ABDI
Agência Brasileira de Desenvolvimento Industrial

BULLETIN

OF INDUSTRIAL CONJUNCTURE

JUNE 2013



Agência Brasileira de Desenvolvimento Industrial

BULLETIN

OF INDUSTRIAL CONJUNCTURE

JUNE 2013

Brazilian Industrial Development Agency – ABDI

Mauro Borges Lemos
President

Maria Luisa Campos Machado Leal
Director

Otávio Silva Camargo
Director

Cândida Beatriz de Paula Oliveira
Chief of Staff

Rogério Dias de Araújo
Coordinator

Carlos Henrique de Mello Silva
Technician

Technical Team

Brazilian Industrial Development Agency – ABDI
Rogério Dias de Araújo – *Competitive Intelligence Coordinator*
Carlos Henrique de Mello Silva – *Technician*

State University of Campinas, Economics Department – IE/UNICAMP
Fernando Sarti – *Director*

Industrial Economy and Technology Center – NEIT/IE-UNICAMP
Fernando Sarti – *Project Coordinator ABDI/NEIT - IE-UNICAMP*
CélioHiratuka – *Project Coordinator ABDI/NEIT - IE-UNICAMP*
Adriana Marques da Cunha – *Executive Coordinator*
Beatriz Freire Bertasso – *Information Coordinator*
Carolina Baltar – *Researcher*
Fernanda Ultremare – *Researcher*
Lídia Ruppert – *Researcher*
Marcelo Loural – *Researcher*
Marco Antonio Martins da Rocha – *Researcher*
Vanessa Moraes Lugli – *Researcher*
Camila Ventura – *Administrative Suppor*t

Translation
Caroline Alberoni

Design
Caluh Assessoria e Comunicação

SUMMARY

PRESENTATION

The Brazilian Industrial Development Agency (*Agência Brasileira de Desenvolvimento Industrial* – ABDI), entity linked to the Ministry of Development, Industry, and Foreign Trade (*Ministério do Desenvolvimento, Indústria e Comércio Exterior* – MDIC), was created in December 2004 with the mission of promoting the implementation of the Brazilian Industrial Policy in accordance with the Foreign Trade, and Science and Technology policies (Law 11.080/2004). It is mainly focused on programs and projects established by the Brazilian industrial policy. The Agency (ABDI) is also an integral part of *Plano Brasil Maior* Executive Group, being responsible for articulating and consolidating its programs and actions, as well as its monitoring.

Aiming at following the Brazilian industry evolution, ABDI develops a set of industrial intelligence studies and researches that guides its work and helps the Brazilian government define and develop actions within the industrial policy. One of these studies is the Bulletin of Industrial Conjuncture, which provides information and analysis on the Brazilian industry evolution, highlighting the main difficulties faced and the acceleration opportunities of its development. The Bulletin, released on a quarterly basis, has been developed in a partnership with the Industrial Economics and Technology Center (*Núcleo de Economia Industrial e da Tecnologia* – NEIT) of the State University of Campinas Economics Institute (*Instituto de Economia da Universida de Estadual de Campinas* – IE-UNICAMP).

The first part of this document highlights the Brazilian economy's modest growth based on the gross fixed capital formation's positive development under a context of reduced dynamism of families and the government's consumption in the first quarter of 2013. It also shows the reduced growth, or even the industrial physical production contraction, for most use categories in the first quarter of 2013, except for the remarkable expansion of capital goods production expansion compared with both the last and the first quarters of 2012. It can be observed that the physical production behavior analysis detailed by industrial sub-sector reaches different results, depending on the comparison basis used: the last or the first quarter of 2012. It is possible to note that most Brazilian industrial sectors underwent contraction or presented a slight growth of their physical production in the first quarter of 2013, compared to the same period of 2012. However, most of them managed to have a more robust growth in physical production in the first quarter of 2013, compared to the last quarter of 2012. The document also emphasizes industrial employment creation in the first quarter of 2013, nearly twice as many jobs generated in the same period of 2012, although followed by payroll loss. It notes that the Brazilian foreign trade was strongly influenced by the significant decline in exports followed by growing imports pressure in the first quarter of 2013, mainly when the baseline is the same period of 2012.

The second part of the Bulletin succinctly analyzes the influence of the increase in imports on the Brazilian industrial physical production. It is also emphasized that the impact of the tougher international competition in the post-downturn period was enhanced by currency appreciation. However, from early 2012, the change in direction of the exchange rate and the demand moderation decreased the negative effect of imports competition on the local industrial production. It is noteworthy that demand reactivation – more stimulated by gross fixed capital formation and less by consumption – will only result in local industrial production growth if demand expansion is rearticulated with industrial supply expansion.

1. Brazilian Economy and Industry Development in the First Quarter of 2013

1.1. Demand and Supply Components and Investment Rate Behavior

The Brazilian economy presented a modest growth in the first quarter of 2013. The Gross Domestic Product (GDP) at market prices had an increase of 0.6% compared to the last quarter of 2012, with seasonal adjustment (Table 1). When comparing with the first quarter of 2012, the increase was more robust (1.9%), confirming the Brazilian product accelerated growth observed since the third quarter (0.9%) through the fourth quarter (1.4%) of 2012, in the series that uses the same quarters of previous years as reference. In the 12-month period ended in March 2013, the cumulated increase reached 1.2%, also showing relative acceleration compared to the Brazilian product's modest growth of 0.9% over 2012.

Table 1 – GDP Variation Rate by Activity and by Demand Component (in %)

	Quarterly rate against immediately preceding quarter (*)		Quarterly rate against the same quarter of previous year		Rate cumulated in the last four quarters	
	4Q12	1Q13	4Q12	1Q13	4Q12	1Q13
Agriculture	(6.1)	9.7	(7.5)	17.0	(2.3)	3.9
Industry	0.0	(0.3)	0.1	(1.4)	(0.8)	(1.2)
Mineral Extraction	-	-	(1.9)	(6.6)	(1.1)	(3.2)
Transformation	-	-	(0.5)	(0.7)	(2.5)	(2.1)
Civil Construction	-	-	(0.2)	(1.3)	1.4	0.3
Energy, gas, and water	-	-	4.1	2.6	3.6	3.3
Services	0.7	0.5	2.2	1.9	1.7	1.7
GDP at base price	0.4	0.7	1.1	1.8	0.8	1.1
GDP at market prices	0.6	0.6	1.4	1.9	0.9	1.2
Families' consumption expenditure	1.0	0.1	3.9	2.1	3.1	3.0
Public administration's consumption expenditure	0.6	0.0	3.1	1.6	3.2	2.8
Gross fixed capital formation	1.3	4.6	(4.5)	3.0	(4.0)	(2.8)
Goods and services exports	6.1	(6.4)	2.1	(5.7)	0.5	(2.3)
Goods and services imports (-)	8.4	6.3	0.4	7.4	0.2	0.6

(*) With seasonal adjustment. Note: Data includes the analysis of the historical series conducted and disclosed by IBGE. Therefore, there may be differences regarding data analyzed in the previous Bulletins of Industrial Conjuncture. Data from the first quarter of 2013 is preliminary.
Source: NEIT/IE/UNICAMP, based on the National Accounts System (SCN)/IBGE.

Taking into consideration the supply side, the difficulty faced by the Brazilian industry – which had a negative impact, compared to the other economic activities – is maintained. The Brazilian industry shrank again in the first quarter of 2013, compared to the last quarter of 2012 (-0.3%) (seasonally adjusted), after the marginal growth presented in the third quarter of 2012 (0.6%) and the stagnation of the last quarter of 2012, always comparing with the immediately preceding quarters (with no seasonal effects).

The Brazilian industry presented the worst performance compared to the first quarter of 2012 (-1.4%). There was a general shrinkage in almost all industrial activities, compared with the period from January to March 2012, taking into consideration the decrease in mineral extraction industry (-6.6%), civil construction (-1.3%) and transformation industry (-0.7%), except the growth presented by energy, gas and water production and distribution activity (2.6%). Cumulated data analysis has also hinted the difficulties faced by industrial activities. In the 12-month accrual ended in March 2013, the Brazilian industry contraction (-1.2%) was confirmed, also observed in 2012 (-0.8%), with significant contribution of the extraction and transformation industries (-3.2% and -2.1%, respectively). This overshadowed the energy, gas and water production and distribution growth (3.3%) and the civil construction's modest increase (0.3%) in the same period.

Therefore, the government concern with the recent performance of the Brazilian industry and its ongoing effort of creating and renewing the industrial activity's stimuli is justified. The Brazilian industry, in turn, has been negatively affected by the recovery difficulty of foreign markets and by the competition intensification of imported products in a context of international competitors' pushiness. As highlighted in the second part of this Bulletin, this effect has been partially compensated by the recent currency depreciation trend, although still in insufficient level to decisively stimulate local production.

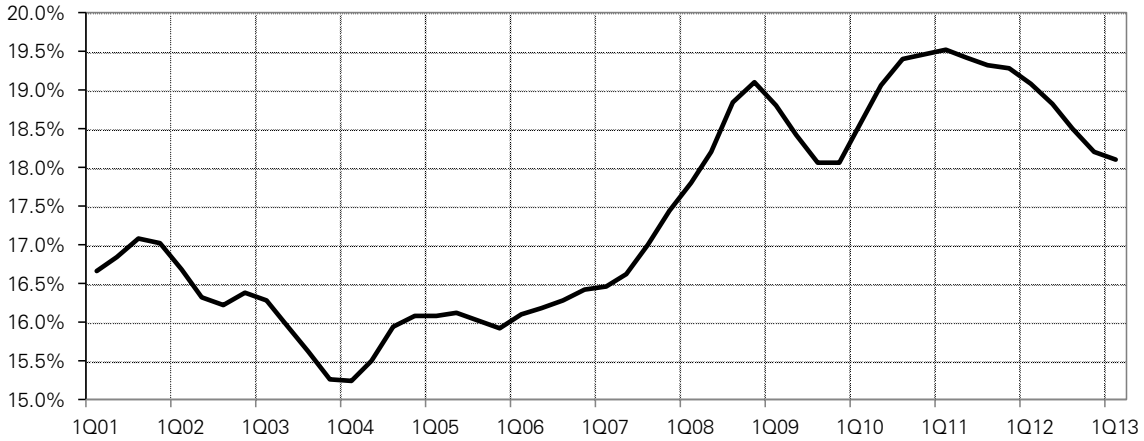
The agriculture activity, in turn, stood out in the first quarter of 2013. The agricultural product presented growth of 9.7% over the last quarter of 2012 (in deseasonalized series) and of 17% over the first quarter of 2012, exceeding all quarterly growth rates of the 2000s (Table 1). This resulted in the major reversal of the agriculture shrinkage observed in the last quarter of 2012. In the four-quarter accrual ended in March 2013, the agricultural product increased 3.9%. The positive performance of agricultural harvests has made its contribution to such results, especially the record harvest of soybeans, followed by ongoing high prices (*Notícias Agrícolas*, May 27, 2013). According to IBGE, the increasing trend of farmed area and the upward trend of production are maintained for the three major crops (rice, corn and soybean), compared to 2012 (SARAIVA, May 09, 2013).

Analyzing the local demand's components, a disappointing performance of families' consumption (0.1%) and the public administration's consumption stagnation (0.0%) can be observed. They are partially compensated by the increase in gross fixed capital formation (GFCF) (4.6%), resulting in a modest grow of the Brazilian product (0.6%) in the first quarter of 2013, compared to the last quarter of 2012 (seasonally adjusted) (Table 1). Data from the first quarter of 2013, compared to the same period of 2012, showed increase in families and government's consumption (2.1% and 1.6%, respectively) – although in decelerating trend – and, above all, investment recovery (3.0%). This meant a reversal of its downward movement observed since the first quarter of 2012, in a series that has quarterly data from previous years as reference. In the four-quarter accrual ended in March 2013, families and government's consumption still led the Brazilian product growth (3.0% and 2.8%, respectively), while investments maintained a contractive behavior (-2.8%). However, consumption underwent a deceleration process, while investments had a milder downward trend. Therefore, the most recent data seems to indicate a depletion of the impulse the consumption had on the Brazilian economy growth, as well as a greater investment participation trend that may not be interpreted as permanent yet.

GFCF and the Brazilian investment rate (GFCF/GDP) evolution was analyzed

in the Bulletin of Industrial Conjuncture, December 2012, from early 2000s. The Brazilian investment rate recovery for five consecutive quarters in the post-downturn period was described, and its uninterrupted contraction from the second quarter of 2011 was emphasized. The document elucidated that the investment rate's 12-month moving average remained positive and increasing from the first quarter of 2010 to the first quarter of 2011, when it reached its highest (19.5%), presenting, however, a downward trend from the second quarter of 2011. Data from the first quarter of 2013 confirmed the 12-month moving average's contractive trend of the Brazilian investment rate, which has reached an 18.1% baseline in the last analyzed quarter (Graph 1).

Graph 1 – Brazilian Investment Rate (1Q01 to 1Q13) (12-month moving average – in %)



Source: NEIT-IE-UNICAMP, based on National Quarterly Accounts/IBGE.

One of the Brazilian government's main concerns has been the investment rate's behavior, because its evolution is critical for resuming a more robust growth of the Brazilian economy. As mentioned in the Bulletins of Industrial Conjuncture, September and December 2012, government policies and measures have been frequently extended and renewed aiming at creating an environment that stimulated consumption and investment[1]. The acceleration of public infrastructure investment projects and highways and airports concession auctions to the private sector can be found in this context, as well as the efforts for approving the Provisional Measure on Ports, with a major effect expected on the investment resumption rhythm. Recent data indicates an investment recovery, however, it is still necessary to wait for next months' results to check this trend's sustainability.

Continuing the analysis of the local demand's components, the important growth of Brazilian goods and services imports was observed in the first quarter of 2013, compared both to the last quarter of 2013 (6.3%) (in deseasonalized series) and to the first quarter of 2012 (7.4%) (Table 1). In the 12-month accrual ended in March 2013, the increase in imports was not as vigorous (0.6%), especially when compared to the significant growth presented in 2011 (9.7% – SCN/IBGE). However, there was a slight acceleration when comparing with data cumulated in 2012 (0.2%).The most recent imports behavior reveals, therefore, a negative pressure on Brazilian production and trade balance. This issue will be further discussed in the second part of this document.

Exports, in turn, which reflect the foreign demand's behavior, presented a contraction in the first quarter of 2013, compared to the fourth quarter of 2012

1. For a more detailed list of measures, see the Bulletins of Industrial Conjuncture, September and December 2012.

(-6.4%, with seasonal adjustment), after a major marginal increase in the fourth quarter of 2012, compared to the third one (6.1%, with seasonal adjustment) (Table 1). The downward and concerning trend of exports was restored, alternating moments of reduced growth with marginal contraction since the second quarter of 2010 (SCN/IBGE). Exports have also started to shrink again in the first quarter of 2013, compared to the same period of 2012 (-5.7%), after presenting some recovery in the fourth quarter of 2012, compared to the same quarter of 2011 (2.1%) (Table 1). The rate cumulated in the last four quarters ended in March 2013 has also shown a contractive trend of Brazilian exports (-2.3% – Table 1). This fact had not been observed for three years, since the first quarter of 2010 (SCN/IBGE).

This downward behavior of Brazilian exports joined the upward behavior of imports, resulting in a rather negative contribution of the foreign sector to the Brazilian gross domestic product in the first quarter of the year. Taking into consideration the still troubled international scenario – with a slight growth of central economies and a lower expansion anticipated for emerging economies –, the Brazilian economy resumption fundamentally depends on the local demand recovery. In the near future, local demand seems to be much more linked to gross fixed capital formation trends than to families' consumption growth.

1.2. Industrial Physical Production Analysis

Monthly Industrial Research-Physical Production (*Pesquisa Industrial Mensal - Produção Física* – PIM-PF/IBGE) data enables detailing the Brazilian industry's behavior in the first quarter of 2013. A modest expansion of the general industry's physical production was observed (0.8%), led by the transformation industry growth (1.5%), considering the rather negative performance of the extraction industry (-7.3%) in the first quarter of 2013, compared to the fourth quarter of 2012 (in deseasonalized series) (Table 2). For the transformation industry and, consequently, the general industry, there was a reversal of the marginal contraction observed in the fourth quarter of 2012, compared to the third one (with seasonal adjustment). In the specific case of the extraction industry, a concerning reversal of the positive behavior presented in the previous quarter was observed, contributing to reducing the Brazilian industrial production growth.

When comparing the first quarter of 2013 with the same quarter of 2012, there was a retraction of the industrial physical production (-0.5%) related to the contraction observed in the transformation industry (-0.2%), but mainly to the extraction industry's physical production decline (-4.9%) in the same period (Table 2). The transformation industry's production shrinkage mitigation since the third quarter of 2012 should be stressed, when the basis of comparison is found in previous years. This encouraging data was already mentioned in the Bulletin of Industrial Conjuncture, December 2012. The main difference observed in this first quarter is that the downward behavior of the transformation industry's production was less intense than of the Brazilian industrial production in general. It was even able to reduce the negative impact of the extraction production decline.

In the 12-month accrual ended in March 2013, in turn, an industrial physical production shrinkage (-2.0%) was also observed, which was a result of the combination of the decline of both the transformation and extraction industrial production (-2.0% and -1.5%, respectively) (Table 2). This negative performance confirms the Brazilian industrial physical production's contraction trend observed since the first quarter of 2012, based on the 12-month cumulated variation rates, calculated at the end of each year's quarter. However, it is possible to note the recent mitigation of the Brazilian industrial production's contractive trend, encouraging the ones who envision the possibility of reversal of this trend in the near future.

In short, the Brazilian industry production presented a more satisfactory performance in this first quarter, especially when compared to the last quarter of 2012

(with seasonal adjustment). On the other hand, the analysis conducted based on the comparison with last year's first quarter or considering the 12-month cumulated data showed a persistently negative – though less intense – behavior.

Table 2 – Brazilian Industrial Production Variation Rate (2Q12 to 1Q13) (in %)

Activities	2Q 2012	3Q 2012	4Q 2012	1Q 2013
Quarterly variation rate compared to the immediately previous quarter (with seasonal adjustment)				
General Industry	**(0.8)**	**1.2**	**(0.1)**	**0.8**
Extraction Industry	1.8	(2.1)	3.4	(7.3)
Transformation Industry	(1.1)	1.4	(0.1)	1.5
Quarterly variation rate compared to the same quarter in the previous year				
General Industry	**(4.4)**	**(2.4)**	**(0.4)**	**(0.5)**
Extraction Industry	0.3	(2.1)	0.5	(4.9)
Transformation Industry	(4.7)	(2.4)	(0.5)	(0.2)
Variation rate cumulated in the last four quarters				
General Industry	**(2.3)**	**(2.9)**	**(2.6)**	**(2.0)**
Extraction Industry	0.7	0.1	(0.4)	(1.5)
Transformation Industry	(2.5)	(3.1)	(2.7)	(2.0)

Note: The data incorporates the eventual review of figures previously disclosed by IBGE. Therefore, there may be differences regarding data contained in the previous Bulletins of Industrial Conjuncture.
Source: NEIT-IE-UNICAMP, based on Monthly Industrial Research-Physical Production (PIM-PF)/IBGE.

The comparison of the last available data from April with the one from March 2013 (seasonally adjusted) showed an increase in general industry production (1.8%) associated with the increase in transformation industry production (1.7%) and, in a lesser extent, to the extraction one (0.3%) (PIM-PF/IBGE). It is worth highlighting that the general and the transformation industry physical production presented, furthermore, a surprising recovery in April 2013, compared to April 2012 (8.4% and 9.4%, respectively), not followed by the extraction industry, that suffered a new decline in April (-8.3%), repeating February and March 2013 behavior, compared to the same periods in 2012 (PIM-PF/IBGE). Therefore, if the last available monthly variation rates of the Brazilian industry's physical production are confirmed, it is possible to envision a relatively more promising trend for the industrial production in the next quarter.

Observing the Brazilian industrial physical production performance by use category, the positive behavior of capital goods production compared with intermediate and consumption goods production was highlighted in the first quarter of 2013.

There was a significant increase in capital goods production in the first quarter of the year, compared to the last quarter of 2012 (seasonally adjusted) (9.1%) (Table 3). This behavior of capital goods' physical production reflected the increase in gross fixed capital formation in the same period. Capital goods production presented an even more sharp expansion in the first quarter of 2013, compared to the same quarter of 2012 (9.8%), with significant contribution to the increase in production of trucks and buses (44.8% – PIM-PF/IBGE, data by industrial sub-sector). Those quarterly growth rates were only exceeded by the ones observed in the first three quarters of 2010, when investments also showed an intense international post-downturn recovery. Such behavior of capital good production in the first quarter of the year meant a major reversal of five consecutive quarters of shrinkage observed since the last quarter of 2011 in the data series compared with previous years. The significant monthly increases observed in January (17.9%) and February (9%) (compared to the same period last year)

contributed to such expansionist trend of the first quarter of 2013. As mentioned in the Bulletin of Industrial Conjuncture, December 2012, January 2013 growth was led by the extraordinary production expansion of trucks and buses (207.6% – PIM-PF/IBGE, data by industrial sub-sector) compared to January 2012, when sales were stalled due to the implementation of new technical rules. This caused anticipation of purchases to 2011, because the new (more efficient and less polluting) vehicles were more expensive.

Table 3 – Industrial Production Variation Rate by Use Category (2Q12 to 1Q13) (in %)

Use categories	2Q 2012	3Q 2012	4Q 2012	1Q 2013
Quarterly variation rate compared to the immediately previous quarter (with seasonal adjustment)				
Capital goods	2.9	1.5	0.0	9.1
Intermediate goods	(0.8)	1.3	(0.1)	0.4
Durable consumer goods	1.2	4.8	(0.4)	(1.8)
Non-durable and semi-durable consumer goods	(2.4)	1.3	0.4	(1.1)
Quarterly variation rate compared to the same quarter in the previous year				
Capital goods	(11.7)	(12.2)	(9.9)	9.8
Intermediate goods	(3.3)	(1.3)	(0.2)	(0.8)
Durable consumer goods	(7.0)	0.0	5.5	1.0
Non-durable and semi-durable consumer goods	(1.6)	(0.9)	1.3	(3.9)
Variation rate cumulated in the last four quarters				
Capital goods	(5.6)	(9.7)	(11.8)	(6.7)
Intermediate goods	(1.5)	(1.7)	(1.6)	(1.4)
Durable consumer goods	(7.5)	(7.0)	(3.4)	(0.3)
Non-durable and semi-durable consumer goods	(0.3)	(0.6)	0.0	(1.2)

Note: The data incorporates the eventual review of figures previously disclosed by IBGE. Therefore, there may be differences regarding data contained in the previous Bulletins of Industrial Conjuncture.
Source: NEIT-IE-UNICAMP, based on Monthly Industrial Research-Physical Production (PIM-PF)/IBGE.

The significant increase in capital goods production in the first quarter of 2013 was not sufficient to reverse the contractive trend observed in the 12-month cumulated data (Table 3). Contraction of capital goods physical production was maintained in the four-quarter accrual ended in March 2013 (-6.7%) – even if in a more smooth way –, certainly linked to investment retraction maintenance in the same period. Investments have presented acceleration difficulties even with recurring stimuli granted by the Brazilian government, such as credit lines at lower interests. This raises doubts as to the future of the Brazilian production of capital goods, which is dependent on investment and local industrial production response to the special treatment received by the government, in a low-dynamism scenario of the international economy. The investment recovery support may become an important stimulus to capital goods production, finally helping reverse the downward trend observed in the series of data cumulated since the first quarter of 2012.

Capital goods physical production growth may be confirmed in April 2013, according to recent data disclosed by IBGE: growth of 3.2%, compared to March 2013 (in deseasonalized series), and of 24.4%, compared to April 2012 (PIM-PF/IBGE). This relevant monthly growth of capital goods production was only exceeded in some months of 2010, during the recovery phase of the Brazilian industrial production post-downturn. Capital goods production for transportation led the production expansion of this use category in April

2013 (34.0% over April 2012). However, almost all capital goods had an increase in production in the same period, except capital goods for non-serial industrial purposes. The production of trucks and buses alone increased 50.6% over April 2012. Therefore, recent data shows a more promising scenario for the physical production of capital goods.

With respect to the physical production of durable consumer goods, its concerning shrinkage intensification when comparing the first quarter of 2013 to the fourth quarter of 2012 (-1.8%, with seasonal adjustment) was observed, leaving behind the (localized) growth presented in the third quarter of 2012, compared to the second one (4.8%, with seasonal adjustment) (Table 3). There was a durable goods production growth – though rather weak – in the first quarter of 2013, compared to the same period of 2012 (1.0%), showing an obvious deceleration when comparing to the growth observed in the fourth quarter of 2012 (5.5%). The durable goods production performance could have been worse but for the physical production expansion of passengers' automobiles (5.5%) in the first quarter of 2013, compared to the same period of 2012 (PIM-PF/IBGE). However, durable goods production retraction endured in the 12-month cumulated variations evolution, even if in a milder way (Table 3). Data cumulated until March 2013 showed a slight contraction of durable goods physical production (-0.3%), in spite of the positive production performance of passengers' automobiles (5.4%).

It looks like the extension of Federal VAT (*Imposto sobre Produtos Industrializados* – IPI) exemption to automobiles until July 2013–even if with gradually lower discounts throughout the first semester –, as well as the IPI increase on cars imported from outside Mexico and Mercosul, contributed to stimulate its local production. Moreover, as a result, it contributed to its favorable effect on the production of durable goods as a whole. Automobiles purchases/sales stimuli may cause direct positive effects on local production if there is more than one clearance sales trend.

According to data recently disclosed by IBGE, the physical production of durable consumer goods grew in April 2013, compared to March 2013 (1.1%, with seasonal adjustment) and April 2012 (14.9%). Automobiles physical production growth contributed to such performance in April over March 2013 (8.2%, with seasonal adjustment) and April 2012 (23.9%) (PIM-PF/IBGE). There was also an increase in automobiles and light vehicles sales in April, as well as in May 2013, compared to the same period of 2012 (29.4% and 9.6%, respectively – FENABRAVE). Automobiles and light vehicles have been reaching historically high levels of monthly sales. This may keep stimulating their production. The most recent data shows signs of recovery in vehicles sales and production, positively affecting the production performance of durable consumer goods.

Local demand's loss of dynamism and difficulties faced by foreign demand for basic inputs and primary products – which are strictly related to the uncertain international economic scenario – have affected the physical production of intermediate goods. Comparing data from the first quarter of 2013 with data from the fourth quarter of 2012 (in deseasonalized series), it was observed that the physical production of intermediate goods presented a weak growth (0.4%) (Table 3). Such marginal performance confirms the difficulty in unleashing a more robust and sustained growth of intermediate goods production, which alternates low growth with contraction periods (considering the comparison with immediately preceding quarters). Brazilian intermediate goods production's difficulties were also manifested in the decline noted in the first quarter of 2013, compared to the same period of 2012 (-0.8%). Persistence of intermediate goods production's contractive trend can also be observed in the evolution of variations cumulated in four quarters. The last available data from April 2013 showed a modest growth in physical production of intermediate goods regarding March 2013 (0.4%, with seasonal adjustment), but a more robust expansion when comparing to April 2012 (5.0%), renewing trust in this use category recovery throughout the following months of 2013.

Production of semi-durable and non-durable consumer goods – more dependent on the revenue and local consumption behaviors – followed the durable consumer goods' negative trend in the first quarter of 2013, compared to the last quarter of 2012 (in deseasonalized series) (-1.1%). Production performance of semi-durable and non-durable consumer goods was even worse in this first quarter, compared to the same period last year (-3.9%). In both cases, there was an inversion of its positive behavior presented in late 2012. Data cumulated in the 12-month period ended in March 2013 also revealed a contractive production trend of goods aforementioned (-1.2%) (Table 3). This use category's recent production behavior may be reflecting local consumption depletion as economic growth's support vector. Moreover, it is worth highlighting that some sectors considered in this use category have more directly experienced the effects of imported products' competition.

Therefore, the physical production analysis by use category in the first quarter of 2013 positively highlighted the capital goods production behavior, considering the local context of gross fixed capital formation extension. It showed, on the other hand, contraction or modest growth of other use categories' production. These use categories have probably felt the reduced growth levels of families' expenditures and government's consumption more intensely. This follows the depletion of the growth model based on consumption, and the importance of sustaining investment recovery and of accelerating the Brazilian economic activity in an environment of uncertainty regarding the future of the main world production and consumer centers, and of intensification of international competition. This generates, among other effects, a high competition between imported and local products for local market, affecting local production behavior in a worrying manner. The attention of the government and of several institutions linked to the Brazilian industry has been justified by the industrial production's lack of dynamism and the suspicious overflow of local demand to foreign production, encouraging the adoption of a series of measures intended to stimulate the Brazilian industrial production.

In order to detail even further the Brazilian industrial physical production, its behavior by industrial activity should be noted based on IBGE research. It is verified that most sectors analyzed by the research (17 of the 27) presented production retraction in the first quarter of 2013, compared with the same period of 2012 (PIM-PF/IBGE). Among them, twelve (12) intensified the contraction observed in preceding quarters. Two (2) of them presented significant reduction in production in the analyzed period: tobacco (-23.3%), and recording edition, print and reproduction (-10.2%). The other research sectors (10 of the 27) succeeded to present an increase in physical production in the same period. Among them, three (3) showed modest growth (between 0.2% and 0.8%), and most of them (7) managed to reach a more robust expansion (above 2.5%). The highlight was automobiles (12.7%), which also reverted a concerning shrinkage trend of its production that persisted since the fourth quarter of 2011, considering the previous years' quarterly data as reference. Therefore, most Brazilian industrial sectors underwent contraction or presented a slight growth of their physical production in the first quarter of 2013, compared to the same period of 2012. Many of them have also intensified the loss of physical production in the analyzed period, sending an important warning sign to the government and institutions representing the industrial sector.

Analyzing the physical production performance by industrial sector in the first quarter of 2013, compared to the fourth quarter of 2012 (with seasonal adjustment), it is possible to note a slightly different situation, since there was a production expansion in sixteen (16) IBGE research sectors. A more relevant growth (above 2.0%) was observed in eleven (11) sectors (PIM-PF/IBGE). The ones that stood out: electronic material, devices and equipment (9.4%); furniture (9.1%); shoes and leather goods (8.9%); and office machinery and computer equipment (8.4%). All of them were able to

revert the physical production contraction experienced in the fourth, compared to the third quarter of 2012. Other five (5) sectors of the research presented minor increases in production (between 0.2% and 1.1%). The other industrial sectors (11) experienced shrinkage or stagnation in their physical production in the analyzed period. There was a significant retraction in physical production of the tobacco (-36.3%), extraction (-7.3%) and pharmaceutical (-4.9%) sectors. Among them, only the extraction industry interrupted the production expansion trend observed in the previous quarter. In the other eight (8) sectors, which had a negative performance, the reduction experienced was not significant (between -0.2% and -1.6%) or there was stagnation compared to the immediately previous quarter. In other words, most Brazilian industrial sectors were able to show physical production growth in the first quarter of 2013, compared to the last quarter of 2012. Furthermore, for the greatest part of those sectors that experienced production contraction, there was no relevant decrease. Therefore, the physical production behavior analysis detailed by industrial sub-sector shows that recovery trend of the entire industry is still quite fragile, revealing itself in different performances of several sectors, with diverging results depending on the comparison basis used: the last or the first quarter of 2012.

1.3. Industrial Employment Evolution

Formal employment generation's results in the Brazilian industry in the first quarter of 2013 were better than the ones showed in the same period of 2012. According to the Employment and Unemployment General Database (*Cadastro Geral de Empregados e Desempregados* – CAGED/MTE), there was a net generation of 100,352 workstations between January and March 2013, virtually twice as many jobs created in the same period last year (slightly less than 54,000 jobs) (Table 4). When comparing with the same period in the previous years (2010 and 2011), however, it is observed that there was deterioration in terms of industrial employment generation in the first quarter of 2013. While it is not such a positive result if compared to 2010 and 2011, the increase of almost 100% compared to 2012 may indicate a growth trend in industrial employment throughout this year above values presented in 2012, which were quite modest.

Table 4 – Jobs Creation and Net Hires Payroll in the Brazilian Industry (1Q10 to 1Q13)

Year	Jobs Creation					Net Hires Payroll (in thousands of R$, Dec/10*)				
	1Q	2Q	3Q	4Q	Total	1Q	2Q	3Q	4Q	Total
2010	199,187	186,139	203,873	(111,408)	**477,791**	104,290	76,794	92,038	(147,372)	**125,750**
2011	127,798	117,211	128,704	(188,217)	**185,496**	46,400	41,794	26,054	(228,229)	**(113,981)**
2012	53,742	62,892	110,499	(182,320)	**44,813**	(28,420)	(22,893)	(15,274)	(247,823)	**(314,410)**
2013	100,352	-	-	-	**-**	(4,347)	-	-	-	-

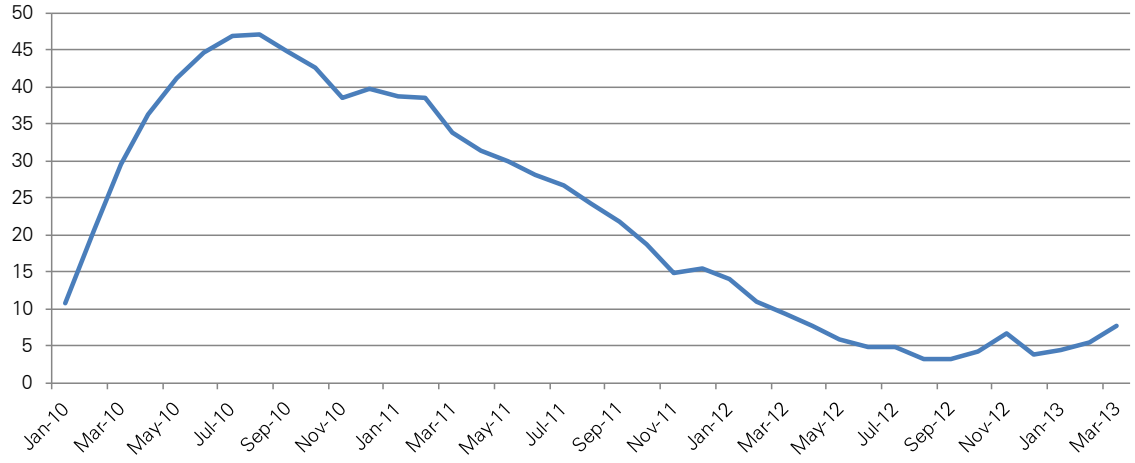
*Data deflated by IPCA (IBGE).
Source: NEIT/IE/UNICAMP, based on CAGED/MTE.

In the case of total net wages of industrial workers (wages of hired workers minus wages of resignees and of those who were dismissed), data indicates net loss in the first quarter of 2013 – slightly more than R$ 4 million (Table 4). This is the sixth consecutive quarter in which there is net payroll loss. If four of the six quarters showed positive values in jobs creation, therefore, it seems that workers are being hired by lower salaries than those of dismissed employees. As a

positive aspect, it is observed that payroll loss between January and March 2013 was small if compared to the five previous quarters.

The industrial employment generation trend becomes even clearer when analyzing the 12-month moving average behavior of net hires (Graph 2). An intense downturn recovery trend is observed until July 2010, reaching the average creation of 46,000 workstations per month. Thereafter, a persistent decrease trend of net hires' moving average (except some short periods with localized increases) that lasts until late 2012 is noted, reaching the average of slightly more than 3,000 jobs created per month. In the first three months of 2013, there seems to have a stimulation trend in employment generation, though still much weaker than the one observed in 2010. However, next months' evolution will be essential to foresee industrial employment generation behavior with greater clarity.

Graph 2 – Brazilian Industry's Net Hires Moving Average(1) (Jan/2010 to Mar/2013) (in thousands of jobs)



(1) 12-month moving average.
Source: NEIT/IE/UNICAMP, based on CAGED/MTE.

On Table 5, it is possible to observe the sectoral composition of formal jobs creation in the Brazilian industry. Analyzing this variable's behavior in the first three months of 2012 and 2013, a performance improvement is observed for most part of the industrial sectors. The leather, leather goods and shoes manufacturing sector – responsible for generating slightly more than 20,000 jobs –, as well as the tobacco products manufacturer sector, led the creation of jobs in the first quarter of 2013, with 12,500 jobs. Both sectors also led the creation of jobs in the first quarter of 2012.

What drew special attention was the performance of other specific sectors, such as clothing and accessories, that generated 11,400 jobs and created slightly more than 3,000 workstations in the same period of 2012 (Table 5). Two other prominent sectors were automobiles production (12,500 jobs in the first quarter of 2013, compared to only 219 in the first quarter of 2012) and machines and equipment (11,000, compared to less than 5,000). As such sectors are important to the Brazilian industry and economy, their good performance is quite relevant. Moreover, the increase in employment in machines and equipment may mean a grow expectation in demand for capital goods, which keeps encouraging production and sectoral employment. In the case of automobiles, tax incentives and the new automotive industry tax regime have stimulated production and local employment. Rubber and plastics manufacturing was also highlighted, generating 8,600 jobs in the first quarter of 2013, compared to less than 3,000 in the same period last year.

The only sectors that had loss of jobs were food products and beverages (Table 5). The former had a significant loss

of almost 21,000 jobs from January to March 2012, to which an important loss of 20,800 jobs was also added from January to March 2013. The latter maintained job losses of slightly more than 2,000 in both analyzed periods.

Table 5 – Jobs Creation by Industrial Sector in the First Quarter (2012 and 2013)

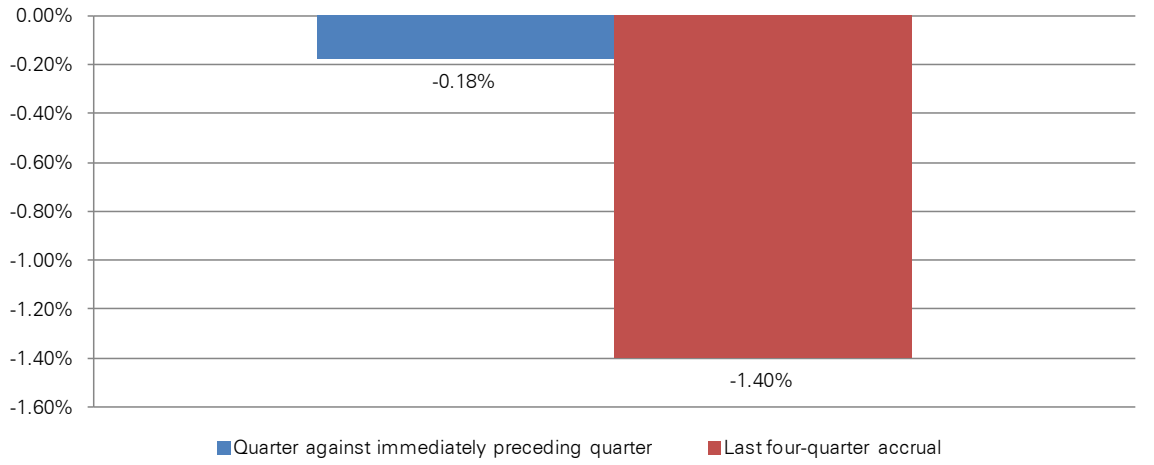
Sectors	Jobs creation (1Q12)	Jobs creation (1Q13)
Coal Mining	107	159
Oil and Natural Gas	331	(21)
Metallic Mining	2,935	659
Non-Metallic Mineral Mining	854	369
Mining Support Activities	754	715
Food Products	(20,913)	(20,860)
Beverages	(2,287)	(2,209)
Tobacco Products	9,935	12,525
Textiles	3,310	6,335
Clothing and Accessories Confection	3,281	11,483
Leather, Leather Artifacts and Footwear	17,137	20,438
Wood Products	(1,155)	(134)
Cellulose, Paper and Paper Products	(498)	1,615
Printing and Reproduction	(78)	(816)
Coke, Oil-Based Products and Biofuel	5,802	6,416
Chemicals	1,213	1,447
Pharmochemical and Pharmaceutical Products	1,376	1,817
Rubber and Plastics	2,748	8,621
Non-Metallic Minerals	2,548	1,836
Metallurgy	1,069	2,627
Metal Products, Except Machines and Equipment	6,127	6,993
Computer Equipment, Electronics and Optical Products	(980)	2,285
Machines, Devices and Electrical Material	3,100	3,643
Machines and Equipment	4,824	11,112
Automobiles, Tow Trucks and Car Bodies	219	12,453
Other Transportation Equipment, Except Automobiles	1,563	2,599
Furniture	4,038	3,660
Others	2,074	1,969
Machines and Equipment Maintenance, Repair and Installation	4,308	2,616

Source: NEIT/IE/UNICAMP, based on CAGED/MTE.

In order to complement the industrial employment's behavior analysis in the first quarter of 2013, Monthly Industrial Research of Jobs and Salaries (*Pesquisa Industrial Mensal de Empregos e Salários* – PIMES/IBGE)[2] data showed that, despite the improvement observed in CAGED data, the employment generation in the Brazilian industry is still far from presenting greater dynamism. Considering the rate cumulated in the last four quarters ended in March 2013, the value is still negative (-1.4%). Using seasonal effects-free data, it can be observed that the Brazilian industrial employment performance showed in the first quarter of 2013 was still lower if compared to the immediately preceding quarter (-0.18%) (Graph 3).

2. PIMES/IBGE has a sampling coverage, including companies with five or more employees, while CAGED/MTE presents the results of all companies, which have performed hiring/firing of formal employees in the researched period, thus, having census coverage. Therefore, it is possible to find divergent trends in both data sources used, especially in sectors with predominance of small businesses.

Graph 3 – Brazilian Industrial Employment Variations in the First Quarter of 2013 (in %)



Source: NEIT/IE/UNICAMP, based on PIMES/IBGE.

Therefore, data concerning the Brazilian industry's employment indicates an improvement compared to the first quarter of 2012. However, such improvement is still insufficient to offset the strong deceleration experienced over the last two years, revealing the production behavior's adverse effects on the industrial activity employment.

1.4. Brazilian Foreign Trade

The Brazilian trade balance had a US$ 5.2 billion deficit in the first quarter of 2013 (FUNCEX), contributing to the increase in the Brazilian negative current account balance, which exceeded the 3% level over the GDP in the 12-month accrual ended in April 2013 – this had not occurred since July 2002 (Central Bank of Brazil). There was an evident reversal of the Brazilian foreign trade positive trend throughout the last years.

Trade surplus transformation reached in the last quarter of 2012 (US$ 3.7 billion) in trade deficit in the first quarter of 2013 resulted from the superiority of the exports value contraction (-18.0%) compared to the imports value retraction (-3.9%) (Table 6). Marginal contraction of Brazilian exports from the fourth quarter of 2012 to the first quarter of 2013 was solely due to the significant decrease in exported quantities (-19.4%), considering the increase in exported products' price (2.0%). Retraction in Brazilian imports in the same period was also solely due to the decrease in imported quantities (-4.3%), given the (modest) increase in imports prices (0.6%).

Comparison of trade data from the first quarter of 2013 with those from the same quarter of 2012 suggests that the emergence of the Brazilian trade deficit was caused by the combination of the reduction in exports value (-7.7%) with the increase in imports value (6.3%) (Table 6). The decrease in both exported quantity (-6.5%) and exported products' prices (-0.9%) contributed to such reduction in exports value in the analyzed period. The increase in Brazilian imports value (6.3%), in turn, was solely caused by the growth in imported quantity (8.1%), considering the decrease in imports prices (-1.5%) in the same period.

Lack of dynamism of foreign consumer markets and deceleration of emerging economies like China, followed by increasing aggressiveness of international competition, constitute important explanatory elements of the recent Brazilian trade performance's deterioration. The Brazilian economic growth in the first quarter of 2013, especially compared to the first quarter of 2012, even if in more modest levels, may also be associated with the upward marginal behavior of imports. Furthermore, the urgent need of facing competitive problems presented by

several Brazilian industrial sectors cannot be denied. These problems go beyond the recent economic activity's behavior and the return of the exchange appreciation in the first quarter of 2012. Although this appreciation trend in the first quarter is punctual, it may have affected the quarter's results.

Table 6 – Exports and Imports Variation Rates by Use Category (in %)

		1Q13/4Q12			1Q13/1Q12		
		Value	Price	*Quantum*	Value	Price	*Quantum*
Exports	**Total**	(18.0)	2.0	(19.4)	(7.7)	(0.9)	(6.5)
	Capital Goods	(38.0)	(1.8)	(36.8)	(14.3)	(2.9)	(11.5)
	Intermediate Goods	(13.5)	3.8	(16.4)	(1.5)	0.5	(1.8)
	Durable Consumer Goods	(2.3)	(0.4)	(1.8)	1.8	2.0	(0.1)
	Non-Durable Consumer Goods	(9.0)	(0.5)	(8.5)	2.2	(2.1)	4.6
	Fuels	(40.6)	(2.4)	(39.1)	(44.8)	(6.9)	(40.8)
Imports	**Total**	(3.9)	0.6	(4.3)	6.3	(1.5)	8.1
	Capital Goods	(4.4)	5.8	(9.8)	8.0	0.6	7.1
	Intermediate Goods	(5.3)	0.1	(5.2)	3.4	(1.4)	5.1
	Durable Consumer Goods	(26.2)	0.1	(26.2)	(23.0)	(0.5)	(22.5)
	Non-Durable Consumer Goods	(2.4)	(1.9)	(0.5)	5.1	(5.0)	10.8
	Fuels	8.5	(0.9)	9.0	27.6	(2.2)	30.4

Source: NEIT/IE/UNICAMP, based on FUNCEX.

Brazilian exports shrinkage in the first quarter of 2013, compared to the fourth quarter of 2012, was generalized by all use categories (Table 6). However, such negative performance of exported values was especially influenced by the reduction in fuel (-40.6%) and capital goods (-38.0%) exports, led by the contraction in their exported quantities. Intermediate goods was the only use category that showed growth in exports prices (3.8%), though it was not able to make up for the decrease in exported volume (-16.4%) and, consequently, in exported value (-13.5%) in the same period. The behavior of intermediate goods' exports prices was solely responsible for the increase in Brazilian exports prices in general. This performance was certainly influenced by the difficulty faced by Brazilian intermediate products in the international market, due to the deceleration in the emerging markets' demand.

Exports data by use category in the first quarter of 2013, compared to the same period of 2012, shows, in turn, that the negative performance of Brazilian exports value was clearly affected by the reduction in foreign sales of fuel (-44.8%) and capital goods (-14.3%), and in a lesser extent, of intermediate goods (-1.5%) (Table 6). In all the aforementioned use categories, such downward behavior was led by the decrease in exported quantities, with less participation of the reduction in prices, except in the case of intermediate goods, which showed a slight increase in exports prices in the period. In the case of consumer goods (both durable and non-durable), marginal exports values presented modest increase (1.8% and 2.2%, respectively). Durable goods exports benefited solely from the recovery in exports prices (2.0%), and non-durable goods exports benefited from the major expansion in exported quantities (4.6%), considering the decrease in their foreign prices (-2.1%). Therefore, only non-durable goods were able to expand their foreign sales, differentiating themselves from the other use categories in the analyzed period.

Analyzing the contractive performance of imports by use category in the first quarter of 2013, compared to the last quarter of 2012, a decrease in imported values in almost all categories, especially durable consumer goods (-26.2%), was observed, led by contraction in imported quantities.

The only exception was the increase in fuel imports (8.5%), leveraged by the expansion in imported volumes in a context of decreasing prices (Table 6). Nevertheless, as aforementioned, reduction in foreign purchases was less accentuated than the retraction in exports, which led to the Brazilian trade deficit in the first quarter of 2013, compared to the last quarter of 2012.

When comparing Brazilian imports behavior by use category in the first quarter of 2013 with the same period of 2012, it was observed that the growth in imported values was generalized in almost all use categories, except for the reduction observed in durable consumer goods (-23.0%). The generalized increase in imports was especially leveraged by imported quantities. Increases in imports quantities of fuel (30.4%), durable goods (10.8%) and capital goods (7.1%) are highlighted (Table 6).

As aforementioned, the Brazilian foreign trade's negative balance in the first quarter of 2013 may be mostly explained by the decrease in exports and the increase in imports of fuel. They were influenced by the retraction in the production of oil, which was related, among other aspects, to the maintenance of platforms, and by the increase in oil consumption to be refined in Brazil. Several imports of oil and derivatives which occurred last year should still affect the Brazilian trade balance in the second quarter of the year, because they were not considered in the foreign trade account due to a Federal Revenue normative instruction, which allowed postponement of oil and derivative imports' bookingconducted last year (RESENDE and MARCHESINI, 2013). Recent data from April 2013 showed a strong decrease in oil exports, compared to the same month last year, negatively surprising the trade analysts. Even with the lowest oil imports, purchases of other fuel, like gasoline, for local consumption, generated an increase in total fuel and lubricant imports in April 2013, compared to April 2012, still negatively affecting the trade balance (LEO, 2013).

Therefore, the Brazilian trade balance's data in the first quarter of 2013 was strongly influenced by the significant decrease in exports, followed by pressure in imports, especially when the baseline is the first quarter of 2012. Persistence of negative impacts on Brazilian foreign trade was confirmed. These impacts come from the recovering difficulty of developed economies and from the deceleration of emerging economies, both accentuated by the intense international competition in a context of new national currency appreciation.

In sum, it was possible to show that the Brazilian economy presented a modest growth in the first quarter of 2013, especially based on the gross fixed capital formation's positive performance on a scenario of reduction in families and the government's consumption dynamism. While promising, investments still experience uncertainties in local and international markets and should be carefully monitored in the next periods to assess the resumption trend's sustainability. As regards to industrial physical production, a weak growth, or even its contraction, was observed for most use categories in the first quarter of 2013, except for the significant increase in the production expansion of capital goods compared with both the last and the first quarters of 2012. Despite the unfavorable production performance in several industrial sub-sectors, the industrial employment creation was still booming in the first quarter of 2013, even followed by payroll loss. One of the major difficulties faced in the first quarter of the year was related to the Brazilian foreign trade behavior. Exports experienced losses, and imports forced the trade result on a scenario of foreign demand slowdown, fierce competition and spot exchange rate appreciation.

The maintenance of a more robust gross fixed capital formation growth becomes essential to reactivate the other aggregate demand's components, as well as to increase industrial productivity and the Brazilian economic activity. The range of stimulus measures, which were persistently adopted by the Brazilian government, has created private investment opportunities. They should show, however, more tangible results on the industrial production and the Brazilian economy. Taking the recent debate regarding the effects of the trade balance's deterioration on the Brazilian industrial production into account, this issue will be further detailed in the next part of this document.

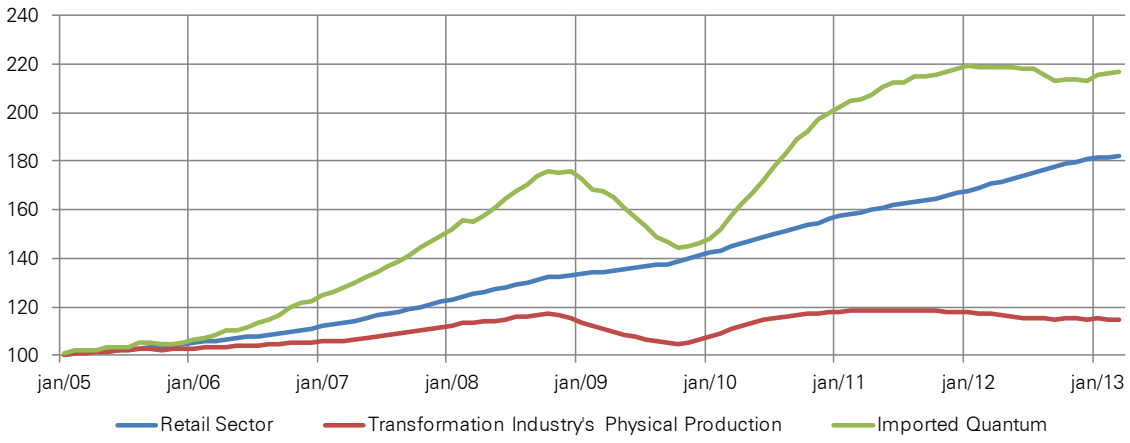
2. Notes on the Effects of Imports on the Brazilian Industrial Production

The Brazilian transformation industry production, as already discussed, has been developing at a slow pace. After a rapid recovery during the immediate international post-downturn, the industrial production has been facing difficulties to recover a more robust growth trend. This section of the Bulletin aims at briefly analyzing how this industrial production trend is related to the increase in imports and to the greater aggressiveness of foreign competitors in the local market.

A major aspect in the analysis concerns the local demand and families' consumption evolution, which had an ongoing growth after the worst phase of the international downturn and, more recently, has been showing moderation signs. Consumption expression in terms of quantity sold by the retail sector can be seen on Graph 1, as well as the evolution of the quantity produced in the transformation industry and the *quantum* imported by Brazil, between 2005 and March 2013 (according to the 12-month moving average of quantity rates, based in 2004).

From 2005 to 2008, it is possible to see that the upward trend of the Brazilian market's final demand was more aggressively followed by the foreign supplier than by the local industry. However, it is possible to highlight the fact that the expansion in imports did not occur to the detriment of the local industrial physical production, which also grew in the period. It can be observed that the international downturn, more intensely triggered in the last quarter of 2008, interrupted an upward cycle with much clearer impacts on the supply side (production) than on the demand's (retail sector), unleashing a major storage cycle. During this period, imports decreased more than the local physical production. Supply's lowest level, in terms of 12-month moving average, occurred in October 2009, when it was possible to observe the significant decrease in imported (-17.8%) and produced quantity (-10.5%), compared to October 2008.

Graph 1 – Quantity Rates Evolution: Retail Sector, Transformation Industry's Physical Production and Imports (Jan/2005 to Mar/2013) (12-month moving average – 2004:100)



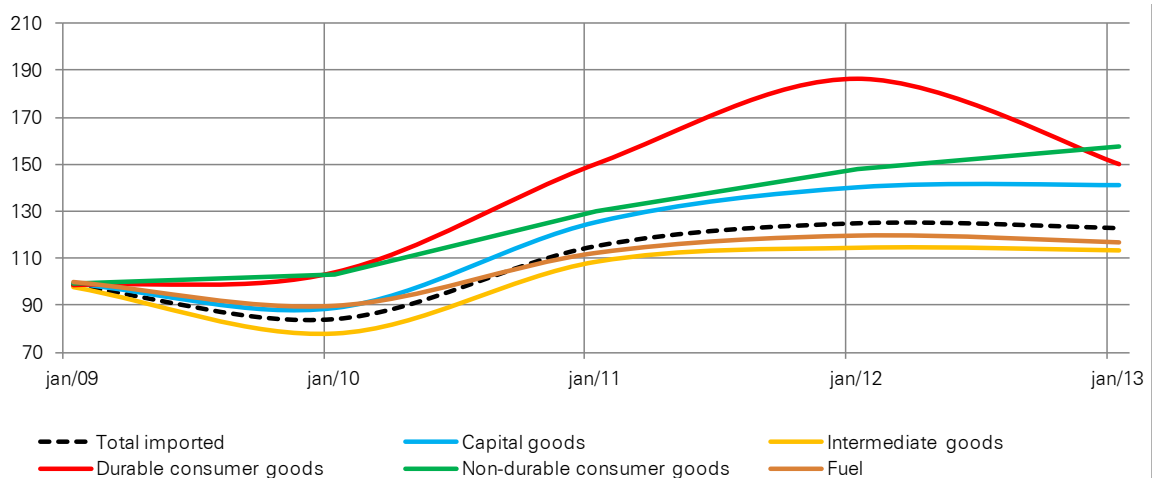
Source: NEIT/IE/UNICAMP, based on PMC/IBGE, PIM-PF/IBGE and FUNCEX.

The recovery was relatively fast in early 2010. However, the ongoing unfavorable situation in central economies rapidly dissipated expectations that overcoming the international downturn would be accelerated, which motivated the intensification of disputes over global markets. Only a few markets worldwide had an increasing demand, as in the case of Brazil, fact that is revealed in the ongoing growth in retail sales post-downturn.

Considering the moving averages, since late 2009, imports clearly substituted local production. While the first maintained an upward trend from November 2009 to January 2012, cumulating an elevation of 52% in 27 months (average of 1.6% per month), the physical production cumulated an expansion of only 13.0% in the 16 months from November 2009 to February 2011 (average of 0.8% per month), when it started its stagnation. On the other hand, there was a decrease of 2.9% in the imported quantity from January to December 2012 (with an average reduction of -0.2% per month, throughout 11 months), followed by a slight reaction in the imported quantity from January to March 2013. The produced quantity, in turn, experienced reduction of 3.2% from February 2011 to March 2013 (with an average reduction of -0.1% per month, for 26 months). In other words, imports have taken more efficient advantage of the Brazilian demand than the local industry. However, imports themselves have shown weakness in the more recent period, reflection of the decrease in consumption growth, but also of the industrial expansion's low rhythm.

The weakest performance of the imported *quantum* may be best qualified when analyzing imports behavior by use category. Graph 2 data suggests that the decrease in imported *quantum* in the recent period was strongly influenced by the decrease in foreign purchase of durable goods, including imports of passengers' cars. The imported quantity of these goods (with reference to the 12-month moving average, based in 2008) almost doubled between 2008 and late 2011, receding ever since.

Graph 2 – Imported Quantity by Use Category
(Jan/2009 to Mar/2013)
(12-month moving average – 2008:100)



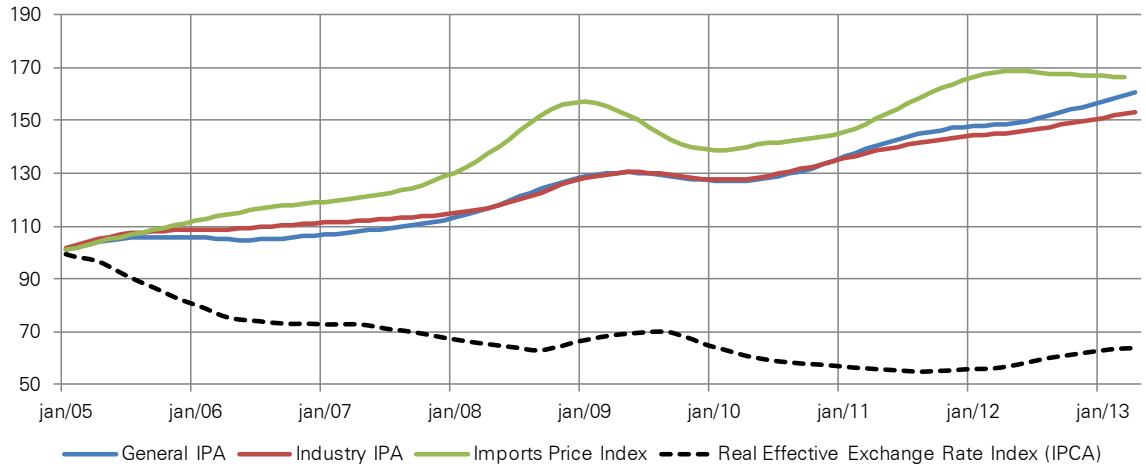
Source: NEIT/IE/UNICAMP, based on FUNCEX.

Deceleration in the imported volume growth of capital and intermediate goods started in the second quarter of 2011, even before the deceleration in the imported quantity expansion of durable goods. This may be a reflection of the local industrial production's loss of dynamism itself. Imports of intermediate goods were the ones that expanded the least in the period. Though imports of non-durable consumer goods, in turn, did not grow as exuberantly as durable goods, they keep a persistently upward trend, having a cumulated growth of almost 60% between the 2008 average

and the March 2013 average. This use category includes the workforce-intensive sectors, where Asian competition is more aggressive.

Graphs 3 and 4 show the evolution of the Brazilian Wholesale Price Index (Índice *de Preços por Atacado* – IPA) (in general and in the industry, calculated by FGV), of Imports (FUNCEX) and of the Real Effective Exchange Rate, according to the 12-month moving average (based in 2004, in Graph 3; and based in 2008, in Graph 4). It is important to emphasize that – since the imports price index is given by the average price of imported products – it is also influenced by changes in the imported goods basket not considered in the analysis.

Graph 3 – Evolution of General and Industry's IPA, of the Brazilian Imports Price Index and of the Real Effective Exchange Rate (IPCA) (Jan/2005 to Apr/2013) (12-month moving average – 2004:100)



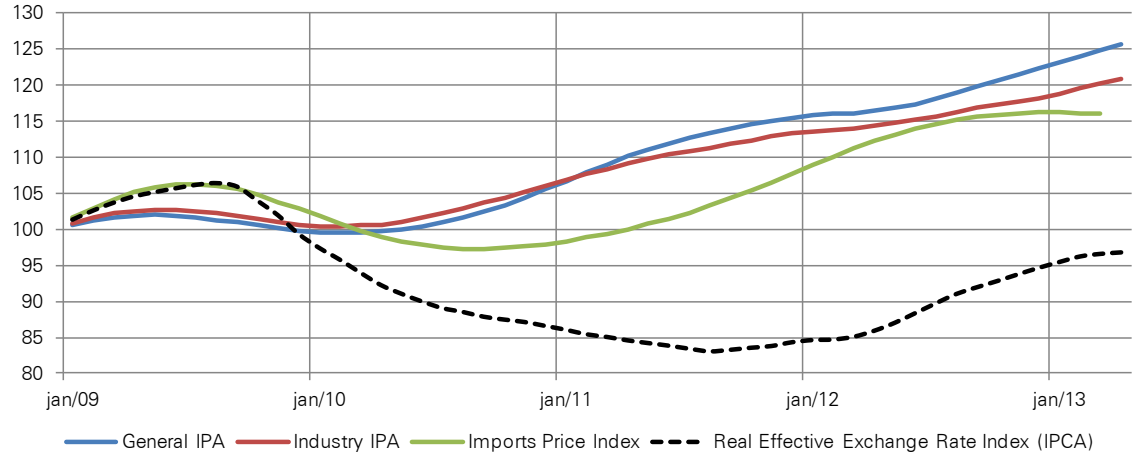
Source: NEIT/IE/UNICAMP, based on FGV, FUNCEX and BCB.

On Graph 3, it is possible to observe that the increase in imported goods' prices exceeded the increase in locally traded goods' prices in the analyzed period. This was certainly compensated by the Real appreciation represented by the decrease in the Real Effective Exchange Rate Index, calculated by the Central Bank of Brazil (BCB). From the average prices implemented in 2004 to its peak in January 2009, imports prices varied 57.2%; wholesale products prices, 28.6%; and the ones implemented by the Brazilian industry, 28%. In the same period, the Real Effective Exchange Rate variation was 33% negative, cheapening imported products when converting to Real.

It is also interesting to note, on Graph 3, that price adjustments of industrial goods in Brazil exceeded those of other segments from 2004 to 2007. From 2011 onwards, industrial prices presented lower adjustments than other segments – reflecting the possible competition intensification with imported industrialized goods.

Graph 4 illustrates the price situation in the post-downturn period. Changing the comparison basis to 2008,it is possible to observe that imported products' price index was maintained lower than the evolution of prices internally implemented from the 2010 recovery. This may partially explain the imported *quantum*'s prolonged growth in 2011 (and the physical production's stagnation), evidenced on Graph 1.

Graph 4 – Evolution of General and Industry's IPA, of the Brazilian Imports Price Index and of the Real Effective Exchange Rate (IPCA) (Jan/2009 to Apr/2013) (12-month moving average – 2008:100)



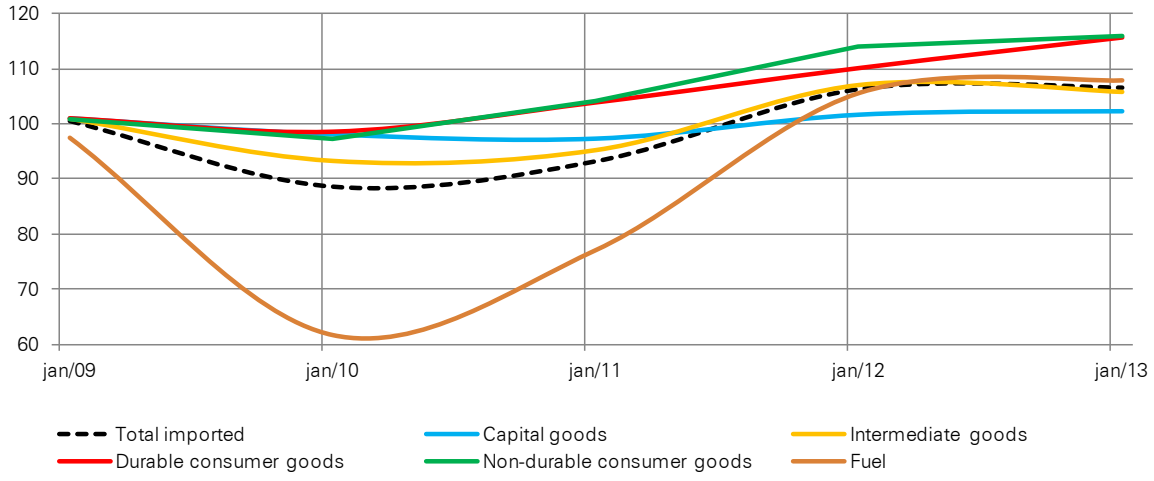
Source: NEIT/IE/UNICAMP, based on FGV, FUNCEX and BCB.

The decrease trend in imported prices was added to the Real depreciation reversal observed in the immediate post-downturn – providing a large price advantage to products brought from the rest of the world. Prices in dollars of imported goods strongly decreased throughout 2010, taking an upward trend in 2011 until mid-2012, when they stabilized almost in the same level of local prices.

Price recovery in dollars of imported goods and stagnation of Real appreciation process may have contributed to the decrease in imported *quantum* in 2012 (Graph 1). This has not yet resulted in actual improvement of the Brazilian industry performance, but may do so.

Aiming at qualifying price evolution of imported products, Graph 5 shows their behavior by use category using the 12-month moving average (based in 2008). An important part of the decrease in prices of imported products post-downturn was due to a recession of fuel prices, which was already fully recovered in the second half of 2011. Capital goods' prices were the ones that had less variation in the period. Non-durable consumer goods' prices, in turn, which experienced a great pressure in the period, have been flat since mid-2011, reflecting on the calculated moving average for the second half of 2012.

Graph 5 – Price Index of Imported Products by Use Category (Jan/2009 to Mar/2013) (12-month moving average – 2008:100)

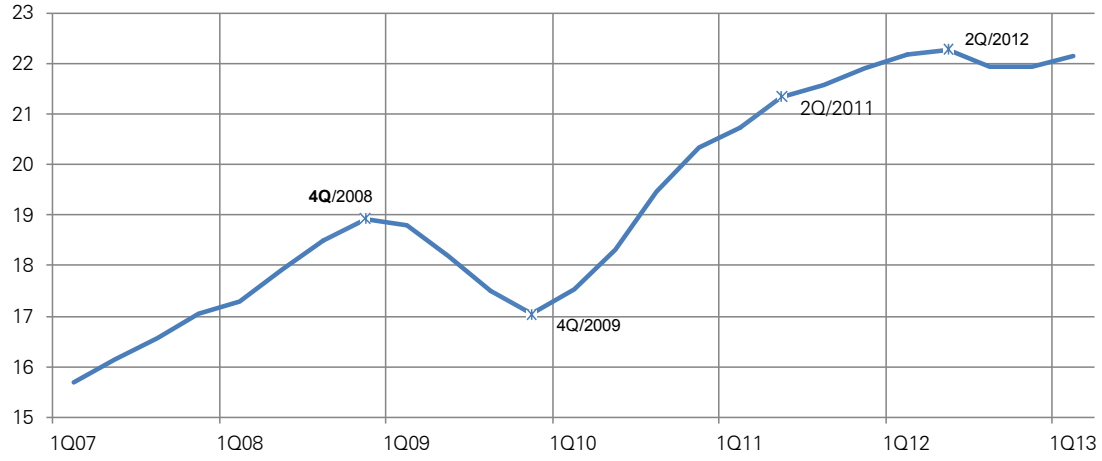


Source: NEIT/IE/UNICAMP, based on FUNCEX.

Graph 6 shows evolution data of Imports Penetration Coefficient at constant prices for the Brazilian industry, estimated by National Industry Confederation (*Confederação Nacional da Indústria* – CNI). The entity estimates the coefficient from IBGE's production statistics and Secex/MDIC's foreign trade statistics in partnership with FUNCEX, measuring the participation of imported goods in local consumption (considering both final and intermediate consumption). Therefore, it is a synthetic indicator of data explored above.

According to the coefficients estimated at constant prices, it is possible to observe that the increasing participation of imports in local consumption was interrupted by the downturn in the last quarter of 2008. It recovered, however, from the fourth quarter of 2009 on, receding only in the last quarters of 2012, and recently increasing again in the first quarter of 2013. Between the first quarter of 2007 and the last quarter of 2008, "imports penetration" grew 3.2 p.p., or 0.46 p.p. each quarter, in average, for seven consecutive quarters. Between the fourth quarter of 2009 and the last quarter of 2011, the coefficient grew 4.9 p.p., or 0.61 p.p. each quarter, in average, for eight consecutive quarters. Imports progress in supplying industrial goods in the post-downturn period was even more accentuated than in the previous year.

Graph 6 – Imports Penetration Coefficient (1Q07 to 1Q13) (4-month accrual, in %, 2007 constant prices)



Source: NEIT/IE/UNICAMP, based on CNI.

Between the last quarter of 2011 and the second quarter of 2012, there is a growth deceleration in imported goods penetration that decreases its expansion to 0.19 p.p. each quarter (for two quarters). The coefficient then decreases in the third quarter and is kept flat in the fourth quarter of 2012, growing again in the first quarter of 2013.

Data points to the fact that in the recent period, particularly from early 2012, the most favorable exchange rate reduced the foreign demand impact. Obviously, in an environment of demand moderation and production stagnation, imports naturally tend to grow less. Expectation of a less favorable exchange rate may result in a more promising relationship than the one verified in 2010 and 2011 between local industrial production and imports for the next periods. If a change in the demand's profile is confirmed – with greater investment weight and less consumption contribution –, it is important to have a positive link between local demand and local industrial production, which the exchange rate will certainly play a central role to. The industrial policy will also be essential to avoid further detachment between local demand and industrial production.

References and Information Sources

AGÊNCIA BRASILEIRA DE DESENVOLVIMENTO INDUSTRIAL (ABDI)/NÚCLEO DE ECONOMIA INDUSTRIAL E DA TECNOLOGIA (NEIT)/Universidade Estadual de Campinas (UNICAMP). **Bulletin of Industrial Conjuncture**. September 2012, December 2012 and March 2013.

BANCO CENTRAL DO BRASIL. Consolidated Economic Indicators. Available at: http://www.bcb.gov.br/?INDECO. Accessed on: June 06, 2013.

FEDERAÇÃO NACIONAL DA DISTRIBUIÇÃO DE VEÍCULOS AUTOMOTORES (FENABRAVE). Newsletters. April and May 2013.

FUNDAÇÃO CENTRO DE ESTUDOS PARA O COMÉRCIO EXTERIOR (FUNCEX). **Foreign Trade Bulletin**. Several numbers.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). **Monthly Industrial Research – Physical Production** (PIM-PF).

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). **National Accounts System.** Quarterly Accounts.

LEO, Sergio. Queda nas vendas de petróleo surpreendeu "até os pessimistas". **Valor Econômico**, May 3-5, 2013.

MINISTÉRIO DO DESENVOLVIMENTO, INDÚSTRIA E COMÉRCIO EXTERIOR (MDIC). **Secretaria de Comércio Exterior (SECEX). Foreign Trade Statistics**. Severalyears.

MINISTÉRIO DO TRABALHO E DO EMPREGO (MTE). **Employment and Unemployed General Database** (CAGED).

RESENDE, Thiago and MARCHESINI, Lucas. Balança tem déficit recorde no quadrimestre. **Valor Econômico**, May 3-5, 2013.

SARAIVA, A. IBGE: safra brasileira de grãos deverá crescer 14,2% em 2013. **Valor Econômico**, September 05, 2013. Available at: http://www.valor.com.br/agro/3117156/ibge-safra-brasileira-de-graos-devera-crescer-142-em-2013. Accessed on: May 31, 2013.

SOJA: Preços seguem elevados mesmo com safra brasileira recorde. NotíciasAgrícolas, May 27, 2013. Available at: http://www.noticiasagricolas.com.br/noticias/soja/122901-soja-precos-seguem-elevados-mesmo-com-safra-brasileira-recorde.html#.Uaju1kCTiSo. Accessed on: May 31, 2013.


ABDI
Agência Brasileira de Desenvolvimento Industrial


GOVERNO FEDERAL
BRASIL
PAÍS RICO É PAÍS SEM POBREZA