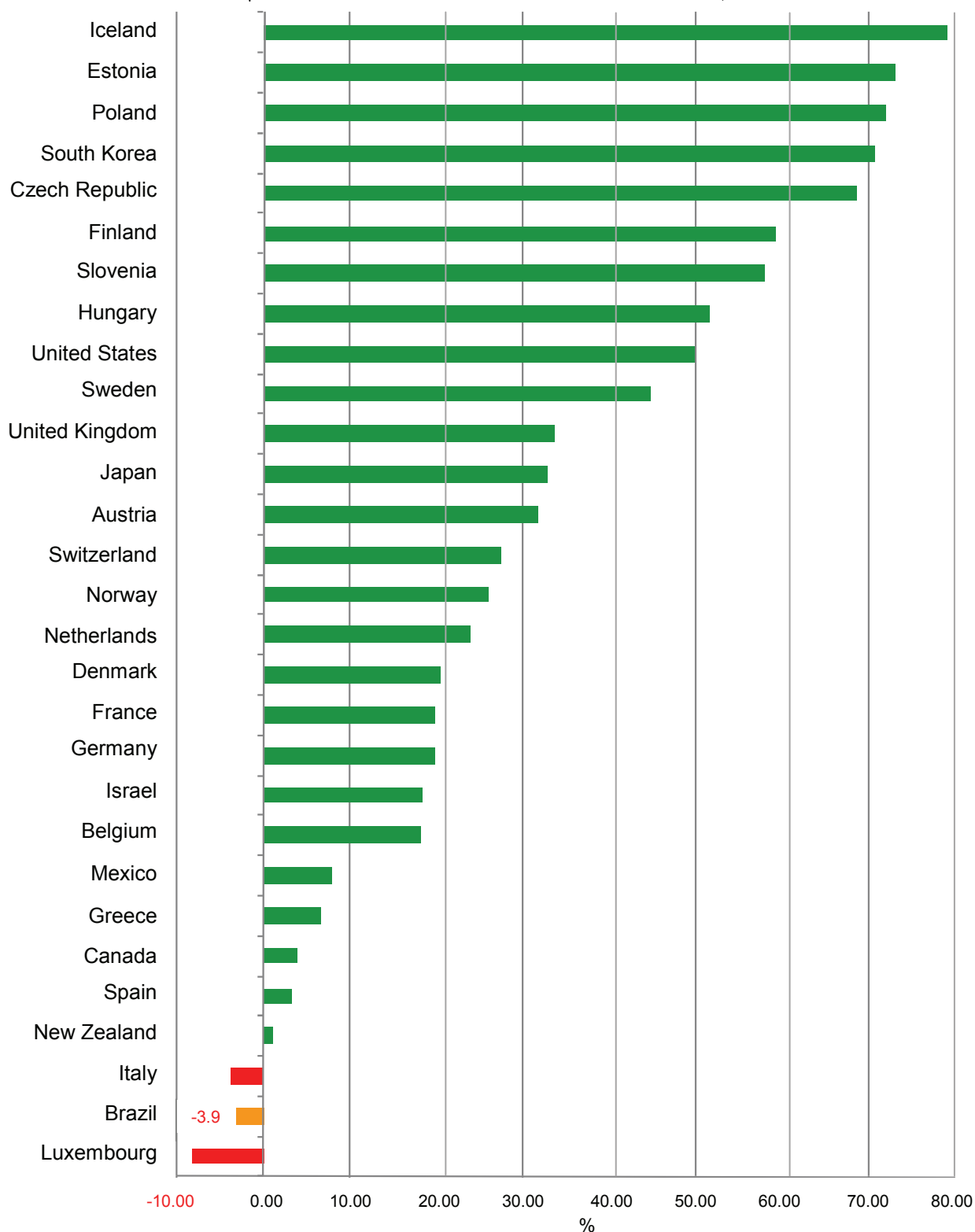
In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

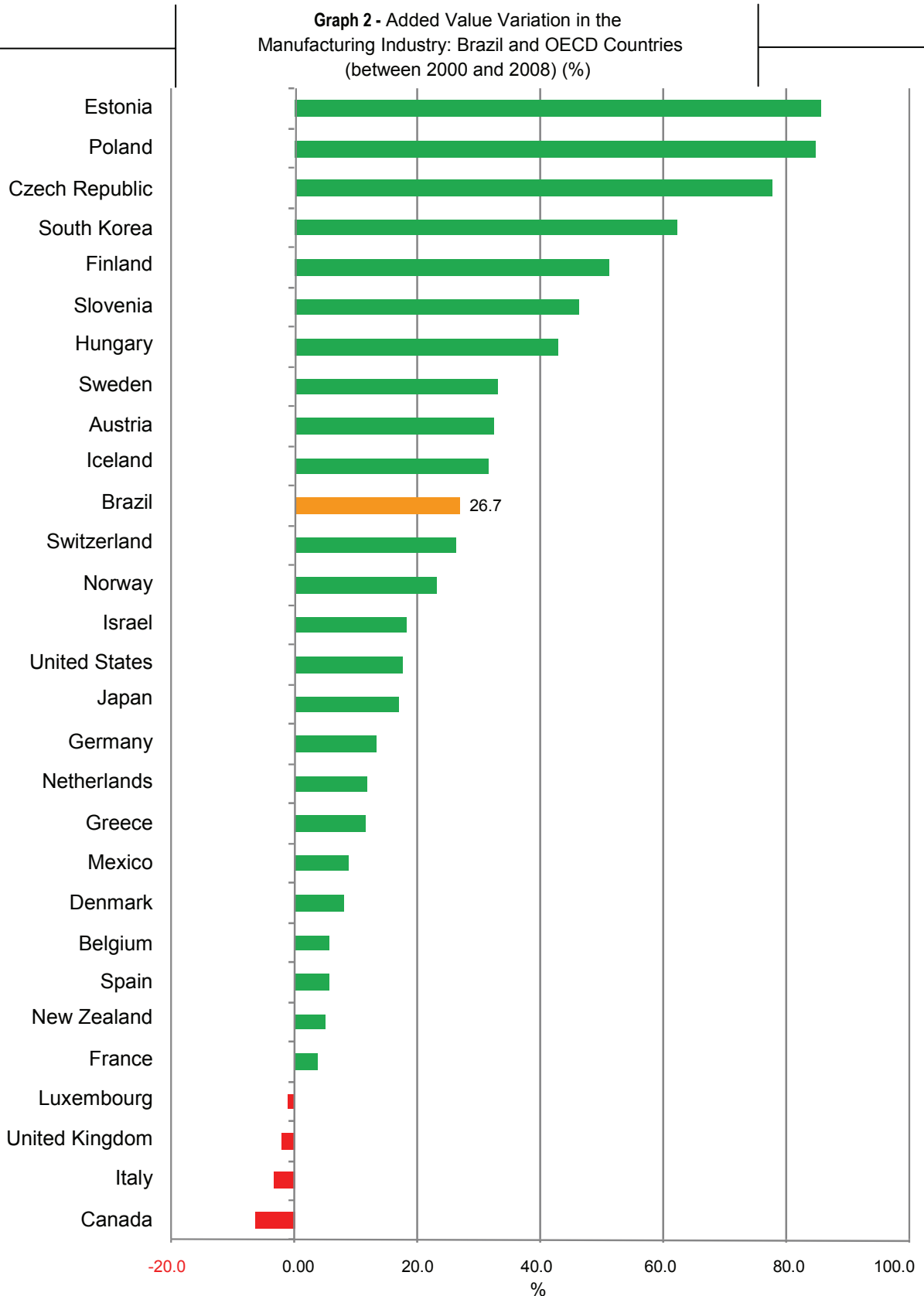
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

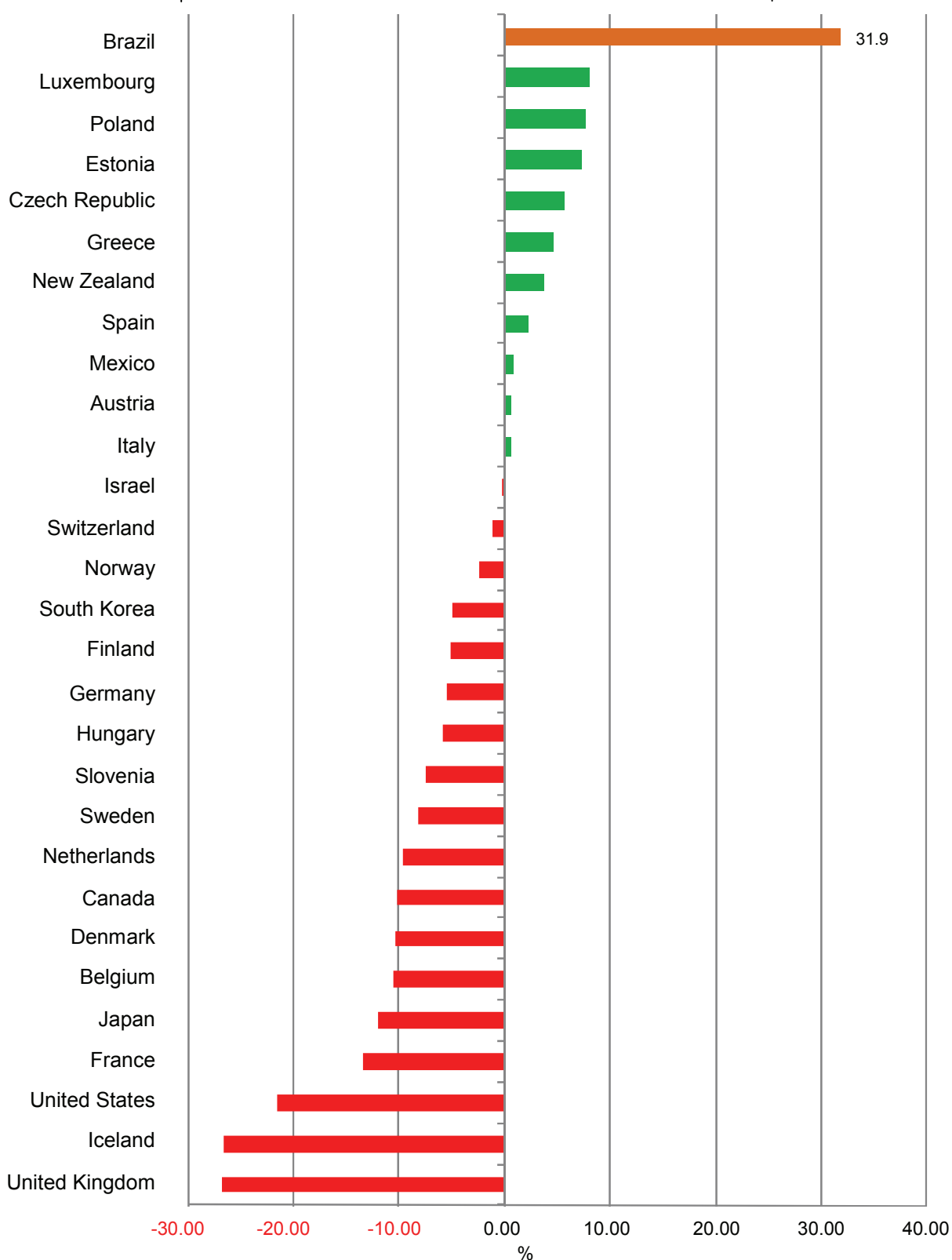


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

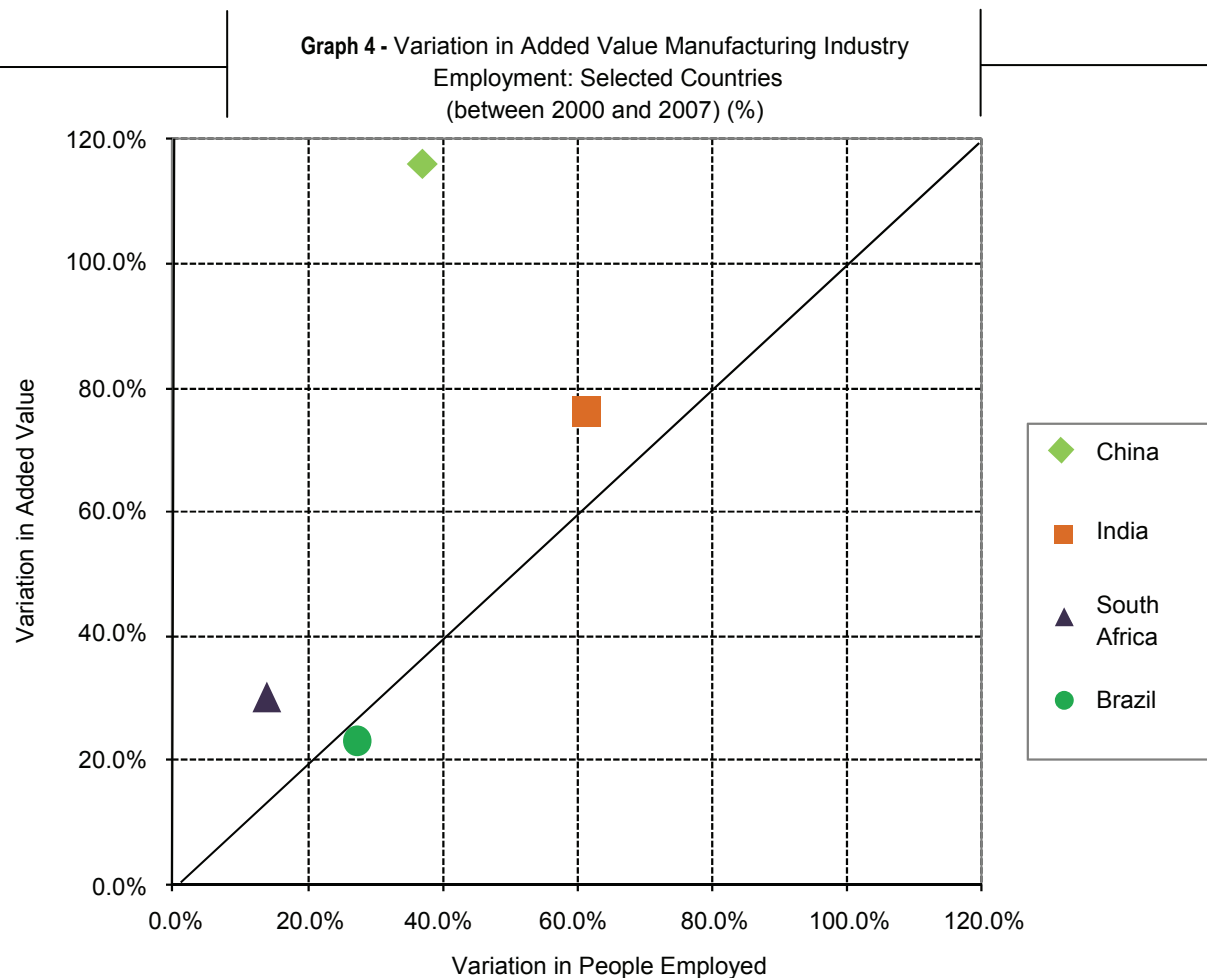
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

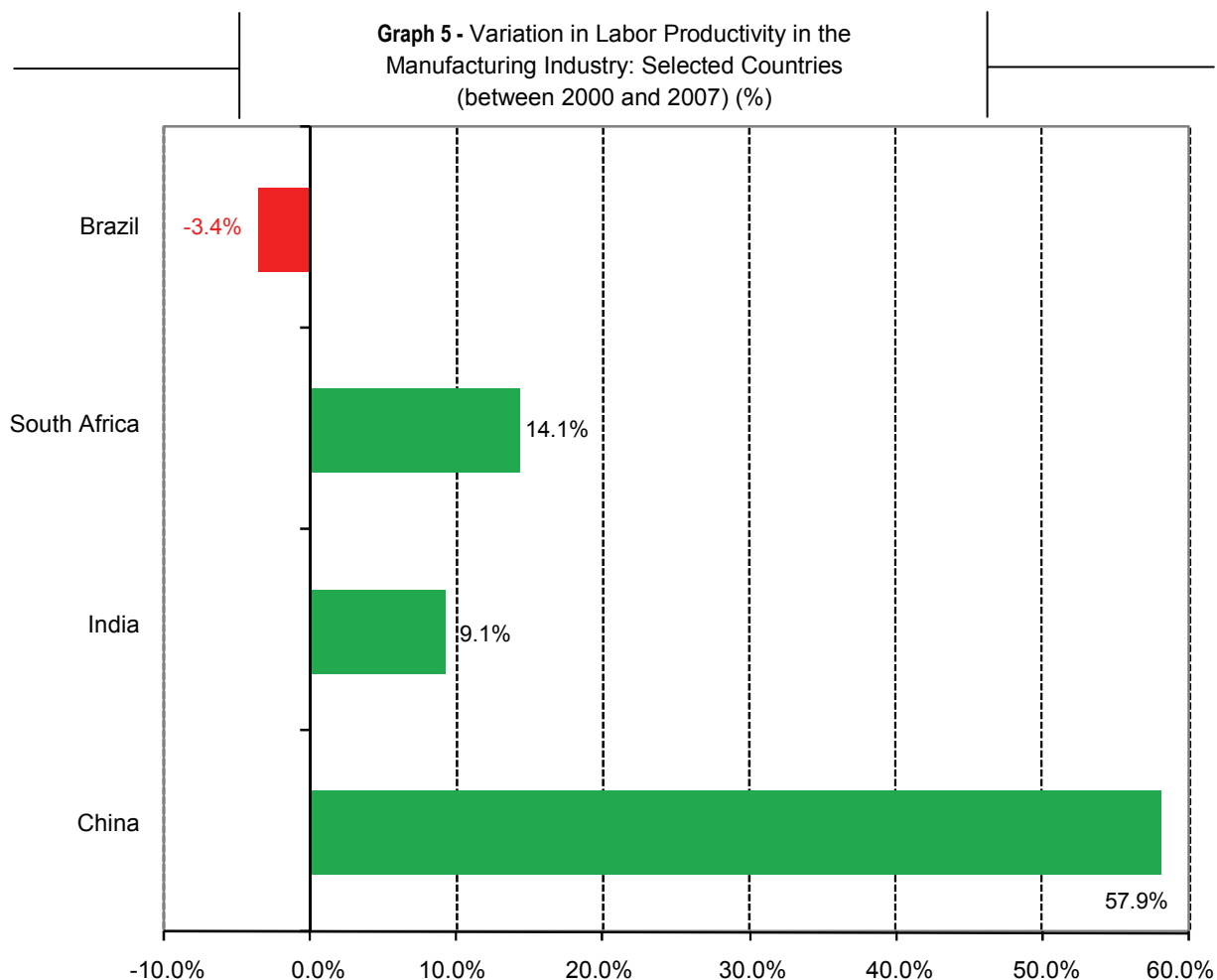
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

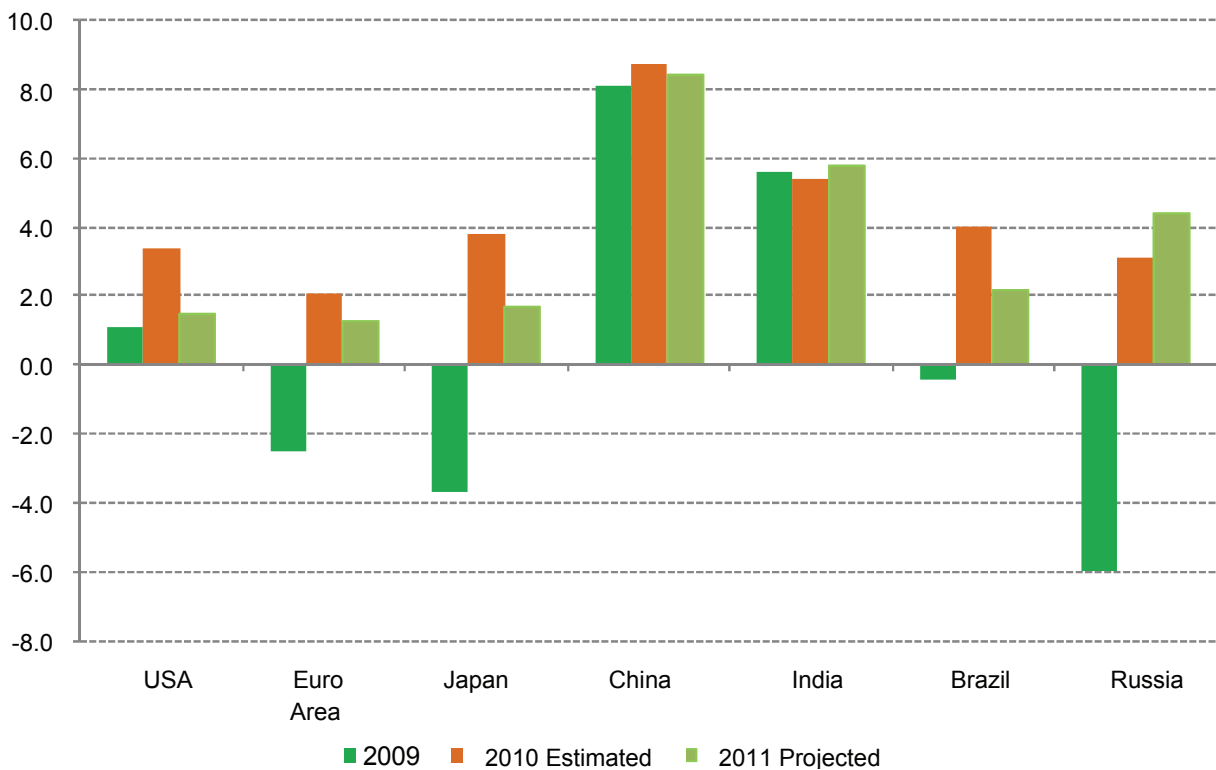
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

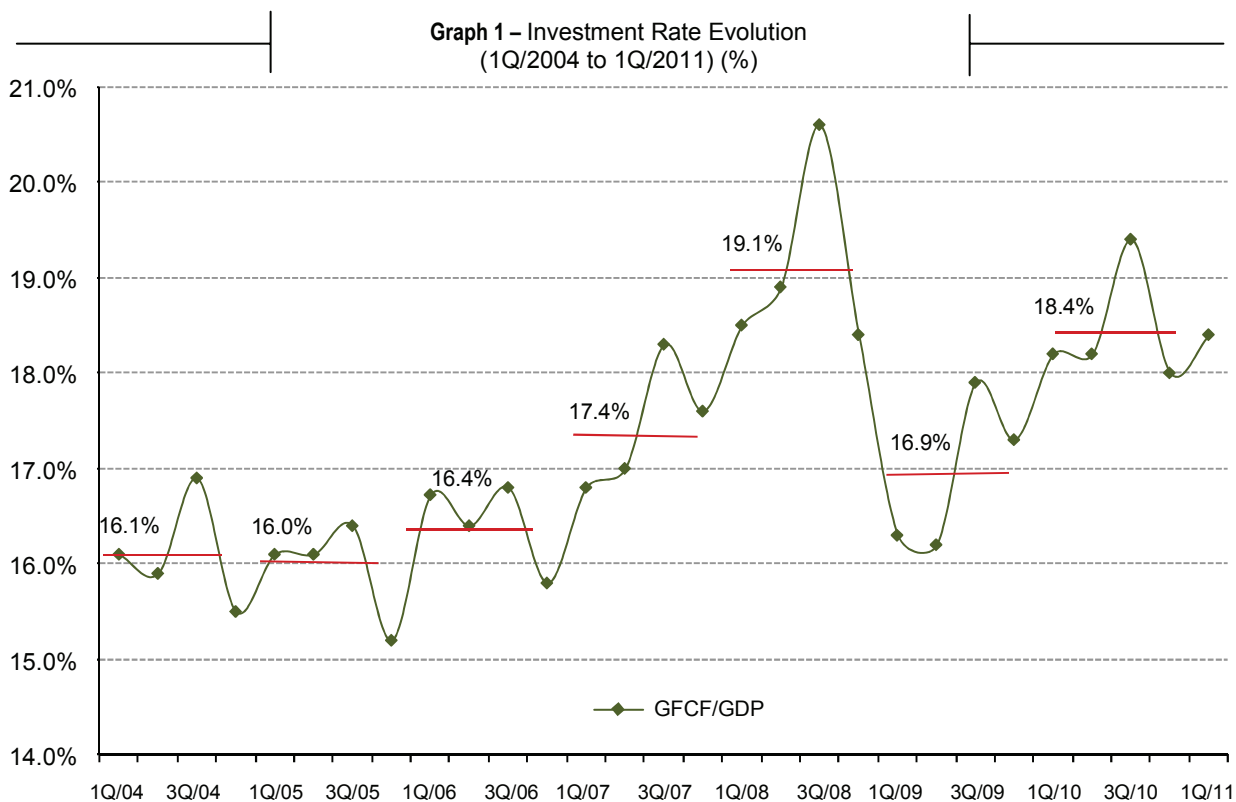
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

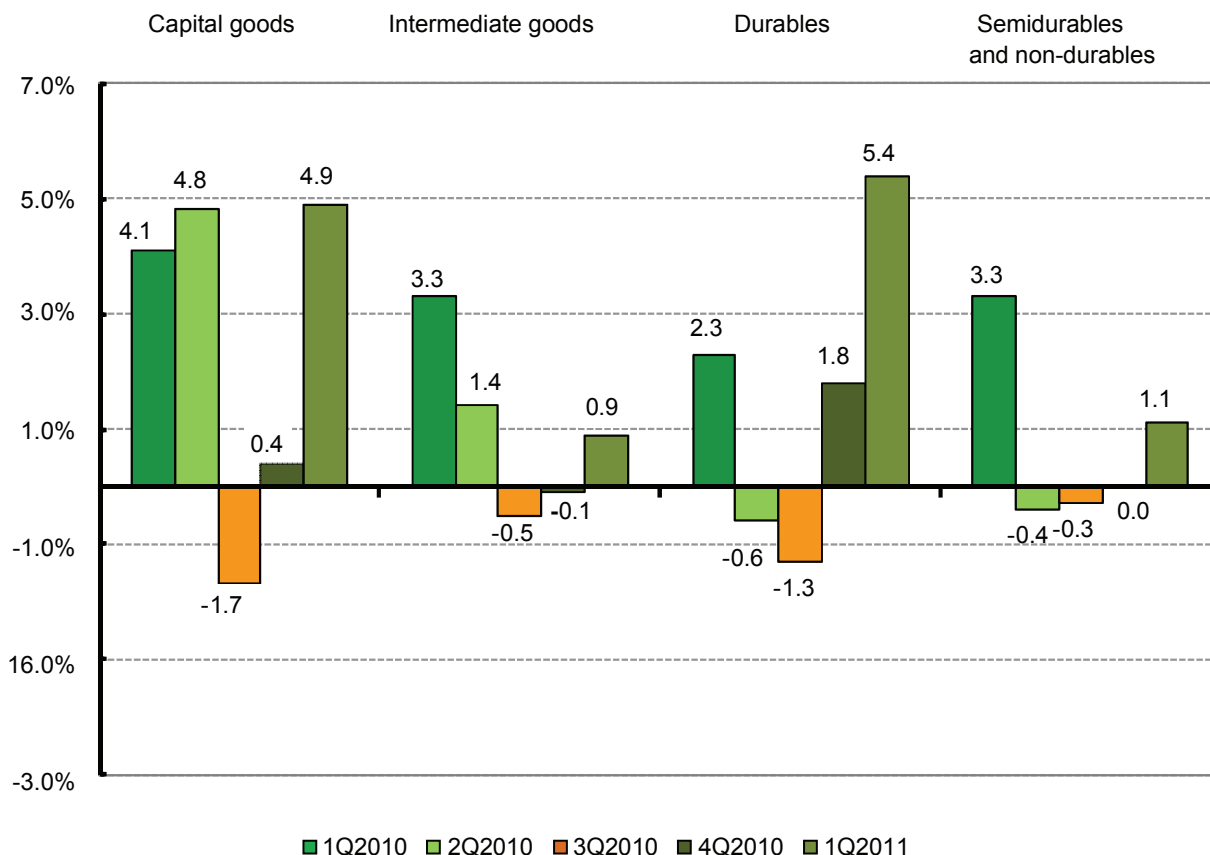
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjunction Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

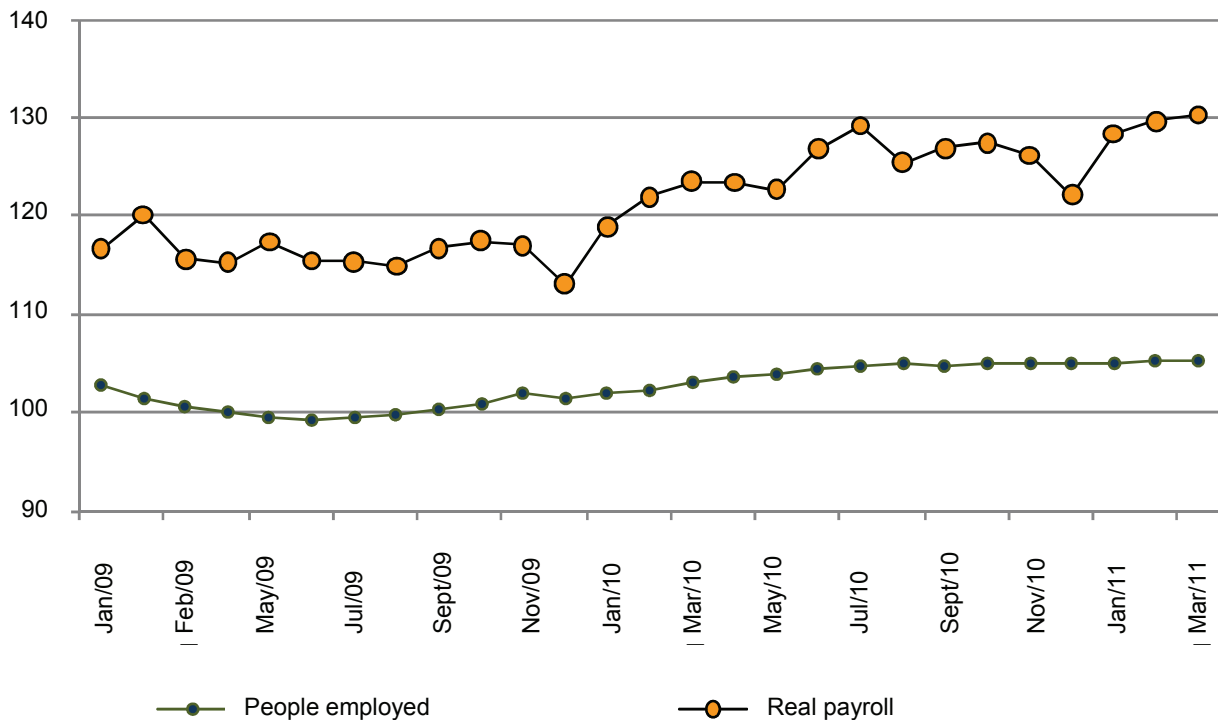
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

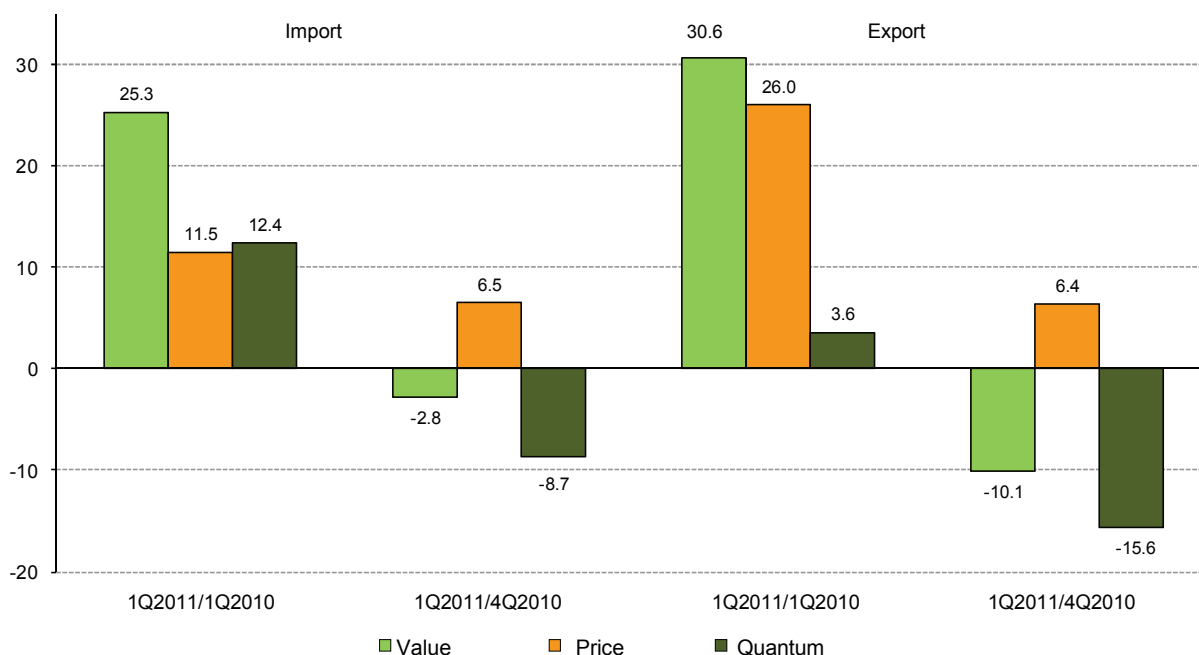
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been led by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

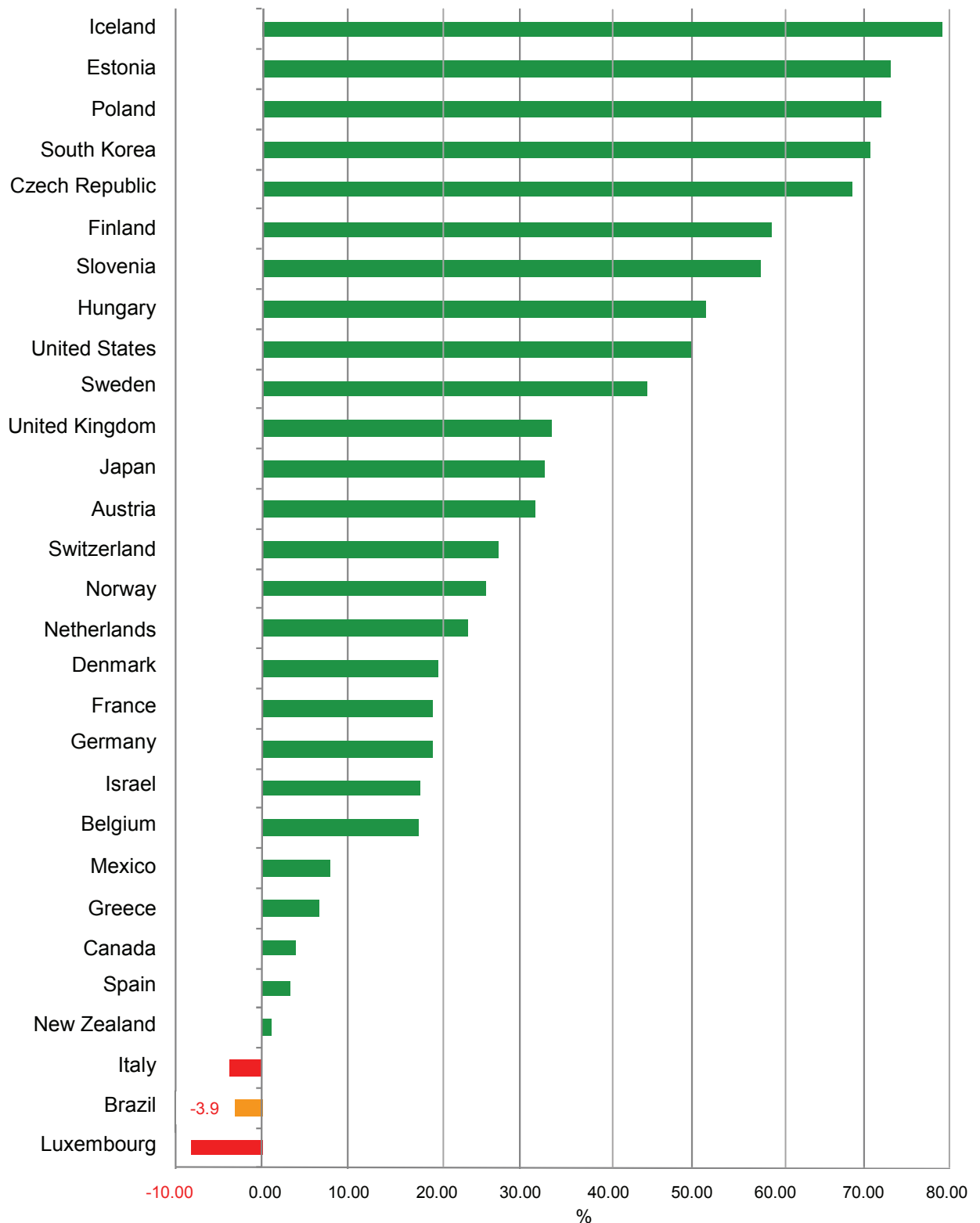
In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

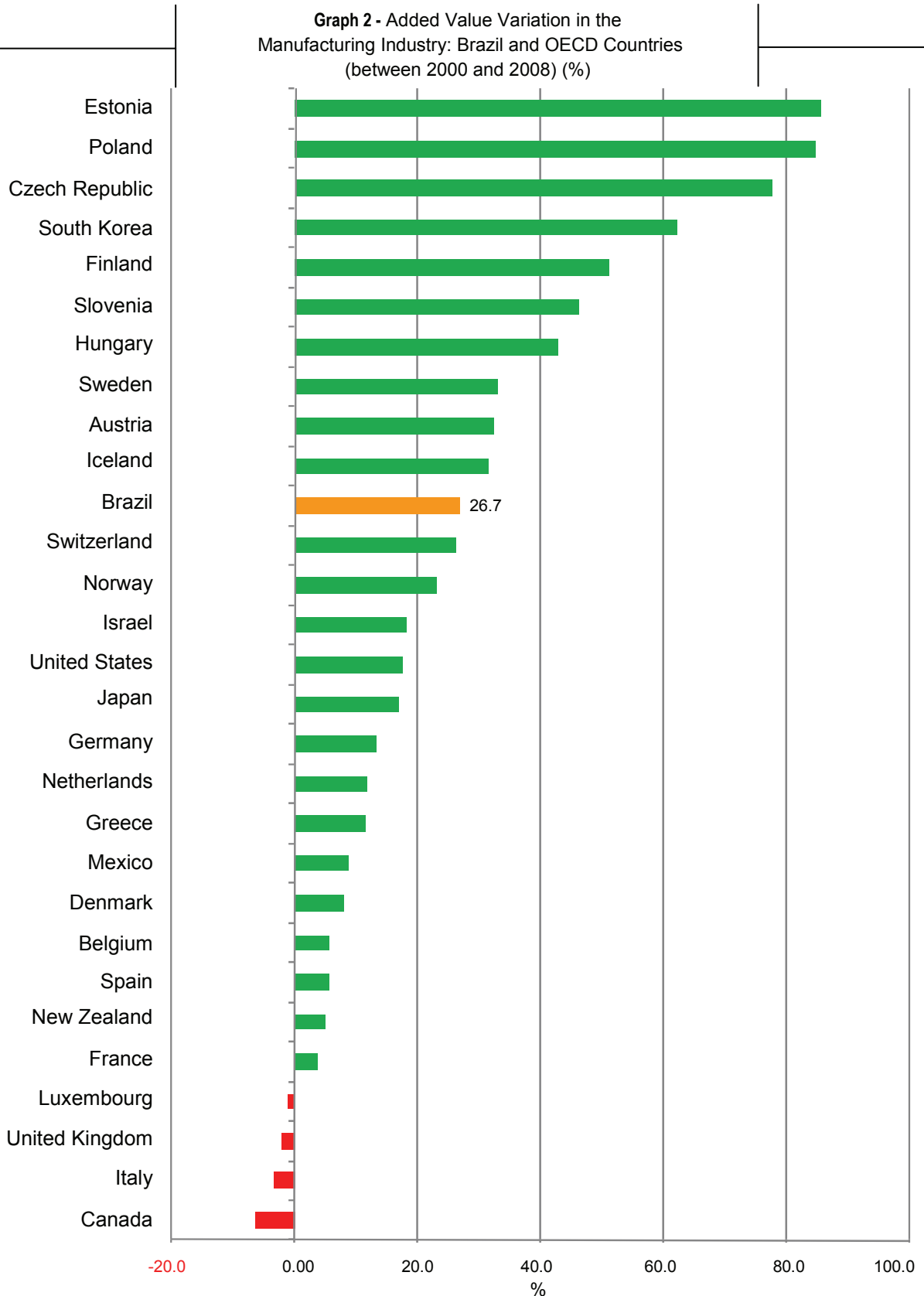
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

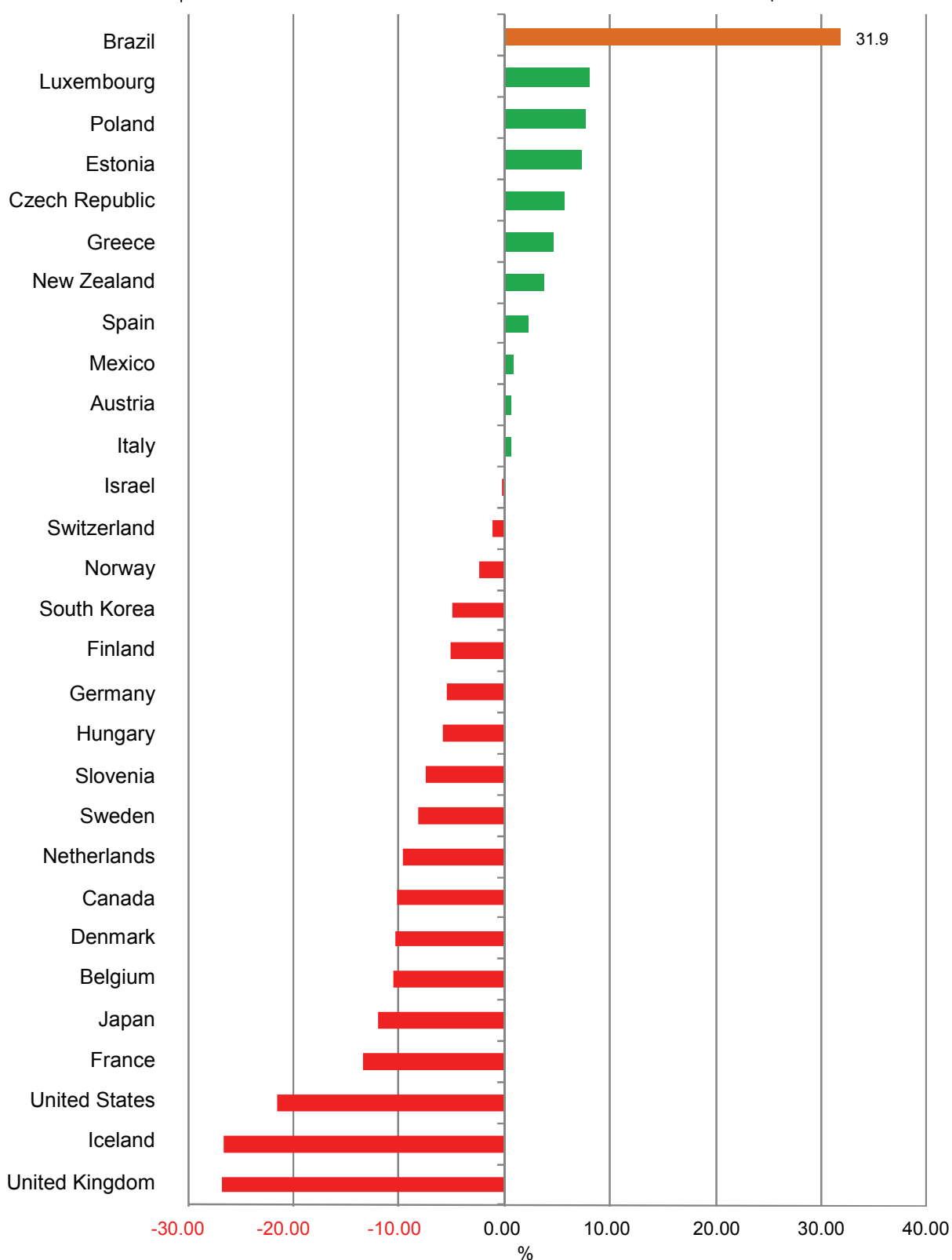


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

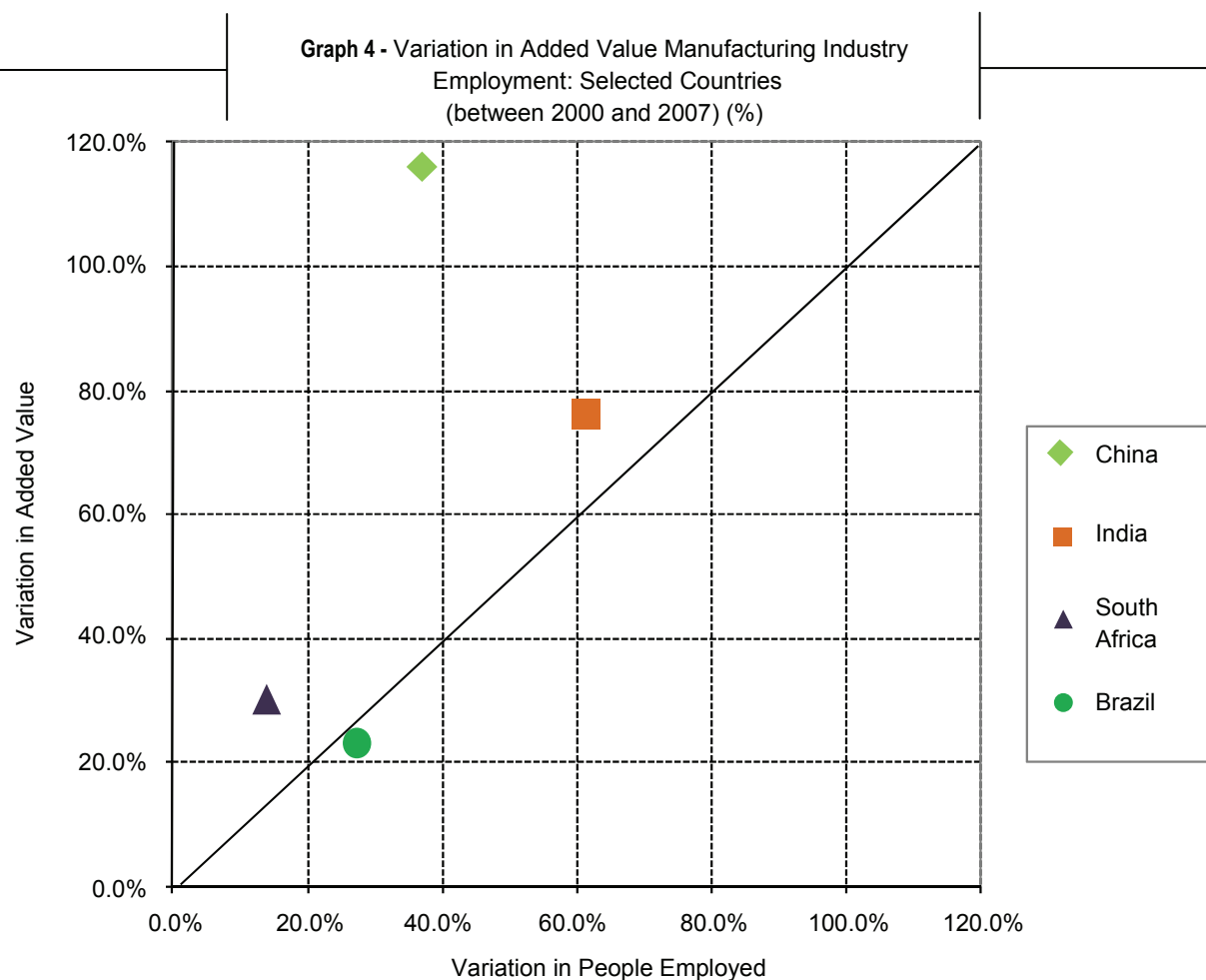
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

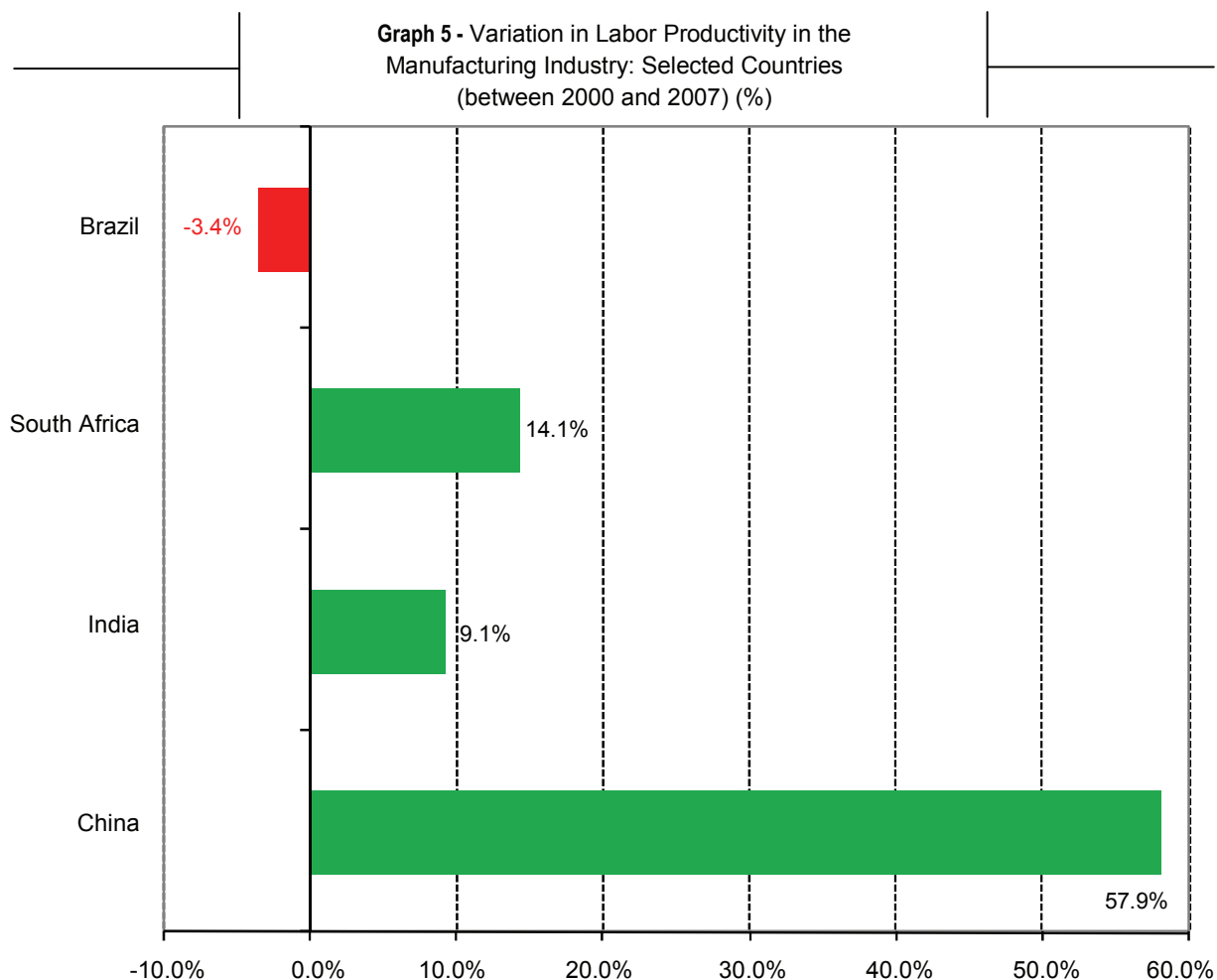
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

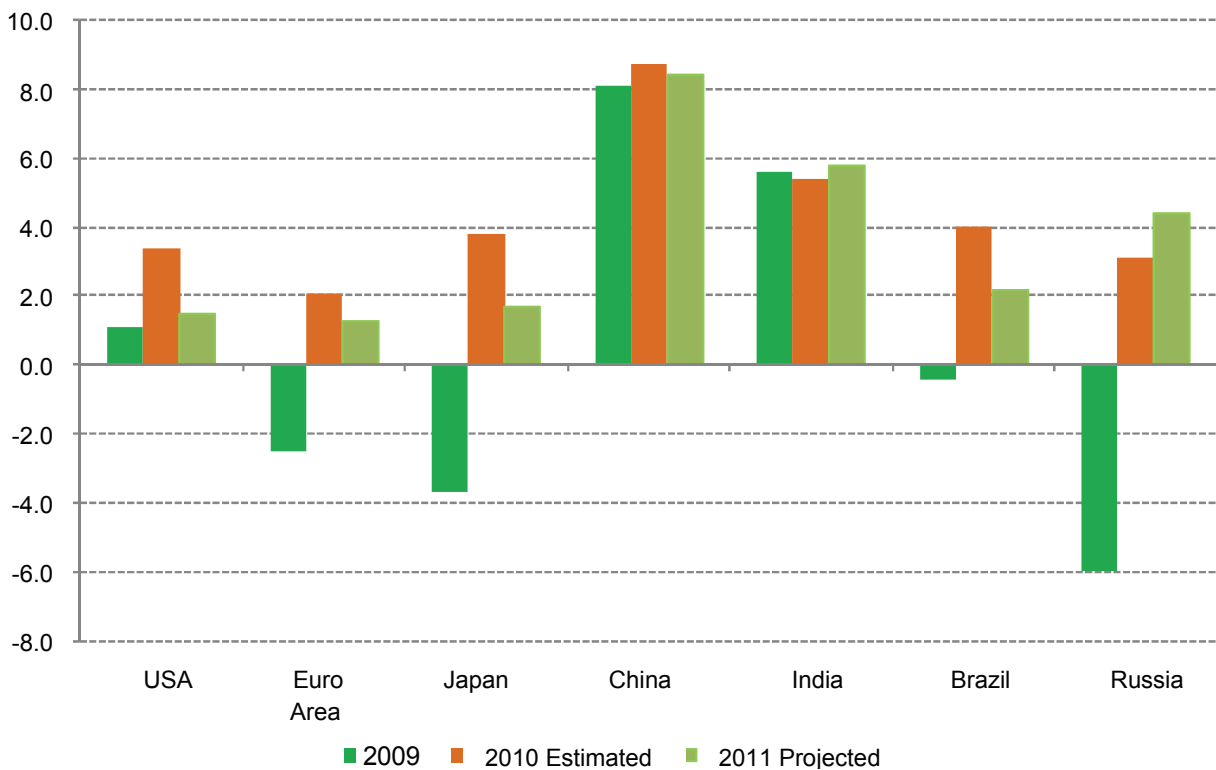
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

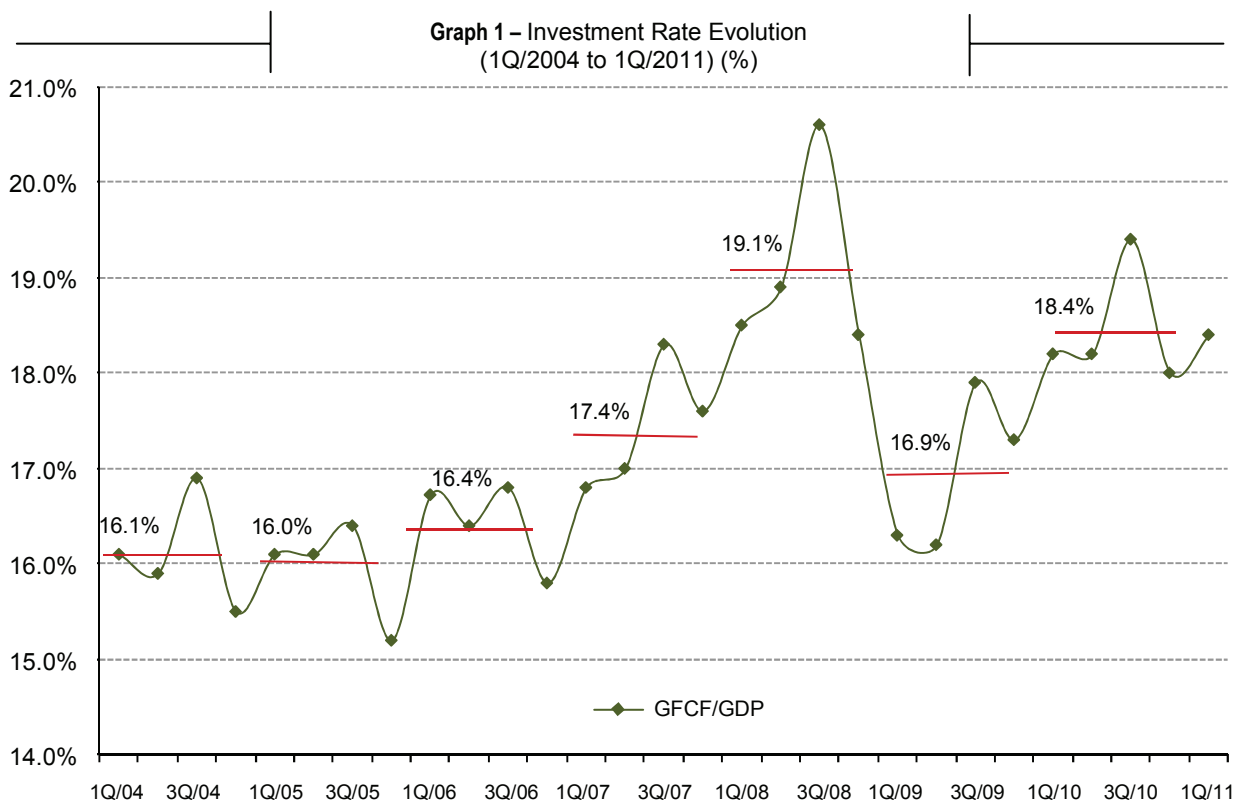
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

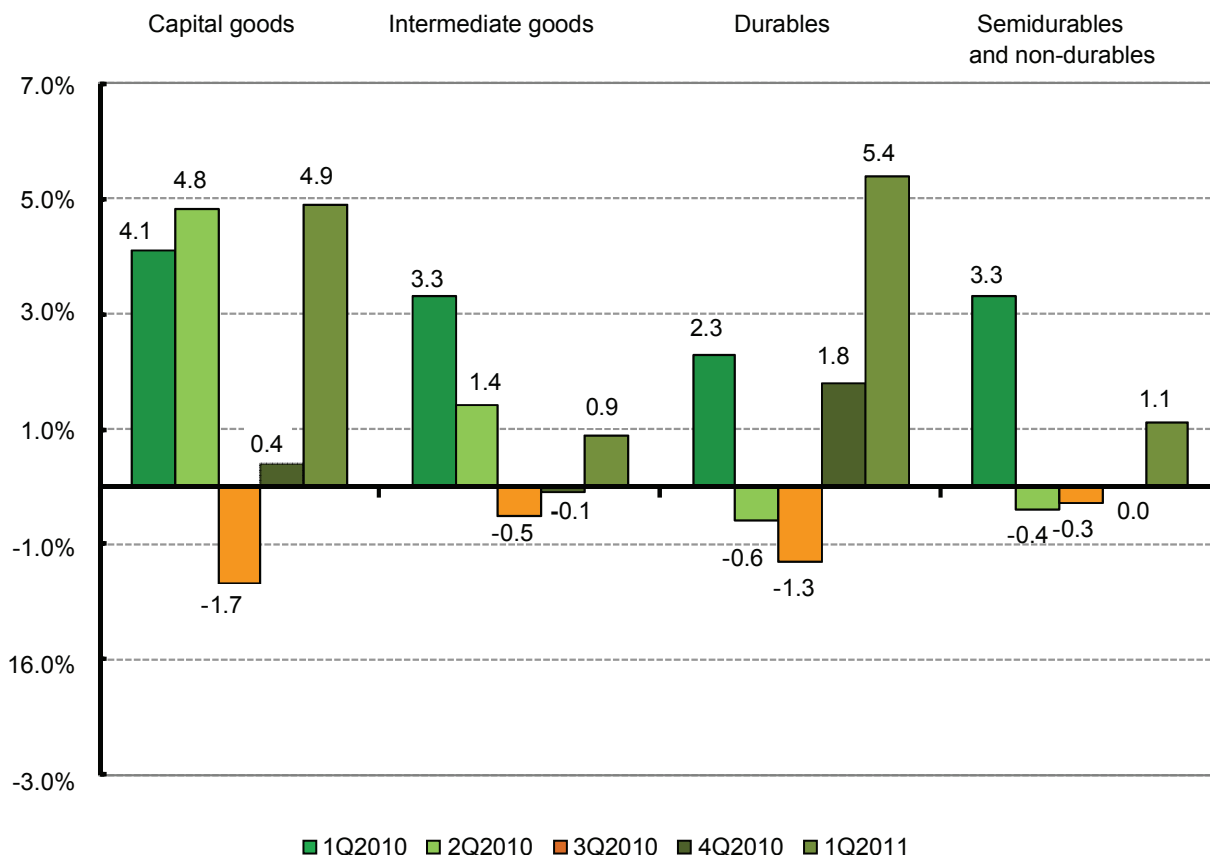
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjunction Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

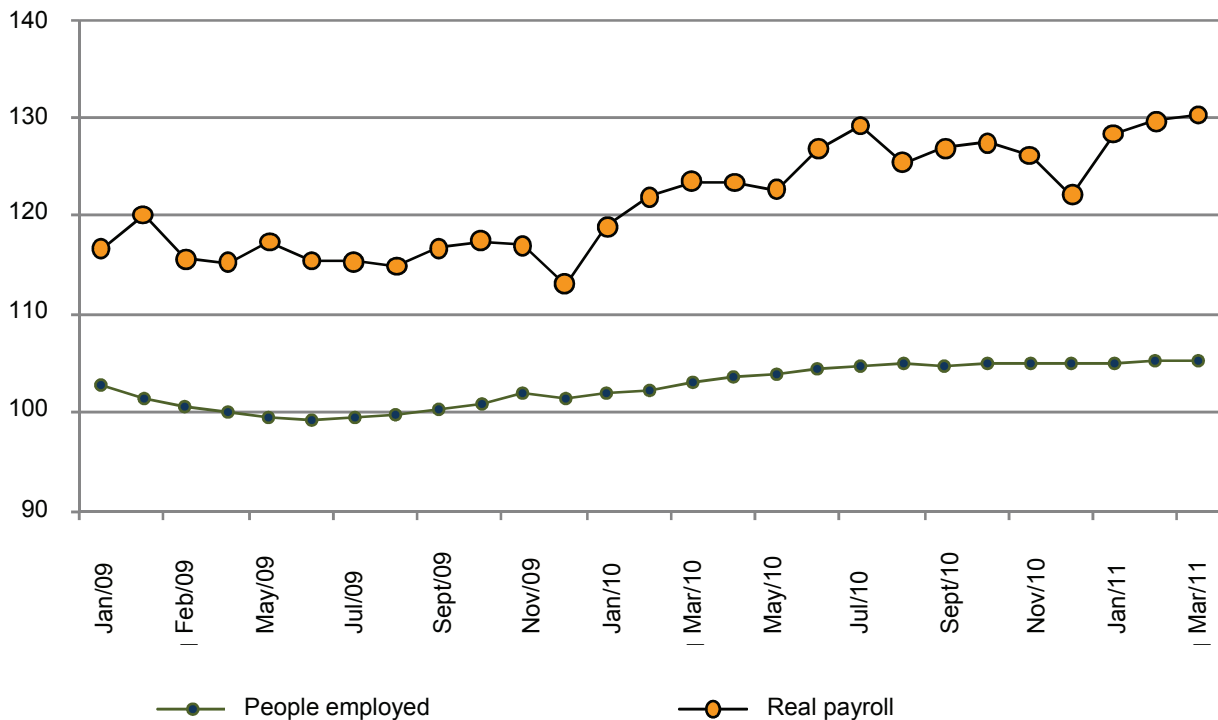
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

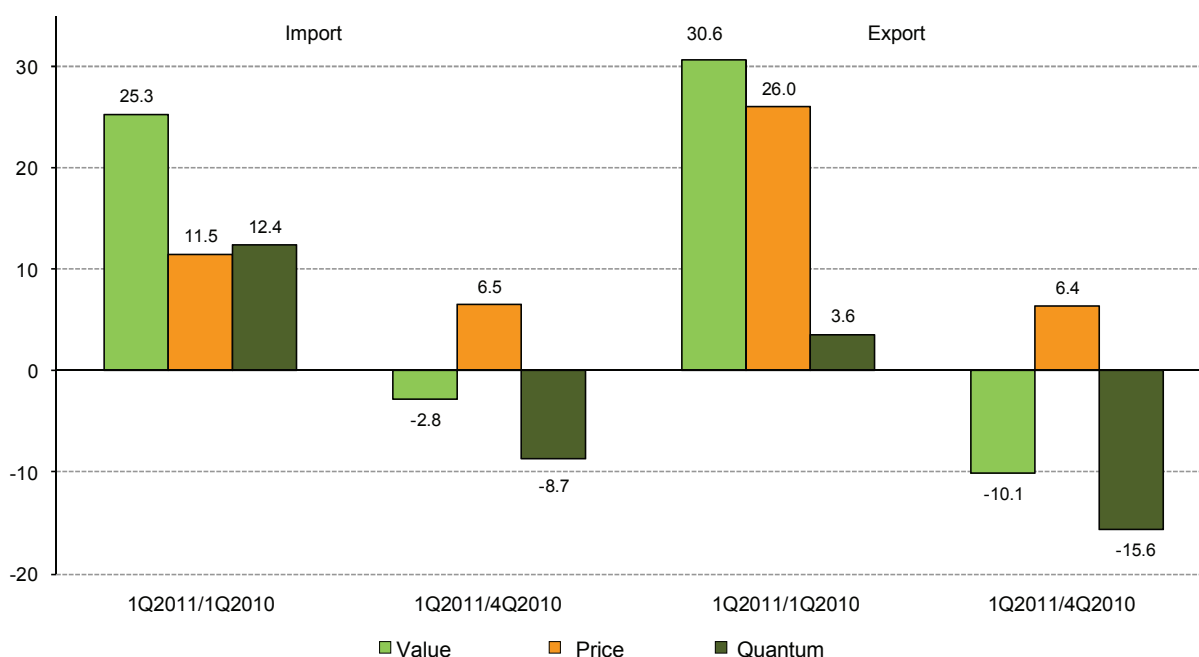
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is lead by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

**Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)**



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been led by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

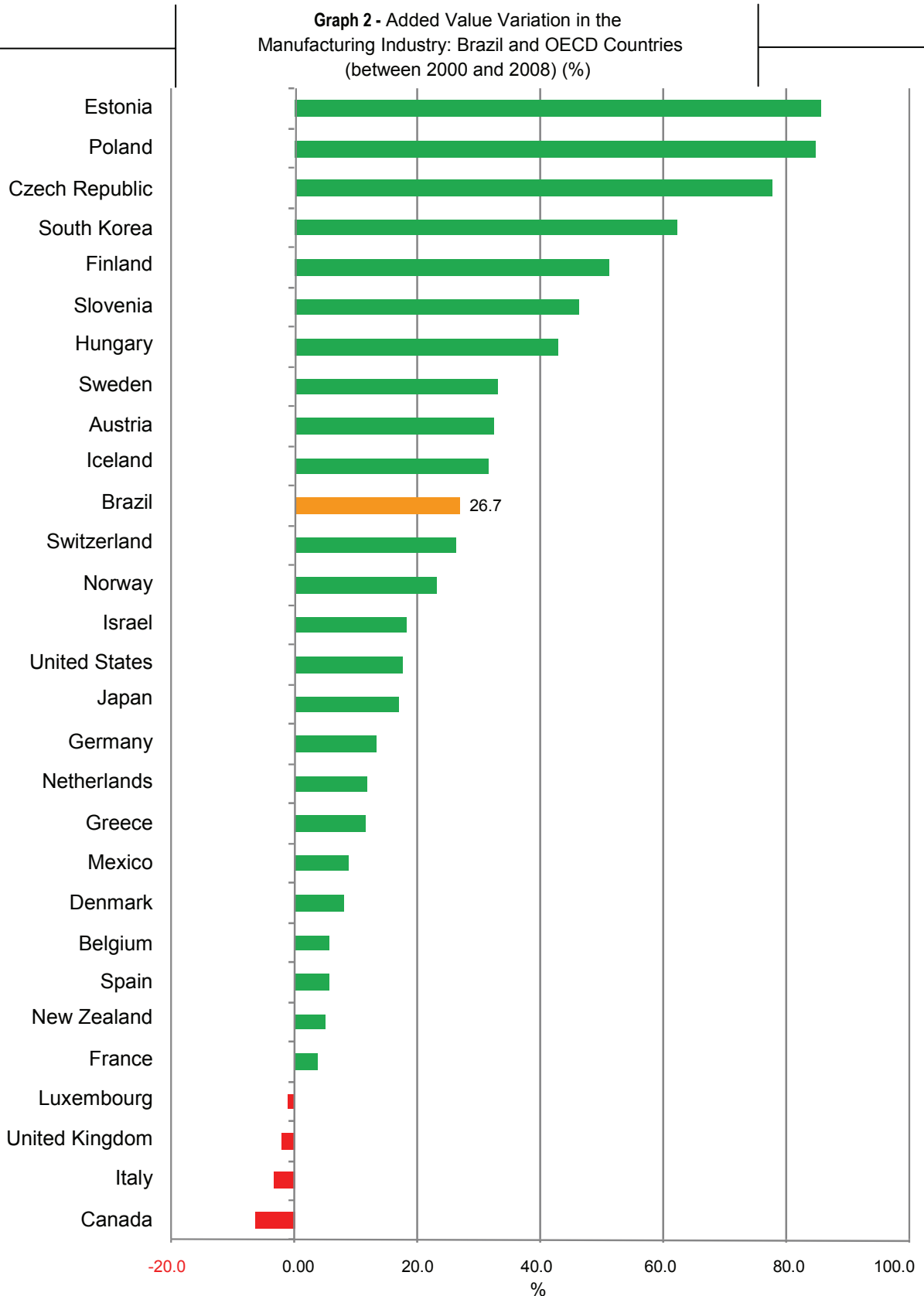
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

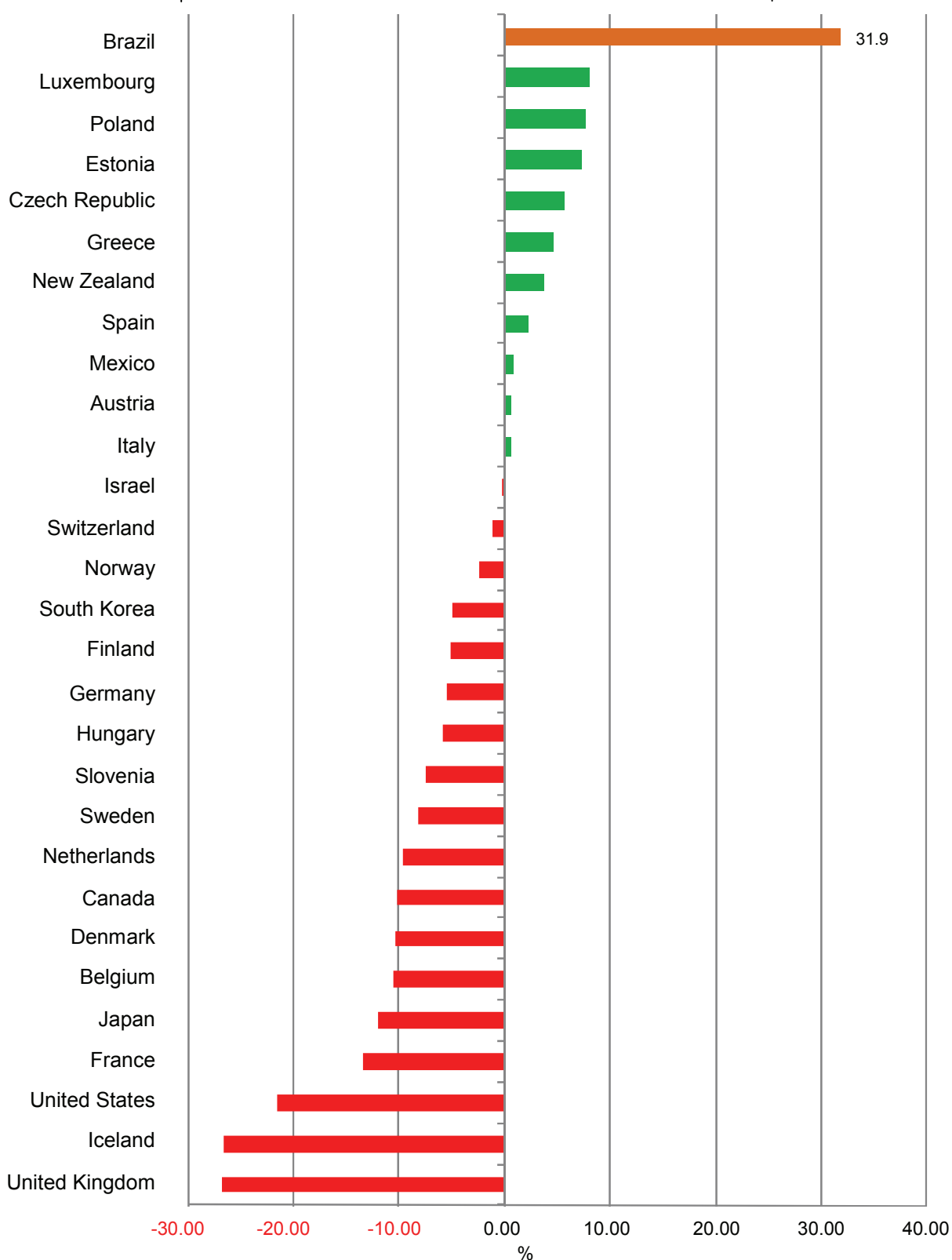


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

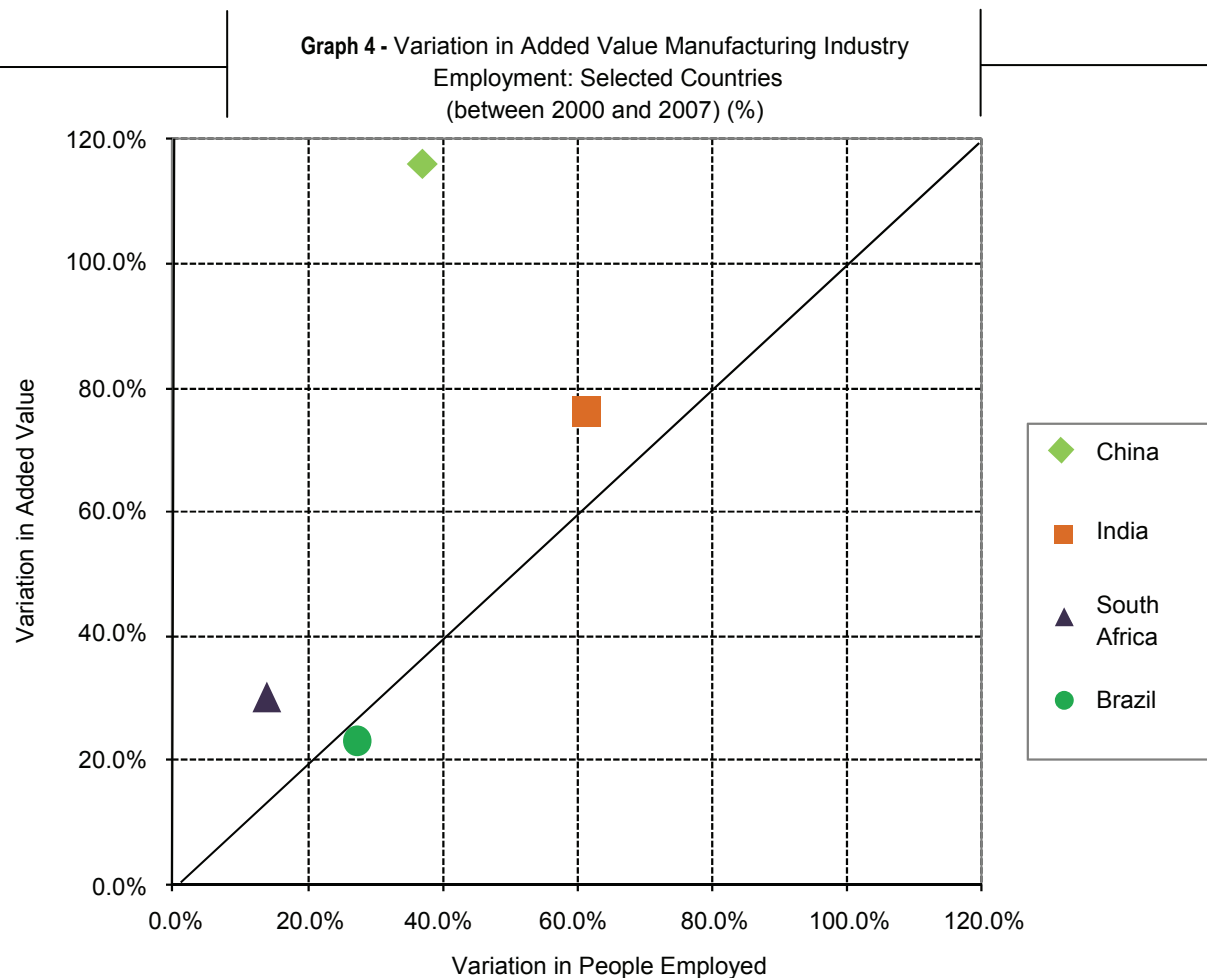
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

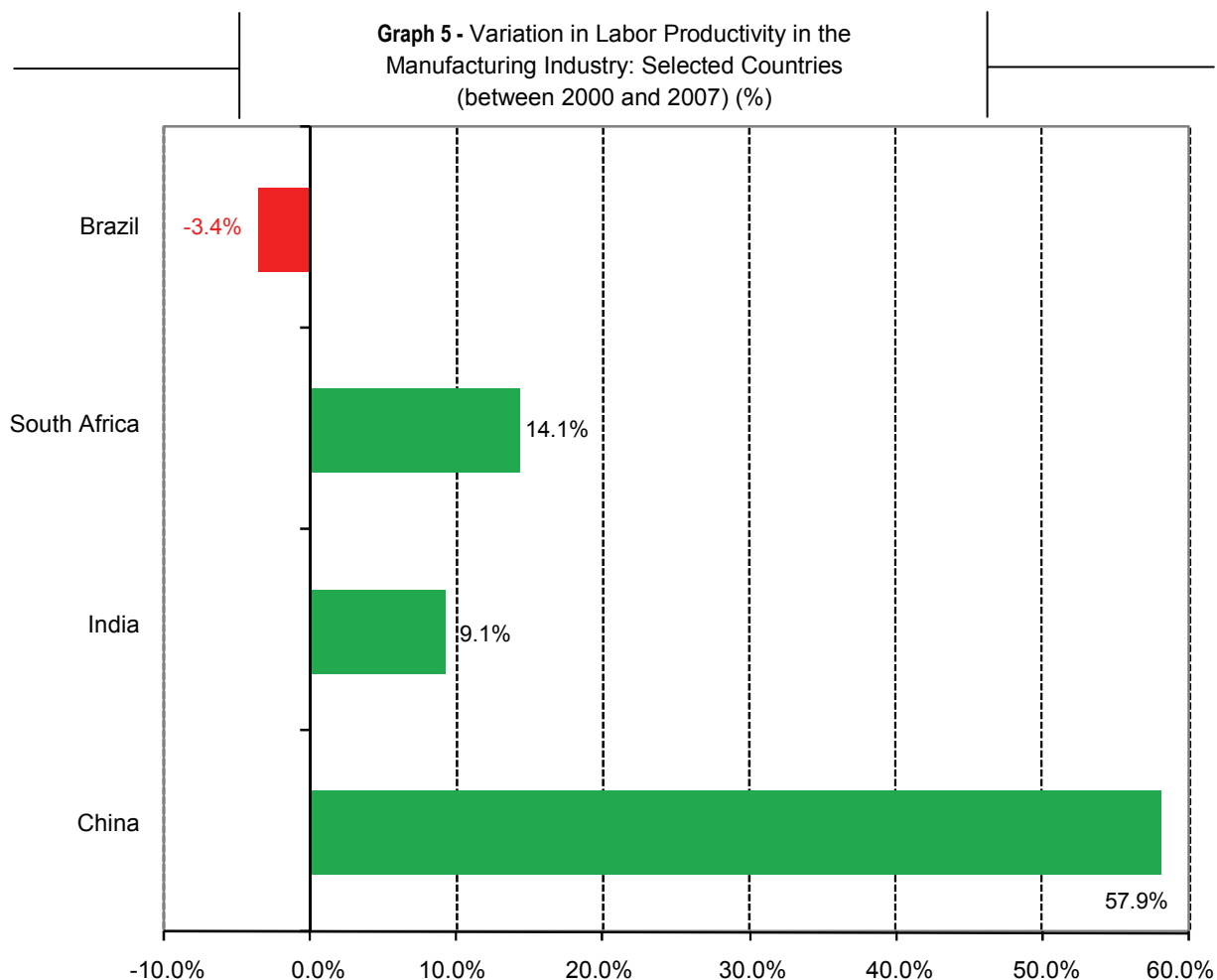
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

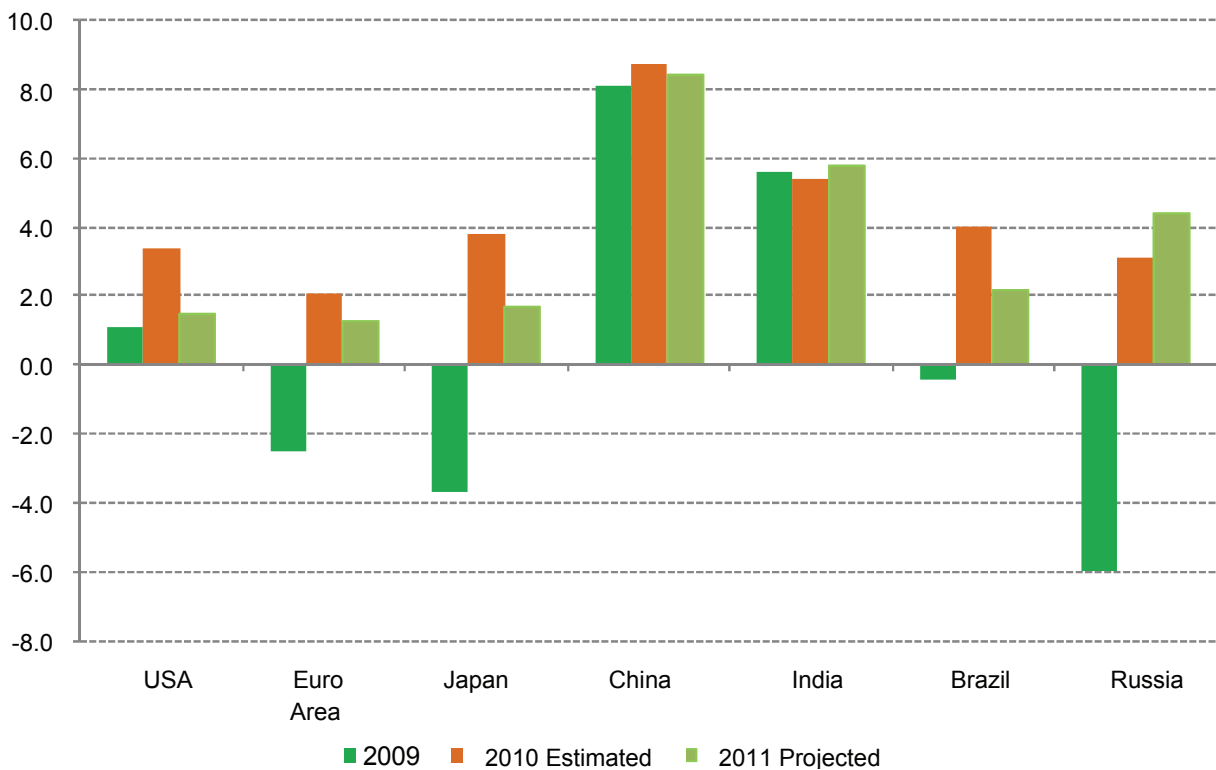
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

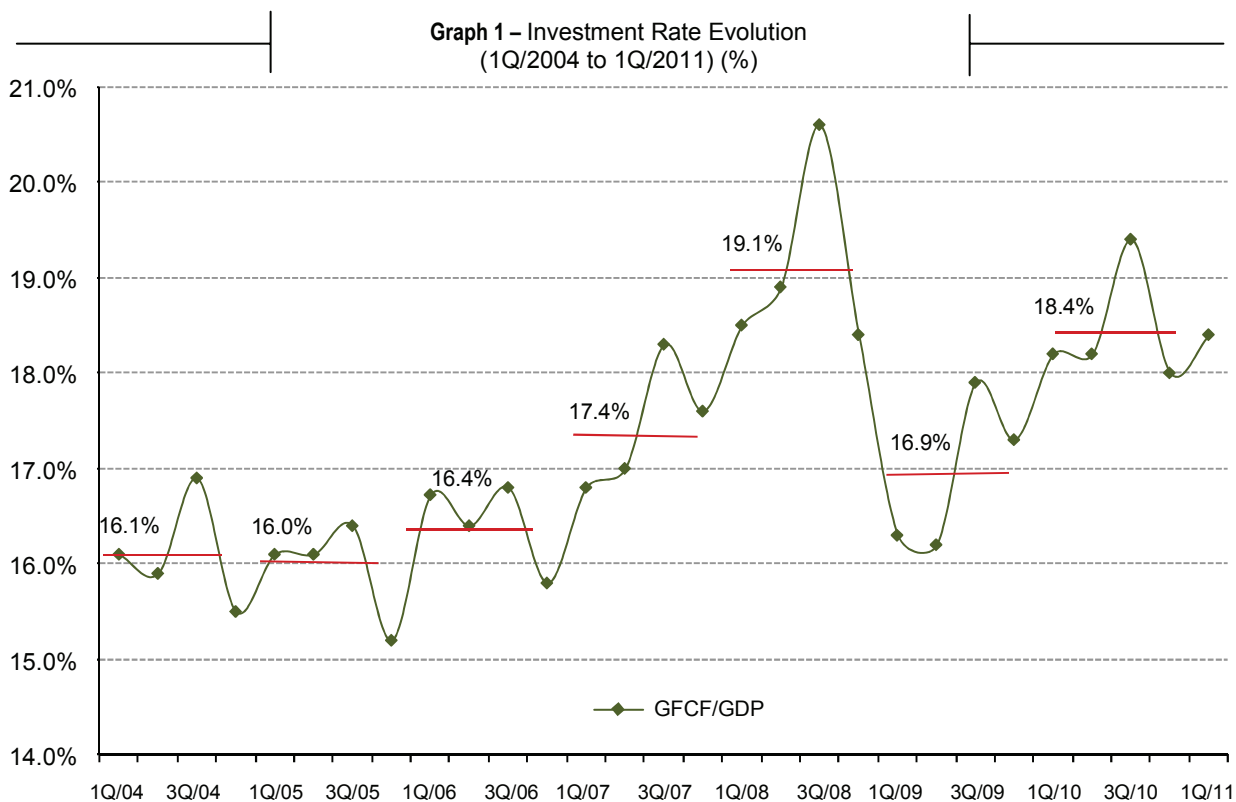
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

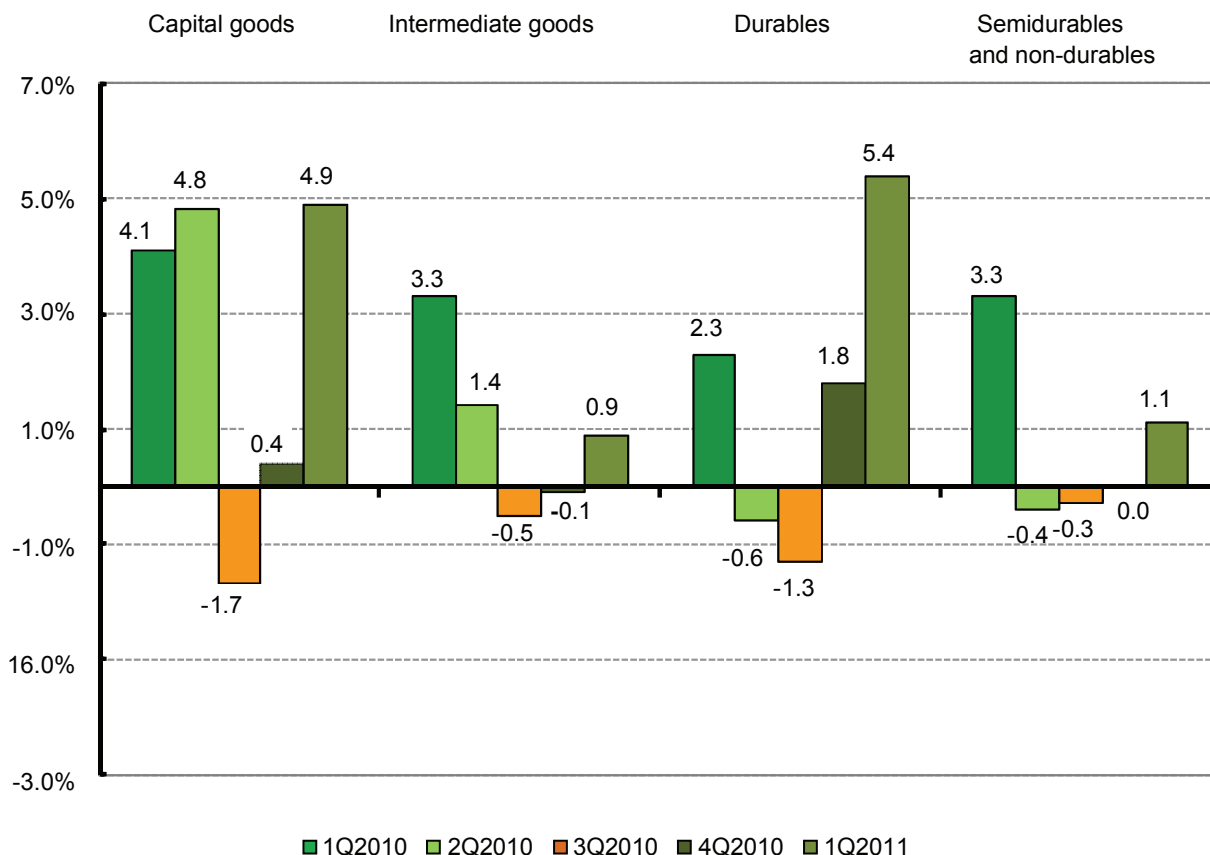
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjunction Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

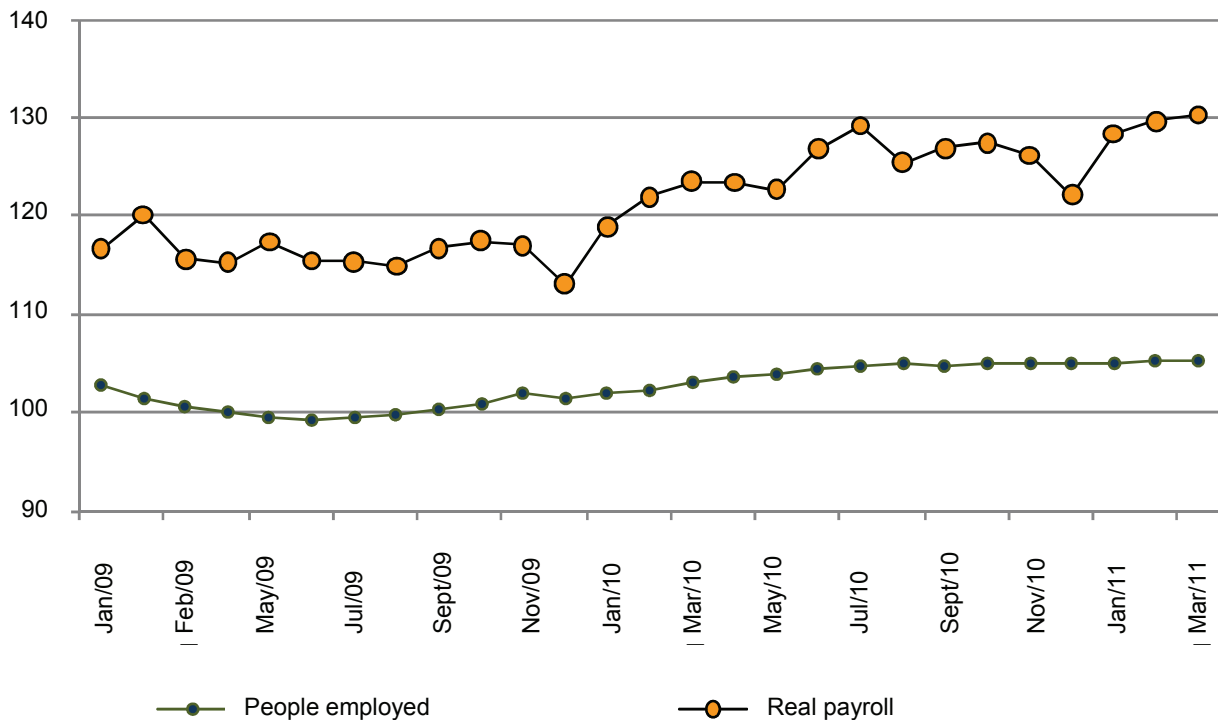
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

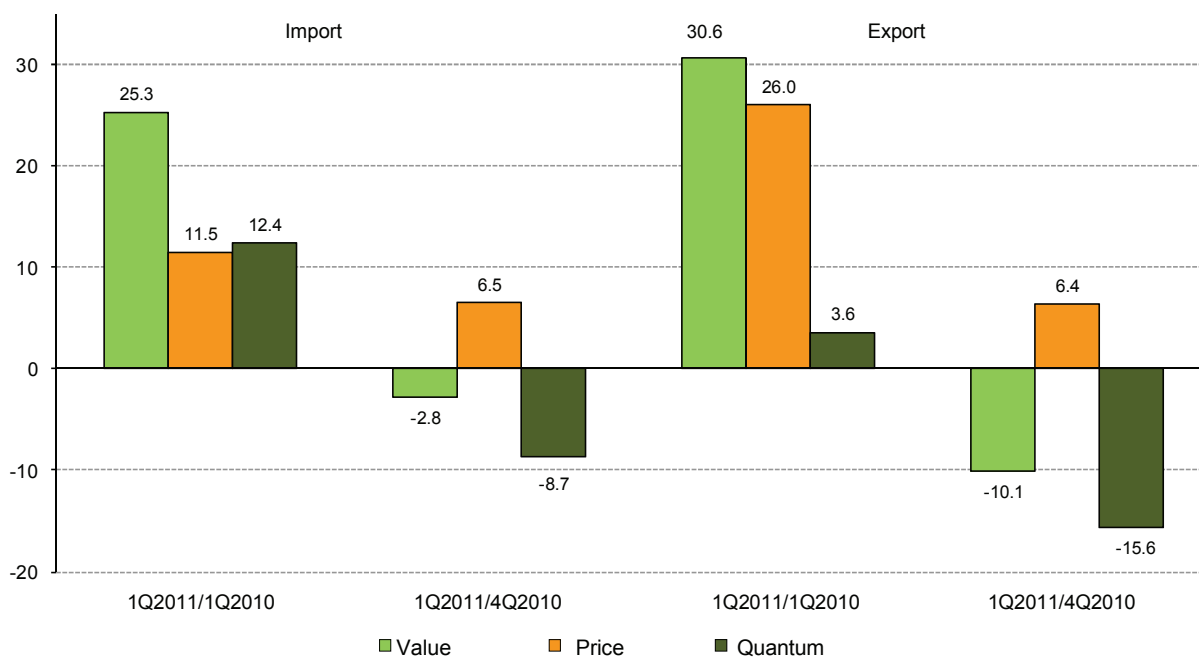
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been lead by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

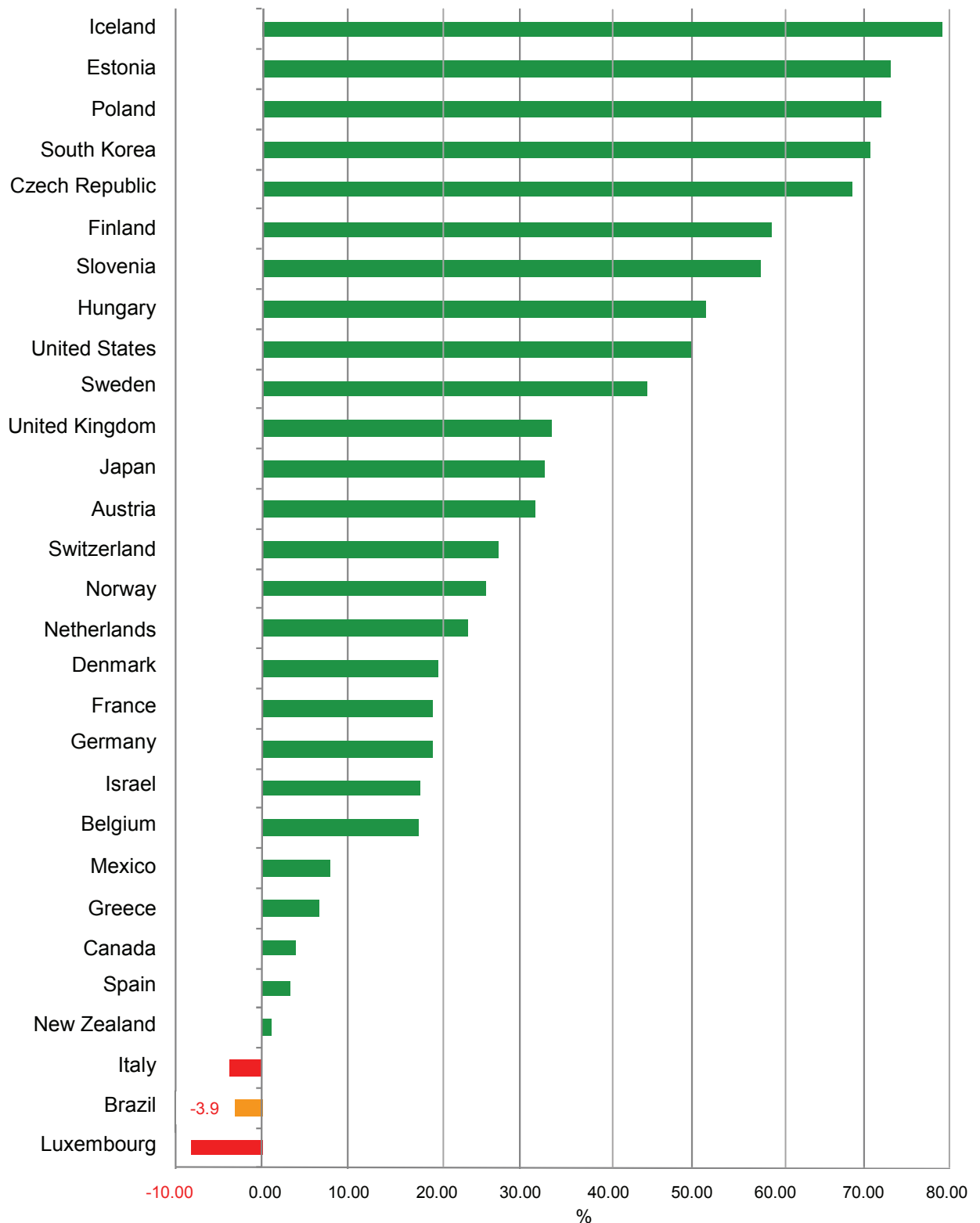
In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

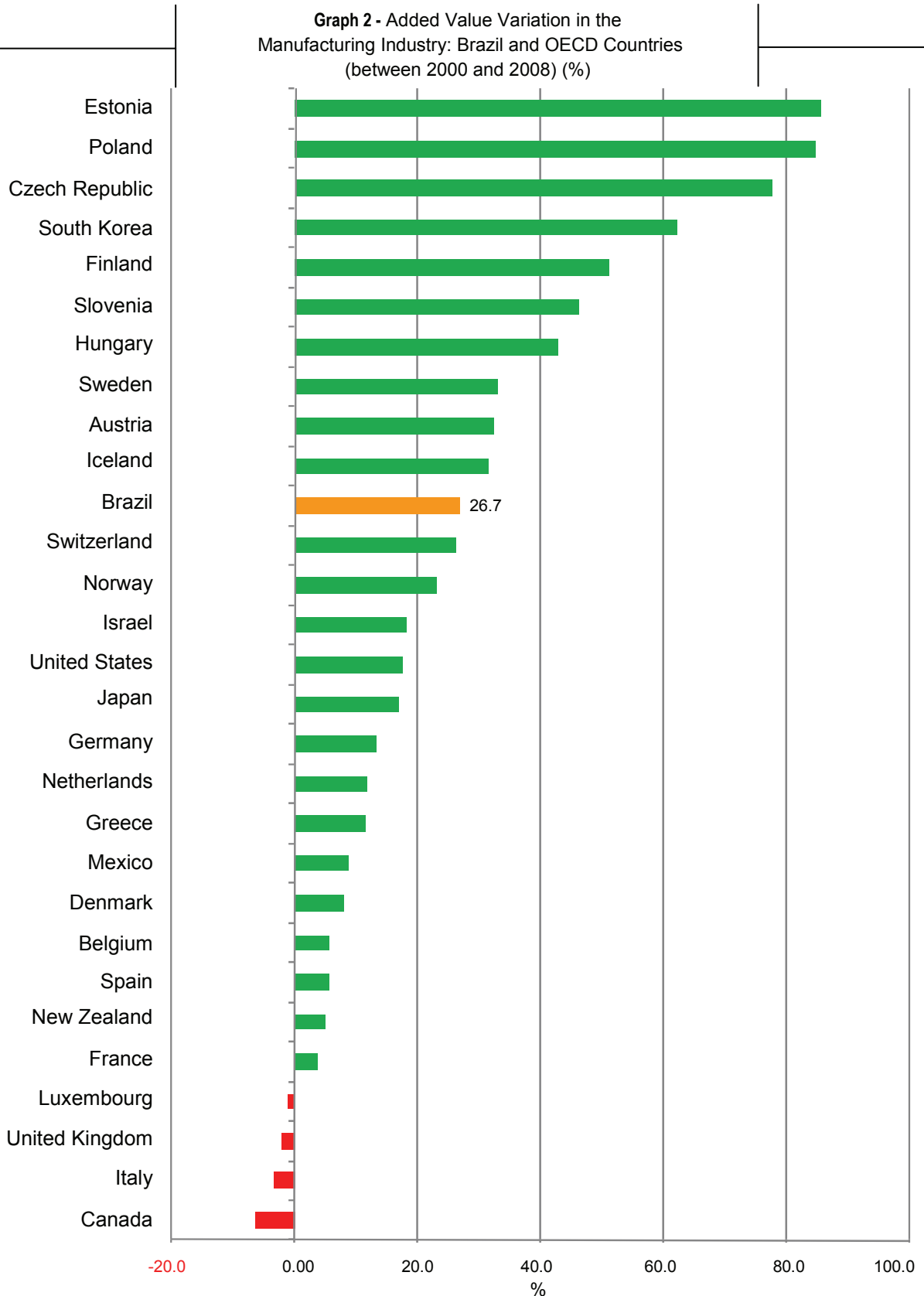
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

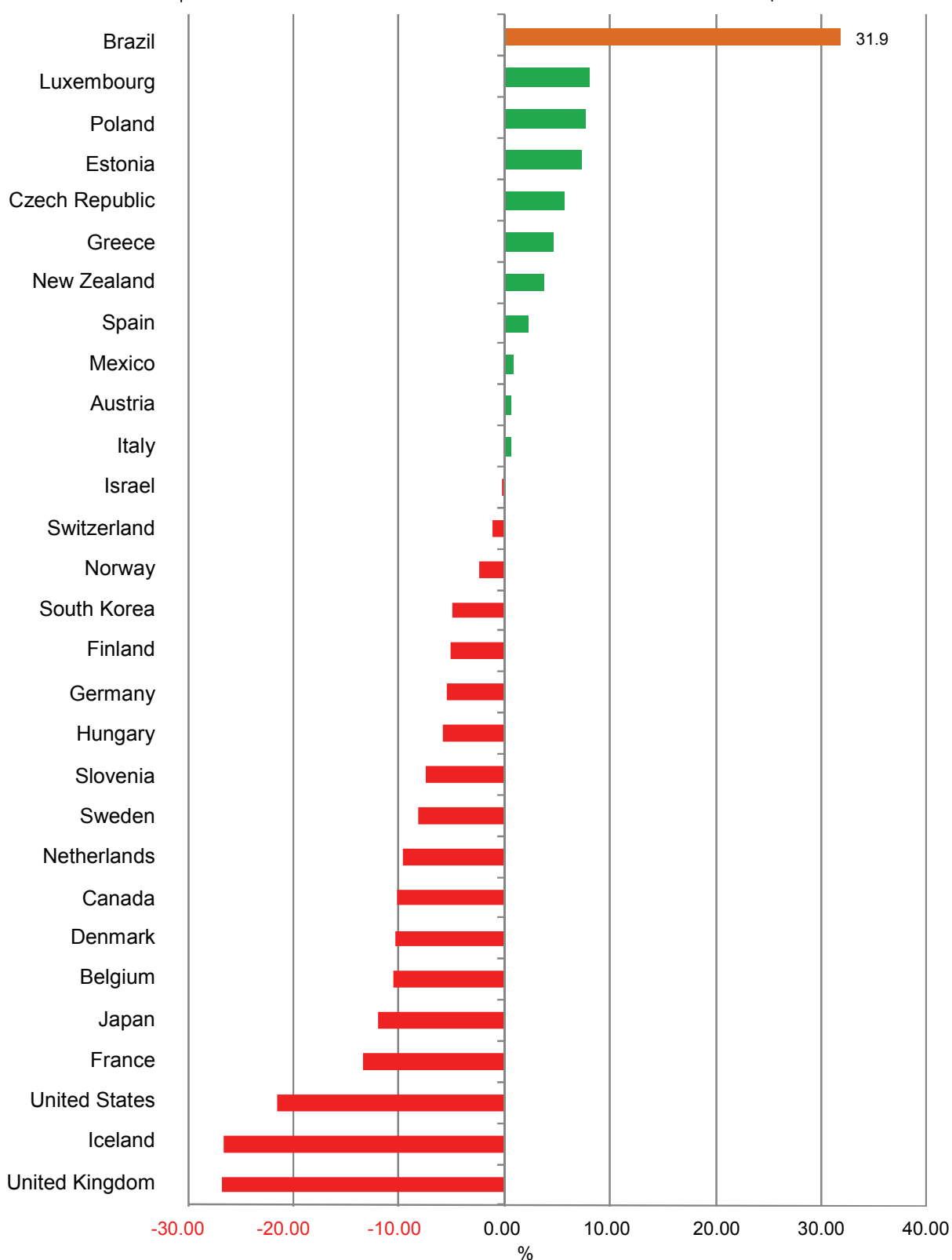


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

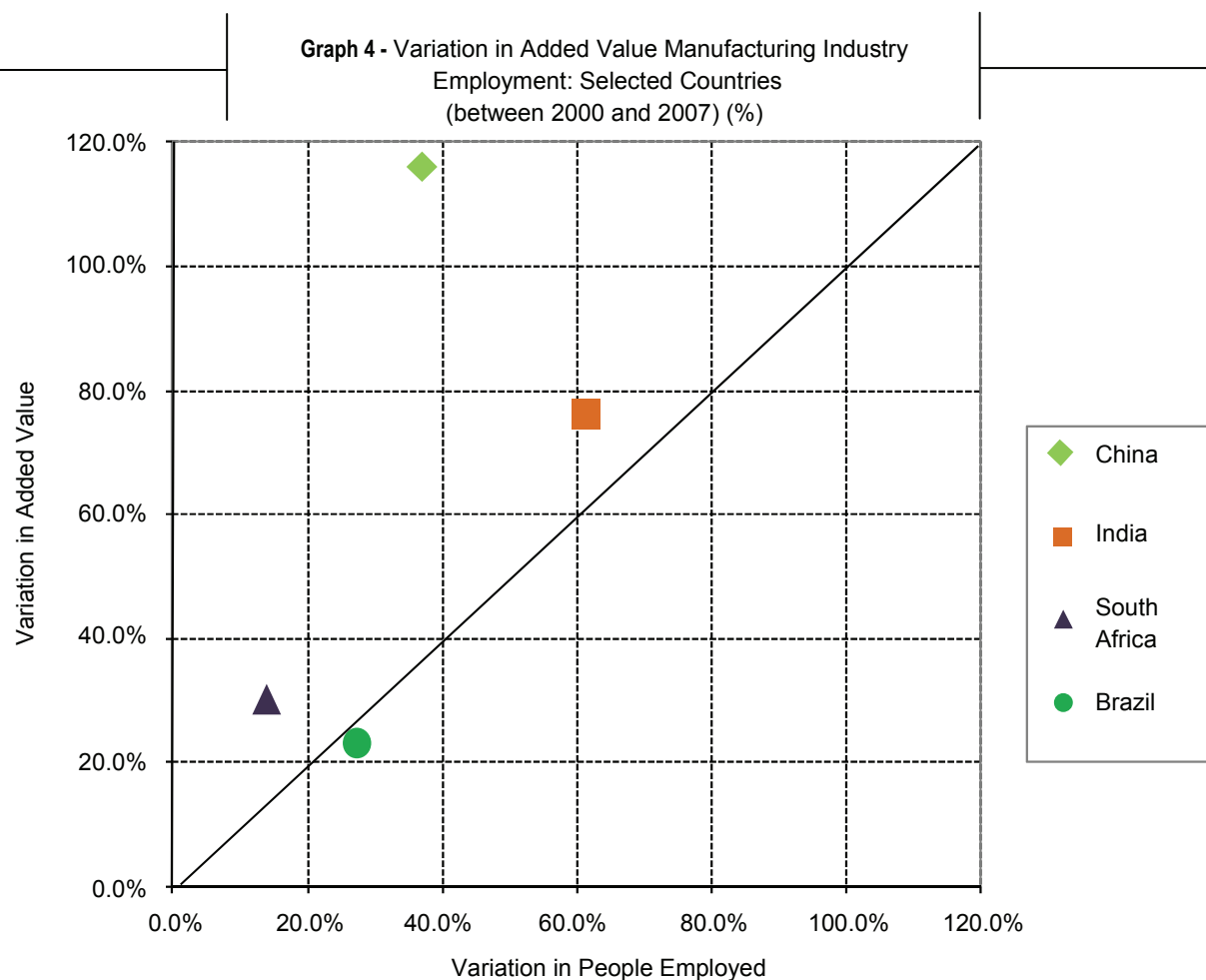
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

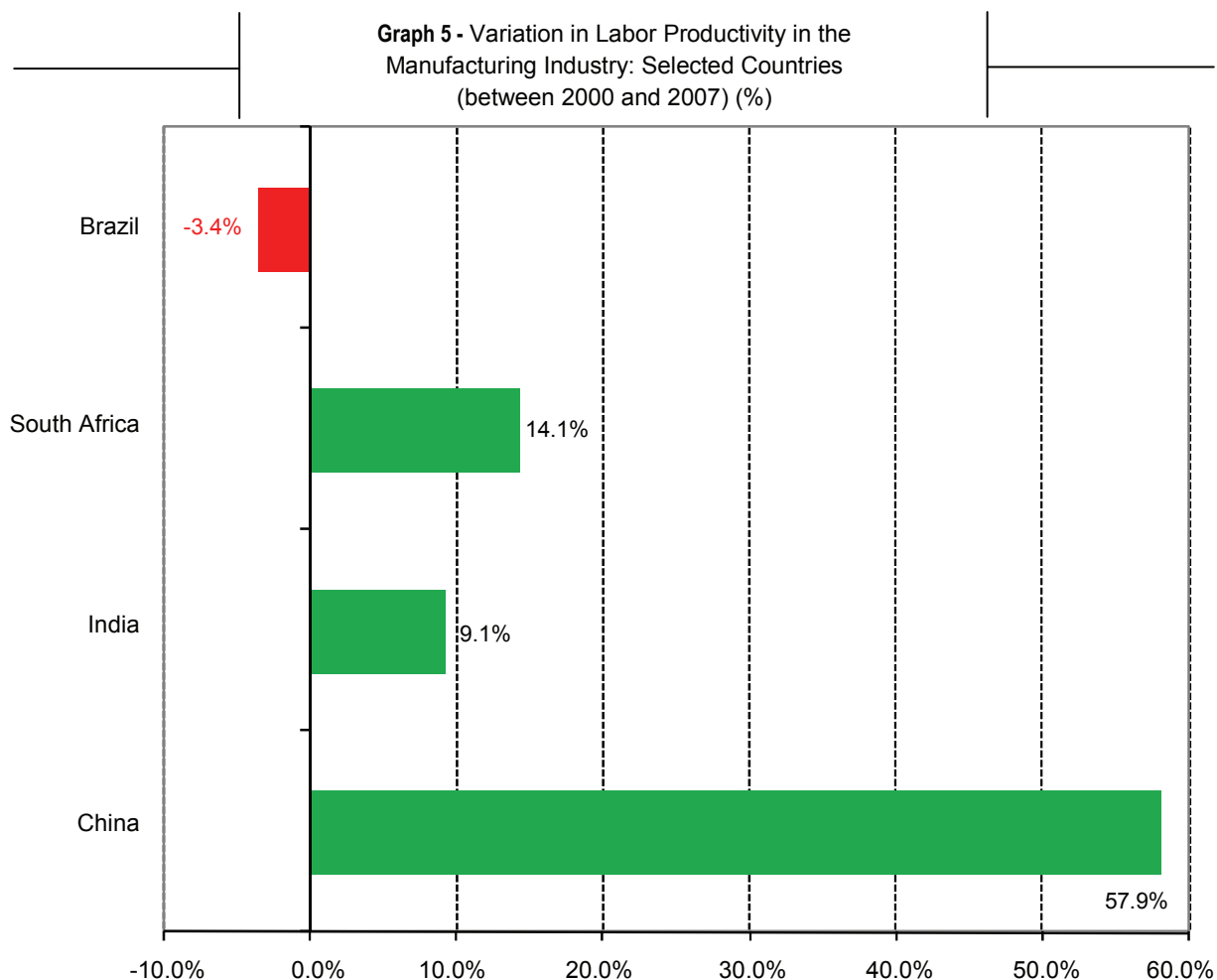
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

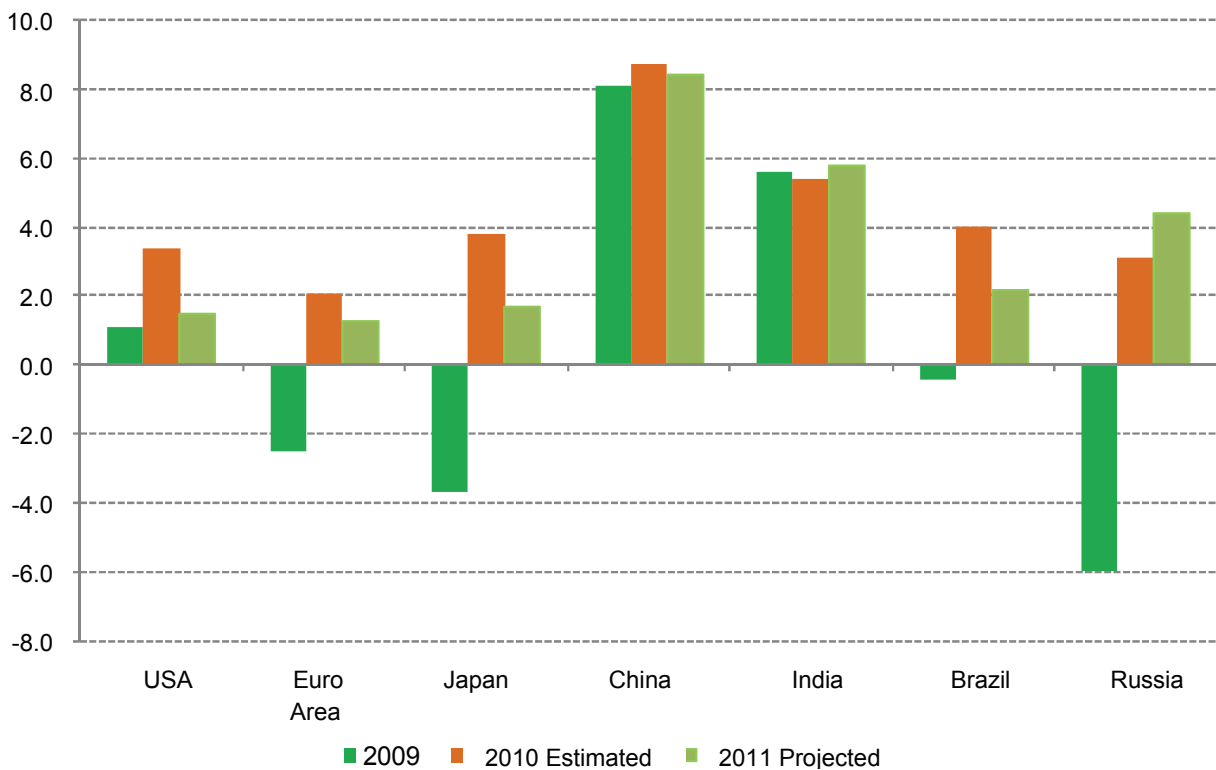
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

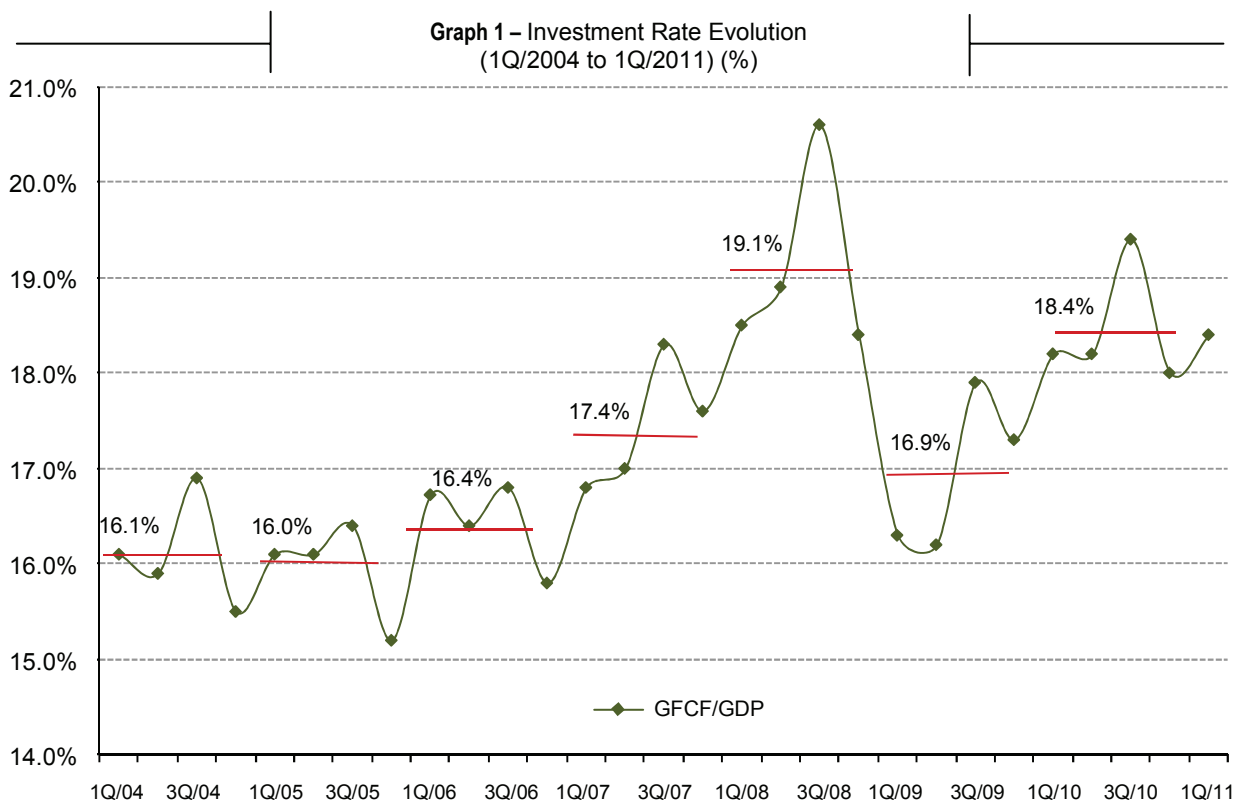
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

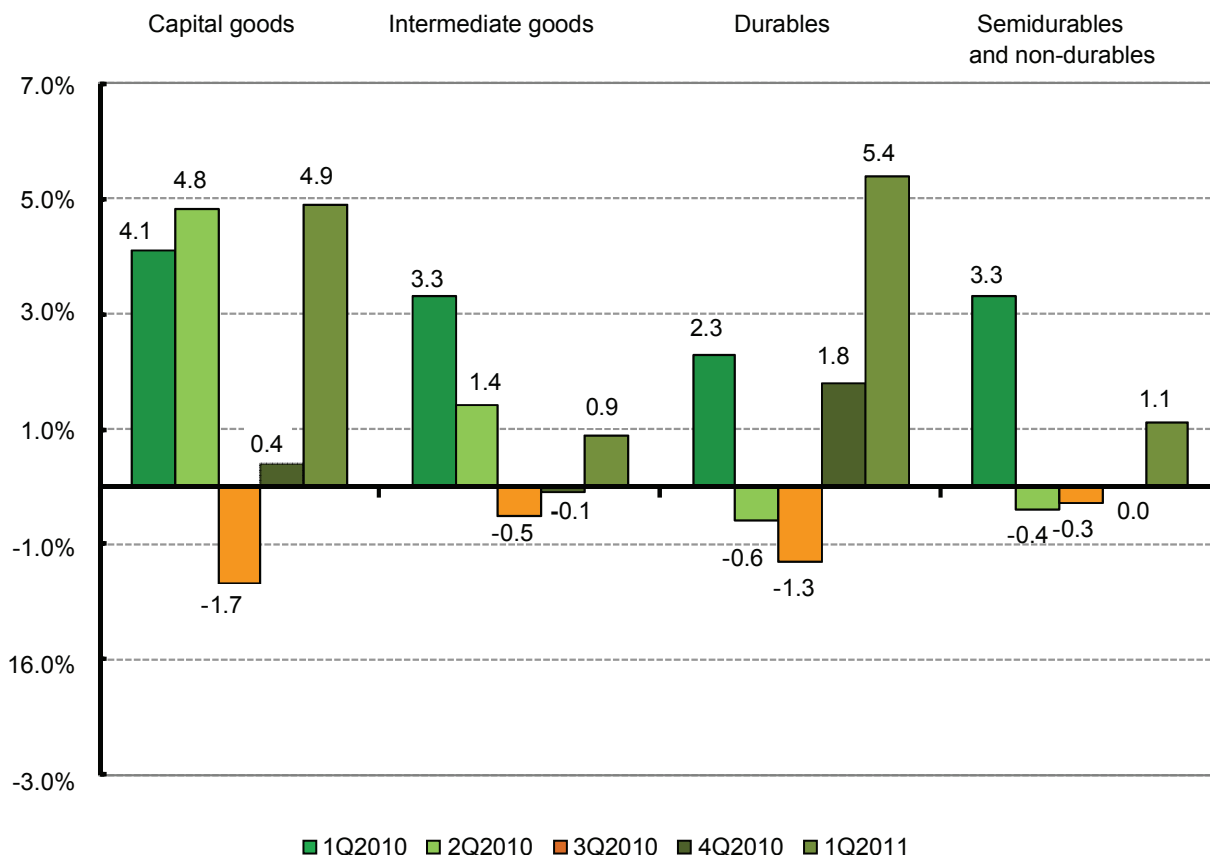
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjunction Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

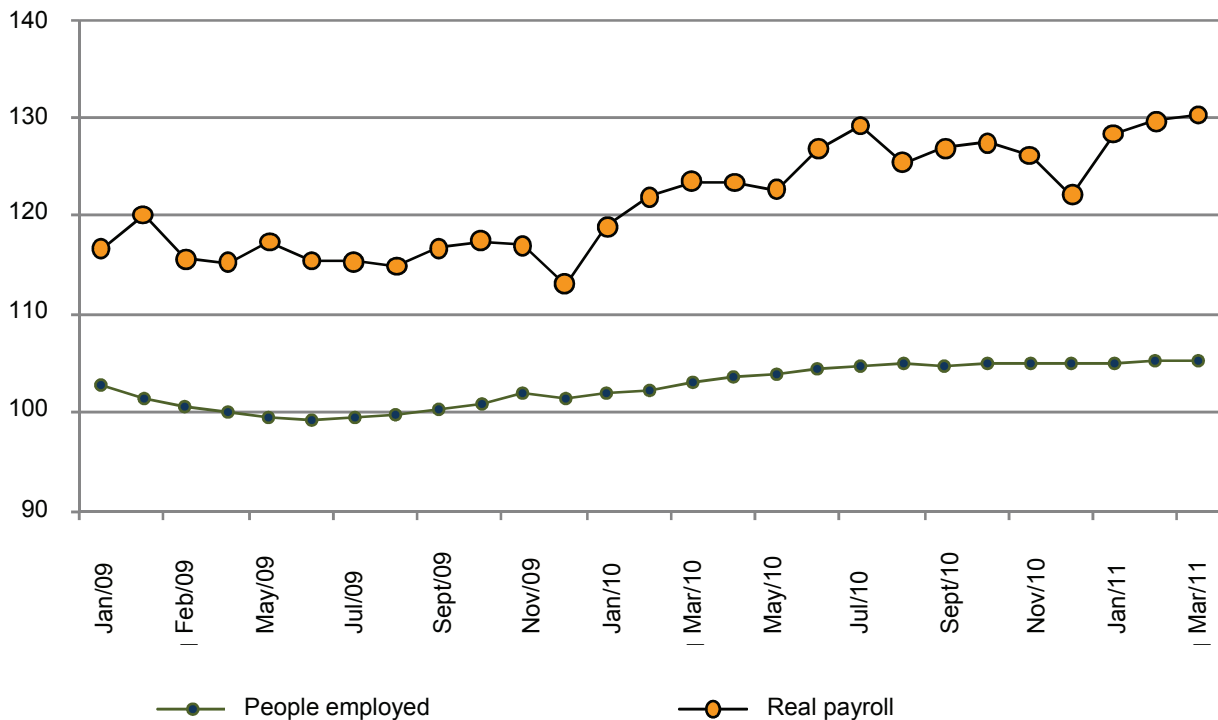
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

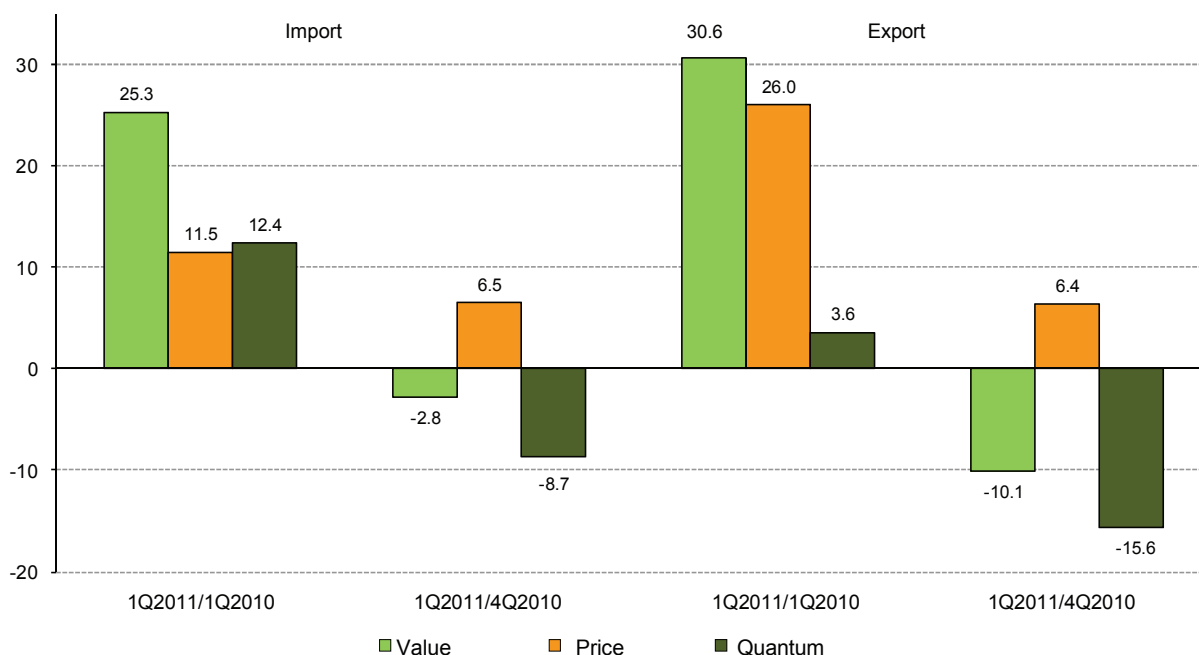
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

**Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)**



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been led by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

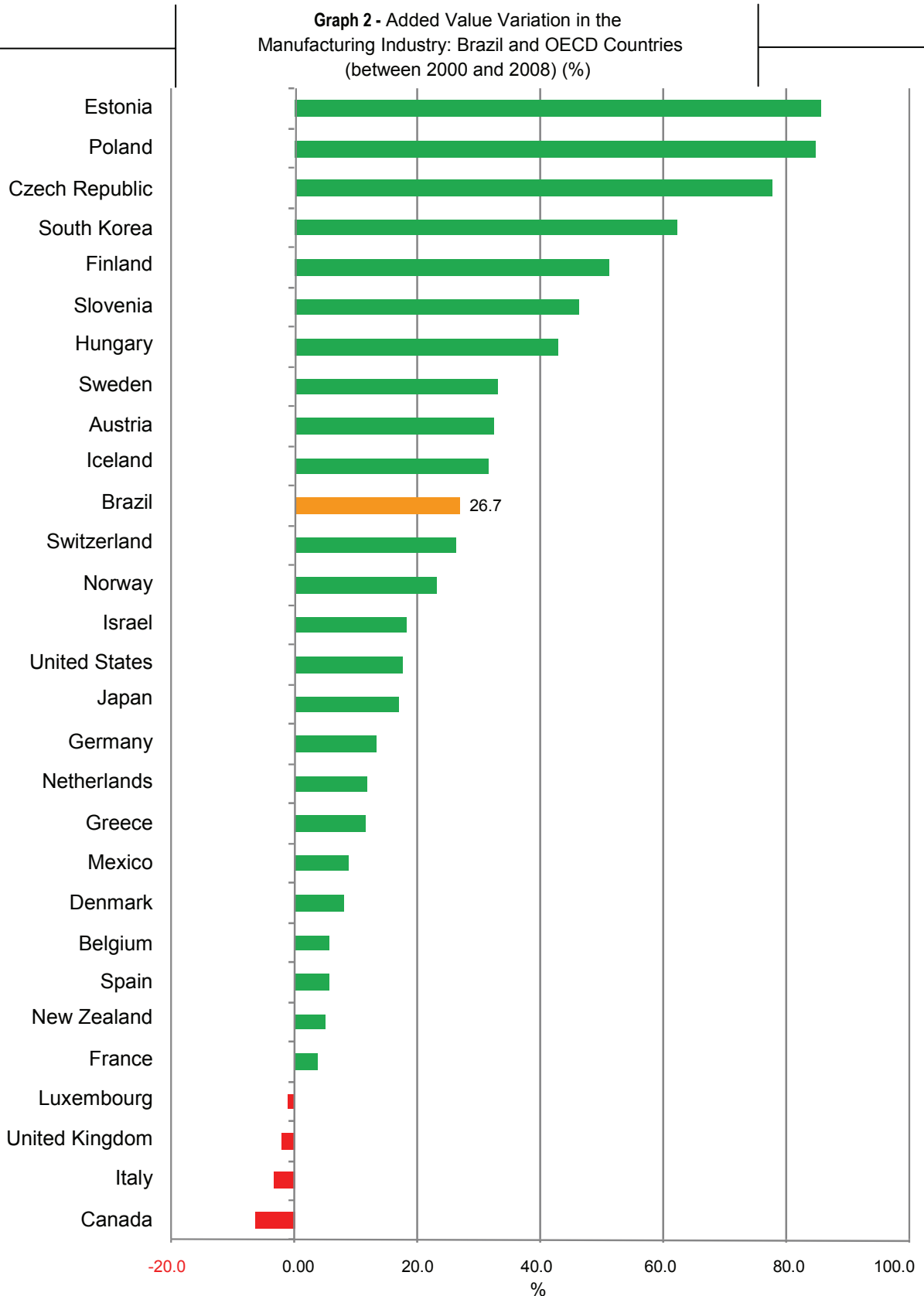
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

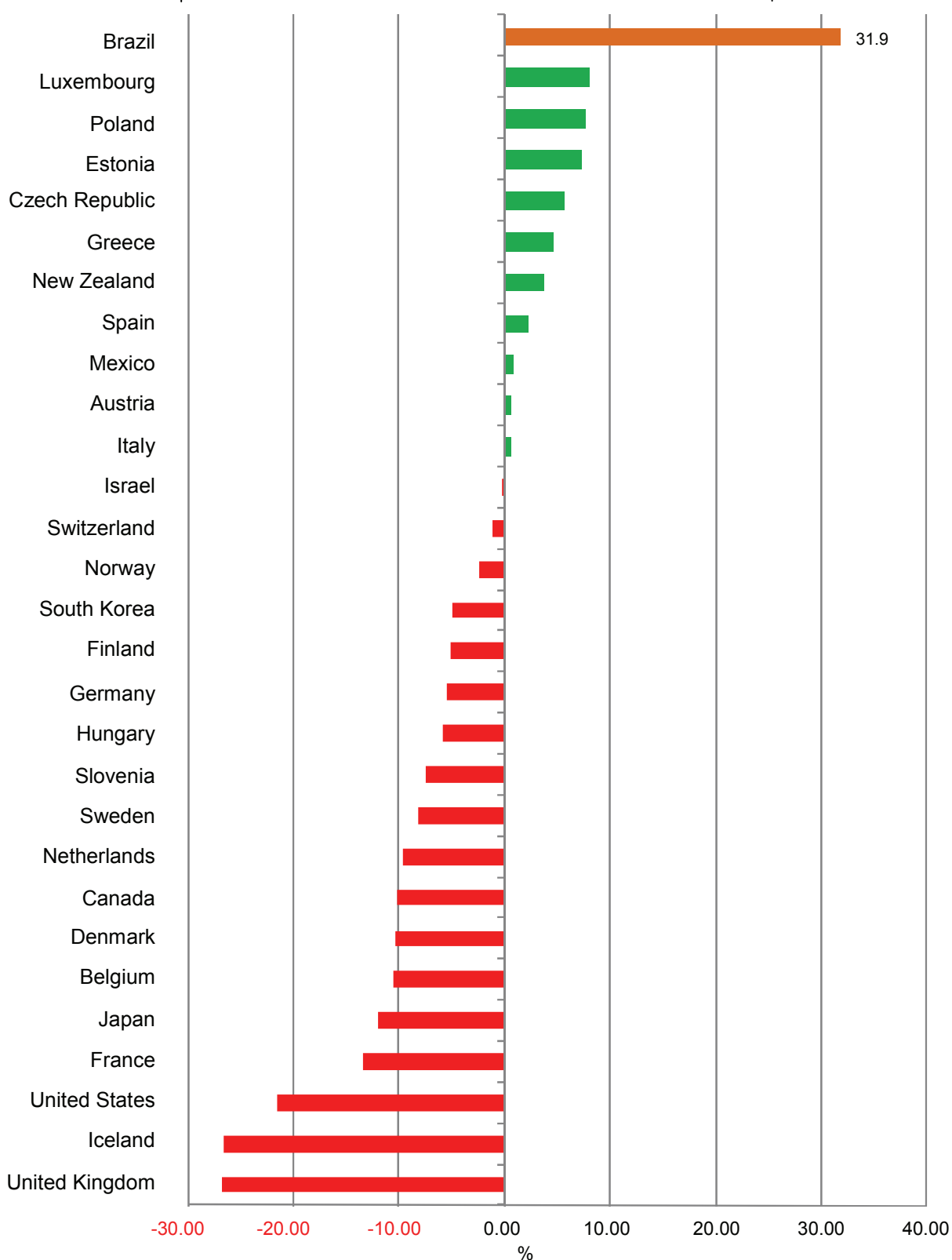


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

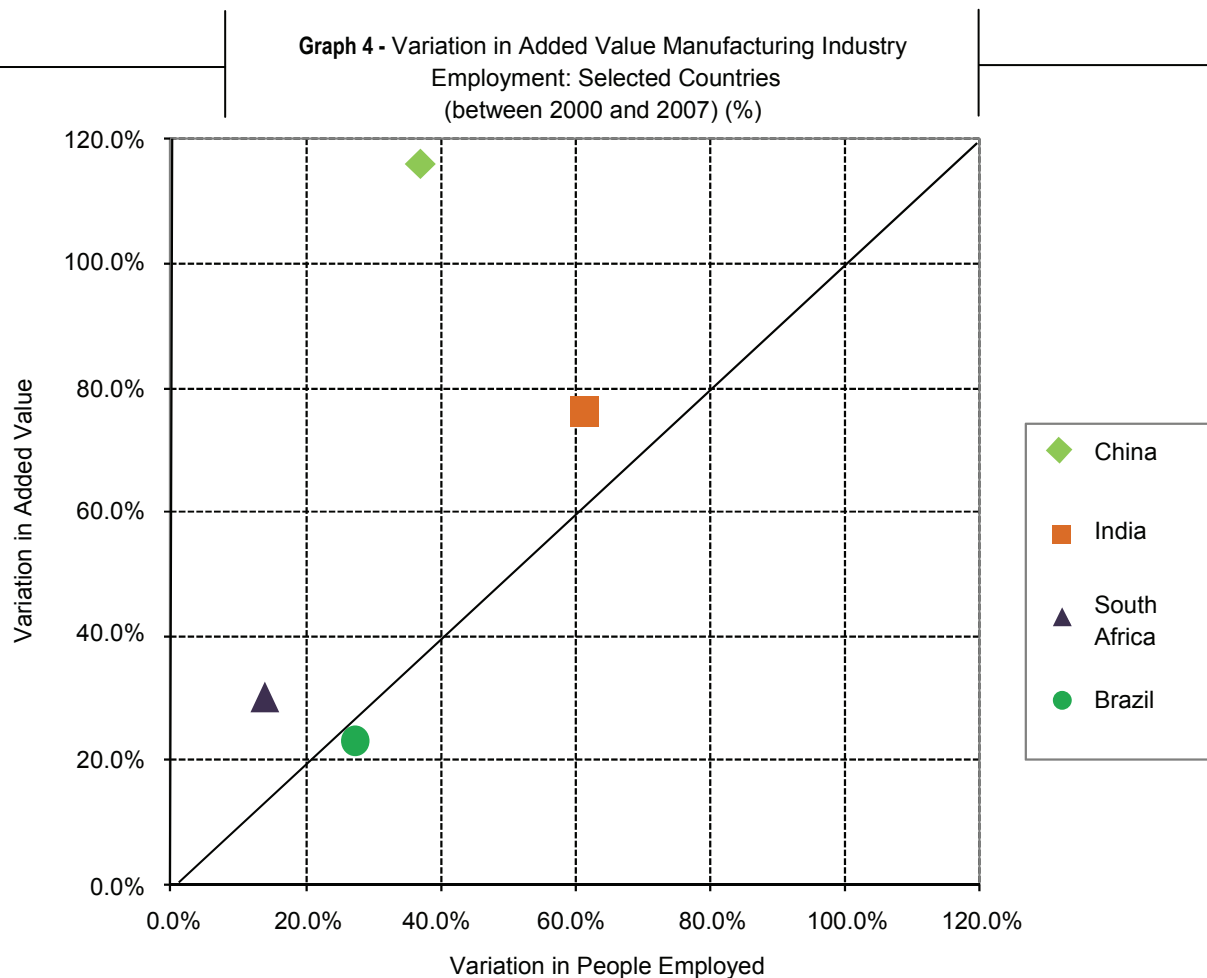
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

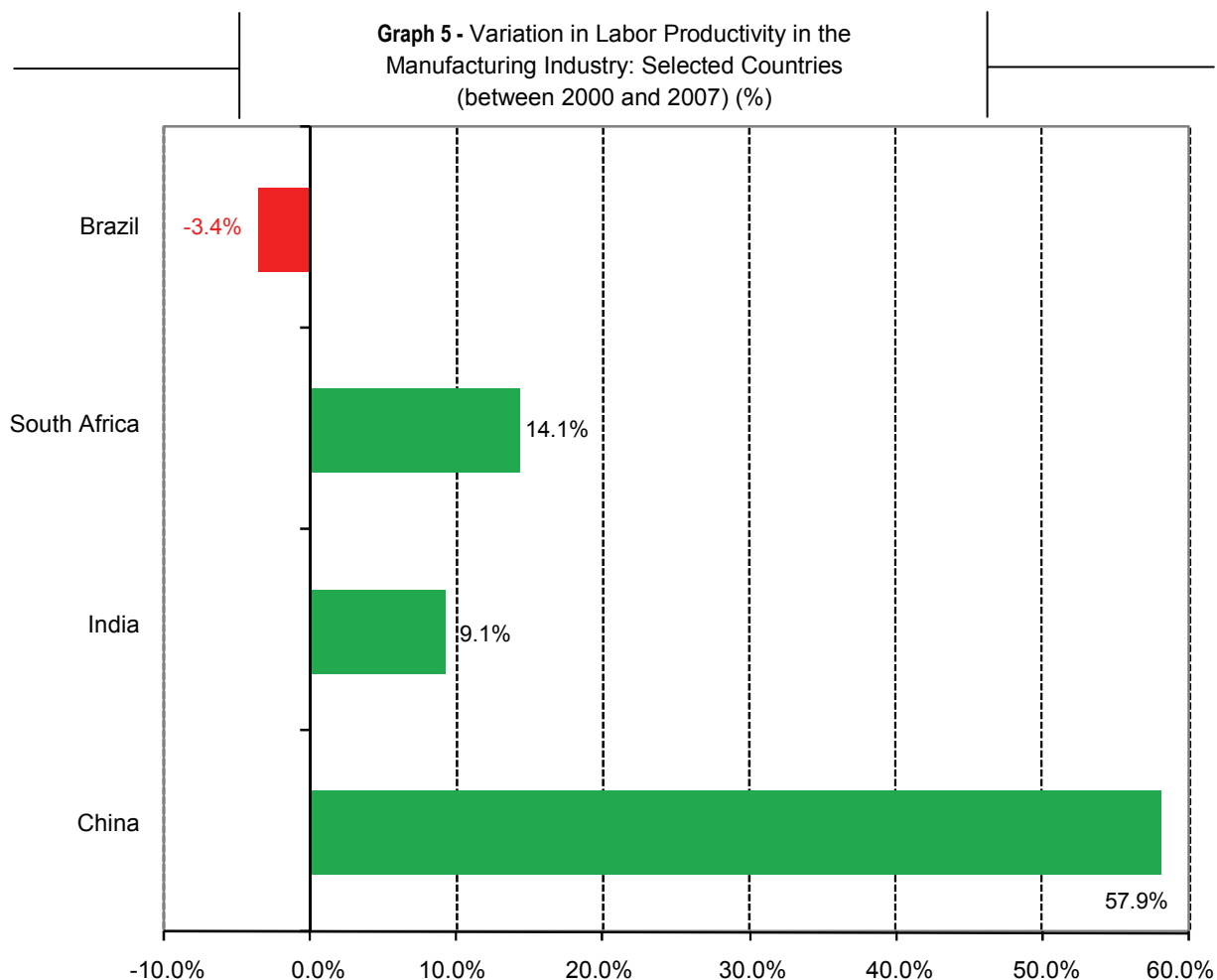
Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.



Source: OIT, WDI and SCN/IBGE.



Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

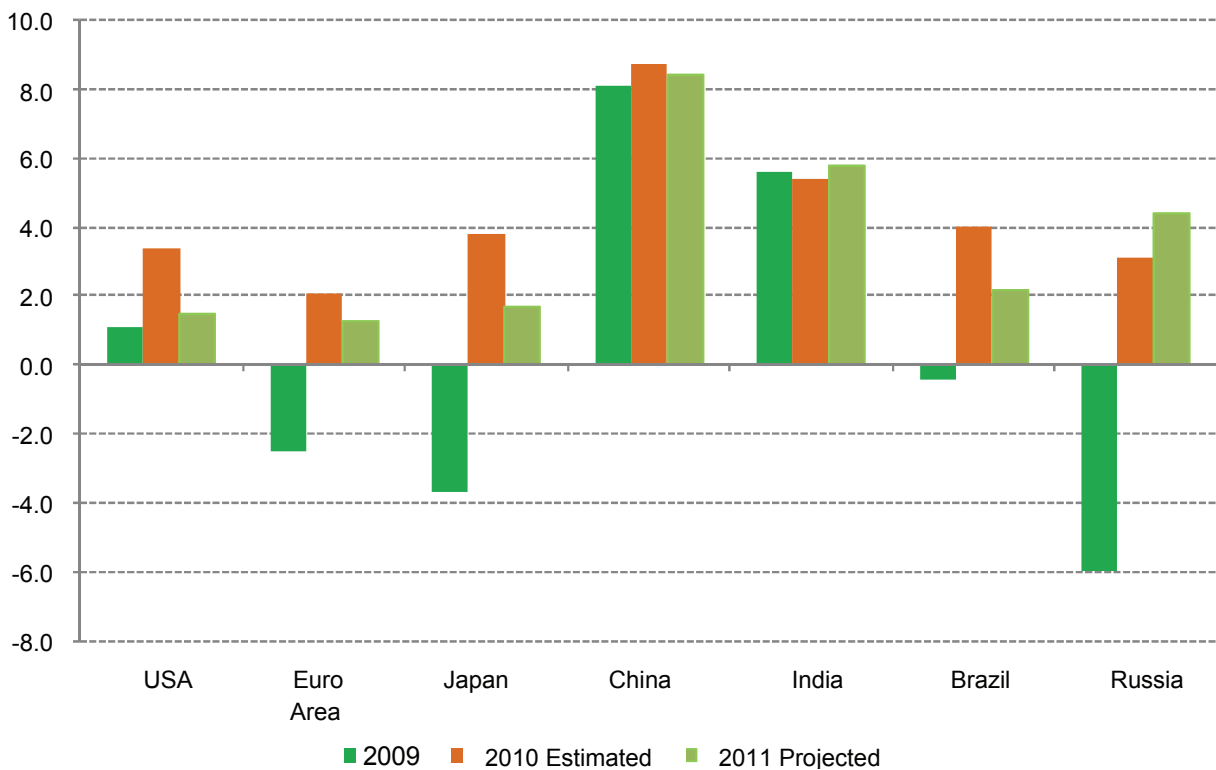
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

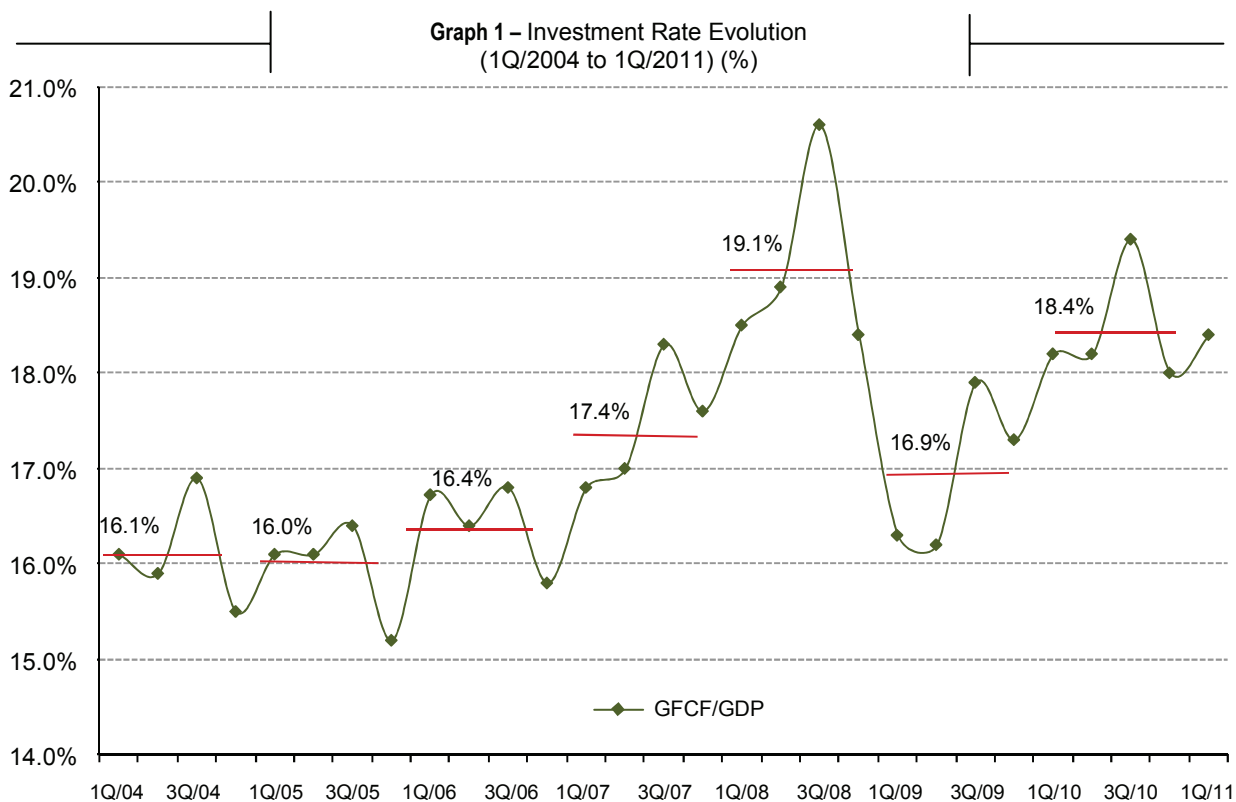
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

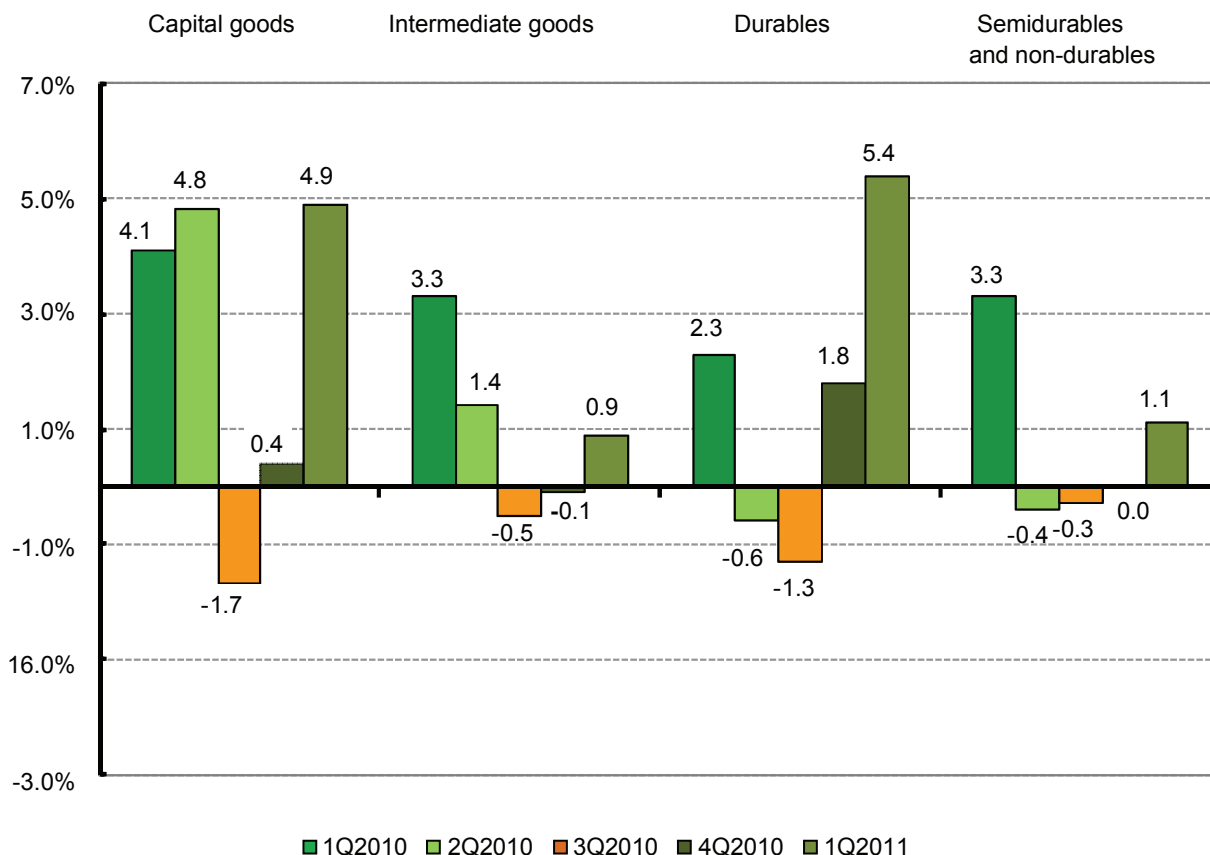
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjuncture Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

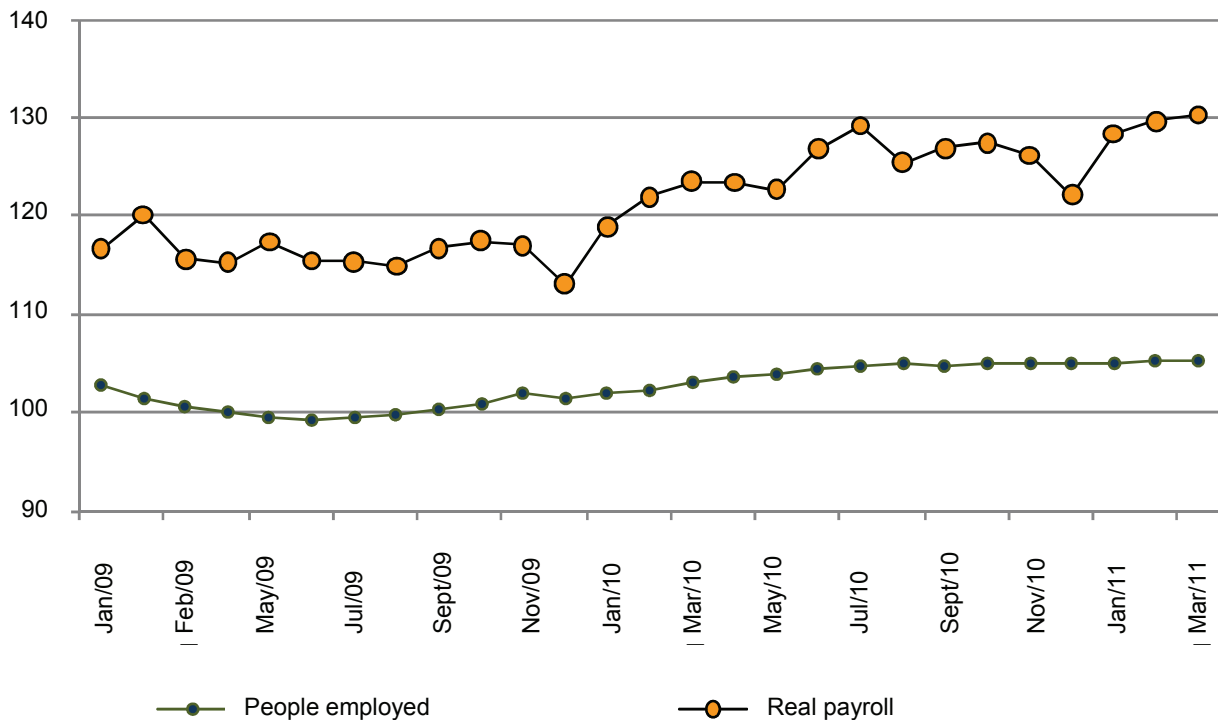
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

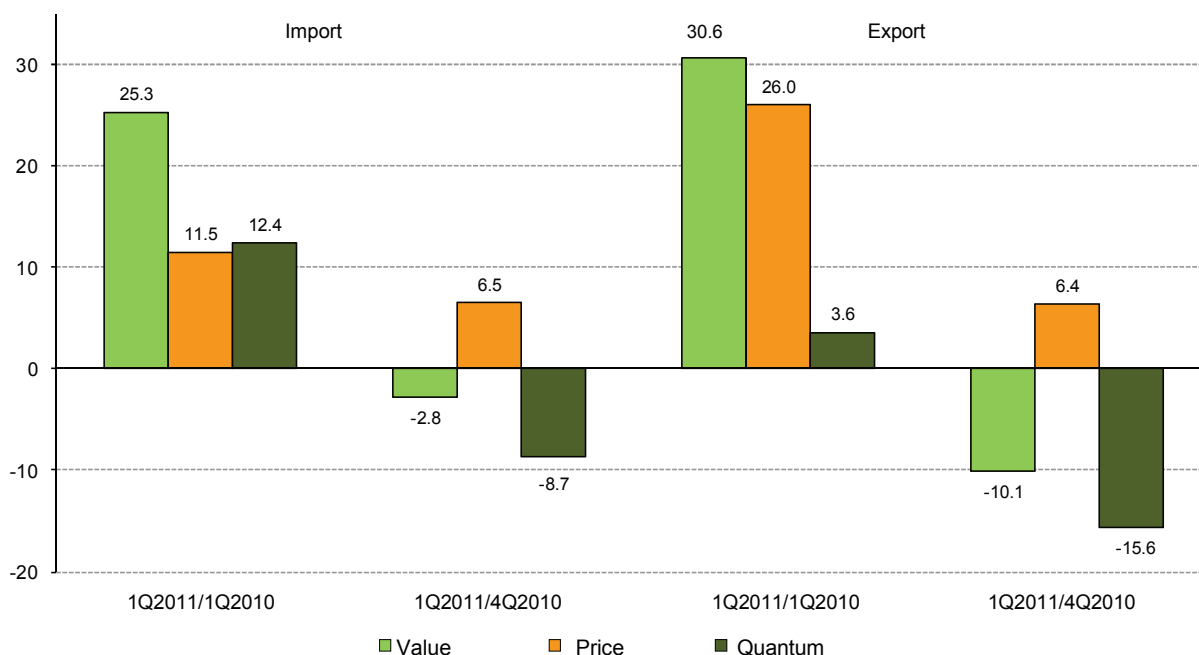
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been lead by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

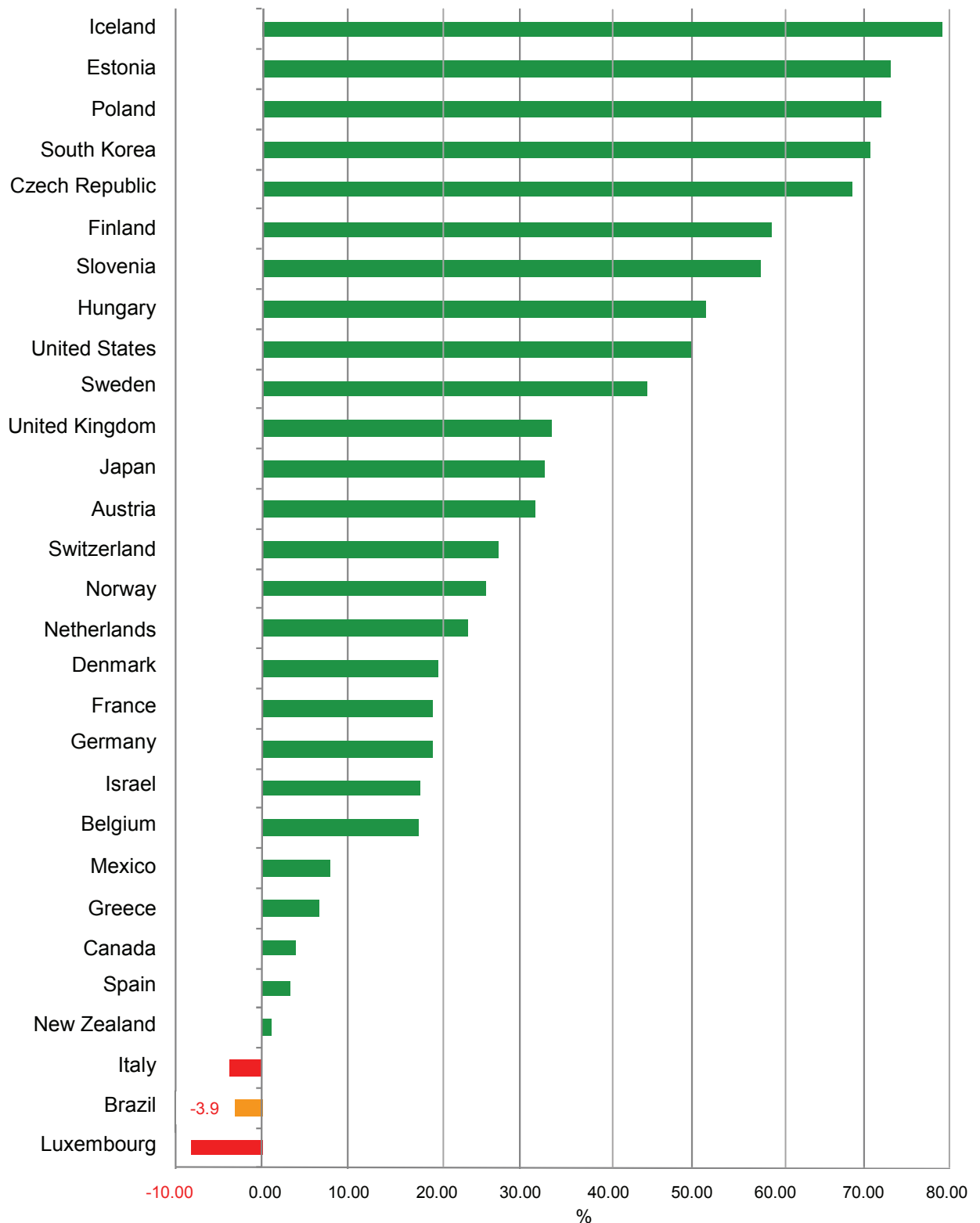
In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

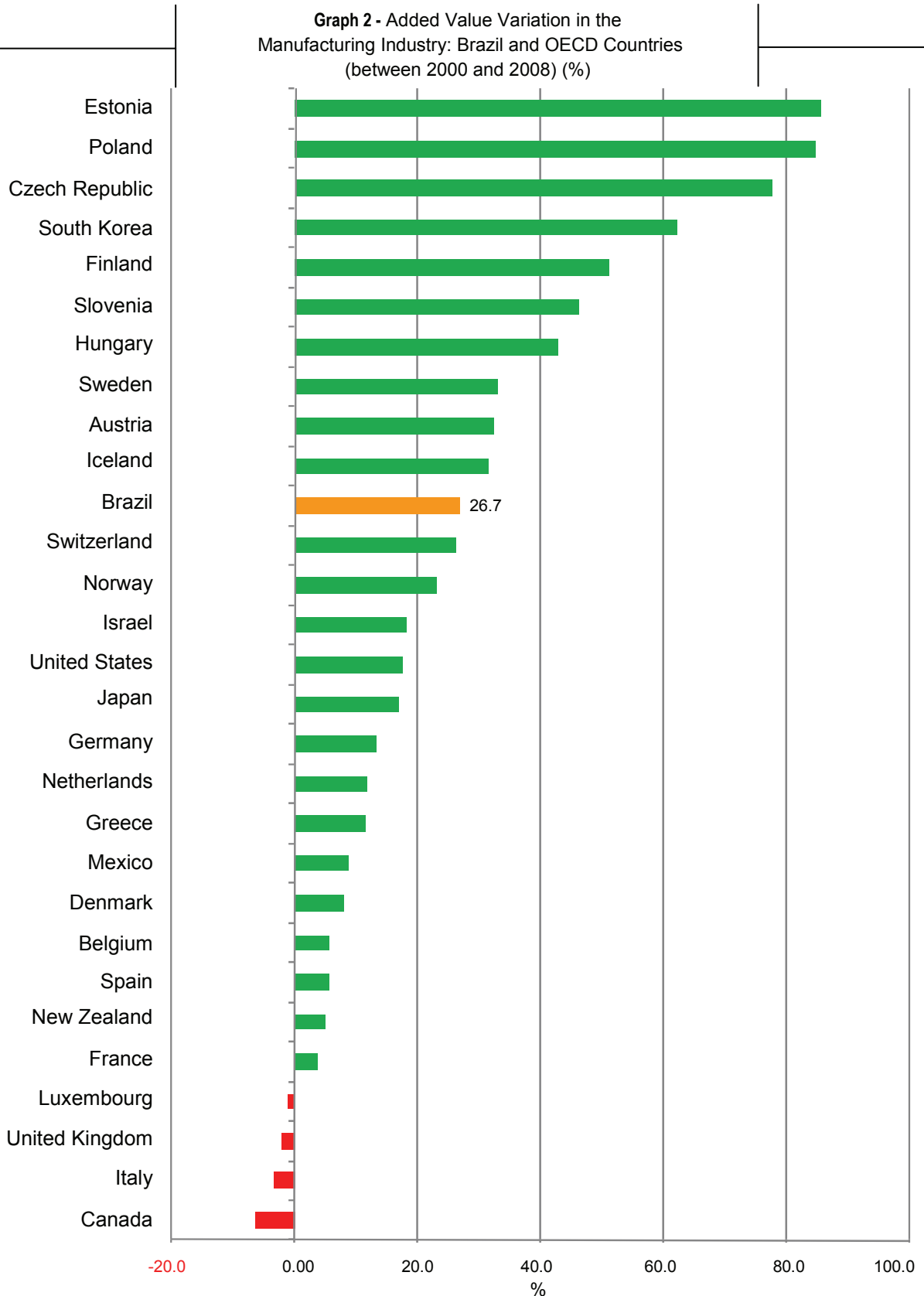
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

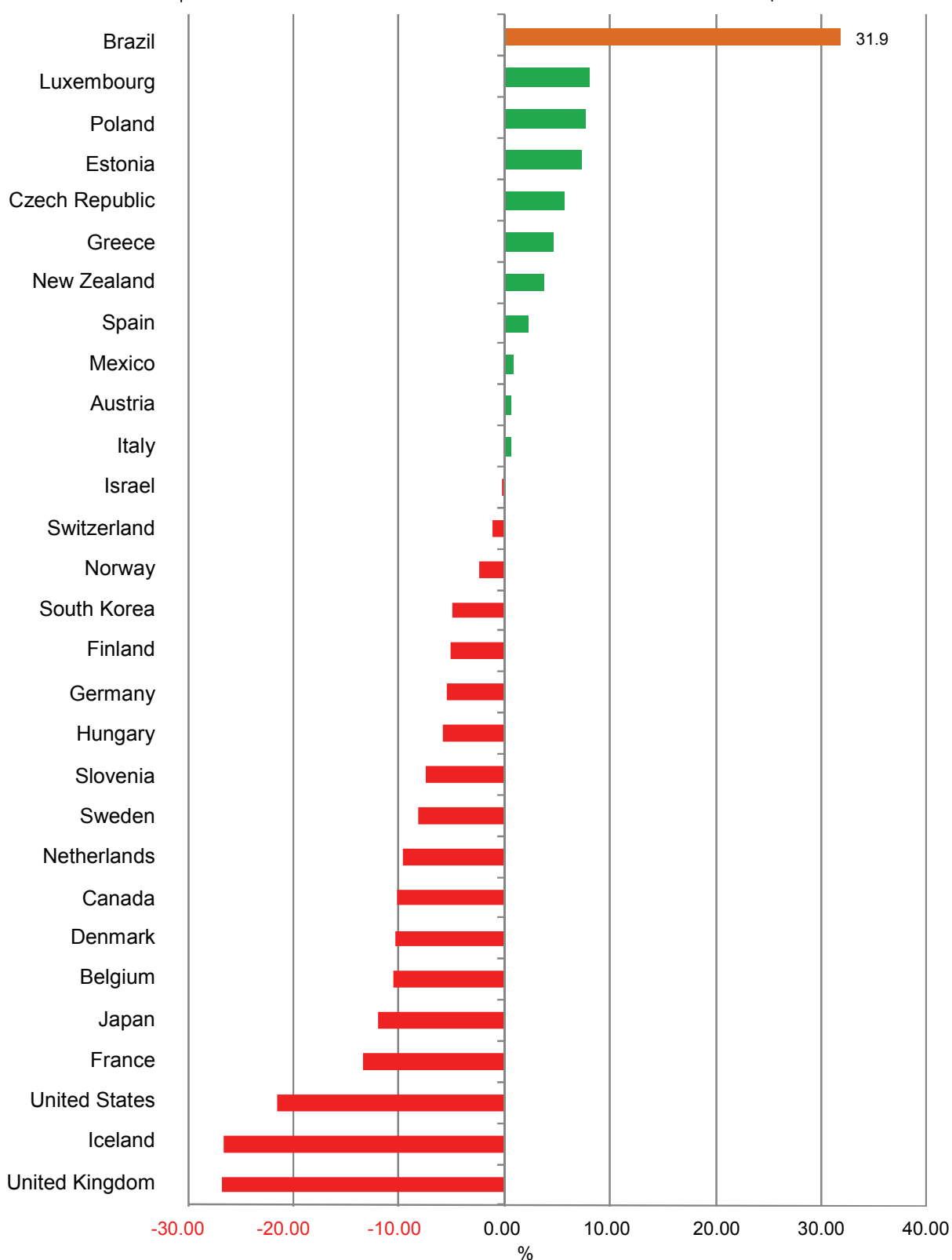


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

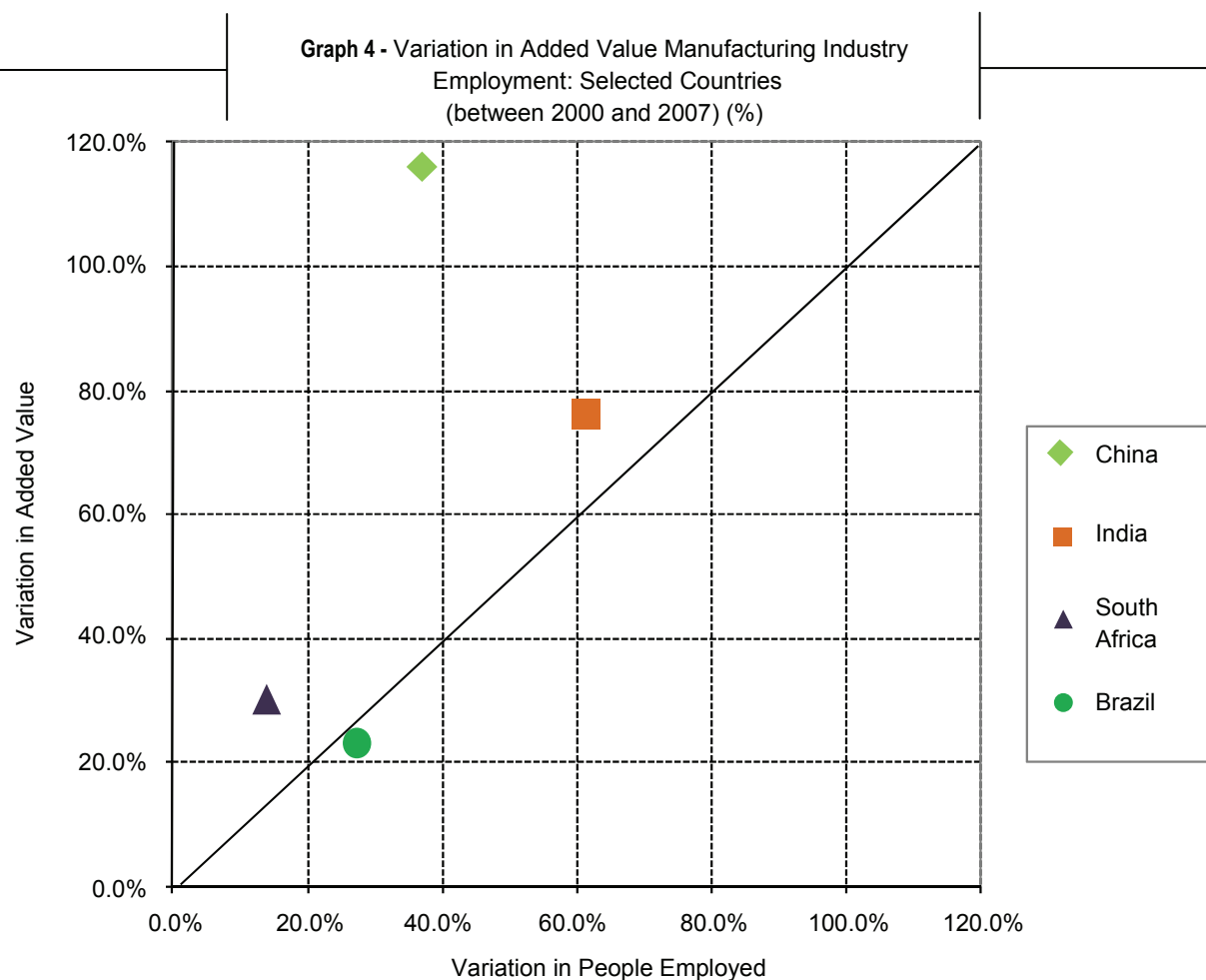
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

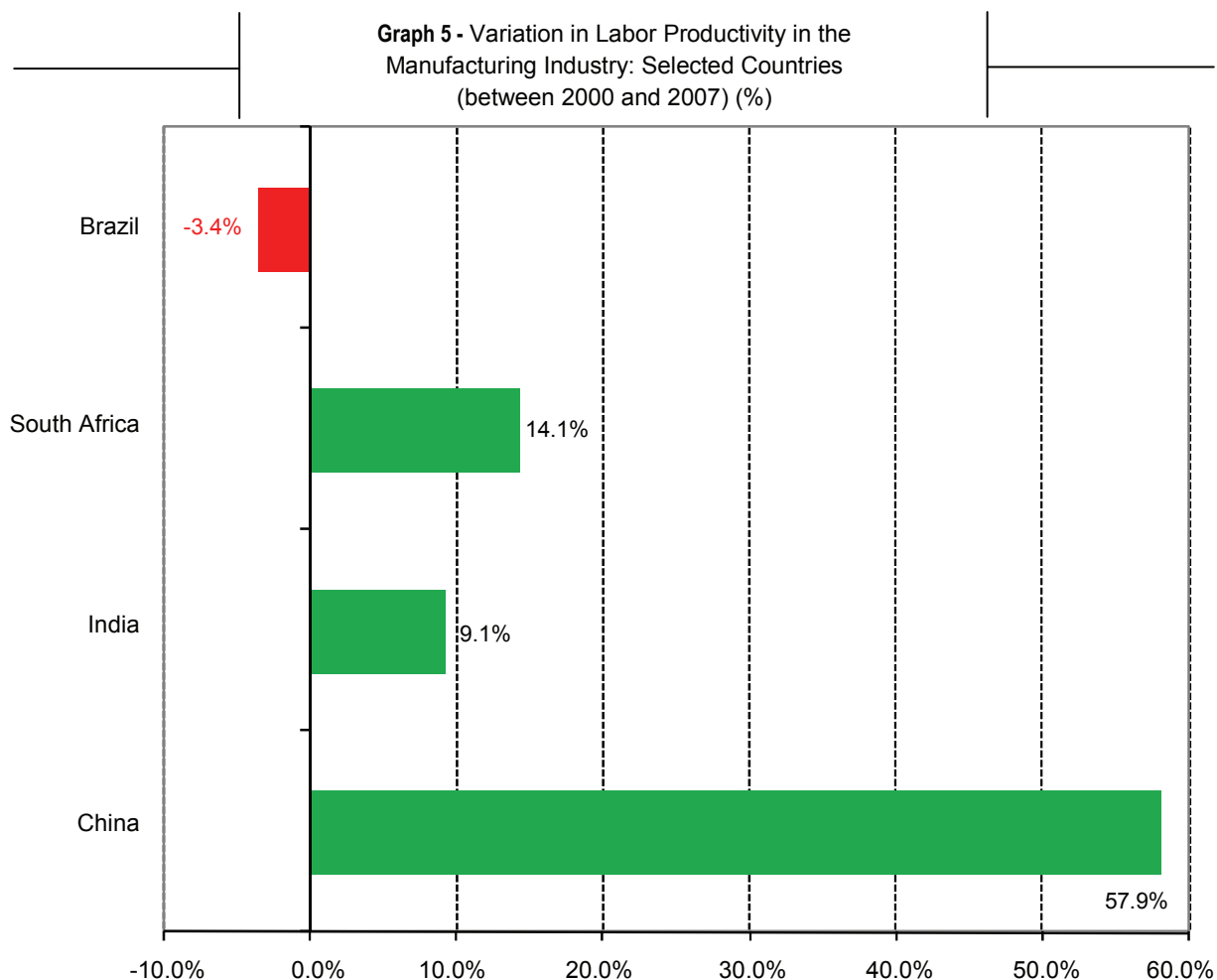
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

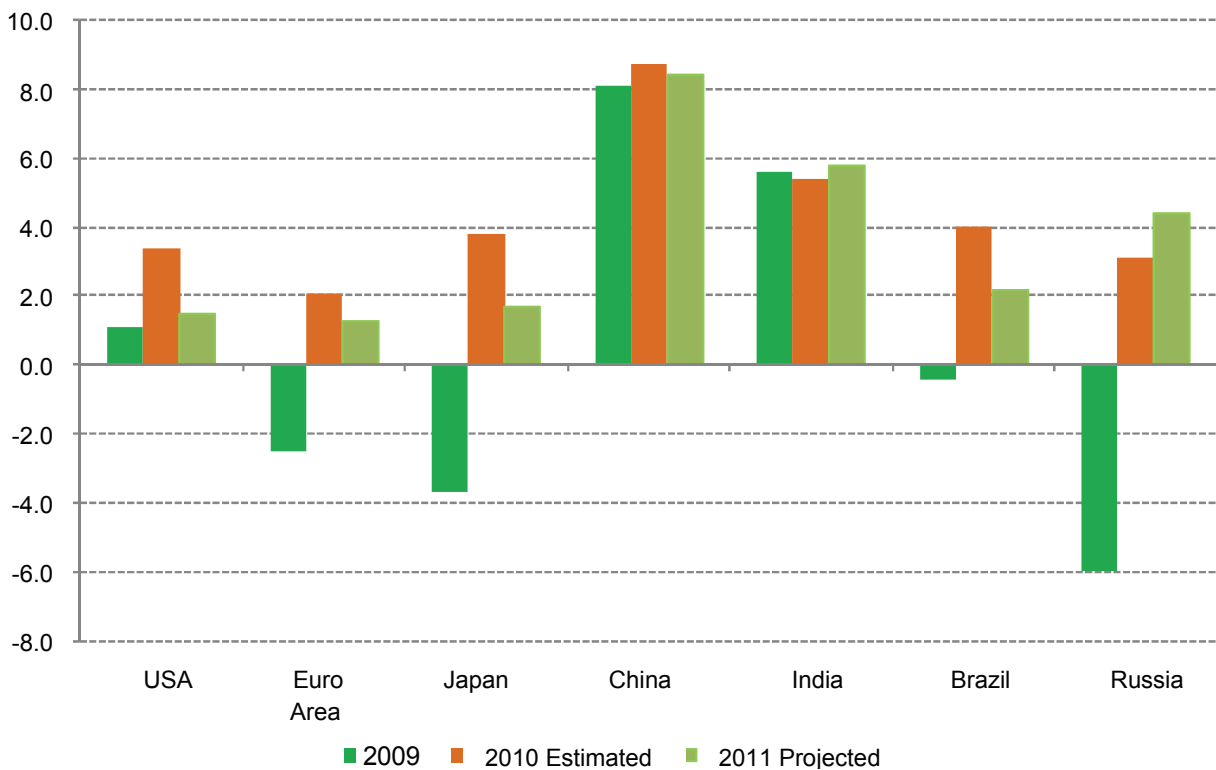
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

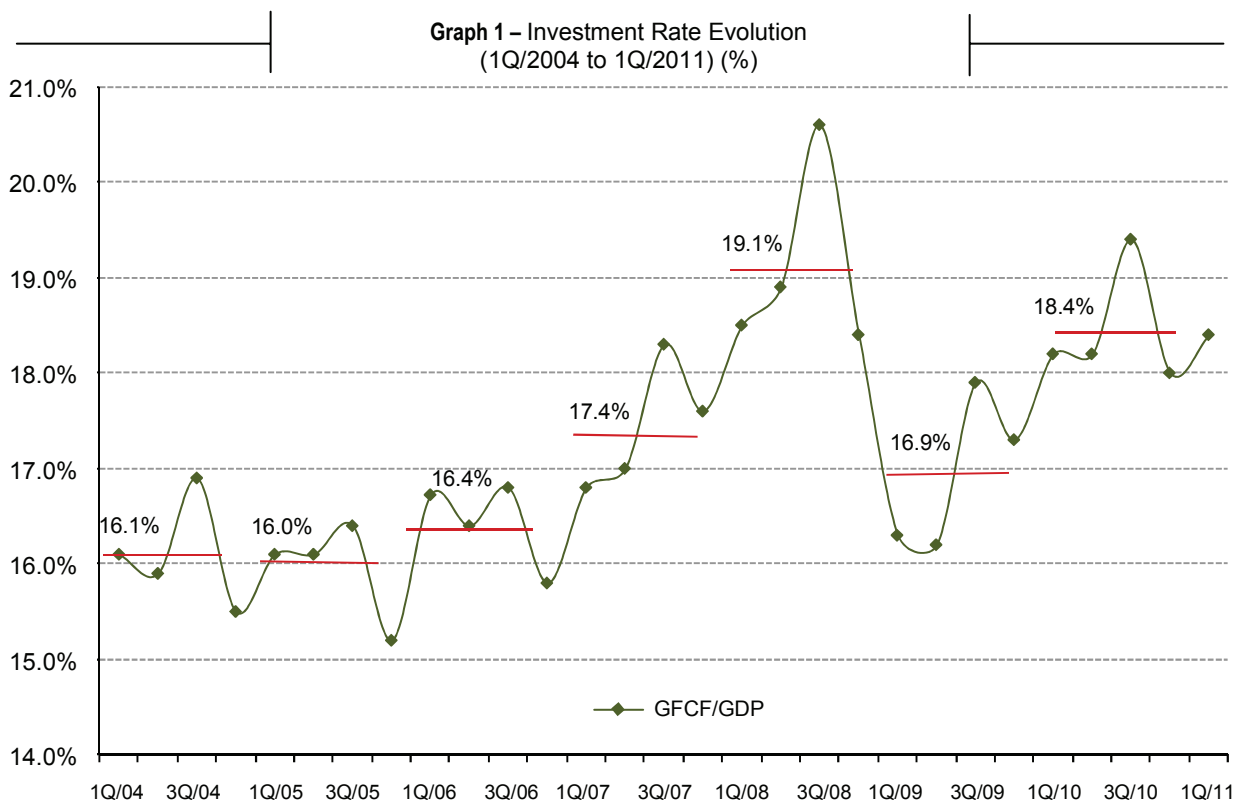
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

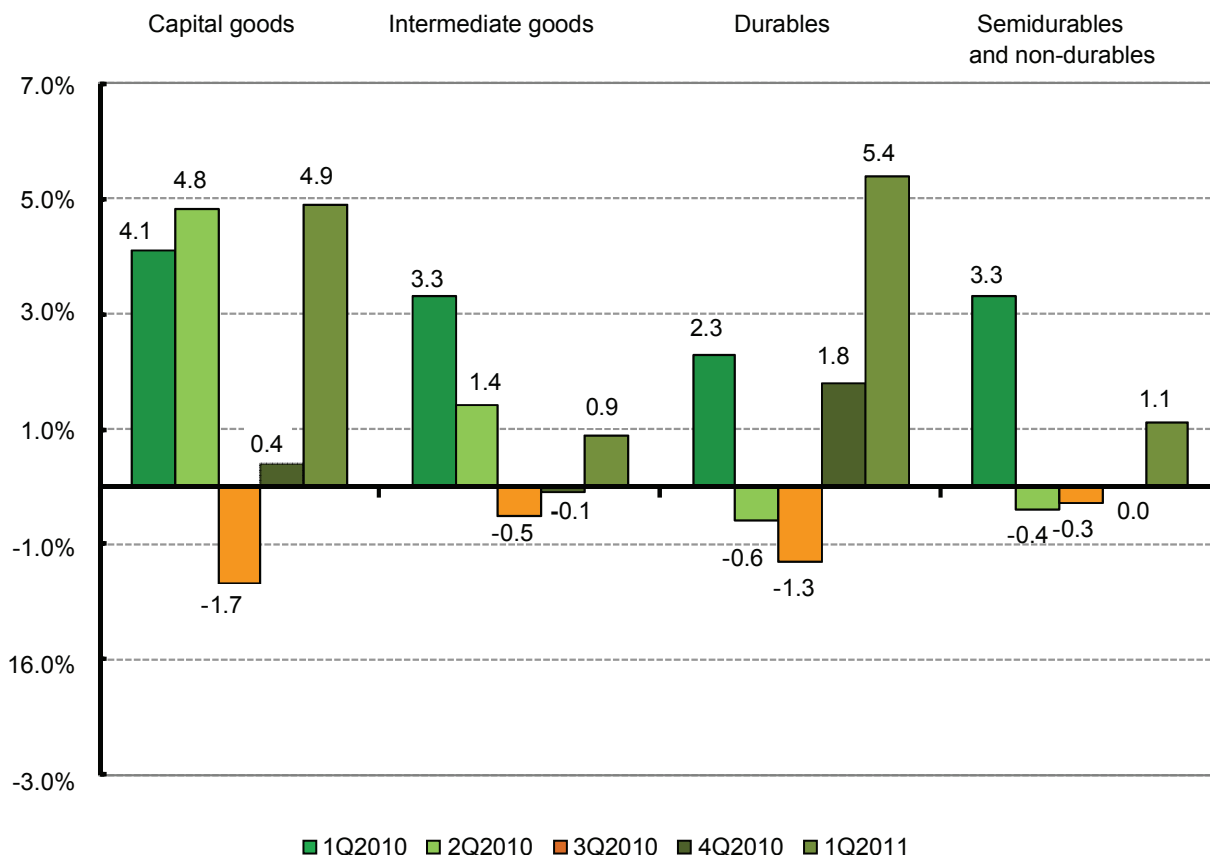
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjunction Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

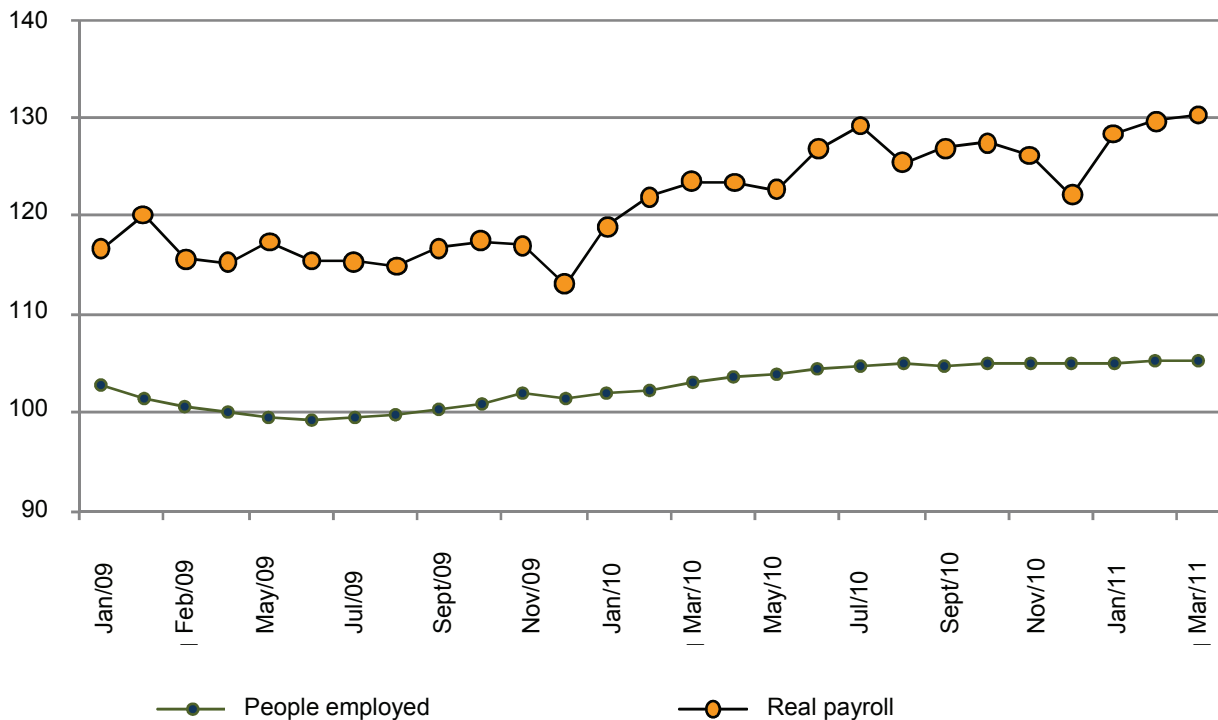
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

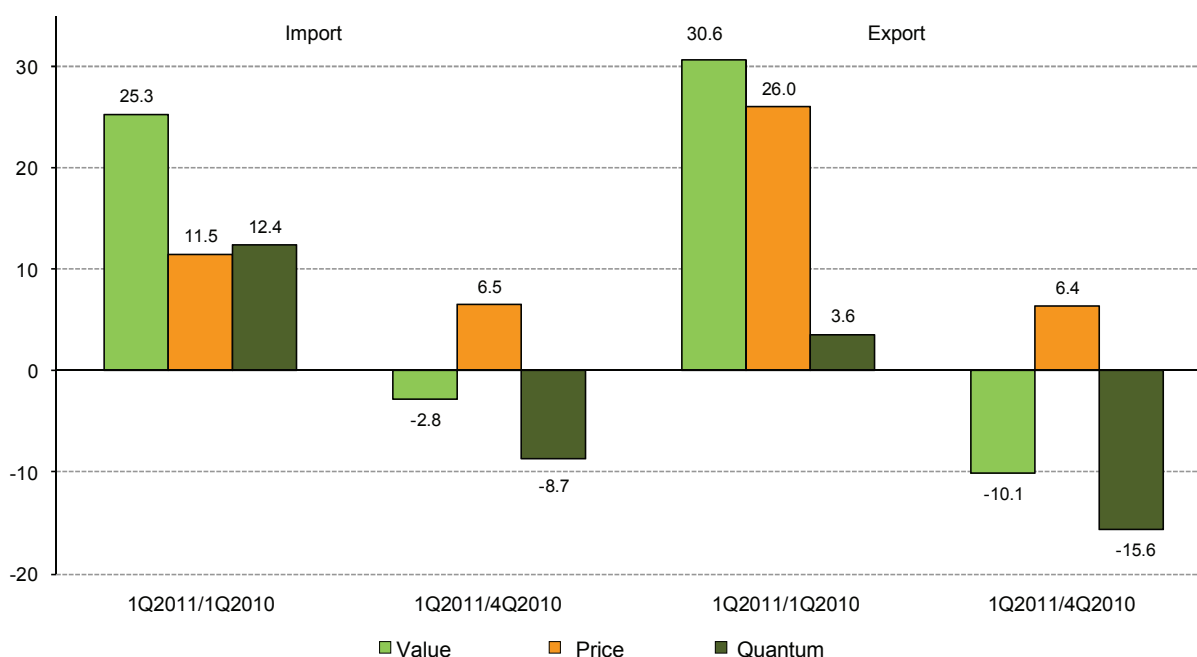
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

**Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)**



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been lead by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

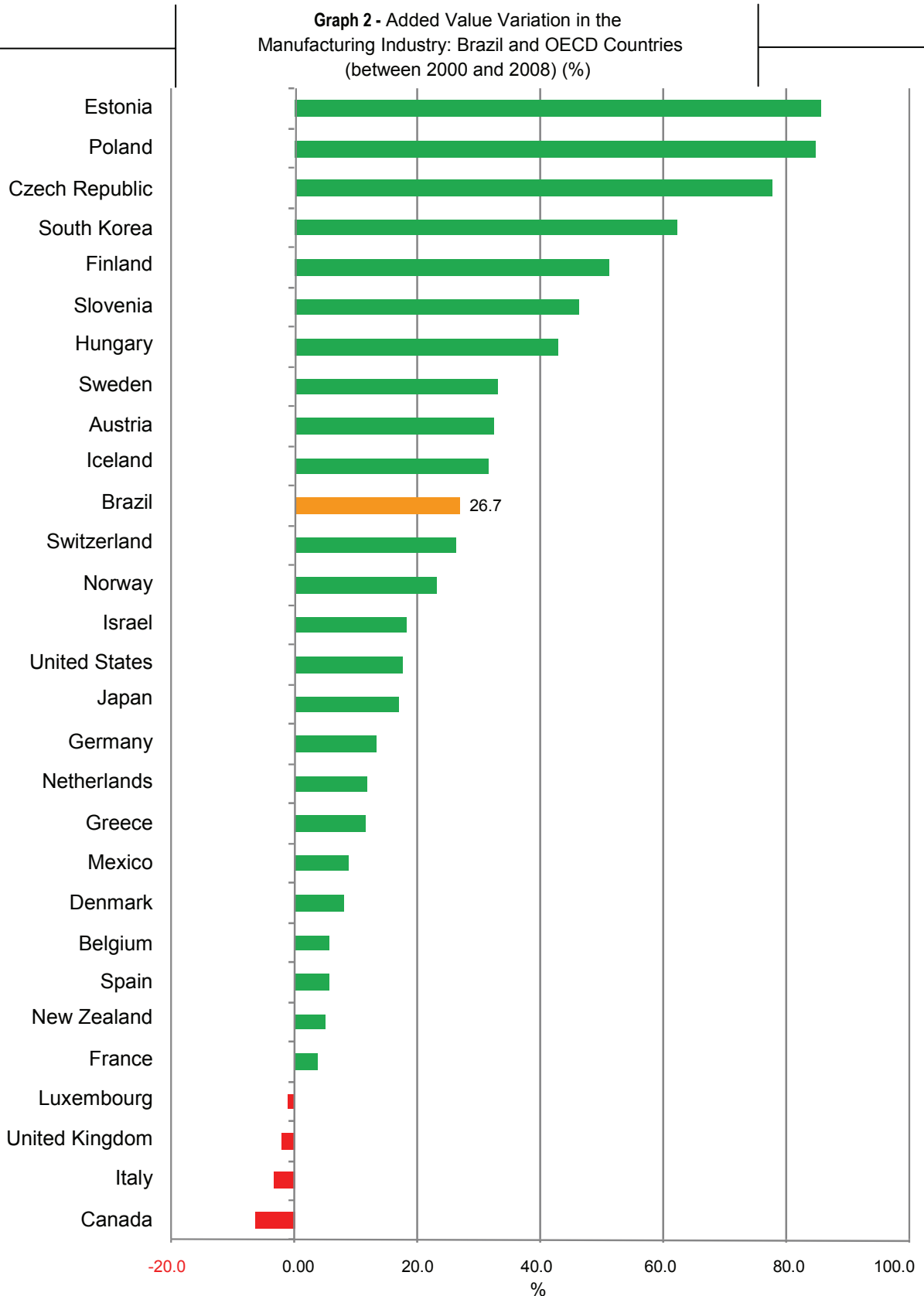
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

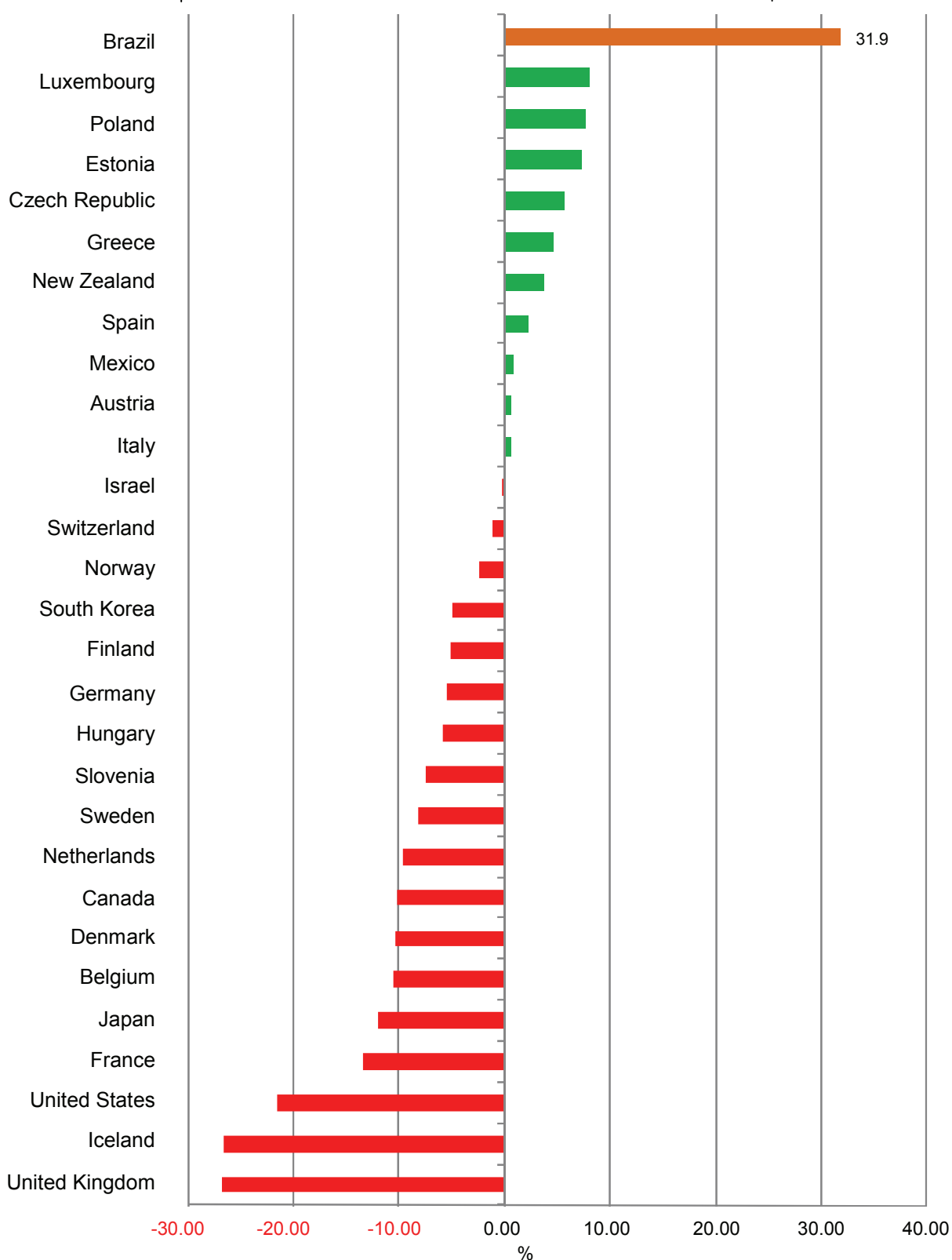


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

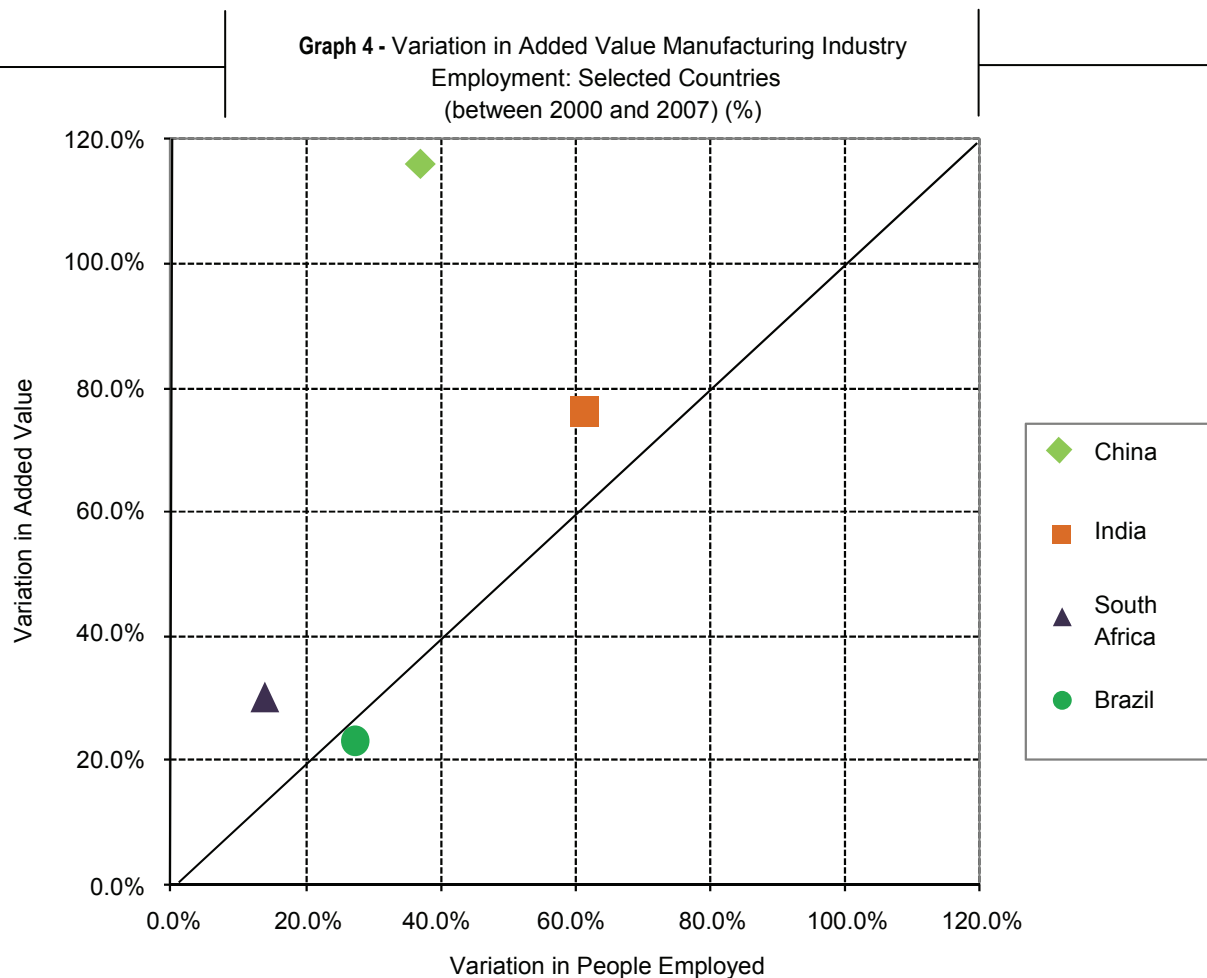
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

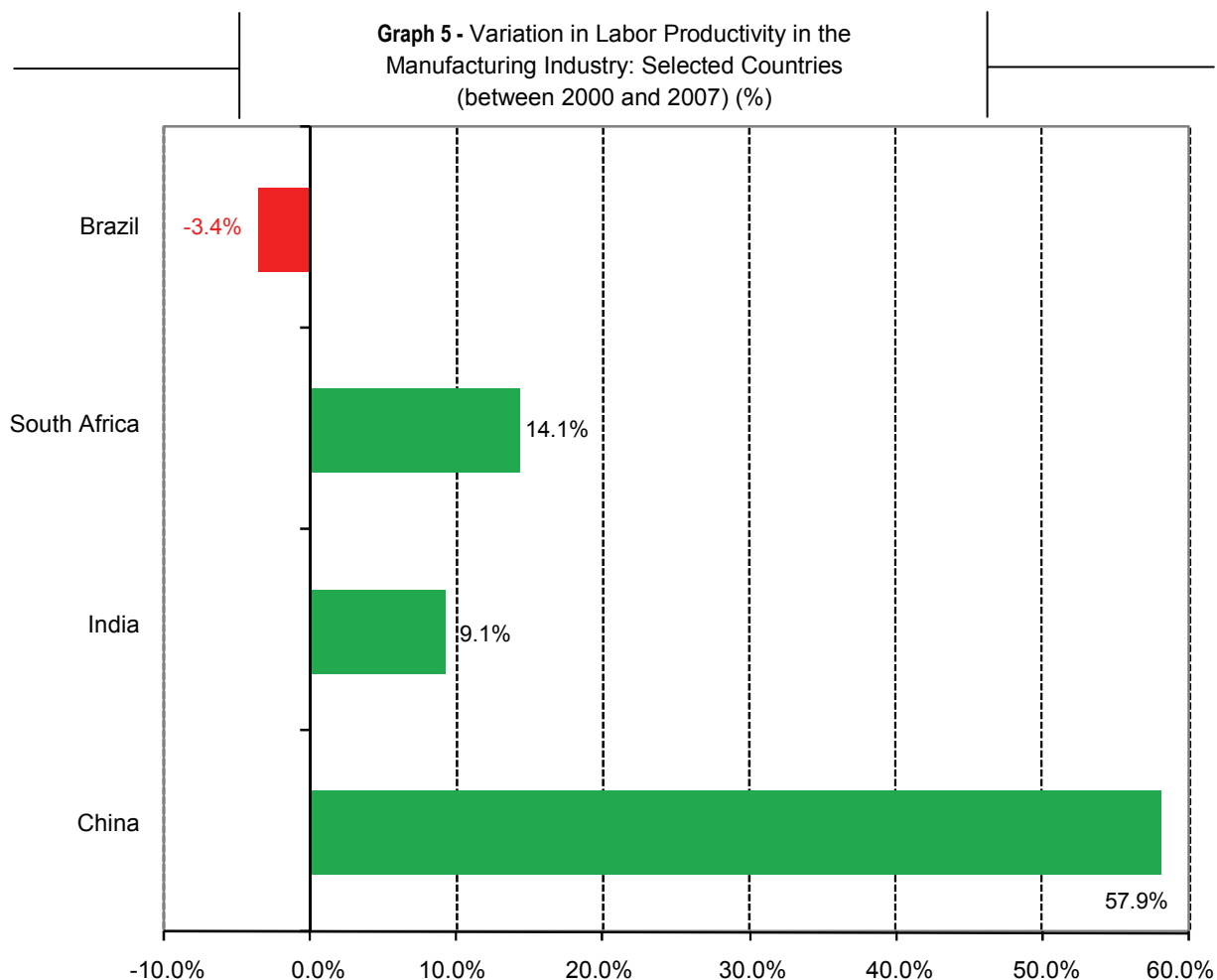
Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.



Source: OIT, WDI and SCN/IBGE.



Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

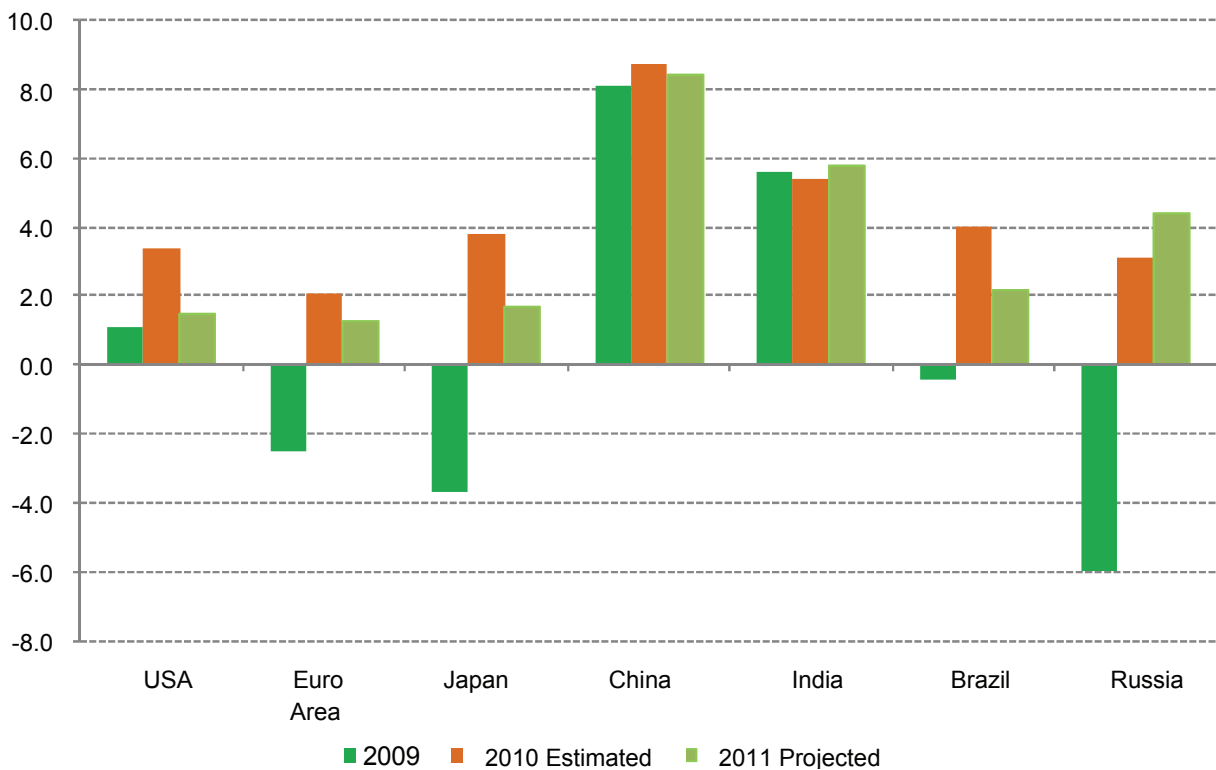
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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INTRODUCTION

The Brazilian Agency of Industrial Development (*ABDI, Agência Brasileira de Desenvolvimento Industrial*) is linked to the Ministry of Development, Industry and International Trade (*MDIC, Ministério do Desenvolvimento, Indústria e Comércio Exterior*). The ABDI was created in December 2004 with the aim of promoting the execution of Industrial Policies in Brazil, in accordance with the International Trade and Science and Technology policies (Law 11.080/2004). It focuses principally on the programs and projects established by Brazilian industrial policy, the present Productive Development Policy (*PDP, Política de Desenvolvimento Produtivo*). The agency, together with the Ministry of Finance, The Ministry of Science and Technology, and the Brazilian National Bank of Economic and Social Development (*BNDES*), answers to the PDP's Executive Secretary.

With the intention of following the progress of Brazilian industry, the ABDI works on developing a group of studies and research projects on industrial intelligence to guide its work and help the Government define and develop actions of the PDP's scope. Among them is the Industrial Conjuncture Bulletin which provides information and analyzes the evolution of Brazilian industry, highlighting the principle difficulties faced and the opportunities available to speed up development.

The Industrial Conjuncture Bulletin, published every three months, works in partnership with the Center of Industrial and Technological Economics (*NEIT, Núcleo de Economia Industrial e Tecnologia*) of the State University of Campinas's Economics Department. This edition of the bulletin shows the deceleration in the Brazilian economy's growth rate in the first quarter of 2011. This information is based on analysis of the behavior of certain aggregate internal demand components, such as household consumption and gross fixed capital formation. Also highlighted is the fall in dynamism of Brazilian industry, confirmed, in particular, by the deceleration in the growth of physical production, to which credit restriction measures and increased imports contributed at a time of sustained high

interest rates and the increased value of the national currency. In terms of formal employment, there was a net increase in the number of jobs in the first quarter of 2011, albeit at more modest levels when compared to the same periods in 2008 and 2010. Thus, the stagnant growth rate of the Brazilian economy and industry is reaffirmed.

In terms of Brazilian external trade, the bulletin points out the recovery in the trade surplus in the first quarter of 2011, together with an increase in exports related to the continuation of external demand for commodities, particularly Chinese, and the resultant increase in international prices. It can be verified that the difficulty in regaining demand in important worldwide consumer markets, as well as the maintenance of the strong national currency (Real) is likely to continue to dampen future expansion of exports and stimulate Brazilian imports. Even considering the decelerating growth rate of internal demand and Brazilian industrial production, imports should remain relatively high. This is due to the prospective economic growth, albeit at a more modest pace, in 2011. The principle concern lies in the possibility to substitute domestic production with imports, negatively affecting decisions regarding investment in the expansion of productive capacity.

The bulletin also discusses Brazilian industry productivity from an international comparison perspective. It can be noted that in the period analyzed Brazil was situated below the majority of OECD countries and the other BRIC countries in terms of evolution of productivity. However, this result was primarily due to the large increase in industrial employment, something that did not happen in the majority of countries analyzed. One point that is highlighted is the necessity to increase investments. This acts as a mechanism to preserve the increase in employment, while also encouraging more than proportional increases in the added value, in order to cause a consistent increase in productivity in the following years.

BRAZILIAN ECONOMY AND INDUSTRY IN THE FIRST QUARTER OF 2011

The Brazilian economy continued to grow at a decelerated rate in the first quarter of 2011. Gross Domestic Product (GDP) grew by 4.2% in the first quarter of the current year compared to the same period in the previous year, albeit less intensely than observed in the previous quarters (Table 1). An increase in the internal product in the first quarter of 2011 in relation to the last quarter of 2010, excluding the seasonal influences (1.3%), was noted. Even though this behavior was more promising than that verified in the last two quarters of last year, in comparison to the periods directly before, the

growth in GDP in the first quarter of this year reached an inferior level to that observed in the recovery period of the Brazilian economy following the world financial crisis. From a long-term perspective, growth in the Brazilian internal product also decelerated. In the four quarters up to March 2011 the GDP still grew significantly (6.2%), although there were evident signals of deceleration when compared to the increase of 7.5% seen in 2010.

Table 1 - Variation Rate of GDP by Activity and Demand Components (4Q/2010 and 1Q/2011) (%)

	Quarterly rate versus the same quarter in the previous year		Quarterly rate versus previous quarter(*)		Accumulated rates of the past four quarters	
	4Q/2010	1Q/2011	4Q/2010	1Q/2011	4Q/2010	1Q/2011
Agriculture and Stock Raising	1.1	3.1	(0.7)	3.3	6.5	5.8
Industry	4.3	3.5	0.2	2.2	10.1	7.4
Mining	14.8	4.0	-	-	15.7	12.9
Manufacturing	2.4	2.4	-	-	9.7	6.4
Civil Construction	6.2	5.2	-	-	11.6	9.2
Electricity, gas and water	5.1	4.9	-	-	7.8	6.9
Services	4.6	4.0	0.8	1.1	5.4	4.9
GDP at basic price	4.2	3.8	0.6	1.4	6.7	5.6
GDP at market prices	5.0	4.2	0.8	1.3	7.5	6.2
Household consumption expenditure	7.5	5.9	2.3	0.6	7.0	6.4
Public administration consumption expenditure	1.2	2.1	(0.3)	0.8	3.3	3.2
Gross fixed capital formation	12.3	8.8	0.4	1.2	21.9	17.1
Goods and services exports	13.5	4.3	3.3	(3.2)	11.5	9.2
Goods and services imports (-)	27.2	13.1	1.5	(1.6)	36.2	29.2

(*) Seasonally adjusted.

Note: The data incorporates the revision of the times series analyzed and published by the IBGE. Therefore, there may be differences in relation to the data analyzed in the previous industrial conjuncture bulletins. The data from the 1st quarter of 2011 are preliminary.

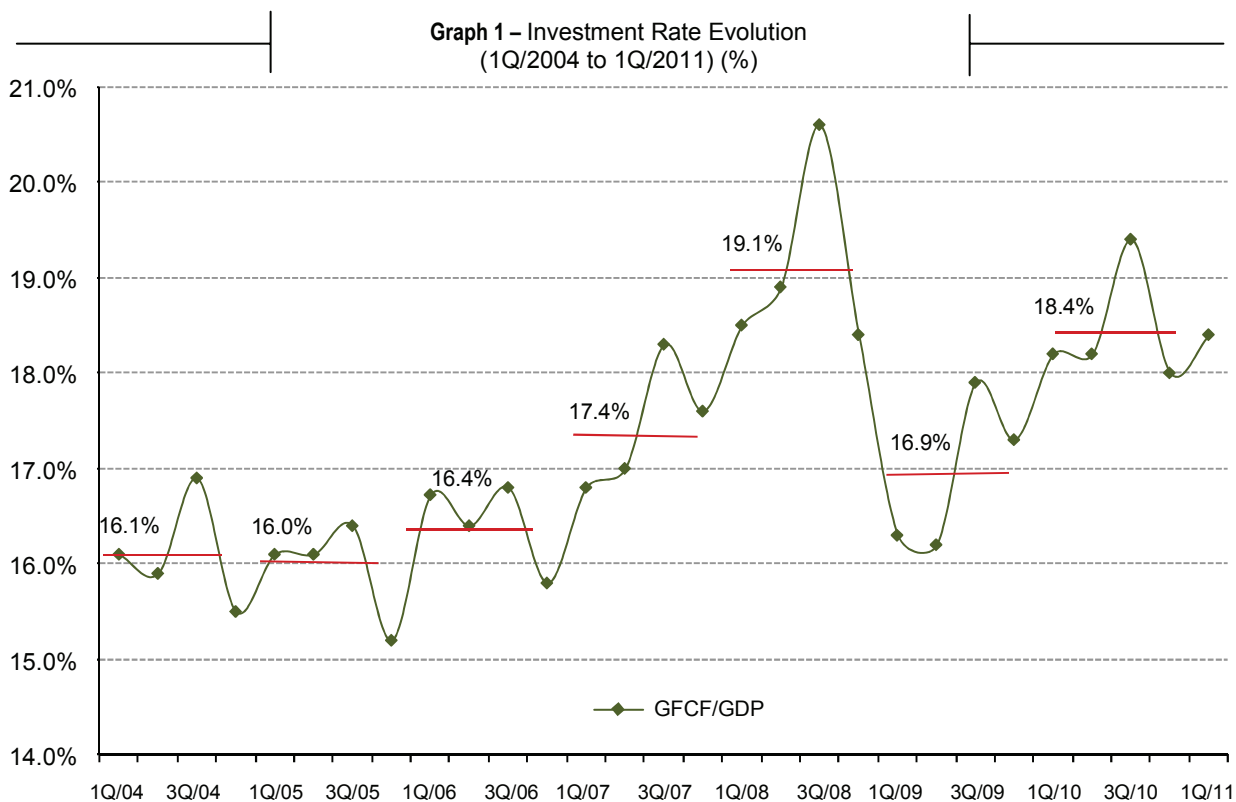
Source: National Accounts System (SCN)/IBGE.

Internal demand continued to sustain Brazilian GDP's growth in the first quarter of 2011 compared to the same period in 2010. Investment performance stood out (8.8%), outperforming once again the behavior of household consumption (5.9%) and government spending (2.1%) in the time period analyzed (Table 1). However, both the gross fixed capital formation and household consumption – historically the factor most responsible for the sustenance of Brazilian internal product – started growing at a slower rate, whereas government spending enjoyed a more vigorous performance in the first quarter of the current year. The continuation of increased interest rates, the corrosion of salaries as a result of the accelerated inflation, as well as the adoption of credit contraction measures announced by the government, precisely to avoid the increase in prices, are considered some of the explanatory elements of the slowdown of the principle internal demand components and, consequently, of the Brazilian economy in the period analyzed.

Considering the seasonally adjusted variation rates in relation to the last quarterly periods, the deceleration in the growth of household consumption (to 0.6%) is confirmed, while the marginal growth of gross fixed capital formation increased (to 1.2%) and government spending managed to regain its positive performance (to 0.8%), reversing the contraction that was present in the previous quarters. In the first quarter of 2011, however, there was a reversion in the

behavior of aggregate demand components, as household consumption decelerated and the gross fixed capital formation entered into a recovery period, sustaining an increase in the domestic product at the beginning of the year. In the twelve months up to March 2011, investment performance continued to stand out (17.1%), followed by household consumption (6.4%) and government spending (3.2%). It can therefore be reaffirmed how important the internal demand is in terms of the Brazilian economy's performance, despite the majority of aggregated demand components having contributed to the deceleration of its growth trajectory in the first quarter of the current year.

In the period analyzed, an increase in the investment rate was verified, equaling the 2010 average rate (18.4%), despite being inferior to that registered in the pre-crisis growth year (2008), and less than the investment rate necessary to achieve sustained economic growth in Brazil (Graph 1). Investment rate behavior throughout the current year has been dependent on the continuity of the gross fixed capital formation leading economic growth. This could point to a recovery in the growth standard that characterized the period before the financial crisis. However, the continuation of high interest rates and credit restriction measures tend to affect investments more vigorously from the following months onwards. It is hoped, therefore, that the increase in investment rate will not be too great in 2011.



Source: National Accounts System (SCN)/IBGE.

Brazilian exports, reflecting external demand behavior, also signaled a deceleration in the first quarter of the year, considering the limited and slow recovery of the world economy. Brazilian exports performed positively when comparing the data from the first quarter of 2011 to the same quarter in 2010 (4.3%) (Table 1). Exports actually decreased in the first quarter of 2011 compared to the last quarter of 2010, taking into consideration the seasonal adjustment (-3.2%). In the twelve months prior to March 2011, exports also followed a tendency of deceleration (to 9.2%). On the one hand, the perspective of Brazilian external trade remained relatively positive, considering the tendency of sustained high international prices of agricultural and mineral commodities in the long-term, despite the possibility of important fluctuations in the short term. On the other hand, it is important to note the slow and uncertain recovery of the world economy and the resulting retrieval of external demand, as well as the continuity of a high exchange rate, a fact which has acted as an additional deterrent to Brazilian exports.

In turn, imports also presented a positive variation rate in the first quarter of the year when compared to the same period last year (13.1%), and a negative rate when compared to the previous quarter (-1.6%). However, the growth in imports was higher than that of exports when compared to last year, and the contraction of imports was less than that of exports, using the previous quarter as a reference. This shows the continuation of the difficulties faced by Brazilian foreign trade, as highlighted in the March 2011 edition of the Industrial Conjuncture Bulletin. The prospect of import growth remains, albeit at a more moderate rate, considering that the Brazilian economy is decelerating. Nevertheless, imports still represent an important source of worry, given the capacity of their increasing trajectory to affect investment decisions in domestic production.

In the first quarter of 2011, compared to the same period of 2010, Brazilian industry grew by 3.5%, due to the positive behavior of both the

mining industry (4.0%) and manufacturing (2.4%), overtaking the activity growth of Agriculture and Stock Raising (3.1%), despite being below the growth rate of services (4.0%) in the same period (Table 1). However, it is worth pointing out that the decelerated growth in Brazilian industry, as well as in the service industry, has persisted since the second quarter of 2010, when compared to the previous year. Agriculture and Stock Raising could be considered an exception as it managed to overcome the trajectory of deceleration, contributing significantly to the growth in Brazilian GDP in the first quarter of 2011. In the last four quarterly periods (up to March 2011), a fall in the dynamism of the total growth in all economic activities is confirmed. However, when comparing the data from the first quarter of 2011 with the last quarter of 2010, including the seasonal adjustment, greater marginal growth for all economic activities is noted, with Agriculture and Stock Raising once again standing out, which even reversed its previous negative performance as verified in the last quarter compared to the third quarter of 2010.

Considering the data on physical production, the accumulated growth in the four quarters up to March of the current year slowed down to 9.6% for the mining industry, 6.7% for manufacturing and 6.9% for general industry (Table 2). Comparing the data from the first quarter of 2011 with the same period in 2010, the deceleration in the increase of Brazilian physical production (2.6%), following the performance of the manufacturing industry's production (2.5%), can once again be seen. This is particularly evident when one observes the notable growth rates seen in the first quarters of 2010 in relation to the same period of 2009. The mining sectors, stimulated by external prices, were able to sustain growth in production in the first quarter of the year (3.3%), albeit less emphasized than the previous quarters.

Table 2 - Variation Rate of Brazilian Industrial Production
(1Q/2010 a 1Q/2011) (%)

Activities	1Q 2010	2Q 2010	3Q 2010	4Q 2010	1Q 2011
Accumulated variation rate in the last four quarters					
General Industry	(0.3)	6.5	11.2	10.5	6.9
Mining	(1.1)	5.4	11.6	13.4	9.6
Manufacturing	(0.2)	6.5	11.2	10.3	6.7
Quarterly variation rate in relation to the same quarter of the previous year					
General Industry	18.2	14.3	8.0	3.3	2.6
Mining	18.9	14.0	11.4	10.2	3.3
Manufacturing	18.2	14.3	7.8	2.9	2.5
Quarterly variation rate in relation to the previous quarter (seasonally adjusted)					
General Industry	3.1	1.1	(0.7)	0.0	1.9
Mining	4.3	2.1	2.2	0.5	(1.5)
Manufacturing	3.2	1.1	(0.8)	0.0	1.9

Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the previous industrial conjuncture bulletins.

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

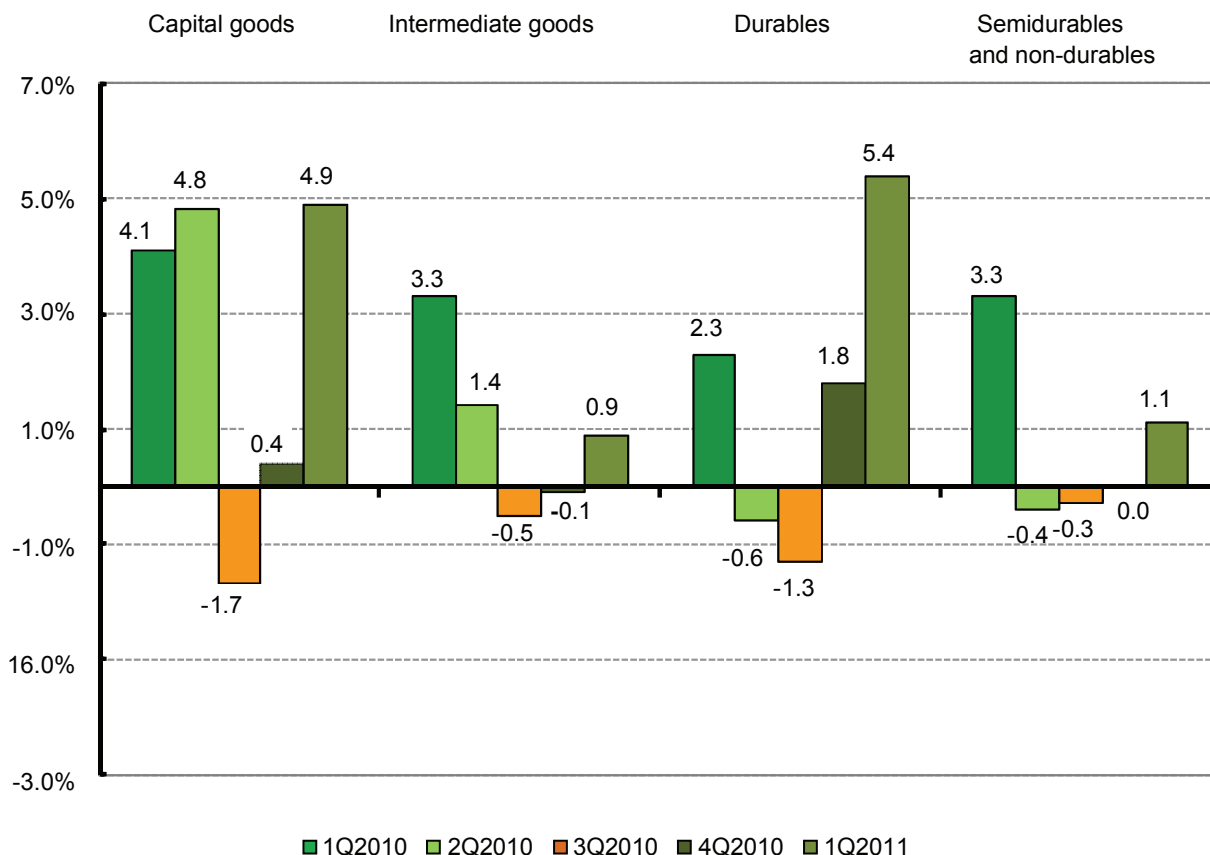
When considering the latest quarters, including the seasonal adjustment, a change in the marginal behavior of the physical production of the manufacturing industry and the industry as a whole is evident. These sectors once again began to grow, albeit moderately, in the first quarter of 2011. The manufacturing industry stood out, with physical production growing by 1.9% in the first quarter of the year compared to the last quarter of 2010, taking into consideration the seasonal adjustment (Table 2). On the other hand, the mining industry faced a fall in production in the same period. The Brazilian industry's physical production was positive in the first quarter of the year (1.9%).

However, analysis of the latest available data on the monthly variation of Brazilian industrial production makes it possible to predict that the growth rate in the second quarter of 2011 compared to the previous one should fall, confirming the recent trend towards deceleration. The industrial production data from March and April of the current year hold worrying signs, as they show a period of contraction in relation to the same months of last year, as well as modest growth in March compared to February 2011 (1.1%), and a decline in April compared to March 2011 (-2.1%), considering the seasonal influences. Thus, the most recent monthly data

show, in a best case scenario, stagnated marginal expansion in low levels of industrial production. Regarding the slowdown in the growth of Brazilian industrial production in the period analyzed, it is likely that macroprudential measures, such as credit restriction, and the increase in imports contributed to this, in a context of the continuation of high interest rates and the increase in value of the national currency.

Analysis of industrial production performance by category of use reveals an important increase in variation rates in the first quarter of 2011 in relation to the last quarter of 2010, taking into consideration the seasonal adjustment (Graph 2). Physical production of durable consumer goods and capital goods once again experienced growth at higher levels than those verified in the first quarters of last year. Production of intermediate goods and semi-durable and non-durable consumer goods was able to reverse its descending trajectory presented in previous quarters, principally in the second half of last year, followed by a relative delay in the performance of the other categories of use that had already shown signs of marginal recovery in the last quarter of 2010.

Graph 2 - Industrial Production Evolution by Category of Use
(quarterly variation rate in relation to the previous quarter –
1Q/2010 a 1Q/2011) (%)



Note: The data incorporates the eventual revision of the numbers previously published by the IBGE. Therefore, there may be differences in relation to the data from the previous industrial conjuncture bulletins

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

The production of durable consumer goods once again managed to stand out in the first quarter of 2011, when compared to the last quarter of 2010, with the seasonal adjustment (5.4%). On the one hand, this reinforced the reversion of its previously negative performance achieved in the last quarter of last year, and on the other hand, surpassing the positive behavior of the other categories of use in the same period (Graph 2). However, this sector performed negatively in April in relation to the same month in the previous year (-5.6%). Also observed was the fall in production of durables in April in relation to March 2011 (-10.1%), taking into consideration the seasonal adjustment, that eliminated the evolution that was registered in the previous month (4.5%). The only time that a larger decrease in durable production was observed was in the last two months of 2008, at

the time of the financial crisis. Therefore, data on the last available month (April) showed worrying signs in relation to future evolution of Brazilian production of durable consumer goods.

Difficulties exist for durable consumer goods to maintain the growth trajectory which started in the last quarter of last year. This will certainly depend on the continuation of the positive performance of employment and income and, as a result, internal demand in the following months. We must not ignore the recent measures taken to restrict credit which could contribute to the slowdown in the recovery of durable goods in the near future. The prospects of growth in the production of durable goods for the rest of 2011 nonetheless remain, albeit at more modest rates.

Production of capital goods once again enjoyed a more vigorous growth rate in the first quarter of 2011 in relation to the last quarter of

2010, taking into consideration the seasonal adjustment (4.9%). This rate even surpassed, marginally, the positive performance observed in the two first quarters of 2010 (Graph 2). This could suggest a recovery for the physical production of capital goods following the contraction period in the third quarter of 2010 that accompanied a loss in dynamism of Brazilian industry. Investment performance contributed to the positive movement of capital goods production in the period analyzed.

Only capital goods presented growth in production, despite being very slight, in April of this year, compared to April of last year (0.1%). In relation to the months prior to April, with the seasonal adjustment, the growth rate of capital goods production accelerated from January 2011 onwards, reaching a growth rate of 4.0% in March, compared to February 2011. However, production of capital goods contracted again in April when comparing to March 2011 (-2.9%), considering the seasonal adjustment, presenting a reduction above the industry average (-2.1%). More satisfactory behavior in terms of the production of capital goods would certainly depend on the continuation of investment, as well as the trajectory of capital goods imports, that, without a doubt, compete with domestic production on the internal market in a context of sustained high exchange rates.

The Brazilian production of intermediate goods has continued to depend on the movements of the external market. It has, however, also benefited from the dynamism of internal demand. The slowdown in the production of intermediate goods was reversed in the first quarter of the current year in relation to the last quarter of 2010 (0.9%), with the seasonal adjustment (Graph 2). Intermediate goods were most likely stimulated both by the recovery of the external demand for basic inputs and primary products, Chinese demand making an important contribution, and the maintenance of the internal demand sectors that have acted as an additional incentive to intermediate production in Brazil. This signified recovery from the negative performance of the production of intermediate goods presented in the third (-0.5%) and fourth

(-0.1%) quarters of 2010 compared to the previous quarters. However, the production of intermediate goods declined in April 2011 in relation to April 2010 (-0.8%), albeit less than the contraction observed in industrial production in the same period (-1.3%). The marginal performance of intermediate production was negative both in March, compared to February 2011 (-0.1%), and April, compared to March 2011 (-0.6%), with the seasonal adjustment, following, albeit less intensely, the negative behavior of industrial production in the last month analyzed.

Production of semi-durable and non-durable consumer goods finally managed to surpass its previously negative or stagnant performance in the first quarter of 2011, compared to the last quarter of 2010, considering the seasonality (Graph 2). The contraction of the production of semi-durables and non-durables, from the second quarter of last year onwards, compared to previous quarters, accompanied the loss in dynamism of production of other Brazilian industrial sectors in the same time period. The recent positive performance of this category of use allowed one to see the growth, albeit modest, of the other Brazilian industrial sectors. The monthly production data showed accelerated growth in the first two months of 2011 compared to the same periods in 2010, with contractions in March (-2.2%) and April (-2.0%) of the current year in relation to the same months last year (data from the Monthly Industrial Research on Physical Production, the Brazilian Institute of Geography and Statistics, PIM-PF/IBGE). Compared to the months previous to this time, excluding seasonal influences, it is noted that a decline in production in April (-1.5%) suppressed part of the growth verified in March 2011 (2.0%). The prospect of the growth of semi-durable and durable goods will continue to depend on the future behavior of employment and income and the performance of the other Brazilian industrial sectors.

The data on physical production according to industrial activity show that diverse industrial sectors enjoyed growth in the first quarter of 2011 compared to the same quarter in 2010. The

physical production of 18 industrial sectors expanded in the period cited, as analyzed by the PIM-PF/IBGE: the growth rate of half of the sectors increased, or they were able to reverse the previous negative behavior, while the other half suffered decelerated expansion rates of production. In the first quarter of 2011, compared to the same period in 2010, the expressive growth of the following sectors is highlighted: physician-hospital instrument equipment and optics (23.2%); other transport equipment (13.3%) and motor vehicles (10.0%). Regarding the composition of the Brazilian industry growth rate in the first quarter of 2011 (2.3%), the following sectors are highlighted: motor vehicles (1.1%); machinery and equipment; oil and alcohol refining and other transport equipment (each sector with 0.3% of participation in quarterly growth). Therefore, some capital goods and durable consumer good's sectors were able to sustain leadership in industrial growth observed last year (Industrial Conjunction Bulletin, March 2011).

Comparing the first quarter of 2011 with the last quarter of 2010, excluding the seasonal effects, 16 sectors were shown to have grown, according to IBGE research. The marginal growth grew or the negative behavior was reversed for 12 out of the 16 industrial activities that enjoyed an expansion in physical production in the first quarter of the current year compared to the last quarter of last year. A number of industrial sectors stood out with significant marginal growth in the period cited: electrical equipment, communication equipment and apparatus (19.9%), metal products – excluding machinery and equipment (9.1%), pharmaceutical (8.1%) and machinery, apparatus and electrical equipment (7.5%).

Observing the first quarter data on production according to industrial activity of the current year, overall growth was noted, albeit with a tendency towards deceleration for certain industrial sectors. The increase in investments and internal demand, although at more modest rates, allowed prospects to remain positive, despite being more reserved, for Brazilian industry in 2011. Credit restriction policies (increased interest rates and

reduced terms) and the high exchange rate together with intensified international competition, as well as budgetary cuts which have a negative impact on public investment are likely to contribute to a more moderate growth rate of Brazilian industry in comparison to the pre-crisis period and the initial months of 2010.

Regarding industrial employment, the increase in the number of jobs available in the first quarter of 2011, after an extremely negative result in the last three months of 2010, stood out. According to data from The General Database of Employed and Unemployed (CAGED/MTE, *Cadastro Geral de Empregados e Desempregados/Ministério do Trabalho e Emprego*), there was a net increase of almost 128 thousand job places between January and March 2011 (Table 3). The industrial sectors that presented the largest number of net hirings (taking away the firings) were leather preparation and manufacturing of leather products, travel items and footwear (a creation of more than 18 thousand places), tobacco products (12 thousand places), manufacture of motor vehicles; manufacture of trailers and semi-trailers (11 thousand places), and manufacturing of machinery and equipment (10 thousand places) (CAGED/MTE).

However, it can be seen from quarterly data from previous years that the generation of industrial employment in the first quarter of 2011 was relatively inferior to its growth verified in the same period in 2008 and 2009, standing out only when compared to hirings in the first quarter of 2009 during the global financial crisis (Table 3). A deceleration in the net generation of employment in Brazilian industry in relation to the first three months of 2010 can therefore be noted. During this time the number of job opportunities grew by 2.8% compared to the amount of industrial employment observed in 2009, and taking into consideration the smaller increase of 1.7% in the first quarter of 2011 prior to 2010.

Table 3 - Creation of New Jobs and Net Hiring Wages in Brazilian Industry (1Q/2008 to 1Q/2011)

Year	Creation of new jobs				Wages (Net Hiring) (R\$ thousand – Dec./2010*)			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
2008	153.090	167.668	193.793	-348.295	69.627	63.471	67.494	-372.616
2009	-146.761	2.578	203.323	-52.009	-308.501	-153.828	37.893	-105.773
2010	199.187	186.139	203.873	-111.408	104.290	76.794	92.038	-147.372
2011	127.798	-	-	-	46.400	-	-	-

* IPCA (IBGE) data.

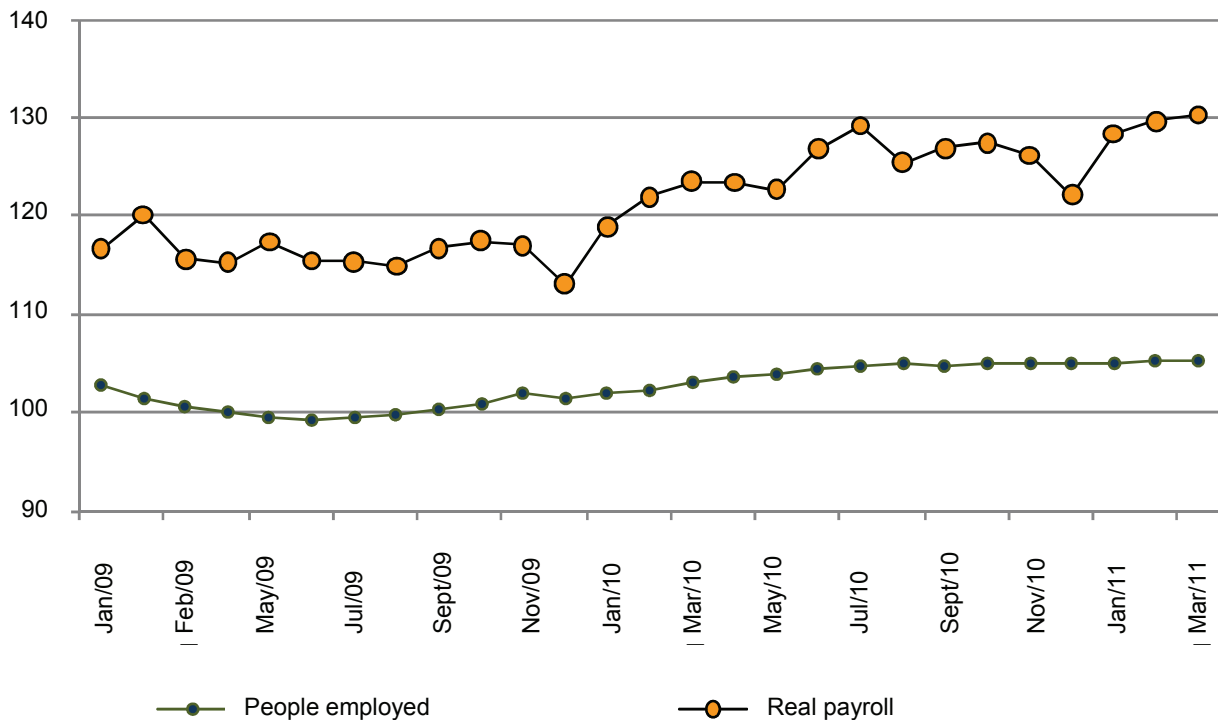
Source: The General Database of Employed and Unemployed (CAGED)/MTE.

In terms of net wages of industry workers (wages of those hired minus wages of those dismissed and resignees), a trade surplus of R\$46 million in the first three months of the year, after a fall in net wages of R\$147 million in the last quarter of 2010, was observed. As was also noted for the creation of new jobs, the rise in wages was found to be below that presented in the same period of 2008 and 2010 (2009 is an exception given that this was the year that the financial crisis took place). The fact that the slowdown in the growth of wages was much more intense than that presented by the net creation of jobs stood out. The rise in net wages in the first quarter of 2011 represented just 44% of growth in the same period in 2010, while this proportion was 64% regarding the creation of jobs in Brazilian industry. This is an indication of the hiring of workers with relatively low salaries.

Data from the Monthly Industrial Research on Employment and Wages (PIMES/IBGE, *A Pesquisa Industrial Mensal de Emprego e Salário/Instituto Brasileiro de Geografia e Estatística*) indicate a positive variation of 2.6% in the number of people employed in Brazilian industry in the first quarter of 2011 in relation to the same period in the previous year. In the time series free of seasonal influences, the volume of people employed in industry presented an increase of 0.25% in relation to the last quarter of 2010. It was observed that the number of

people employed in industry increased in 2010 (in relation to 2009), in a series with the seasonal adjustment, and continued to be relatively stable, with minor increases, in the first three months of 2011 (Graph 3). In April, the marginal variation was almost completely stable (-0.1%), but points to a future scenario of a lower increase in employment in relation to the previous periods. In relation to salaries, PIMES data point to an increase in the real payroll in the first quarter of 2011, in the time series with the seasonal adjustment, after a fall in the last month of 2010. It was also observed that the real payroll increased in 2010 when comparing to 2009. The increase in April, in the time series with the seasonal adjustment in relation to March, however, demonstrated a fall of 0.8%, also indicating the possibility of a less positive trajectory in the following quarters.

Graph 3 - Real Payroll Evolution and People Employed in Brazilian Industry (Jan/2009 to Mar/2011) (numbers-index)



Note: January/2001 = 100.

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

Consequently, both the CAGED/MTE and PIMES/IBGE data indicated that industrial employment grew in the first quarter of 2011, despite the deceleration in the net generation of jobs when comparing with the same period in the previous year, according to the CAGED data. It is worth pointing out that the growth rate of annual wages fell significantly more in intensity than the growth rate regarding the generation of jobs.

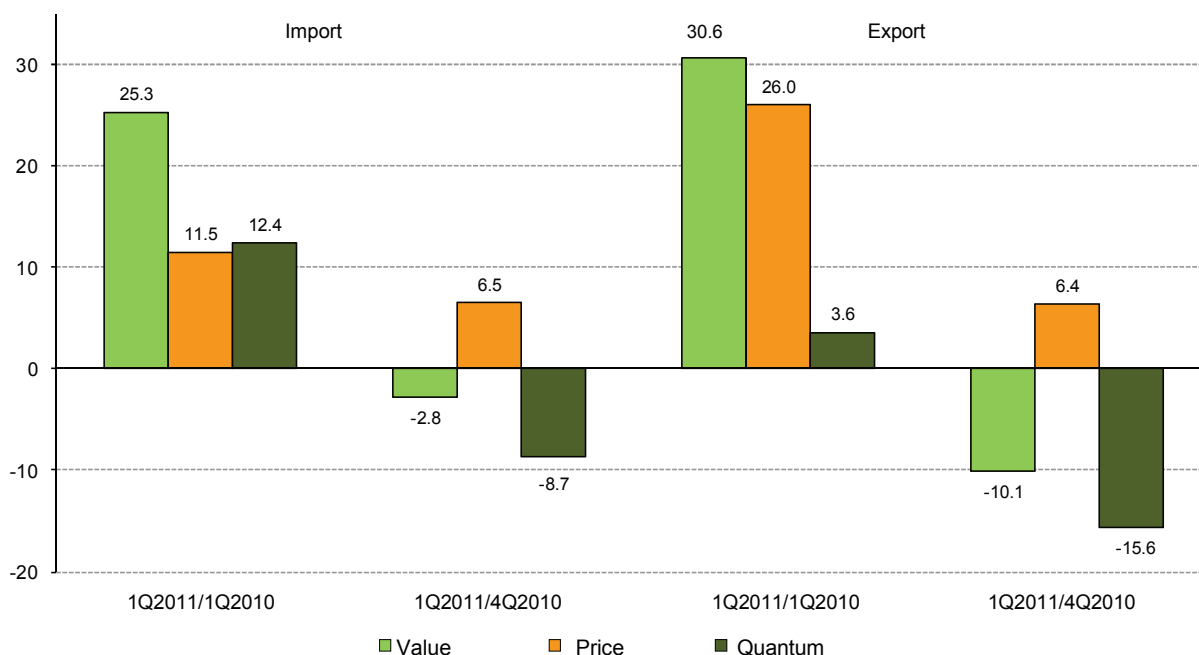
Previously analyzed information indicates that the Brazilian economy can be found to be slowing down. This slowdown is led by internal demand behavior, based on a fall in dynamism of household consumption and investments, despite a recovery in government spending. Brazil's industrial production has suffered a slowdown in growth, despite the marginal increase, as was observed in the first quarter of the year, alongside the creation of formal employment. Brazilian foreign trade continues to face a number of difficulties, though the trade surplus has recently recovered, regardless of these difficulties.

In the first quarter of 2011, the Brazilian balance of trade was US\$3.2 billion (data from The Center of International Trade Studies Foundation, FUNCEX) The trade surplus grew substantially in the first three months of the

current year compared to the same period of the last year, as a result of the increase in exports (30.6%) that surpassed the positive performance of imports (25.3%) in the same period (Graph 4). The increase in amounts exported in the period analyzed was strongly influenced by the increase in prices (26.0%), considering that the actual amount exported was not significant (3.6%).

Both the increase in amounts imported (12.4%) and the prices of products imported (11.5%) contributed to the increase in imports in the first quarter of 2011, when compared to the same period of 2011. An increase in imports occurred for all categories of use in the period cited, with durable consumer goods (42.5%) and capital goods (33.1%) standing out. The amount of imports (36.1% and 27.0% respectively) contributed largely to this increase. Sustained internal demand and the high exchange rate certainly favored the increasing trajectory of Brazilian imports, principally consumer goods (durable and non durable) and capital goods. It is important to remember that the increase in imports could be substituting domestic production, considering the deceleration of internal physical production and the reduced elevation of the quantum of certain categories of use exported.

Graph 4 - Export and Import Variation Rates:
value, price and quantum (%)



Source: FUNCEX.

Comparing the data from the first quarter of 2011 with the last quarter of 2010, a contraction in the trade surplus is noted (-57.8%), derived particularly from the fall in exports (-15.6%). This marginal decline in exports marks a divergence from the increasing movement observed throughout 2010. All categories of use suffered a fall in exports during the period analyzed, with capital goods (-28.7%) and durable consumer goods (-24.0%) standing out. However, the contraction in exports of intermediate goods (-8.5%) must be highlighted because of the high degree of intermediate goods in Brazil's export portfolio. This occurred as a result of reduced exports, taking into consideration the continuation of increased prices of exported intermediate goods exported in the same period. Despite this, quarterly Brazilian exports remained high, similar to those levels observed in some of the quarters prior to the emergence of the financial crisis (2008).

Imports also suffered a contraction (-2.8%), albeit to a lesser degree than exports, in the first quarter of the current year in relation to the fourth quarter of last year. This was due to a fall in quantities imported (-8.7%) at a time of decelerated internal demand. This marginal decline in imports repeated the behavior that

stood out in the fourth quarter compared to the third quarter of 2010, ending the quarterly trajectory of increasing imports that has been observed since the third semester of 2009. The majority of categories of use suffered a decline in imports in the period in question, with the exception of modest growth in fuel imports (0.2%), lead by the substantial increase in import prices (19.5%). Contractions in durable consumer goods stood out (-8.6%) as well as capital goods (-8.0), both driven by reductions in quantities imported (-7.6% and -9.4% respectively), with reduced participation in the fall in prices in the specific case of durable consumer goods (-1.7%) only. Despite this decline, Brazilian quarterly import values can still be found at very high levels, reaching those of the pre-crisis quarterly growth levels (2008).

Despite the fact that the deceleration in the growth of internal demand and Brazilian industrial production contributed to preventing the entrance of imported products, foreign purchases should remain at relatively high levels due to economic growth perspectives, albeit more modest, in the current year. In addition, the high exchange rate will continue to stimulate imports. The principal worry regards the possibility of substituting domestic production for

imports, adversely affecting decisions regarding investment in productive capacity expansion.

All of the information analyzed confirms that the Brazilian economy has been led by the behavior of internal demand, particularly household consumption and investments. The gross fixed capital formation has carried out a fundamental role in terms of the recovery of industry and the Brazilian economy post-crisis. Even the recent slowdown in the principle components of aggregate demand were not able to lessen the importance that investments had on the economy and Brazilian industry. The rise in investments remained a central point regarding the stimulus for production and industrial employment. At the same time, the April results, in terms of industrial production and employment, point to a more modest growth scenario for the following time periods.

From an international standpoint, signs of deterioration are observed in terms of both the continuing poor results of recovery policies implemented in the central economies, particularly in terms of the recovery of employment levels, and greater concern about inflation in emerging countries, notably China, that has employed policies to reduce the rate of economic activity in order to avoid increasing inflationary pressures.

Even though the data up to now has shown that this situation should result in a certain degree of stagnation in the growth rate of industrial production, it is important to closely follow the indicators in the following periods in order to understand how much expectations could fall by and result in an interruption in the positive trajectory of recovery in investments seen in the post-crisis period.

BRAZILIAN INDUSTRIAL PRODUCTIVITY: AN INTERNATIONAL COMPARISON

The Industrial Conjunction Bulletin from March 2011 highlighted the recent increase in labor productivity in Brazil. The information analyzed showed, on one hand, the increase in the physical productivity indicators calculated according to the relationship between physical production and paid hours (PIM-PF), and on the other hand, the stagnation of the manufacturing industry productivity based on national accounts (added value in relation to the number of employed). This result was explained by the significant increase in employment in the period, as well as by the difficulty of the manufacturing industry to capture the efficiency gains and transform them into added value, given that productivity gains were transferred to other economic sectors.

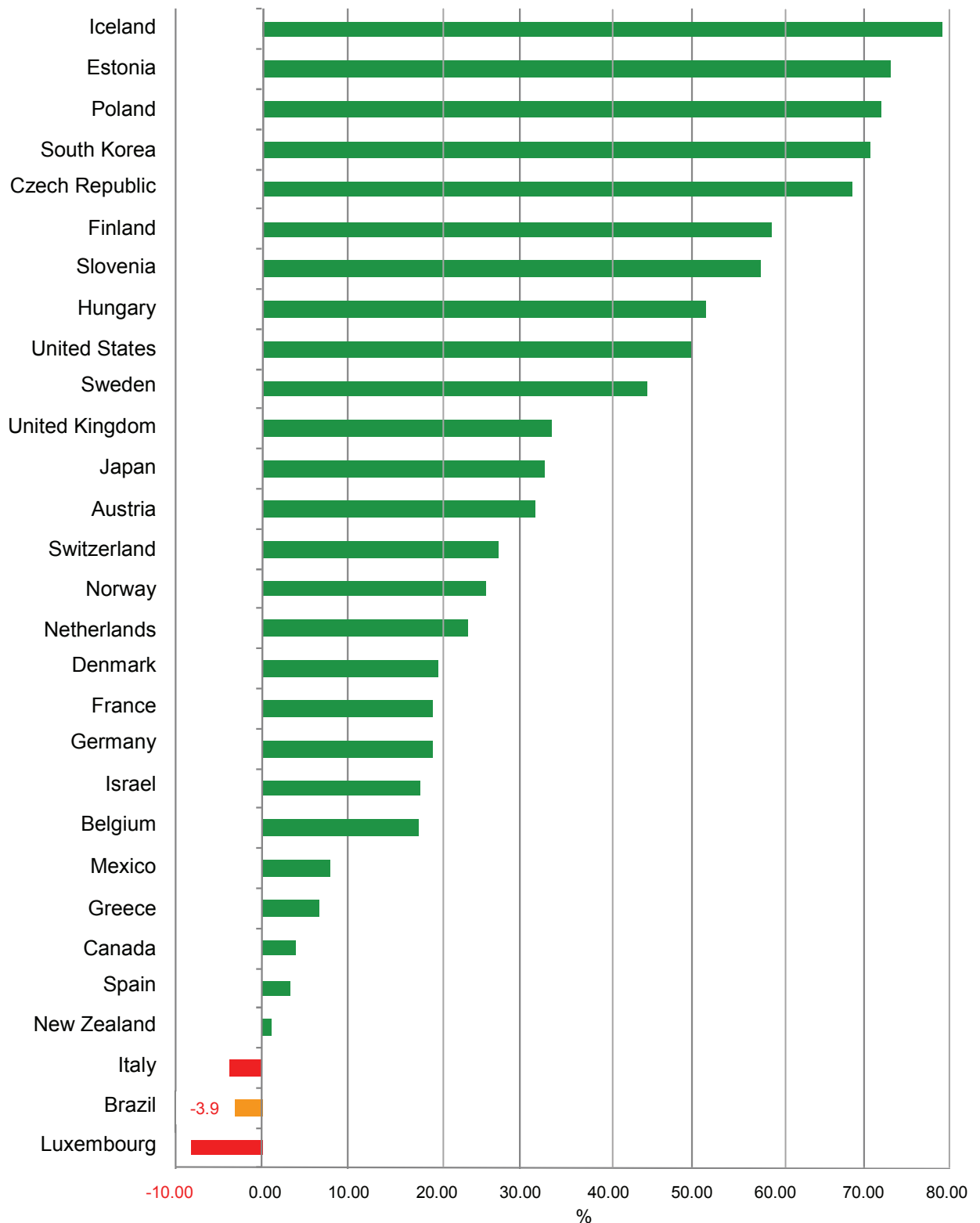
In this edition, the theme of Brazilian industrial productivity is continued, this time from the perspective of an international comparison. The principal source of international information was the STructural ANalysis Database (STAN), compiled and harmonized by the OECD, based on the national accounts of member countries. In this way, the labor productivity indicator expresses the relationship between the variation in volume of added value in the manufacturing industry and the variation in the number of employed people. It is worth pointing out that, as with Brazil, the most recent data are from 2008. As the OECD countries in general present a larger degree of development, largely the

European countries, it was aimed to also gather information about other developing countries such as China and India, with data available up to 2007 from various sources.

It is also important to highlight that no international data similar to that of the PIM-PF of the IBGE was found for a sufficient number of countries to be able to also carry out a comparison on the physical production/paid hours indicator. For the most recent period, information regarding labor productivity of the whole economy and not just for the industry was obtained.

Considering, primarily, the information about productivity evolution based on information from the OECD's STAN database, it is possible to observe that during the period 2000-2008, among the 29 countries analyzed, Luxemburg was the only country to perform worse than Brazil (Graph 1). Among the leading countries in terms of productivity elevation, the predominance of East European countries can be verified. These countries have benefited from integrating into the European Union, as the stages of manufacturing activities that were more labor intensive, previously carried out in the more developed countries in the region, were passed to them. Countries such as South Korea, the United States, Sweden, the United Kingdom and Japan also showed significantly relevant growth in productivity in the period.

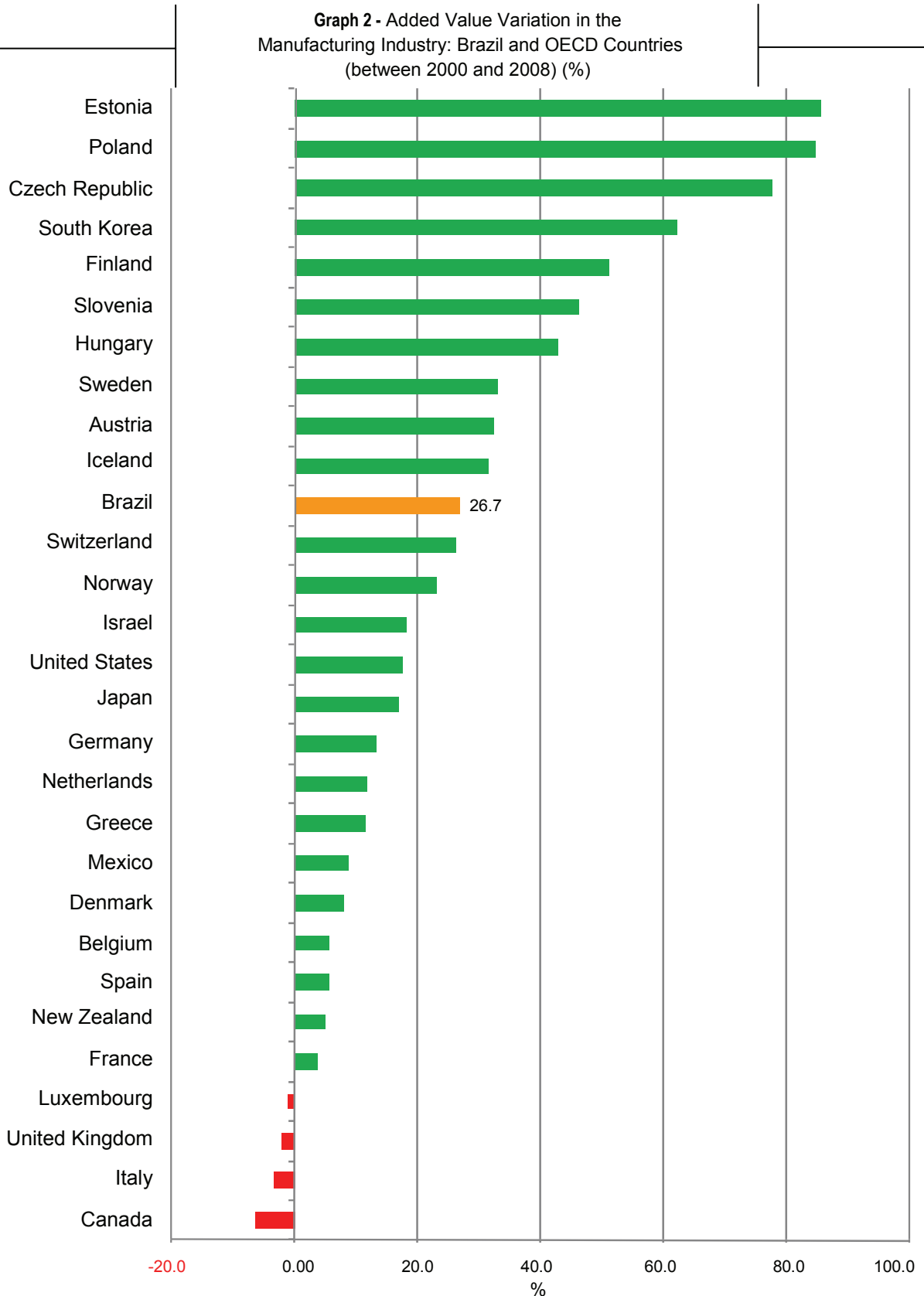
Graph 1 - Productivity Variation in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

Observing separately the evolution of added value and people employed, it is evident that what differentiates the dynamics in Brazil in relation to the other countries is the increase in the number of jobs. In terms of added value, the

variation observed in the Brazilian economy was at an intermediate level (growth of 26.7%), far from that of the leading countries, such as Estonia, The Czech Republic and Poland, but more than The United States, Japan, Germany and Mexico (Graph 2).

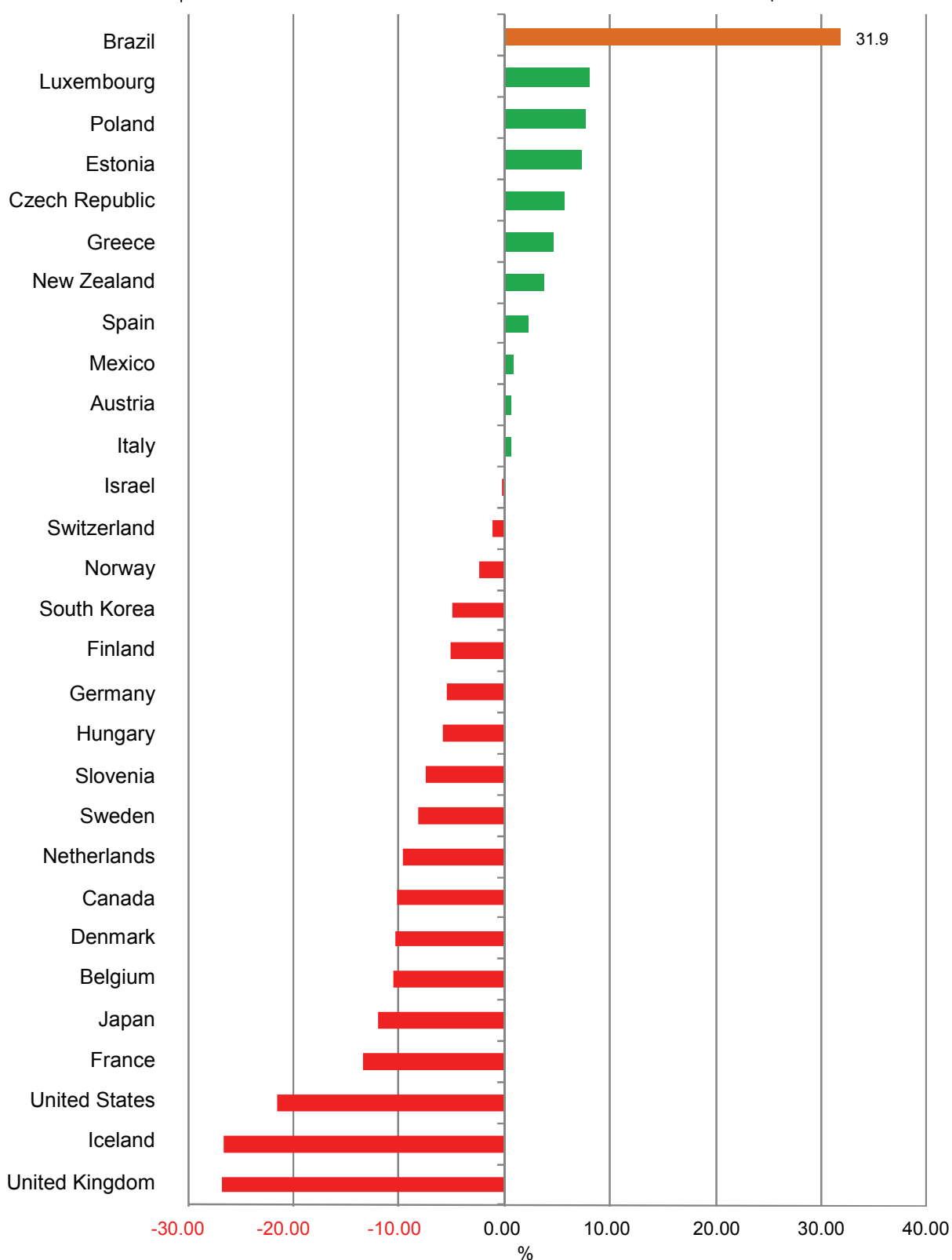


Source: STAN Database/OCDE and SCN/IBGE.

The growth in industrial employment in Brazil in the period was 31.9%, a rate substantially higher than the other countries. It is worth pointing out that in addition to Brazil, just 10 other countries presented growth in employment. Once again, countries such as Poland, Estonia

and The Czech Republic stood out, as well as Luxemburg, although the increase in employment for these countries was around 7% only. The decline in industrial employment in countries such as Japan, France, the UK and the USA also stands out (Graph 3).

Graph 3 - Variation in the Number of People Employed in the Manufacturing Industry: Brazil and OECD Countries (between 2000 and 2008) (%)



Source: STAN Database/OCDE and SCN/IBGE.

There is no doubt that these countries are outsourcing more labor intensive activities to developing countries, particularly Asia, and

increasing the degree of specialization in service activities. This movement explains, in part, the degree of adjustment in terms of industrial

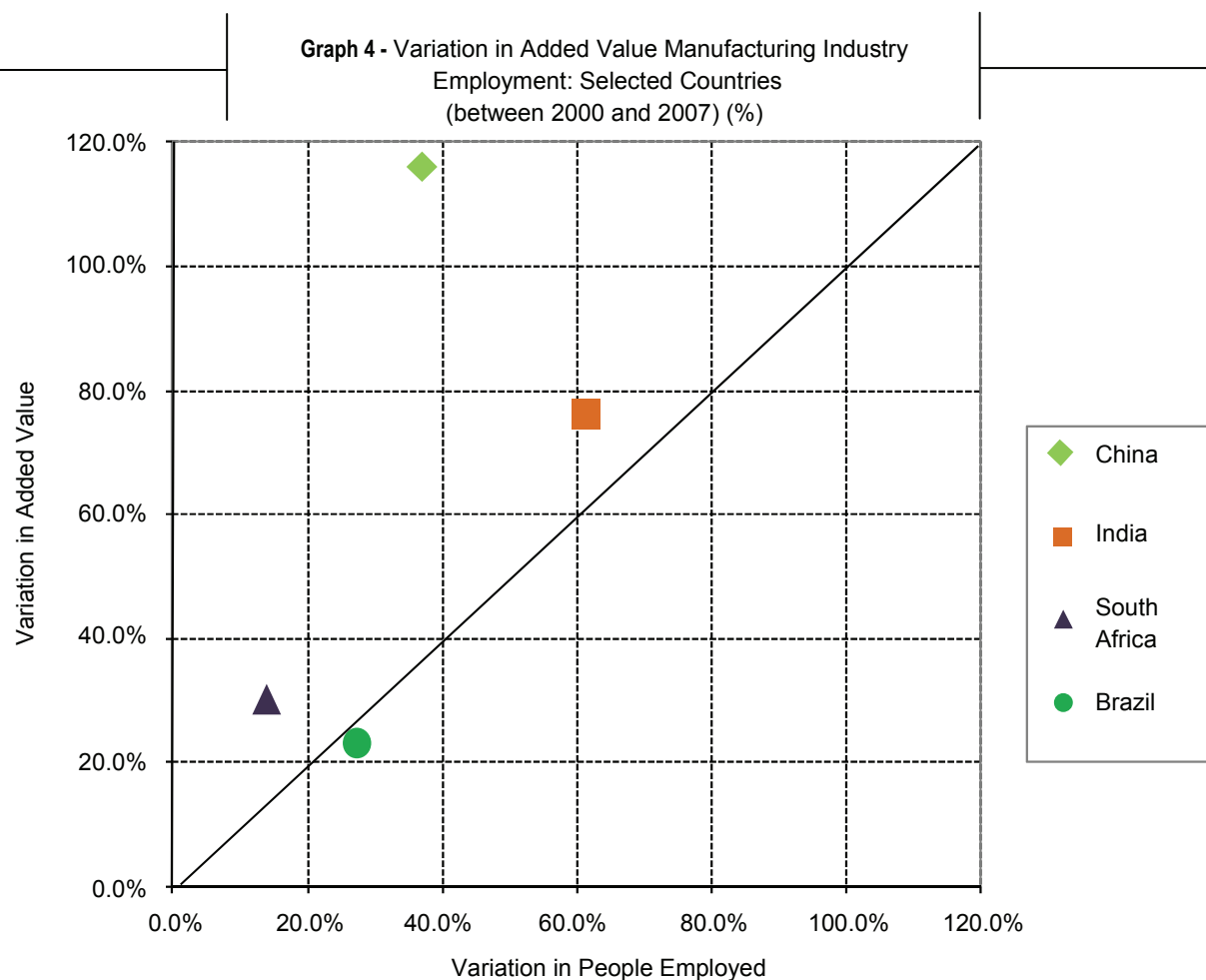
employment in developed countries. In absolute terms, the sum of OECD countries represented a net loss of almost 8 million jobs in the manufacturing industry at that time. This can therefore be approached as a productivity adjustment, which is negative in social terms, especially as there was important economic growth in the period analyzed (2004 to 2007) which was not accompanied by a rise in employment. Currently, with the conjuncture of a prolonged economic crisis, it can be understood exactly why it is so difficult to once again achieve an increase in the number of jobs available.

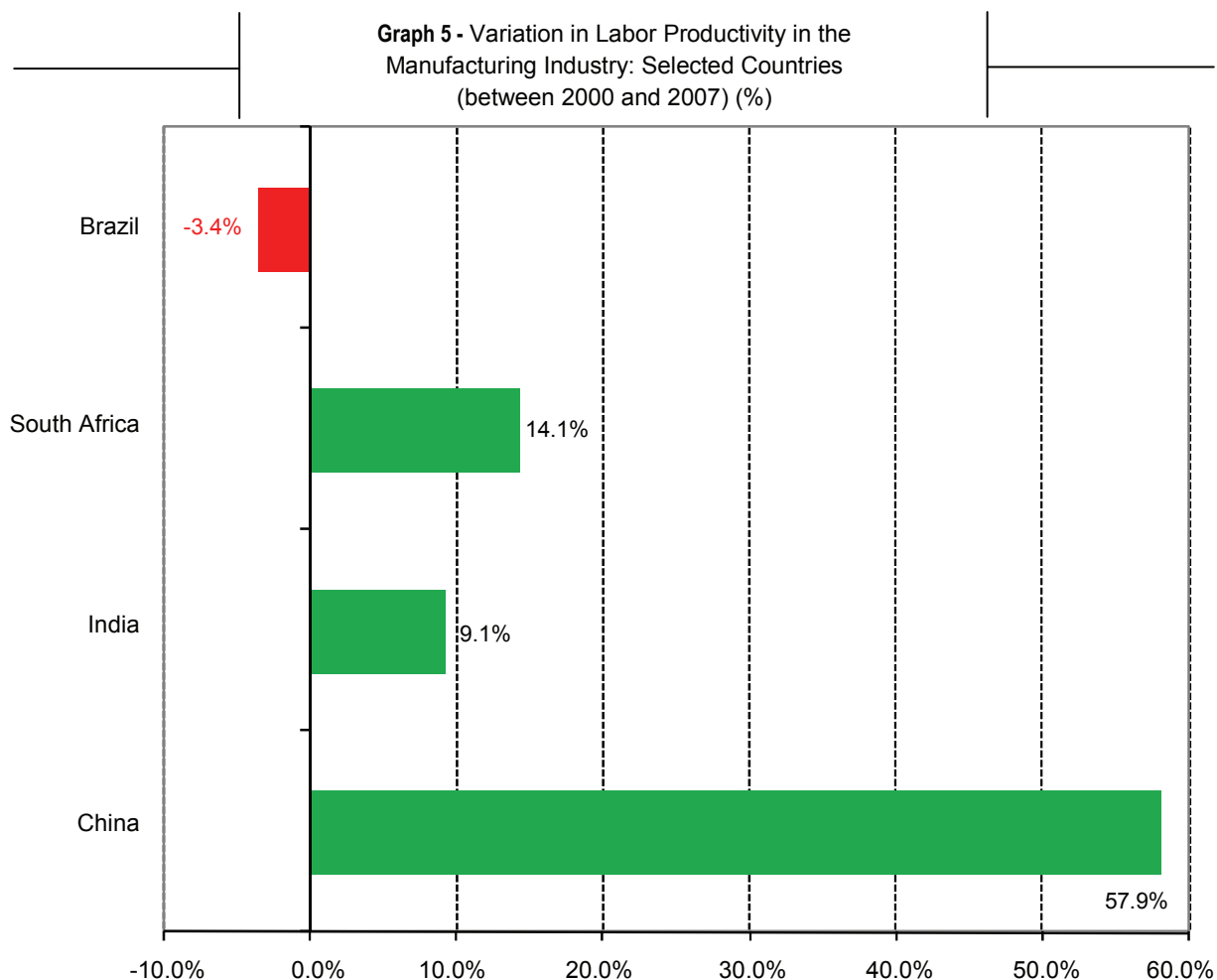
The poor performance of Brazilian productivity could be considered the opposite of the negative side of the increase in production in the central countries. However, in this case, the convergence of tendencies is not desired. Future gains in productivity should be obtained, sustaining the rising generation of employment, and accompanied by a more than proportional increase in added value.

Considering a number of selected countries that could not be found on the OECD database, it is possible to see how China, India and South Africa were able to combine the increase in

employment with more than proportional increases in terms of added value in industry (Graph 4). For China in particular this meant a significantly positive performance in terms of industrial productivity (Graph 5).

Deeper analysis is necessary in order to determine the factors explaining China's performance. However, it is possible to define a number of elements that must have contributed to the consistent increase in Chinese productivity. Similar to what happened in the Eastern European countries, and certain peripheral economies, China received an important part of the value chain's manufacturing stages outsourced by central economies. However, in this case it was at a much greater scale and speed. As well as a larger insertion into global production chains, another fundamental factor regarding the significant productivity gains is associated with the increased rates of investment in basic infrastructure and in industry itself, which sustained an intense movement of structural change.





Fonte: WDI, APO and SCN/IBGE.

Regarding Brazil, the increase in productivity can be explained by the conjuncture of growth in domestic demand, particularly from 2004 onwards, accompanied by a rise in operational costs and imports (Industrial Conjuncture Bulletin, March 2011). In addition, investments rose more effectively from 2006 onwards only, with a greater emphasis on 2007 and 2008, interrupted by the international crisis and, currently, the recovery process.

A more favorable performance of industrial productivity in Brazil is vital, moreover so that productivity gains continue to fuel the virtuous cycle of the growth in demand, consumption and investment. On the other hand, this increase will only be viable if investments effectively increase in relation to the current level and take on a more strategic character, towards structural changes in industry and the entrepreneurial sector, increasing scales of

production and company size and complexity, incorporating innovative activity in the most effective way possible and increasing the degree of internationalization of the productive structure.

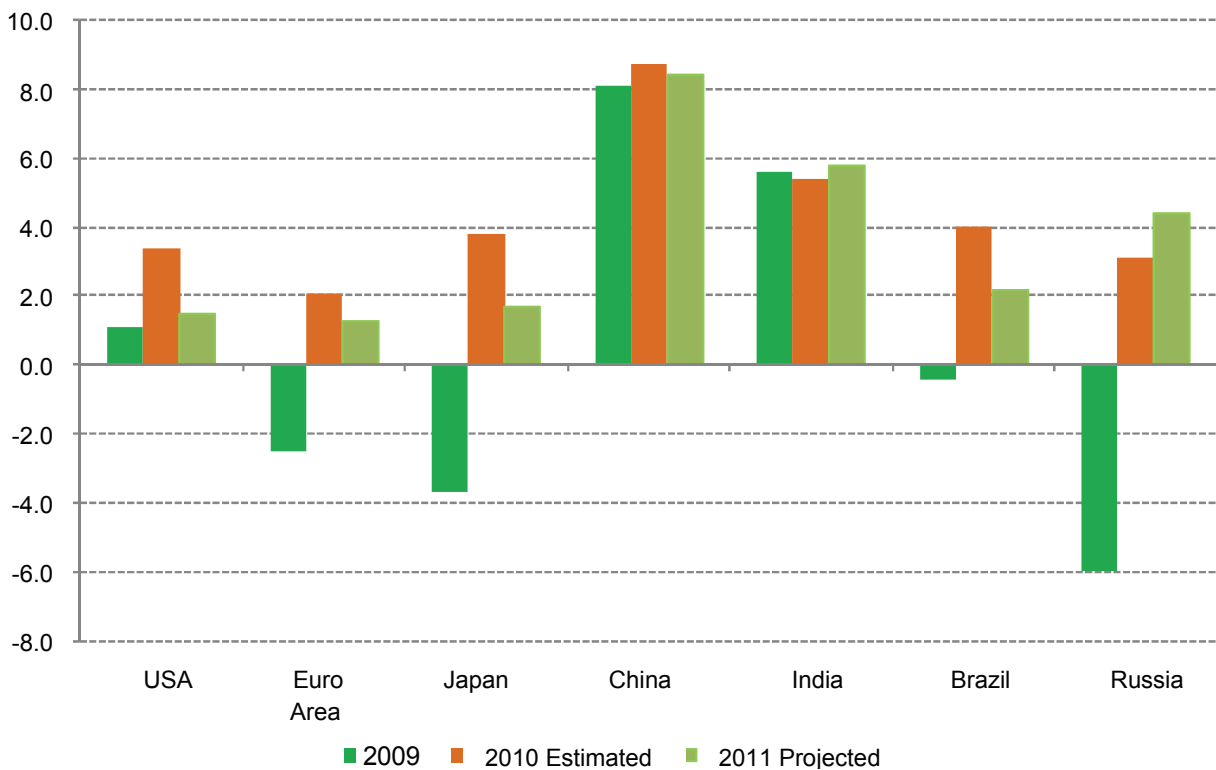
Regarding the most recent increase in productivity (post-2008), there are still no published data available that enable an international comparison to be carried out in the same way as was carried out up to 2008. The analysis realized by the Conference Board (2011) pointed out that global productivity began to grow again in 2010 (estimated at 3.3%) after a decrease of 1.2% in 2009. The negative results in 2009 were due principally to the low growth rate in the global product as a consequence of the world financial crisis. The positive result in 2010 is characteristic of a "post-recession boom", with a tendency towards a slowdown in 2011.

The study also indicates that the recent increase in productivity has been led by emerging countries, particularly China and India that represented productivity gains of 8.7% and 5.4% respectively in 2010. These two countries also enjoyed positive values in 2009 (8.1% and 5.6%) despite the crisis, while the United States was the only country to present productivity gains among the developed countries, albeit at reduced levels. This positive result in the US, in 2009, was due to the superior level of

employment contraction in comparison to the fall in GDP (-3.8% versus -2.7%).

Brazil, in turn, presented a slight fall in GDP per worker in 2009 (-0.4%), followed by the recovery of this indicator in 2010 (4.0%). Compared to the other BRICs, Brazil presents significantly smaller increases in productivity than China and India, at similar levels to Russia, despite Russia's fall in productivity being much larger than that of Brazil in 2009 (Graph 6).

Graph 6 - Annual Variation Rate of GDP per worker:
Selected Countries (2009-2011)



Source: The Conference Board Total Economic Database (January 2011).

In 2011, a slight deceleration in the increase in global productivity is expected (from 3.3% to 2.9%), more so in developed countries (as shown in Graph 6). China and India are likely to continue leading global productivity growth, while Brazil should also present a deceleration in

productivity growth (GDP per worker) in 2011 (from 4% to 2.2%). As these values are extremely sensitive to the greater utilization of productive capacity, they tend to present significant variations in terms of the intensity in world economic growth.

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