



STATE UNIVERSITY OF CAMPINAS – UNICAMP

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**Project: Bulletin of Industrial Conjuncture,
Sectoral Monitoring, Industry Overview and
Industrial Policy Analysis**

Bulletin of Industrial Conjuncture

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The deceleration of the Brazilian economy became evident as of the last quarter of 2008, mirroring the intensification of the international financial crisis. The Gross Domestic Product (GDP) grew slightly by 1.3% in the last quarter of 2008 and contracted 1.8% in the first quarter of 2009, when compared with the same period in previous years (Table 1). Considering the variation related to the immediately previous quarter (seasonally adjusted), a reduction of 3.6% in the last quarter of last year – the highest quarterly reduction in the historical data series beginning in 1996 – stands out, together with that of 0.8% in the first quarter of this year (National System of Accounts/Sistema de Contas Nacionais – SCN/IBGE). Therefore, a moment of economic recession takes shape, causing great concern over its consequences.

**Table 1 – GDP Variation Rate per Activities and Demand Components
(4Q/2008 and 1Q/2009) (In %)**

	Quarterly rate against same quarter of previous year		Quarterly rate against immediately previous quarter (*)	
	4Q/2008	1Q/2009	4Q/2008	1Q/2009
Agriculture and Livestock	2.2	(1.6)	(1.0)	(0.5)
Industry	(2.1)	(9.3)	(8.2)	(3.1)
Mining	0.2	(1.1)	-	-
Manufacturing	(4.9)	(12.6)	-	-
Civil Construction	2.1	(9.8)	-	-
Electricity, gas and water	3.2	(4.2)	-	-
Services	2.5	1.7	(0.4)	0.8
GDP at basic price	1.0	(1.5)	(3.7)	(0.4)
GDP at market price	1.3	(1.8)	(3.6)	(0.8)
Household consumption expenditure	2.2	1.3	(1.8)	0.7
Government consumption expenditure	5.5	2.7	0.5	0.6
Gross fixed capital formation	3.8	(14.0)	(9.3)	(12.6)
Exports of goods and services	(7.0)	(15.2)	(3.2)	(16.0)
Imports of goods and services (-)	7.6	(16.0)	(6.6)	(16.8)

(*) Seasonally adjusted.

Note: These data include the revision of numbers previously released by IBGE. Therefore, there may be differences in relation to data included in previous bulletins of industrial conjuncture.

Source: System of National Accounts (SCN)/IBGE.

The economic growth cycle based on the dynamism of domestic demand was drastically interrupted as of the end of last year. An analysis of the behavior of demand components reveals that the deceleration in the domestic demand growth observed in the last quarter of 2008 intensified and even transformed into a significant reduction in the first quarter of 2009, depending on the component under analysis. There was deceleration in the growth of household (1.3%) and government (2.7%) consumption and a substantial reduction in gross fixed capital formation (-14.0%) and imports of goods and services (-16.0%) in the first quarter of 2009 in relation to the same period in 2008 (Table 1).

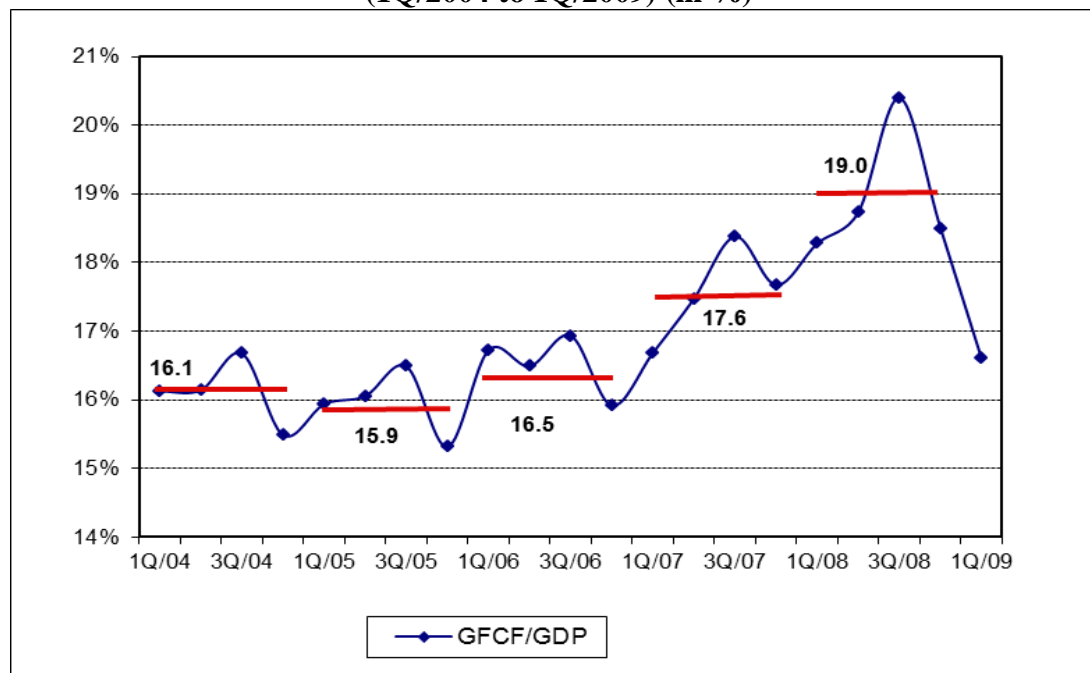
The difficulties in domestic demand also appear in data on the first quarter of this year in relation to the immediately previous quarter (considering the seasonal adjustment): a sharp fall in gross fixed capital formation (-12.6%) and in imports of goods and services (-16.8%). However, household and government consumption avoided an even poorer performance in their activity level growing, albeit timidly, in the first quarter of 2009 when compared with the immediately previous quarter (0.7% and 0.6%, respectively).

Observing foreign demand through exports behavior, we can perceive how its negative influence on the economic growth at the end of 2008 (-7.0%) intensified

dramatically in the first quarter of 2009 in relation to the same period last year (-15.2%) and to the immediately previous quarter (-16.0%).

Another indicator of the difficulties the Brazilian economy is facing is deceleration in the investment rate, which reached its highest level in the decade in the third quarter of last year (20.4%), decreasing in the last quarter of 2008 (to 18.5%) and in the first quarter of 2009 (to 16.6%) (Chart 1).

**Chart 1 – Evolution of Investment Rate
(1Q/2004 to 1Q/2009) (in %)**



Source: SCN/IBGE.

When we detail the behavior of economic activities, the negative performance of the Brazilian industry continues causing concern, especially in the manufacturing industry. In the March issue of the Bulletin of Industrial Conjuncture, we highlighted a contraction of 4.9% in the manufacturing industry, which led to a reduction of 2.1% in the general industry in the last quarter of 2008 in relation to the same period of the previous year. Comparing the behavior of economic activities in the last quarter of 2008 with that in the immediately previous quarter (seasonally adjusted), this negative performance becomes even more evident (reduction of 8.2%). Difficulties in the industry were confirmed in the first quarter of this year, considering the sharp falls of 12.6% in the manufacturing industry and of 9.3% in the general industry in relation to the same period in 2008.

A comparison between data on the first quarter of this year and on the last quarter of 2008 (seasonally adjusted) allows us to discern a slight softening in their negative performance (reduction of 3.5%), probably meaning that the crisis' most acute effects on the Brazilian industry may actually be concentrated at the end of last year. Even so, the industrial activity is definitely behaving in a much more worrying way than other economic activities – agriculture/livestock and services – in a context of economic crisis. Services were able to maintain a differentiated behavior, cushioning to some extent the negative effects on industry and agriculture/livestock in the first quarter of the year.

An analysis of data from the Monthly Industrial Survey-Physical Production (PIM-PF/IBGE) confirms that the Brazilian industry experienced serious difficulties in the first quarter of 2009 (Table 2). Physical production reduced significantly in the manufacturing industry (-14.5%), in the mining industry (-15.8%), and in the general industry (-14.6%) in the first quarter of this year in relation to the same period of last year. These reductions are definitely much more marked than those seen at the end of 2008. Considering the variation accumulated over the four quarters that ended in March 2009, there was a reduction of 1.9% in the general and manufacturing industry, whereas the mining industry fell by 1.8%. It meant a clear reversion in the still positive performance accumulated last year (3.1% and 3.8%, respectively).

**Table 2 – Growth Rate of Industrial Production (In %)
(1Q/2008 to 1Q/2009)**

Activities	1Q 2008	2Q 2008	3Q 2008	4Q 2008	1Q 2009
Quarterly growth rate in relation to the same quarter of the previous year					
General Industry	6.4	6.2	6.7	(6.3)	(14.6)
Mining Industry	6.8	6.3	8.9	(6.5)	(15.8)
Manufacturing Industry	6.4	6.2	6.6	(6.3)	(14.5)
Growth rate accumulated over the past four quarters					
General Industry	6.6	6.7	6.8	3.1	(1.9)
Mining Industry	6.2	6.3	7.0	3.8	(1.8)
Manufacturing Industry	6.7	6.7	6.8	3.1	(1.9)

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

When compared with production data for April 2008, the most recent data for April 2009 continue to show their downward trajectory in the general and manufacturing industry (-12.3%) and in the mining industry (-10.8%). However, comparing data for April with those for March 2009 (seasonally adjusted), we observe a modest recovery in both the mining (1.1%) and the manufacturing industry (1%), resulting in a slight recovery of the industrial production in general (1.1%). This rather slow and gradual recovery has been detected monthly since January this year, and cannot be overlooked in an analysis of the Brazilian industrial production prospects for the near future.

Considering data on industrial production by categories of use, we observe a generalization of the negative performance observed in the first quarter of 2009 in relation to the same period in 2008, with emphasis on a downward movement in the production of consumer durables (-22.5%), capital goods (-20.2%), and intermediate goods (-18.1%) (Chart 2).

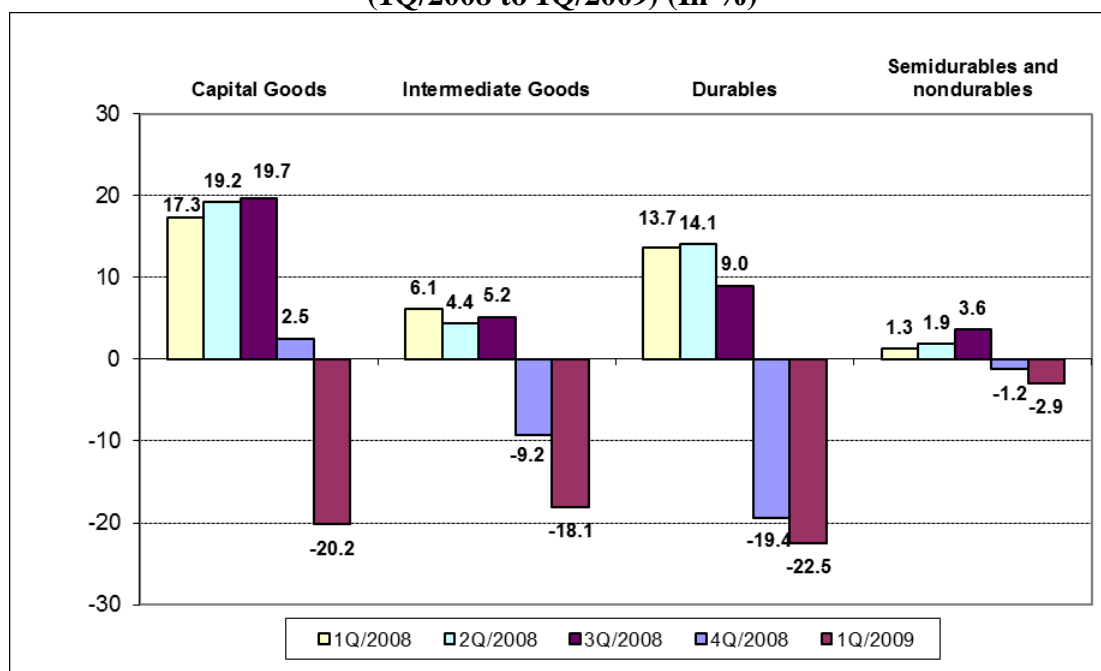
This negative performance in the production of consumer durables and intermediate goods had already shown in the last quarter of last year, reverting the positive performance observed during the industrial growth cycle in the preceding period. As to intermediate goods, significantly export-oriented, the downward trend in production has especially mirrored the foreign demand cooling since the end of last year. On its turn, deterioration in the production of consumer durables was headed primarily by the performance of the automotive production at the end of the year, which suffered greatly with the negative adjustment in the expectations of the business system, motivated mainly by credit shortage, as stressed in the last Bulletin of Industrial Conjuncture (March 2009).

However, a comparison of data on the physical production of consumer durables in the first quarter of this year with those on the immediately previous quarter

(seasonally adjusted) shows a slight recovery (1%), which makes its performance different from that of other categories of use analyzed. The most recent data for April, when compared with those for March 2009 (also seasonally adjusted), continue to reveal a small growth in the production of consumer durables (2.7%), even exceeding the also positive production performance in other categories of use in the same month. As to consumer durables, this performance seems to mirror the incentives offered to car sales, changing the expectations of the automotive industry at the beginning of this year. This might be a sign that the production of consumer durables has already gone through its most difficult moment and that there is a reversion in expectations that tends to establish an upward, albeit slow, trend in the next months.

The production of capital goods, which headed the previous industrial expansion, showed a substantial deceleration in the last quarter of the year, which turned into a marked contraction in the first quarter of 2009 in relation to the same period of last year. Comparing with the last quarter of the year (based on a seasonally adjusted series), there was an unprecedented fall of 18.6% in the production of capital goods, exceeding the negative performance of other categories of use in the same period. In other words, the sector of capital goods clearly demonstrates the adverse reflects of the global crisis on the Brazilian industry. However, a comparison of data on the production of capital goods in April with that in March 2009 (seasonally adjusted) reveals a slight recovery (2.6%), rather similar to the level observed for consumer durables. The prospects for capital goods production are still very obscure, and depend on reducing its idle capacity and resuming investments in the near future.

**Chart 2 – Evolution of Industrial Production per Category of Use
(growth rate in relation to the same period of the previous year)
(1Q/2008 to 1Q/2009) (In %)**



Source: NEIT/IE/UNICAMP, based on data from PIM-PF/IBGE.

An analysis of production data per industrial activity, especially the variation accumulated during the 12 months that ended in March 2009, reveals a deterioration trend in the production performance of most industrial sectors. This deterioration occurred both in those sectors that were following an upward trajectory and started to face growth deceleration and even production reduction, and in those that were already following a downward trajectory since the end of last year and whose production suffered an intensified decline at the beginning of this year (cases that include 25 of the 27 sectors listed in the PIM-PF/IBGE).

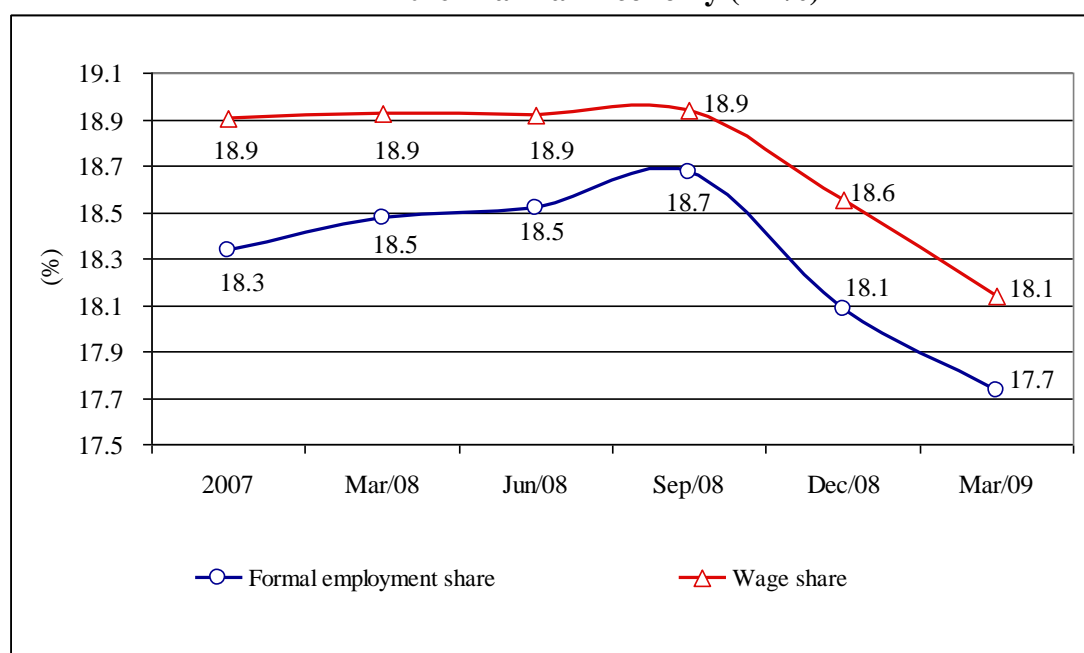
Almost all sectors related to capital goods or to consumer durables, which had previously sustained the industrial production growth, suffered a reduction in their production in the total accumulated during the 12 months that ended in March this year, especially electronic supplies, communication devices and equipment (-14.9%) and office machinery and data processing equipment (-10.9%). Other industrial sectors showed similar contraction in production: wood (-15.8%); footwear and leather products (-11.2%), and chemicals (-8.5%). The five sectors mentioned above headed production decline in the total accumulated in the year that ended in March 2009.

Considering the variation in physical production in the first quarter of 2009 in relation to the same quarter in 2008, it also stands out the negative performance of some sectors that had played a relevant role in the industrial growth in the previous period, such as machinery and equipment (-28.2%) and motor vehicles (-27.2%), besides electrical machinery, equipment and supplies (-27.0%), and basic metallurgy (-30.8%). The sector of machinery and equipment even headed the production decline in the first quarter of 2009 when compared with the immediately previous quarter (-21.3% – with seasonal adjustment). Some of the sectors mentioned were particularly affected by the credit interruption that resulted from the global crisis, since they depend crucially on the maintenance of credit expansion.

We can see that, out of the 27 industrial sectors included in the PIM-PF/IBGE, just seven grew in the total accumulated during the 12 months that ended in March 2009. Only some sectors, exceptionally, were able to maintain or even expand their high growth rates in the period mentioned, such as other transportation equipment (41%), which remain leveraged in aircraft (66.9%) and railroad rolling stock (33.6%) manufacturing; pharmaceuticals (16.4%); and medical and therapeutic equipment, optical and other instruments (11.3%).

The adverse effects of the crisis on the Brazilian industrial production have been spreading to industrial employment, which has been losing share in Brazilian formal employment since the last quarter of 2008. The share of the industrial employment followed an upward trajectory until the third quarter of 2008, but moved sharply backward in the last quarter, closing the year with a relative stock lower than that of the previous year (18.3% in 2007 against 18.1% in 2008) (Chart 3). The trajectory of wage bill in industry remained steady until the third quarter of last year, and has also moved backward since then. From September to December 2008, the wage bill moved back 0.3%, whereas the industrial employment lost 0.6% of its share in the Brazilian formal labor market. In the first quarter of 2009, the loss of job vacancies and wage bill in industry increased 0.4% and 0.5%, respectively. The movement of both variables in the semester under analysis points to some resistance in the average salary in a job-loss scenario.

Chart 3 – Evolution of the Share of Industrial Formal Employment and Wage Bill⁽¹⁾ in the Brazilian Economy (In %)



(1) Data deflated by IPCA (IBGE).

Source: NEIT/IE/UNICAMP, based on data from RAIS and CAGED/MTE.

The generalization of this contraction in physical production in the Brazilian industry was followed by a significant negative adjustment in formal industrial employment in the first quarter of 2009 (Table 3). Seasonality seems to have been infringed, since almost 147,000 job vacancies were closed in a period when they are usually open. However, data for April 2009 show a softening in the downward trend in formal employment, considering that job vacancies losses were rather inexpressive in the

Brazilian industry (157 vacancies – CAGED/MTE). As regards to the wage bill of net hirings, calculated by the difference between the wage bill of hirings and dismissals, seasonality had been disrupted in the last quarter of 2008, when the decline in the average salary of the remaining stock of employees contributed to an actual contraction in the wage bill paid in the Brazilian industry. This movement intensified in the first quarter of 2009. Data for April 2009 confirm the contraction trend in the wage bill of net hirings, but surely at a lower level than those in the first months of this year.

Observing this more marked decline in the industry wage bill than in the level of employment, we can suggest two possibilities: a generalized movement for dismissing workers with higher relative pay and/or a rearrangement of employment among sectors that pay differentiated average salaries.

Table 3 – Creation of Job Vacancies and Wage Bill of Net Hirings in the Brazilian Industry (1Q/2007 to 1Q/2009)

Year	Creation of Vacancies				Wage Bill of Net Hirings (in thousands of R\$ for Dec/08*)			
	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter	1 st quarter	2 nd quarter	3 rd quarter	4 th quarter
2007	108,986	297,232	473,135	386,604	17,725	77,437	126,321	25,071
2008	153,090	320,758	514,551	166,256	63,025	120,477	181,571	(155,711)
2009	(146,761)	-	-	-	(279,247)	-	-	-

*Data deflated by IPCA (IBGE).

Source: NEIT/IE/UNICAMP, based on data from RAIS and CAGED/MTE.

Comparing data for December 2008 with those for the same month in 2007, we observed a generalized reduction in the actual average salary¹ in all Brazilian industrial sectors last year (Table 4). Considering the variation in the employment level in the same period, we perceived that almost all industrial sectors have improved, except for the manufacturing of wood and footwear and leather products. In general, both the mining industry and the manufacturing industry improved their levels of employment (6.0% and 2.3%, respectively), but in both of them the actual average salary declined in the period under analysis (-4.1%).

We have also observed that the sectors that maintained the highest average pay (placed at the bottom of Table 4) were those that showed the strongest employment growth and the sharpest fall in the average level of salaries paid, such as petroleum and gas extraction; supporting activities for mineral mining; medicinal chemicals manufacturing; other transportation equipment, excluding motor vehicles; and metallic mineral mining. However, these sectors are not labor-intensive – the job posts they generate do not amount to 4% of the total in industry.

On their turn, labor-intensive sectors – such as food manufacturing; apparel manufacturing; metal product manufacturing, excluding machinery and equipment; motor vehicles; and rubber and plastic products manufacturing – increased somewhat in employment (between 0.4% and 5.2%) and dropped reasonably in actual average salary (between 2.5% and 5.0%).

¹ The average salary was estimated based on data on the stock of workers and wage bill reported in the Annual List of Social Information (RAIS/MTE) for 2007, and updated according to data on hirings and dismissals from the General Register of Employed and Unemployed Persons (CAGED/MTE).

Table 4 – Variation of Volume of Employment and Actual Average Salary ⁽¹⁾ in Industrial Sectors ⁽²⁾ (December 2007 to December 2008) (In %)

Industrial Sectors	Variation of stock of job vacancies	Variation of average salary
Apparel manufacturing	3.7 ↑	(3.5) ↓
Leather processing, leather products and footwear manufacturing	(4.1) ↓	(3.0) ↓
Wood products manufacturing	(7.6) ↓	(2.5) ↓
Furniture manufacturing	1.5 ↑	(4.1) ↓
Textile products manufacturing	(0.7) ↓	(4.3) ↓
Food manufacturing	2.3 ↑	(4.7) ↓
Nonmetallic mineral products manufacturing	3.8 ↑	(4.8) ↓
Nonmetallic mineral mining	1.3 ↑	(2.7) ↓
Other miscellaneous manufacturing	4.4 ↑	(4.0) ↓
Metal products manufacturing	5.2 ↑	(5.0) ↓
Rubber and plastic products manufacturing	0.4 ↑	(4.1) ↓
Printing and reproduction of recordings	5.0 ↑	(4.9) ↓
Beverage manufacturing	3.7 ↑	(5.2) ↓
Coal mining	9.6 ↑	(1.9) ↓
Maintenance, repair and installation of machinery	4.7 ↑	(7.8) ↓
Electrical machinery and supplies manufacturing	4.4 ↑	(4.8) ↓
Pulp and paper manufacturing	1.6 ↑	(3.6) ↓
Data processing, electronic and optical equipment manufacturing	0.2 ↑	(2.6) ↓
Coke, petroleum by-products and biofuels manufacturing	8.8 ↑	(4.5) ↓
Machinery and equipment manufacturing	6.0 ↑	(5.7) ↓
Metallurgy	3.2 ↑	(3.7) ↓
Tobacco products manufacturing	2.6 ↑	(4.0) ↓
Chemical products manufacturing	2.8 ↑	(5.2) ↓
Motor vehicles, trailers and bodies manufacturing	2.5 ↑	(4.3) ↓
Metallic mineral mining	8.9 ↑	(4.7) ↓
Other transportation equipment manufacturing	10.3 ↑	(8.1) ↓
Medicinal chemicals manufacturing	4.4 ↑	(6.3) ↓
Support activities for mineral mining	10.8 ↑	(9.3) ↓
Petroleum and gas extraction	8.6 ↑	(5.8) ↓

(1) Data deflated by IPCA (IBGE).

(2) Sectors are sorted in ascending order of average salary paid in December 2007.

Source: NEIT/IE/UNICAMP, based on data from RAIS and CAGED/MTE.

A comparison between the most recent data for the end of March 2008 and those for the end of the same month in 2007 shows localized gains in the volume of employment and maintenance of contracted actual average salaries after one semester on a downward trajectory (Table 5).

The mining industry expanded its volume of employment by 3.6%, whereas the manufacturing industry accumulated a negative balance of 2%. There was a retraction in actual average salaries, of -3.0% and -3.7%, respectively. Once again, the sectors with the highest average salaries – except for other transportation equipment – showed more marked employment expansion and salary retraction. The sector of petroleum and gas extraction expanded employment even more, but also showed a sharper drop in actual average salary. The most labor-intensive industrial sectors, in general, showed retraction in the volume of employment – except for the two most labor-intensive sectors: food and apparel, which sustained their employment growth rates in the period under analysis. In general, the downward trajectory followed by actual average salaries remained the same.

Table 5 – Variation of Volume of Employment and Actual Average Salary ⁽¹⁾ in Industrial Sectors ⁽²⁾ (March 2008 to March 2009) (In %)

Industrial Sectors	Variation of stock of job vacancies	Variation of average salary
Apparel manufacturing	1.3 ↑	(3.3) ↓
Leather processing, leather products and footwear manufacturing	(6.2) ↓	(2.9) ↓
Wood products manufacturing	(9.3) ↓	(3.2) ↓
Furniture manufacturing	(1.0) ↓	(4.0) ↓
Textile products manufacturing	(3.5) ↓	(3.6) ↓
Food manufacturing	0.1 ↑	(5.1) ↓
Nonmetallic mineral products manufacturing	0.9 ↑	(4.7) ↓
Nonmetallic mineral mining	0.0 -	(2.3) ↓
Other miscellaneous manufacturing	1.1 ↑	(3.5) ↓
Metal products manufacturing	(1.8) ↓	(4.0) ↓
Rubber and plastic products manufacturing	(3.8) ↓	(3.3) ↓
Printing and reproduction of recordings	2.1 ↑	(4.6) ↓
Beverage manufacturing	1.0 ↑	(5.2) ↓
Coal mining	7.3 ↑	(0.9) ↓
Maintenance, repair and installation of machinery	(1.8) ↓	(5.4) ↓
Electrical machinery and supplies manufacturing	(1.8) ↓	(2.8) ↓
Pulp and paper manufacturing	(1.5) ↓	(2.8) ↓
Data processing, electronic and optical equipment manufacturing	(7.8) ↓	(0.5) ↓
Coke, petroleum by-products and biofuels manufacturing	3.0 ↑	(2.1) ↓
Machinery and equipment manufacturing	(3.1) ↓	(3.3) ↓
Metallurgy	(7.0) ↓	(0.5) ↓
Tobacco products manufacturing	(7.9) ↓	3.9 ↑
Chemical products manufacturing	0.7 ↑	(4.9) ↓
Motor vehicles, trailers and bodies manufacturing	(6.7) ↓	(1.3) ↓
Metallic mineral mining	3.6 ↑	(3.5) ↓
Other transportation equipment manufacturing	(0.2) ↓	(6.6) ↓
Medicinal chemicals manufacturing	2.0 ↑	(5.0) ↓
Support activities for mineral mining	7.9 ↑	(7.5) ↓
Petroleum and gas extraction	9.5 ↑	(6.4) ↓

(1) Data deflated by IPCA (IBGE).

(2) Sectors are sorted in ascending order of average salary paid in December 2007.

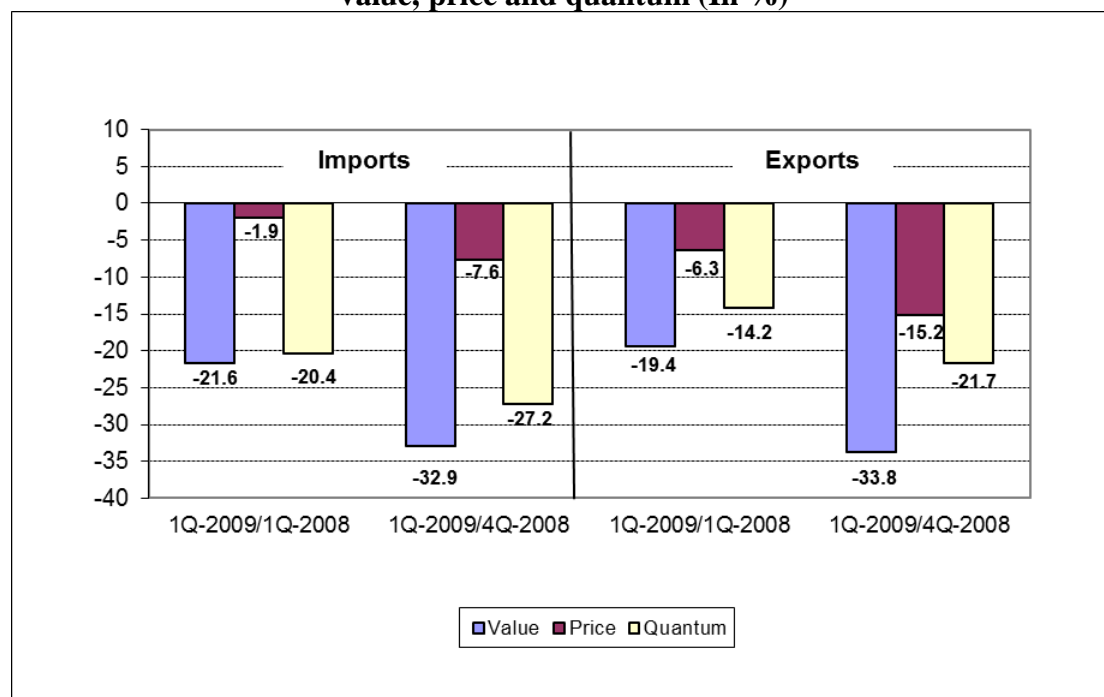
Source: NEIT/IE/UNICAMP, based on data from RAIS and CAGED/MTE.

The data on industrial employment analyzed confirm a familiar scenario of high labor turnover in the Brazilian labor market. Companies that were facing narrowing margins to negotiate as a result of the economic growth have not only dismissed in the economic crisis context, but also reduced their actual average salary levels in a generalized way.

An analysis of Brazilian foreign trade in the first quarter of this year shows a positive balance of US\$ 3 billions (FUNCEX). However, comparing it with the trade balance of the immediately previous quarter, of about US\$ 5 billions, we verify a contraction trend in the quarterly trade surplus, which has been observed since the third quarter of last year. There was a marked drop in the trade surplus from the third to the fourth quarter of 2008 (-38.6%), which intensified from the last quarter of 2008 to the first of 2009 (-41.2%). The strong contraction in the exports performance, both in quantum and price, can be considered the main responsible for this deterioration in the Brazilian trade surplus in the semester that ended in March 2009.

Comparing the first quarter of 2009 with the same period in 2008, we observe a decline both in exports value, to US\$ 31 billions (-19.4%), and in imports value, to US\$ 28 billions (-21.6%) (Chart 4). In both cases, the largest contribution came from quantum reduction, with price reduction contributing a smaller relative share. As to imports, quantum reduction was more significant (-20.4%), following a retraction in activity level observed in the period under study. As to exports, strongly impacted by the international economic scene deterioration and the resulting dwindling foreign demand, quantum contraction stood out (-14.2%), but the price of exported products also contributed significantly (-6.3%).

Chart 4 – Variation Rate of Exports and Imports: value, price and quantum (In %)



Source: NEIT/IE/UNICAMP, base on data from FUNCEX.

A comparison between data for the first quarter of 2009 and the last quarter of 2008 reveals intensification in the negative performance of Brazilian exports and imports (Chart 4). The imports value dropped significantly (-27.2%), especially as a result of a contractionist performance in quantum (-32.9%), but this time with a larger contribution from imported products price (-7.6%). The exports value, on its turn, dropped even more drastically (-33.8%) in consequence of a reduction in the quantum (-21.7%) and price (-15.2%) of exported products. It is evident that the difficulties in the recovery of the Brazilian economy are certainly being followed by the weakening of imports, just as the world economic recession has been responsible for a significant contraction in Brazilian exports.

This declining performance in imports occurred again in April 2009, as it did in March 2009, when we observed a drop in the imported value (-14.3%), caused mainly by quantum reduction (-12.4%), but with a contribution from the also negative performance of imported products price (-2.1%) in the same period (FUNCEX). However, we perceived a reversion, even though localized, in the negative performance of exports, when comparing April with March 2009. The exported value grew (4.3%), pulled exclusively by a recovery in the exported quantum (5.4%), taking into account the maintenance of price reduction in exported products (-1.1%).

Therefore, an analysis of the recent performance of the Brazilian foreign trade demonstrates intensification in trade surplus deterioration, associated mainly with the negative performance of quantum and price in Brazilian exports in a scenario of global economic recession. The recent trend to reappreciate the national currency may heighten the negative effects of the international crisis on Brazilian exports, especially making difficult the recovery of external sales in those industrial sectors that depend on the behavior of the foreign market.

In the near future, we consider that growth resumption in Brazilian economy and industry will depend crucially on domestic market performance, since foreign demand may continue showing little dynamism in the next months. On the other hand, considering the components of domestic demand, it is possible to suppose that investments in machinery and equipment will remain low, since capacity occupation is expected to be slow in most economic sectors. Therefore, the rhythm of household consumption will determine the rhythm of the Brazilian economy recovery, which calls attention again to the importance of credit resumption and the maintenance of low interest rates. In any way, due to the retraction in foreign demand and investments, the current prospect is that of a hard and uncertain way toward economic and industrial recovery over the next quarters.

The Cosmetics Industry

Global Overview of the Cosmetics Industry

According to ANVISA's definition, the cosmetics industry includes the production of "preparations composed of natural or synthetic substances for external use in the various parts of the human body – skin, hair, nails, lips, external genital organs, teeth, and mucous membranes of the oral cavity – aiming exclusively or mainly at cleaning them, perfuming them, changing their appearance and/or correcting body odors, and/or protecting them or keeping them in good conditions". In this definition, we see that the cosmetics industry also includes the production of articles for personal hygiene and perfumery. Some authors adopt the name Industry of Personal Hygiene, Perfumery and Cosmetics. In this bulletin, for simplicity, we opted for calling it cosmetics industry.

From the technical and production point of view, this industry is characterized by a relatively simple basis, involving the manipulation of formulas that, in general, are not highly complex. Although there are no significant technical barriers to trade, companies can take advantage of large economies of scale and scope, both in the use of ingredients and packaging, and in their commercial activities, profiting from common distribution channels, marketing campaigns, and branding strategies.

Different possibilities of profiting from such economies of scale and scope also help to explain the diversity of production and trading strategies in companies operating in this sector. On the one hand, we can see that there are large diversified multinational companies producing a wide range of consumer products besides cosmetics, such as food, cleaning products, and pharmaceuticals. The main examples are Procter & Gamble, Unilever, Colgate, and Johnson & Johnson.

On the other hand, there are large companies operating in a more specialized way in the cosmetics sector, but that serve practically all its segments, such as hair products, make-up, perfumes etc. Market segmentation also occurs by type, age group, gender, income etc. In contrast to the large diversified companies, which use traditional retail sales channels as supermarkets and drugstores, the specialized companies seek to control other more specialized channels as well, such as door-to-door sales, beauty salons, specialized shops, and franchise networks. As an example of the second group, we can mention international companies as L'Oreal, Avon, Beiersdorf, Estée Lauder, Shiseido, in addition to domestic companies such as Natura and O Boticário. It is also worth emphasizing that these companies, when compared with the first ones, adopt product strategies that privilege innovation, differentiation, and constant launch of new products.

Finally, together with these two types of company, there is a large collection of small and medium-sized companies that, thanks to small technical barriers, do not find difficulty to enter market, but face restrictions to expand in view of their limited assets, especially brand names and distribution channels.

The global cosmetics market reached US\$ 290 billions² in 2007, which represented an annual average growth of 5.9% in relation to the percentage observed in 2000 (Table

² Measured at consumer prices.

1). Comparing the two years shown in the table, it is possible to perceive in the ranking an increase in the relative importance of emerging countries. Brazil, especially, increased from sixth largest market in 2000 to third in 2007, when it represented 7.6% of the global market. Even considering that part of this performance is a consequence of its national currency appreciation, which raised the value of the Brazilian market in dollars, it is a rather favorable result.

It is also possible to perceive China's increasing importance; it moved from eighth to seventh in rank, raising its relative share from 2.2% in 2000 to 4.9% in 2007. Russia, which was not among the top 10 in 2000, became the ninth largest market in 2007.

Table 1 – World Cosmetics Market and Ranking of Top 10 Markets (2000 and 2007) (in US\$ millions)

2000			2007		
Country	Market	Share (%)	Country	Market	Share (%)
1. United States	47,6	24.4	1. United States	51,3	17.6
2. Japan	23,0	11.8	2. Japan	30,5	10.5
3. Germany	9,8	5.0	3. Brazil	22,2	7.6
4. France	9,3	4.8	4. United Kingdom	14,6	5.0
5. United Kingdom	9,0	4.6	5. France	14,5	5.0
6. Brazil	8,5	4.4	6. Germany	14,5	5.0
7. Italy	7,1	3.7	7. China	14,3	4.9
8. China	5,6	2.9	8. Italy	10,5	3.6
9. Mexico	4,4	2.2	9. Russia	9,9	3.4
10. Spain	4,3	2.2	10. Spain	8,9	3.1
TOP 10	128,6	66	TOP 10	191,2	65.7
TOTAL	195,0	100	Total	290,9	100.0

Source: NEIT/IE/UNICAMP, based on data from Euromonitor, extracted from ABIHPEC.

Therefore, we can see that the growth rate in cosmetics consumption in emerging countries has been higher than in mature markets. Among the factors that explain this more accelerated growth, we have to stress GDP growth rate itself, which has been improving the income available for consumption in these countries. Besides, sociodemographic changes also expand possibilities for consuming in a more accelerated pace than in developed countries, such as increase in women's share in the labor market, increase in life expectancy, and mainly, for China, effects on consumer habits in view of an increasing urban population.

It is also worth observing that, although emerging countries have increased importance as markets, developed countries continue holding the largest share of world production and trade. Moreover, the large companies that control the largest share of world production are headquartered in the United States, in Japan, or in the European Union.

Analyzing the value of world cosmetics exports³ and the main exporting countries, we observe an average growth rate in exports by 13.6% per annum between 2000 and 2007 (Table 2). As for the main exporting countries, we perceive a relative stability in those that top the ranking. France stands out with exports of about US\$ 13 billions in 2007, representing a share of 21%, followed by Germany and the United States. At

³ We considered the codes 33.03, 33.04, 33.05, 33.06, 33.07, and 34.01, of the four-digit Harmonized System, to make up the international trade of cosmetics.

the bottom of the list come developing countries as China and Poland, which were not listed in 2000, but ranked eighth and ninth, respectively, in 2007.

**Table 2 – Largest Cosmetics Exporting Countries
(2000 and 2007) (In US\$ millions)**

2000			2007		
Country	Exports	Share %	Country	Exports	Share %
1. France	5,708	22.4	1. France	13,053	21.0
2. United States	3,305	12.9	2. Germany	7,579	12.2
3. United Kingdom	2,616	10.2	3. United States	6,586	10.6
4. Germany	2,554	10.0	4. United Kingdom	5,069	8.2
5. Italy	1,476	5.8	5. Italy	3,414	5.5
6. Belgium	878	3.4	6. Spain	2,475	4.0
7. Spain	849	3.3	7. Belgium	2,151	3.5
8. Canada	609	2.4	8. China	1,726	2.8
9. Japan	588	2.3	9. Poland	1,671	2.7
10. The Netherlands	555	2.2	10. The Netherlands	1,640	2.6
Total (Top 10)	19,138	75.0	Total (Top 10)	45,365	72.9
World Total	25,532	100.0	World Total	62,187	100.0

Source: NEIT/IE/UNICAMP, based on data from Comtrade.

In addition to this upward trend in the importance of emerging countries as producing and exporting markets and centers, it is also possible to emphasize other trends that are acquiring significance and can be perceived in business strategies adopted by the most important companies in the sector.

First come the leadership position of beauty products and make-up, especially those associated with skin care. According to Euromonitor, the skin care segment grew 40% between 2002 and 2007, when it reached US\$ 65.7 billions in value. Among the factors that have been fostering its growth is increase in life expectancy and in the average age of the population, especially in developed countries. Their sociodemographic structure, combined with high income *per capita* and a growing interest in health and beauty, has been directing the investments of cosmetics companies to these segments. At the same time, an increase in income *per capita* in emerging countries is also contributing to stimulate the demand for such products in these countries as well, although in segments of lower unitary value.

With regard to business strategies, this trend has been translating into an increasing use of new active ingredients for actions such as anti-age, anti-signs, moisturizing, enhanced skin elasticity and firmness etc., besides developing new proteins, amino acids, and amino-acid chains with more specific functions. Vehicles of application are also receiving more and more investments. Recently, the development of nanotechnology applications to cosmetics has grown stronger as a priority field in R&D laboratories in large companies and in agreements between laboratories and research institutions and universities.

A second important trend is the growing interest of companies in developing products that use natural and organic ingredients, fostered by consumers' environmental and ecological concern. It is worth stressing that this trend is more recent than the one pointed out previously, and, for this reason, it is still a little difficult to define exactly what an "organic" or "green" product is, a cause of concern for health surveillance and regulatory agencies. In general, companies that seek differentiation appealing to organic products emphasize a wider use of natural extracts of flowers, seeds and fruit, and a more limited use of synthetic ingredients that could damage skin, such as

coloring and preservatives. Besides, environmental responsibility is a concern that ranges from the use of recyclable or biodegradable packaging, through commitment to not test on animals nor use endangered fruit and flower species, to the environmentally sustainable production of natural ingredients.

Finally, the third trend that is acquiring importance recently is the launch of “nutricosmetics”, as orally-taken products (food, beverage, or pills) with ingredients that promise to improve body, skin, and hair health and beauty are called. Many companies in the food sector, such as Danone, are seeking to develop functional food, and recently started to underline the effects of its products on beauty. In the Asian market, Nissin Foods has recently launched noodles enriched with collagen. However, perhaps the most relevant initiative is L’Oreal’s, which developed a nutricosmetics line together with Nestlé. The products developed have active antioxidant ingredients that are absorbed by the body.

On the one hand, the trends highlighted above point to the growing importance of applying and interpenetrating technological developments from several fields, not only from traditional chemistry, but also from pharmaceuticals, biotechnology, and nanotechnology in the cosmetics sector. At the same time, distribution channels themselves are being transformed, mimicking forms that are characteristic of other sectors. On the other hand, regulatory issues also become increasingly important, both because of the use of active ingredients, which require more control and inspection due to potential risks to health, and because it is necessary to establish clear standards and norms to classify products and offer customers more precise meanings for terms such as “organic” and “natural”.

Characteristics and Recent Performance of the Brazilian Cosmetics Industry

According to data from ANVISA, there were 1,694 companies registered as cosmetics manufacturers at the end of 2008, a number that represents an increase of about 6.1% in relation to the end of 2007 (Table 3). According to these data, this increase was a little higher in the Northeast and Center-West regions, which raised their share in the total of companies in this sector. The share of companies located in the Northeast reached 8.6% of the total in 2008, and that of companies in the Center-West reached 6.6% in the same year. Notwithstanding, it is possible to perceive that the Southeast region still concentrates the largest part of the production, with about 64% of companies, followed by the South region, with nearly 20%.

Table 3 – Number of Cosmetics Companies (per region) (2006-2008)

	2006	%	2007	%	2008	%
North	20	1.3	21	1.3	23	1.4
Center-West	88	5.9	98	6.1	111	6.6
Northeast	117	7.8	132	8.3	145	8.6
Southeast	970	64.9	1027	64.3	1079	63.7
South	299	20.0	318	19.9	336	19.8
Total	1494	100.0	1596	100.0	1694	100.0

Source: NEIT/IE/UNICAMP, based on data from ANVISA.

Data on sales in this sector point to an annual average growth of 5.8% in physical production in the period 2004-2008. With regard to value, the nominal growth was of 12.8% per annum, which means a rather positive performance (Table 4).

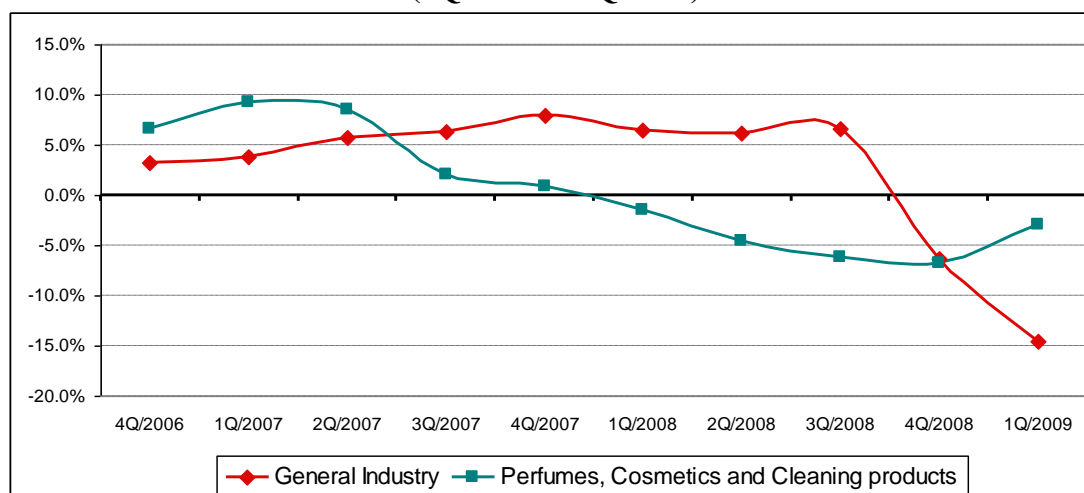
**Table 4 – Evolution of Sales in the Cosmetics Industry (2004-2008)
(In tons and R\$ millions)**

Year	Tons	R\$ millions
2004	1,252,0	13,390,6
2005	1,344,6	15,379,7
2006	1,418,8	17,550,1
2007	1,496,2	19,516,5
2008	1,570,8	21,654,8
Average growth rate (%)	5.8	12.8

Source: NEIT/IE/UNICAMP, based on data from ABIHPEC.

Concerning physical production, data obtained from the Monthly Industrial Survey-Physical Production (PIM-PF/IBGE) show that the cosmetics industry grew rather rapidly in the period between the last quarter of 2006 and the second quarter of 2007 (Chart 1). However, this growth pace slowed down during 2007. In the first quarters of 2008, cosmetics production started to decrease, contrasting with an accelerated growth rhythm in the general industry. As of the first quarter of 2009, however, the cosmetics sector already shows deceleration in its downward trend, again contrasting with the general industry, whose production continued to deteriorate.

**Chart 1 – General Industry and Brazilian Cosmetics Industry:
variation of physical production
(growth rate in relation to the same quarter of the previous year)
(4Q/2006 to 1Q/2009)**



Source: NEIT/IE/UNICAMP, based on data from PIM-PF/IBGE

Data from the General Register of Employed and Unemployed Persons (CAGED/MTE) confirm a formal employment deceleration in the sector in 2007 (Table 5). Net hirings declined in the period between the first quarter of 2007 and the first quarter of 2008. Data show a drop in the hiring balance: from 1,600 persons in 2007 to 859 in 2008, as a result of a much higher increase in the number of dismissals than in that of hirings. It is also worth emphasizing the destruction of job posts the industry experienced in the first quarter of 2009, which confirms the sector is facing retraction.

**Table 5 – Brazilian Cosmetics Industry: Hirings and Dismissals of Formal Employees
(1Q/2007 to 1Q/2009)**

	1Q 2007	2Q 2007	3Q 2007	4Q 2007	2007	1Q 2008	2Q 2008	3Q 2008	4Q 2008	2008	1Q 2009
Hired	3.395	3.349	3.238	3.096	13.078	3.349	3.618	3.478	3.245	13.690	2.939
Dismissed	2.771	3.035	2.797	2.816	11.419	3.130	3.221	3.437	3.043	12.831	3.452
Creation of jobs	624	314	411	280	1.629	219	397	41	202	859	-513

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

With regard to foreign trade, it is important to stress, first of all, the low level of trade liberalization in the sector. According to data for 2007, exports represented about 4.4% of sales in the Brazilian cosmetics sector, whereas the imports coefficient was of about 2.6% in the same year. We must also underline that, despite the low degree of liberalization, trade flows in this sector evolved significantly, with emphasis on exports, which grew approximately 25% per annum between 2000 and 2007, at rates higher than those for Brazilian external sales in the same period (16.5% per annum).

More recently, we notice that Brazilian cosmetics exports followed an upward trajectory until the last quarter of 2008, so that the exports balance at the end of the fourth quarter remained virtually the same in relation to the first quarter of the same year (Table 6). As to cosmetics imports, they grew thanks to a significant increase in imports of toilet waters, deodorants, and shaving products, reaching US\$ 83,3 millions at the end of the fourth quarter of 2008.

Therefore, the balance of overseas transactions dropped during 2008 from US\$ 66,7 millions in the first quarter to US\$ 44,2 millions in the fourth quarter. Comparing data for the first quarter of 2009 with those for the same period in 2008, we see a significant reduction in trade balance (-48%), as a result of an increase in imports (16.8%) and a decline in exports (-17.6%). When comparing the first quarter of 2009 with the fourth quarter of 2008, we observe a decline not only in exports, but also in imports. However, this more marked drop in exports eventually caused a reduction of about 20% in trade balance in the first quarter of 2009 in relation to the fourth quarter of 2008.

Table 6 – Brazilian Foreign Trade in Cosmetics (1Q/2008 to 1Q/2009)
(In US\$ millions)

	1Q 2008	2Q 2008	3Q 2008	4Q 2008	2008	1Q 2009	Variation 1Q-2009/ 1Q-2008 (%)	Variation 1Q-2009/ 4Q-2008 (%)
Exports								
Perfumes and toilet waters	0.8	1.1	1.3	2.7	5.9	1.7	106.8	(36.6)
Beauty products and make-up	11.6	15.4	17.1	12.9	57	10.6	(9)	(17.8)
Hair preparations	38.4	42	42.3	38.8	161.5	38.1	(0.6)	(1.8)
Oral hygiene preparations	35	37.2	33.1	31.5	136.8	19.4	(44.7)	(38.5)
Deodorants and shaving preparations	10.5	14.6	14.2	10	49.3	11.2	5.9	11.3
Soaps	29.1	38	37.8	31.6	136.4	22.4	(23.1)	(29.1)
Total	125.4	148.3	145.7	127.5	546.9	103.3	(17.6)	(19.0)
Imports								
Perfumes and toilet waters	8.7	18.5	20.7	12.7	60.6	8.4	(3.1)	(33.8)
Beauty products and make-up	11.6	17.9	21.9	14.5	65.9	15.1	29.7	4.2
Hair preparations	5	4.3	4.7	6	20	6.4	28.2	6.1
Oral hygiene preparations	5.3	7	6.1	9.6	28	9.9	86.7	3.6
Deodorants and shaving preparations	26.4	32.1	37.9	38.4	134.8	27.1	2.6	(29.6)
Soaps	1.8	1.5	2.2	2	7.6	1.8	(0.1)	(12.7)
Total	58.8	81.3	93.5	83.3	316.8	68.7	16.8	(17.5)
Balance								
Perfumes and toilet waters	(7.9)	(17.5)	(19.4)	(10.0)	(54.7)	(6.7)	(14.6)	33.0
Beauty products and make-up	0.0	(2.5)	(4.8)	(1.6)	(8.9)	(4.5)	(26.406)	(179.6)
Hair preparations	33.4	37.7	37.6	32.8	141.5	31.8	(4.9)	(3.3)
Oral hygiene preparations	29.7	30.3	26.9	21.9	108.8	9.4	(68.2)	(57.0)
Deodorants and shaving preparations	(15.8)	(17.5)	(23.7)	(28.4)	(85.4)	(15.9)	0.4	44.0
Soaps	27.3	36.5	35.6	29.5	128.8	20.6	(24.6)	(30.3)
Total	66.7	67.0	52.2	44.2	230.1	34.6	(48.0)	(21.7)

Source: NEIT/IE/UNICAMP, based on data from Secex.

It is worth remembering that the Brazilian foreign trade in cosmetics is strongly influenced by intra-firm trade among large transnational companies, whose production shows a certain specialization among South American countries, especially in Brazil and Argentina, a fact that reflects both on exported and imported products and on origin and destination patterns.

Data for 2008 show that exports are still concentrated in Latin American countries, with emphasis on Argentina, Chile, and Venezuela, which accounted for almost half of total exports. As to imports, Argentina, France, and the United States – in this order – continue as the main countries of origin.

Concerning market share, we observe a remarkable stability in the Brazilian share in global trade flows in 2006 and 2007 (Table 7). Between 2000 and 2006, it increased from 0.3% to 0.7% in global cosmetics exports, pushed mainly by oral hygiene products. In 2007, Brazil lost a little of its market share exactly in these products, but remained as their sixth largest world exporter. In other products, the Brazilian share is still little relevant, although it is important to stress an increase in soaps exports, in which Brazil ranks 16th among the largest exporters.

In the two products that represent the largest part of world trade, perfumes and beauty products and make-up, the Brazilian share is marginal. It is worth emphasizing a higher average value of world exports in these two products and a wider gap in relation to the average value of Brazilian exports. In 2007, perfumes reached an average value of US\$ 27,3/kg, and beauty products and make-up reached US\$ 13,8/kg. With regard to the Brazilian case, the average value of exports was of US\$ 9,0/kg for both products.

Table 7 – Brazilian Cosmetics Industry: share in world trade and average value of exports (2000, 2006 and 2007)

Product	Share in world trade (%)			Average value of exports (2007) (US\$/kg)	
	2000	2006	2007	World	Brazil
Perfumes and toilet waters	0.02	0.04	0.04	27,3	9,9
Beauty products and make-up	0.1	0.2	0.2	13,8	9,9
Hair preparations	0.3	1.3	1.3	3,8	2,6
Oral hygiene preparations	3.0	4.9	4.4	3,7	2,3
Deodorants and shaving products	0.2	0.4	0.4	4,6	7,4
Soaps	0.8	1.7	1.8	1,7	1,3
Total	0.3	0.7	0.7	5,8	2,3

Source: NEIT/IE/UNICAMP, based on data from SECEX and Comtrade.

In sum, Brazil still has a marginal share in the world trade of cosmetics. Besides, foreign trade absorbs a marginal part of the local supply and demand for perfumery and cosmetics.

Final Considerations

The global cosmetics industry has been showing great dynamism lately. Among the conditioning factors of this dynamism stand out the increased importance of skin care products, the trend to use natural and organic ingredients, and the development of nutricosmetics. These trends point to a growing sophistication of products in the cosmetics sector, which also results in a more complex technical basis that demands qualification in different fields of knowledge. At the same time, forms of commercialization and marketing strategies have been demanding knowledge on formerly distinct market areas to follow technical changes.

As a result, it is possible to consider an increase in the necessary technology, production, and commercialization capacity to win space in the world market. It means that competitive challenges for the Brazilian cosmetics industry tend to become more complex.

Brazil is one of the developing countries with higher competitive potential, both for its market size and for the existence of an industrial structure capable of meeting most of the demand. In this sector, there are large international companies producing locally – diversified consumer goods companies and companies specialized in the cosmetics sector – and also important national companies, which were able to gather relevant production capacity and, at the same time, assets such as rather developed brand names and distribution channels. There are also many small and medium-sized companies, configuring a diversified and complex structure.

Progressing toward a more competitive structure, on the side of the Brazilian industry, requires to follow closely the main changes in the world market and observe to what

extent these changes will demand new efforts from the private sector, as well as from policy makers, to foster the incorporation of technological advances in key areas and to comply with regulations and certifications as a way of protecting consumers and, at the same time, guiding the private sector to high levels of quality.

Facing these challenges can result in giving continuity to the process of competitiveness improvement through which the sector has been going recently, rising its capacity to offer quality products to the Brazilian population and, at the same time, to improve Brazilian manufacturers' insertion in the international market either through trade or foreign investment operations.

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