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1) INTERNATIONAL PERSPECTIVE

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The performance of the international economy and perspectives for the ensuing years

One year after the worsening of the world economic crisis, marked by the Lehman Brothers bankruptcy, the world economy has begun to show visible signs of recovery. The tax and monetary expansionist policies and the overhaul of financial institutions have been crucial to getting credit to flow once again, even if in a limited and selective manner. The success of the anti-cyclical policies has contributed to the progressive, yet cautious, recovery of the confidence of private economic agents. Sustaining the demand levels aggregated by expansionist fiscal policies has managed to prevent an across-the-board deflation in the market, as was happening with the commodities and financial assets. Among the measures adopted, highlights include tax exemption, the increase of public investments, and the strengthening of programs for income transfer.

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Commodities and the financial market are primed to direct their recovery towards pre-crisis levels. (Charts 1.1 and 1.2).

Chart 1.1 – Commodities Prices

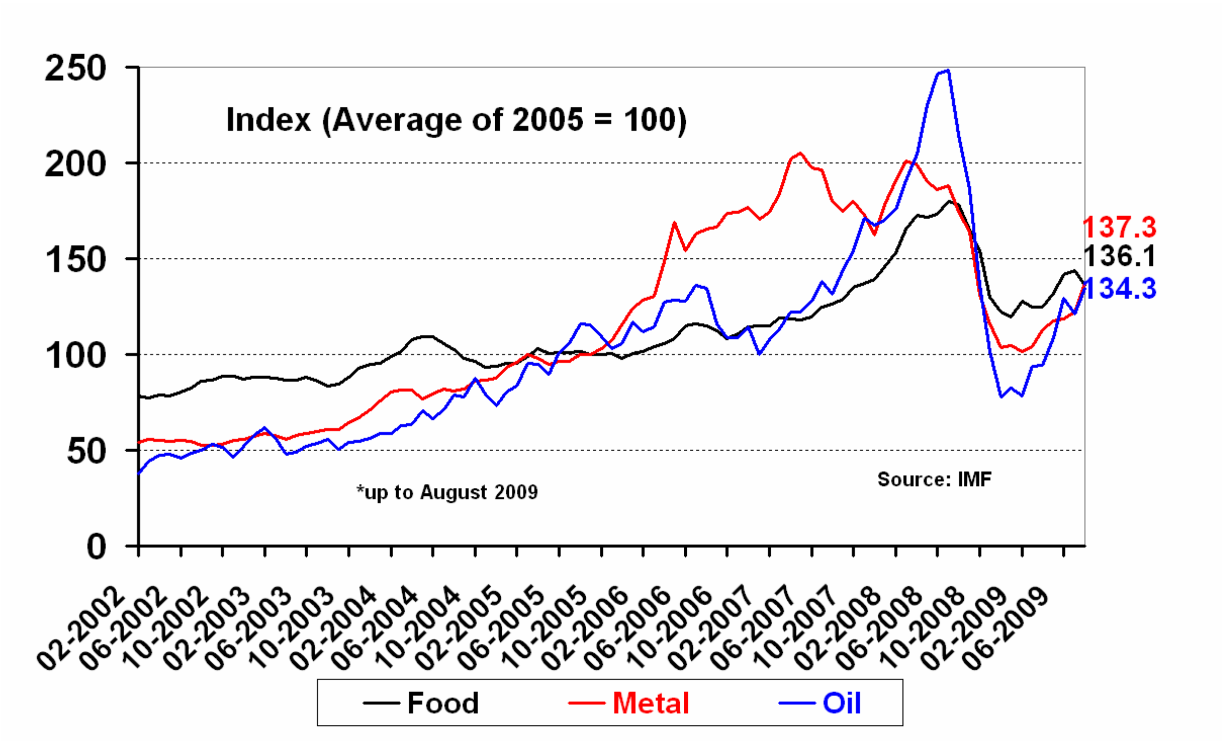
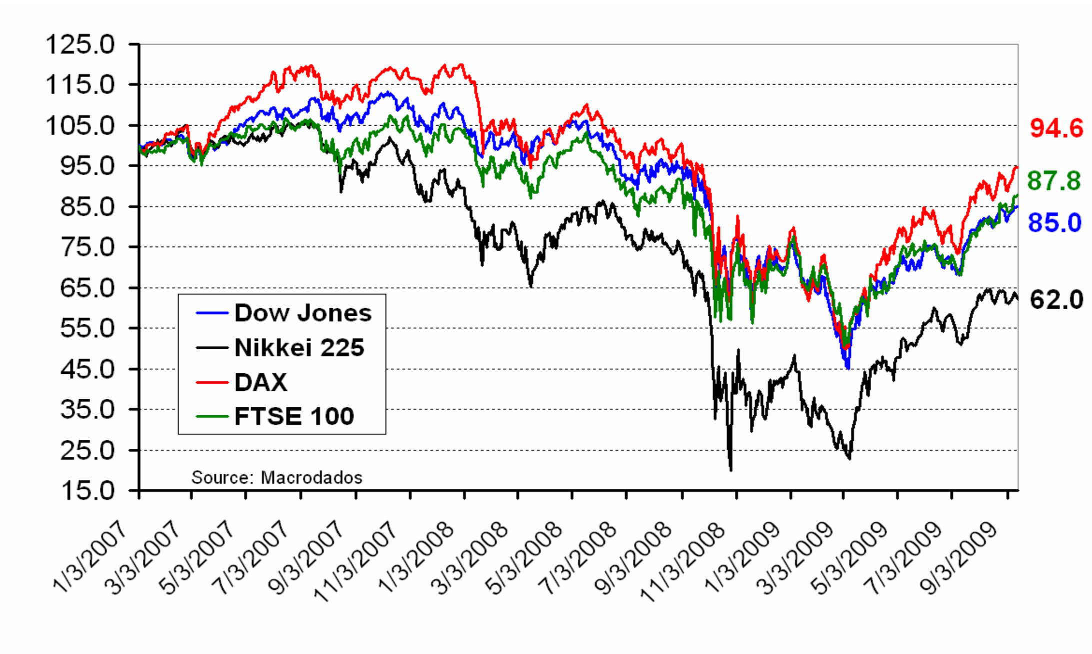


Chart 1.2 – Stock Market Indexes



The economies that most rely on exports in general (such as commodities), as well as on the production of capital goods or on services, such as the financial and tourism services, were the most affected by the crisis up to the second quarter of 2009 (Table 1.1).

Table 1.1: Rate of GDP increase from quarter to quarter (%)

	3Q2008	4Q2008	1Q2009	2Q2009	IMF Projection 2009	IMF Projection 2010
US	-2.7	-5.4	-6.4	-0.7	-2.7	1.5
Euro Zone	-0.4	-1.8	-2.5	-0.2	-4.2	0.3
EU	-0.4	-1.9	-2.4	-0.3	-4.2	0.5
Germany	-0.3	-2.4	-3.5	0.3	-5.3	0.3
France	-0.3	-1.4	-1.4	0.3	-2.4	0.9
United Kingdom	-0.7	-1.8	-2.5	-0.6	-5.4	1.7
Japan	-1.3	-3.4	-3.3	0.6	-4.4	0.9
Brazil	1.3	-3.4	-1.0	1.9	-0.7	3.5
China*	9.0	6.8	6.1	7.9	8.5	9.0
India*	7.7	5.8	5.8	6.1	5.4	6.4
Korea	-1.3	0.3	-9.4	9.1	-1.0	3.6
Russia	11.3	-2.7	-23.5	7.4	-7.5	1.5

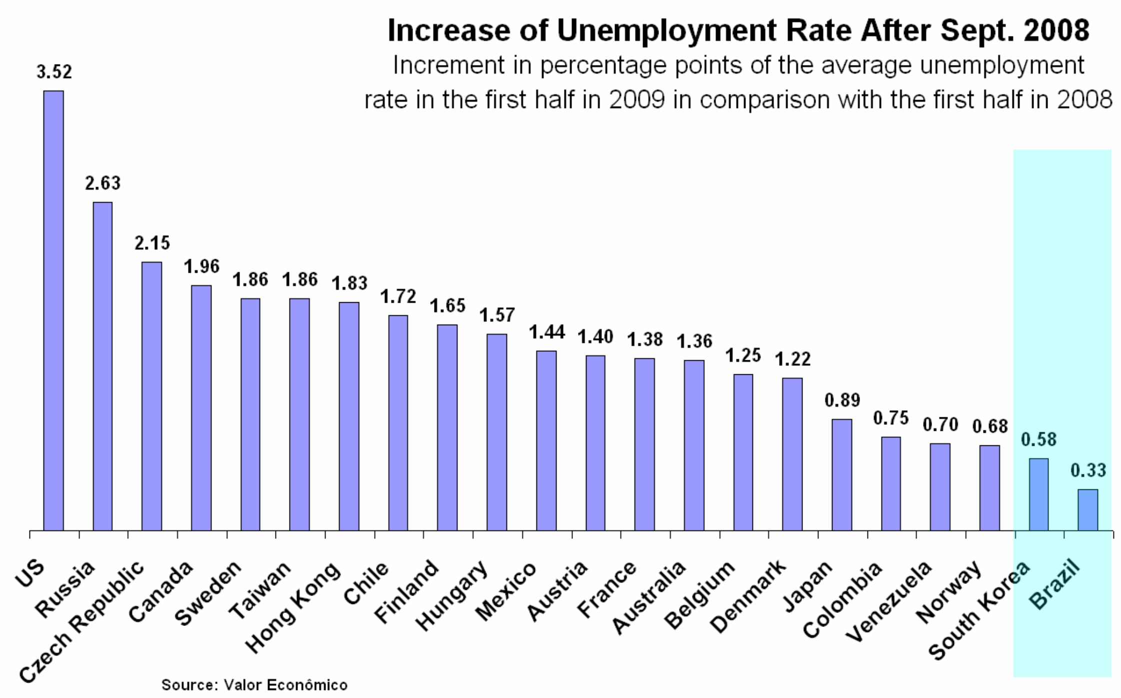
Source: Statistics websites of countries andthe IMF

*the variations for China and India are related to the same quarter of the previous year

The IMF's most updated estimates were published in the October 2009 issue of *World Economic Outlook*. Since the crisis worsened, the IMF has been regularly reviewing its estimates and eventually raised its expectations for the GDP in most countries. The improvements in the reviews indicate that the pace of the world economy's recovery has been a positive surprise to economic analysts.

Notwithstanding the government's efforts to prevent job elimination, employment is among the least sensitive variables to economic stimulus and to the first signs of recovery of the pace of production activities. In the United States, the August unemployment rate was 9.7%. Such high unemployment rates have not been seen in the American economy since the second oil crisis. In the Euro zone, the unemployment rate in August was 9.6%, the highest level in over ten years. However, the Brazilian economy was not strongly affected by the impact of the financial crisis on employment rates. The Brazilian unemployment rate reached 8% in July this year, the lowest rate registered in the month of July historically, and remained relatively stable at 8.1% in August. Chart 1.3 shows an increase in the unemployment rate as of September 2008. The first quarter of 2009, when compared with the same period in 2008, reveals that the highest unemployment rate was registered in the United States (3.52 percentage points). Brazil registered the lowest increase in the rate during the same period.

Chart 1.3 – Unemployment rate increase after Sept./08



Evolution of Anti-cyclical Policies

Monetary policies

Political authorities in several countries took too long to realize the actual dimension of the world economic crisis, sometimes accepting incorrect diagnosis. Until mid-2008, some monetary authorities, such as the European Central Bank, had believed that a potential acceleration in inflationary would be the most serious risk posed by the crisis. For this reason, they opted for tight monetary policies.

Since the initial symptoms of the crisis were identified, the United States has played a leading role in efforts to combat the crisis, which have been more or less followed by other countries. At first, it was necessary to provide liquidity to financial markets, since the institutions that had until then granted short-term credit to markets were suddenly unsure of the quality of the assets they were acquiring. The credit risk they were undergoing was then deemed liquidity risk. Governments reacted to such a liquidity crisis with gradual adjustments to the basic interest rates.

The conduct of developing countries differed depending on the initial situation of their current accounts and the openness of their capital accounts. Brazil, Chile, Mexico and Russia are examples of countries which tightened their monetary policies during the third quarter of 2008 due to the strong pressure on their currencies. As for the Asian countries, in general, they were able to anticipate an expansionist monetary policy, as was the case of China and

India, which cut basic interest rates and banks' requirements for capital in September 2008. Korea decided to cut basic interest rates despite its exchange rate depreciation. Countries seeking help from the IMF, such as Hungary, Pakistan and Ukraine, had to subject themselves to the pro-cyclical requirements for financing, and they seem to have been more severely affected by the crisis. (Table 1.2)

Table 1.2: Basic Interest Rates in Selected Economies (% p.a.)

	July 08	July 08	Dec. 08	May 09
Argentina	9.34	8.98	11.12	10.82
Brazil	11.25	13.00	13.75	10.25
Chile	5.25	7.25	8.25	1.25
China	3.33	4.14	2.79	2.79
Korea	4.75	5.00	3.00	2.00
United States of America	5.25	2.00	0-0,25	0-0,25
Hong Kong	4.37	2.30	0.95	0.31
Hungary	7.75	8.50	10.00	9.50
Iceland	13.30	15.50	18.00	13.00
India	6.00	6.00	5.00	3.25
Japan	0.50	0.50	0.10	0.10
Mexico	7.25	8.00	8.25	5.25
Pakistan	10.00	13.00	15.00	14.00
United Kingdom	5.75	5.00	2.00	0.50
Russia	10.00	11.00	13.00	12.00
Ukraine	9.00	15.90	14.80	17.20
Euro Zone	4.00	4.25	2.50	1.00

Source Unctad, *Trade and Development Report*, 2009

Aid to financial institutions

In September 2008, the world realized that the traditional monetary policies adopted up to then were unable to prevent the financial system from collapsing as the losses incurred by financial institutions were much higher than initial expectations. Monetary authorities went far beyond the limits of bankers when they acquired toxic assets, which contaminated the balance sheets of these institutions.

In the United States, due to the insolvency of two financial institutions sponsored by the government, Freddie Mac and Fannie Mae, authorities began nationalizing the economy. Since then, not only financial institutions but also strategic companies have been nationalized, as was the case of AIG and General Motors, while guarantees were granted to acquisition operations, as occurred when Bear Stearns was acquired by JP Morgan Chase.

After case-by-case negotiations with strategic companies, the American government launched the Troubled Assets Relief Program (TARP), which allowed the treasury to purchase the financial institutions' toxic assets for a total of US$ 700 billion, in a buyback auction. At a later stage, the program funds were used to purchase preferred stocks of companies in financial trouble. In March 2009, the Geithner Plan determined that the remaining TARP funds would form public-private partnerships to acquire toxic assets. Then, private investors could provide half the investment, and the government would account for the other half. Investors could even receive government financing of up to 85% of the value they were to invest in the initiative.

The FED's interventions caused its balance sheet to rise from US$ 890 billion in September 2008 to US$ 2.055 trillion in June 2009. As for the composition, some 93% of its assets comprised treasury bonds in June 2007. This ratio changed to 21% in December 2008 and 31% in June 2009 due to a larger number of risky assets in the FED's balance sheet.

The UK government acted in a very similar manner, bailing out the British banking system. According to its plan, the government decided to inject ₤ 50 billion into the banking institutions in return for preferred stocks. The government was also obliged to nationalize two large financial institutions. The Bank of England offered ₤ 259 billion in short-term credits to private banks and ₤ 250 billion in government securities for interbanking loans.

In July 2009, the German government adopted a plan to transfer toxic assets from banks to other banks known as "bad banks". The financial institutions would be able to transfer their toxic assets to Special Purpose Vehicles (SPV) at 90% of their book value. In return, these institutions would acquire SPV bonds guaranteed by the Financial System's Stabilization Fund, created in October 2009. If SPVs yield profits at the time of liquidation, the bonds held by the financial institutions will be paid. However, if a loss is verified at the time of SPV liquidation, the financial institutions will only be allowed to pay dividends to their shareholders after the stabilization fund is compensated for the incurring losses.

The massive bailout operations and provisions for liquidity carried out by Central Banks managed to prevent widespread bankruptcy of the financial system. Still, such measures were not enough to rebuild the world economy. Cuts in interest rates and recovered banks are not enough to reestablish credit while unemployment and income rates continue to restrain the aggregate demand. Meanwhile, the fiscal policy in the economic stimulus packages is the most effective, as it directly impacts on demand.

Fiscal Policies

When the financial crisis was felt by the real economy, it became clear that the automatic stabilizers would not be enough to curb it and its damages. Governments realized they would need to take action in order to stimulate aggregate demand by increasing public expenditure and tax exemptions. In November 2008 during a G-20 meeting, the IMF's board of directors stated that 2% of world GDP should be spent by way of tax incentives to recover the world economic order. This recommendation was reviewed and later expanded.

In early 2008, the United States made use of tax incentives in its economy. However, a more aggressive attitude against the crisis was only adopted when the recession was confirmed in the third quarter of 2008. In February 2009, the American fiscal stimulus package was announced with the forecast of spending US$ 787 billion over the 2009-2010 period. This package takes into account transfers to low-income workers and the unemployed, increased expenditure in education and health and investments in infrastructure, including renewable energy.

The European Union decided to launch a recovery plan comprising a coordinated effort between member countries. The approved proposal foresaw fiscal stimulus totaling 1.5% of each country's GDP, excluding expenditures already incurred with automatic stabilizers and financial institution bailout plans. Germany and Spain were the exceptions, committing more than 3% of their GDP. European authorities justified the small dimension of their packages as they had more automatic stabilizers in their economies.

According to the OECD, the countries known as BRICs are among those which made greater fiscal efforts. China launched one of the most comprehensive stimulus packages, in both absolute and relative terms. All of its fiscal policies announced under the context of the crisis tally 19% of its GDP, although it cannot be affirmed exactly how many of these measures had in fact been previously planned. Even taking only new measures into account, the IMF's lowest estimates are still above 6% of China's GDP. Russia, whose economy was seriously affected by the fall in oil prices, made a remarkable fiscal effort as well: Its fiscal package corresponds to 8% of its GDP. Brazil aims at spending around R$ 300 billion on investments in infrastructure, on reinforcing income transfer programs, increasing social security benefits and civil servant wages, tax exemptions and incentives in the building sector, mainly for low-cost housing projects. Table 1.3 shows the sum obtained from fiscal measures to support the financial system in several countries.

The expansionist fiscal policy applied to combat the economic crisis spread across a number of countries. Chart 1.4 shows the evolution in public debt in selected countries as of 2003. The expressive increase in debt projected for 2009 and 2010 reflects how committed governments have been to adopting anti-cyclical fiscal policies.

The uncertainty of the sustainability of public deficit crops up in the debate on fiscal packages for economic stimulus. Consensus has it that, sooner or later, the fiscal measures will burden future generations and interest rates will rise in order to compensate for elevated debts. Nevertheless, it is worthy to note that if governments were to shirk their responsibility to combat the crisis by increasing budget deficits, the impact on public accounts would be even worse as economic activity would take too long to recover and the collection basis of governments would become limited. Therefore, the focus shifts onto the effectiveness of fiscal policies to increase investments, consumption and employment, i.e., to make use of the short-term needs to stimulate demand so as to guarantee long-term sustainable development.

Table 1.3: Tax Incentive and Support to the Financial System in Selected Economies (% of GDP)

	Tax Incentive	Support to Financial System	Years to spend the tax incentive
Developed Economies	**3.7**	**48.5**	-
Canada	4.1	24.8	3
France	1.5	19.1	2
Germany	3.6	22.2	2
Hungary	-7.7	9.1	2
Iceland	-7.3	263.0	2
Irlanda	-8.3	266.4	3
Italy	0.3	3.3	2
Japan	4.7	22.3	3
Netherlands	2.5	46.5	2
Spain	3.9	22.9	3
United Kingdom	1.9	81.7	3
United States of America	5.5	81.1	3
Economies to be Developed	**4.7**	**2.9**	-
Argentina	6.4	0.9	1
Brazil	5.6	1.5	1
Chile	2.8	0.0	1
China	6.2	0.5	2
India	1.8	6.4	3
Mexico	1.6	0.0	1
Republic of Korea	6.2	20.5	3
Economies under Transition	**5.8**	**7.4**	-
Russian Federation	5.4	8.0	2
Total[c]	**4.0**	**36.1**	-

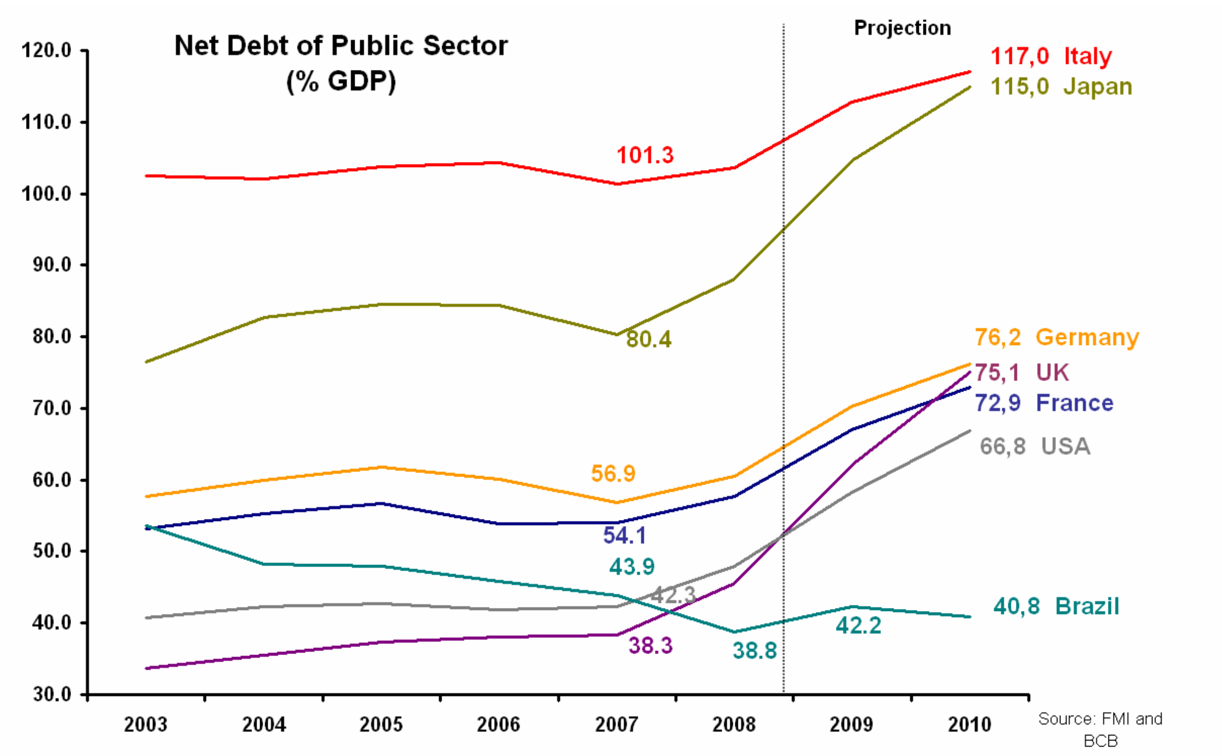
Source: UNCTAD Trade and Development Report, 2009.

a. This corresponds to dicretionary measures on the public expense or incomes in response to the financial crisis, not considering the "automatic stabilizers".

b. Includes capital injection, purchase of properties, loans provided by government capital, support from the central bank with support from the National Treasury, provision of liquidity by central banks and guarantees.

c. Values used to gather the countries are based on current dollars.

Chart 1.4 – Evolution of Net Debt in Public Sector of Selected Economies



Government efforts and opportunities arising from the crisis

In “Policy Responses to Economic Crisis: Investing in Innovation for Long-Term Growth”, published in late June, the OECD emphasizes the need to take into account innovation and long-term growth within the government’s short-term measures to combat the crisis. The role of economic stimulus plans should not only be to recover aggregate demand and the market's trust, but also to prioritize the expansion of production capacity within the standards that arise in this context.

The institution affirms that, although innovation activities are, as a rule, extremely pro-cyclic, structural changes caused by crises open the doors to opportunities and heighten the competitive advantages of R&D-intensive companies. The creative destruction that gains strength in moments of crisis fortifies the leadership of innovative companies and establishes new paradigms for production. In such moments, less efficient companies are surpassed by the most dynamic ones, which emerge and expand.

However, crisis also brings additional trouble to companies seeking to expand their market shares by innovating production methods: credit constraints are more severe for small and medium-sized companies and for those with fewer real guarantees to offer, a situation faced by the majority of those companies with the potential to expand economic activities.

Another aspect worthy of note concerning the crisis is the opportunity to implement environmental policies under the context of productive restructuring. Crisis encourages continuous not only pollutant practices but also those that are resource-inefficient: lower oil prices, credit constraints on resource-saving techniques and financial shortages for consumers, which means they are less likely to pay the premium embedded in the prices of environmentally-friendly products – all these factors are disincentives to adopt "greener" practices. However, downsizing or closing industrial plants and the consequential depreciation of their equipment mean that such equipment can be replaced with other types that save energy and other resources.

Governments should shape their incentive frameworks to promote the rise of companies prepared for new paradigms, besides taking advantage of the trend to change in order to cut subsidies to fossil-fuel production and consumption. In addition, they could eliminate tariff barriers on the trade of environmentally-friendly products. Public investments in infrastructure included in fiscal packages, such as those promoting transportation, are convenient to shift towards a low-carbon and cost-effective economy.

According to the OECD's document, measures implemented by the economic incentive packages may be divided into five groups:

i. measures to bail out banks and financial institutions;
ii. measures to support business, such as tax exemption, credit guarantees, incentives to hire personnel and worker retention... ;
iii. measures focused on a specific industrial sector, in general on the automotive and construction sectors;
iv. measures to support household consumption and decrease exposure to crisis, such as tax exemptions, reinforcing the income transfer programs, maintaining salaries and social security benefits... ;
v. measures concerning innovation and long-term growth.

Examples of the measures included in economic packages mentioned in the abovementioned topic are in Box 1.1 and Tables 1.4 and 1.5.

Box 1.1 – Support for innovation and long-term growth	
i) Infrastructure and improvements (highways, public transport, information technology and communications,...)	
Japan	JPY 4 billion to reinforce anti-terrorist structures of public facilities. JPY 3 trillion in intelligent transport systems, improvement of IT infrastructure in the medical field and in the government, besides personnel training for IT.
Korea	Alternative water sources, besides construction of small environmentally-friendly reservoirs and a transport system.
US	US$ 100 billion in infrastructure, of which US$ 17 billion is earmarked for public transport and high-speed trains, US$ 40 billion for highways, bridges, reservoirs and water, and US$ 7 billion to expand access to broad band.
European Union	Modernization of infrastructure. European-trans connection of the energy grid. € 1 billion euros for high-speed Internet connection in all regions of the economic bloc.
Germany	€18 billion in education, hospital, transport and IT infrastructure. € 150 million for broad band: target is to reach ¾ of households by 2014.
France	Broad band inside the TGV trains system and in small cities: target is to reach total coverage by 2012. Development of networks for education and research.
ii) Support for R, D & I activities	
European Union	Reduction of up to 75% in registration and patent maintenance costs.
Germany	€ 900 million in R&D in small and medium-sized companies. € 500 million to foment development of hybrid automobiles and other clean technology.
France	€ 70 million for research in nanotechnology.
Korea	17 large-scale research projects in green industry and technology, robotics, biomedicine, IT systems and in high aggregate-value services. Research in green technology total approximately US$ 4.7 billion over the next four years.
US	Increase in employment for scientists and development of diverse packages to foment research: US$ 10 billion for biomedicine and health, US$ 1 billion in climate change, US$ 1.6 billion in energy sources,...

iii) Investments in human capital, education and training	
Germany	Essential in the German package. € 8.7 billion in crèche facilities, schools and universities. € 2 billion in training, especially in vulnerable groups and part-time workers. Stimulate companies to retain and retrain employees
UK	Employment is the central issue. A package for the automotive sector complements support for training. Its "New Opportunities White Paper" is expected to expand investments in crèches and public schools, granting bonuses to teachers and financial rewards to companies hiring unemployed workers and maintain them for more than a six-month period.
Korea	Support for foreign students, when using digital textbooks and technological resources for teaching. The country has created Korean language courses in other countries and implemented "green schools", with efficient equipment in terms of energy, with many treed areas.
Russia	Support for students: scholarships, student loans with low interest rates, frozen tuition prices and free student accommodation. Some students will be selected for study programs with government sponsorship this year.
US	New sources for resources for schools, preventing dismissals; program to modernize and repair schools and other educational technology, to improve the quality of education and the availability of technological resources for educational purposes, besides expanding students access to technological teaching

iv) Promoting "green technology" and innovation that bring more efficient formats for energy consumption	
Korea	The central issue is responsible environmental policies. Its package has been nicknamed the New Green Deal. Development of technologies for conservation, reusing and generating clean energy, construction of transport networks with low carbon emissions and use of stable sources of clean water. Research in development of automobiles that pollute less, of buildings that are more energy-efficient, as well as of renewable energy sources.
US	Lowering reliance on oil, doubling the production of renewable energy, fomenting research on green technologies (especially in automobile batteries) and optimizing the energy production, transmission and distribution. Budget of US$ 30 billion.
UK	Establishing a £ 250-million fund to support investments in lower carbon emissions and £ 50 million for innovation and research in green technology.

Most OECD countries have implemented non-financial measures establishing minimum energy-efficiency requirements. Strong support for the automotive industry was also provided by most countries, provided that less pollutant vehicles were sold. Programs such as cash for clunkers, besides guaranteeing a demand for vehicle production, aim at streamlining the replacement of the current pollutant vehicles with another fleet that saves natural resources and releases less carbon. (Table 1.4)

Table 1.4: Incentive for cars with efficient fuels

Country	Package Size	Connected with clean technologies	Incentive to purchase new cars
Australia	AUD 6.2 billion	•	
Canada	CAD 4 billion		
France	EUR 6 billion	•	•
Germany	EUR 1.5 billion	•	•
Italy	EUR 1.7 billion	•	•
Korea	KRW 2 trillion	•	
Luxemburgo	EUR 4,5 million	•	•
Mexico	USD 1 billion	•	
Norway	NOK 100 million	•	
Portugal	EUR 200 million		
Spain	EUR 4 billion	•	•
Sweden	SEK 20 billion	•	
Turkey	TRY 210 million		•
United Kingdom	GBP 2.3 billion	•	•
United States of America	USD 17.4 billion		

Source: Table based on works for the Committee of Industry, Innovation and Projects of OCDE.

The OECD's study also offers some examples of measures to support innovation and entrepreneurship related to long-term growth, as well. Credit constraints, which more seriously effect small and medium-sized companies, were offset by measures implemented by many countries, such as establishing credit funds for companies, contribution to the banking system of public funding earmarked for small and medium-sized companies, and guarantees of export credit.

Other common measures aimed at minimizing the cash flow problems of these companies included cuts in value-added tax, its return or postponement of payment. The United Kingdom, the United States and France also adopted pay-roll tax exemption for small businesses with the purpose of encouraging them to create more jobs.

Table 1.5: Financial spending of long-term policies on incentive packages in countries selected by the OECD, May 2009				
	Infrastructure	Science, R&D and Innovation	Education	Green Technologies
Australia	AUD 9.7 bn	AUD 2.9 bn	AUD 15.7-17 bn	AUD 5.7 bn
% of GDP	0.82%	0.25%	1.4%	0.48%
Canada	CAD 20.3 bn	CAD 800 mm	CAD 1.9 bn	CAD 2.8 bn
% of GDP	1.27%	0.05%	0.12%	0.18%
Chile	USD 700 mm	USD 8.8 mm	USD 147 mm	USD 0
% of GDP	0.50%	0.01%	0.10%	0%
Finland	EUR 910 mm	EUR 25 mm	EUR 30 mm	EUR 38 mm
% of GDP	0.48%	0.01%	0.02%	0.02%
France	EUR 4.7 bn	EUR 46 mm	EUR 731 mm	EUR 30 mm
% of GDP	0.24%	0.00%	0.04%	0.00%
Germany	EUR 11.5 bn	EUR 1.4 bn	EUR 14,5 bi	EUR 5.7 bn
% of GDP	0.5%	0.1%	0.6%	0.2%
Korea	KRW 50 trn (US$ 36 bn) of environmental investment (5.14% of GDP) - distributed by			
% of GDP	these categories. The composition of such distribution, therefore, was not released.			
Norway	NOK 3.8 bn	NOK 170 mi	NOK 270 mi	NOK 1.6 bn
% of GDP	0.16%	0.01%	0.01%	0.06%
Sweden	SEK 8.6 bn	SEK 9 bn	SEK 500 mm	SEK 2 bn
% of GDP	0.27%	0.29%	0.016%	0.06
Poland	PLN 91.3 bn	PLN 16.8 bn	n.a	PLN 2.5 bn
% of GDP	0.072%	0.013%	n.a	0.002%
Portugal	EUR 50 mm	EUR 224 mm	EUR 682 mm	EUR 260 mm
% of GDP	0.03%	0.13%	0.41%	0.16%
United States of America	USD 100 bn	USD 16 bn	USD 83 bn	USD 59 bn
% of GDP	0.70%	0.11%	0.58%	0.41%

Note: Based on 2008 GDP. The values are indicative, since the application of clear and identical definitions for such categories, in order to make them comparable between the countries, is extremely difficult. For example, some double counts may occur.

Reproduced from Policy Responses to Economic Crisis: Investing in Innovation for Long-Term Growth, OECD, 2009

As for non-financial measures, many countries have sought to streamline their administrative processes, mainly those concerning the opening of businesses, building licenses and startup authorizations. Reductions in administrative costs and more efficient public bureaucracy are other objectives to be achieved by legislation and regulation amendments, modernization of the government's electronic systems and the reduction of fiscal costs.

Even before the end of concrete problems brought on by the crisis, such as unemployment, poverty and social inequality, bankruptcy of companies and asset depreciation, voices from several sectors had alerted to the potential future side effects of economic incentive programs, such as the risk of accelerating inflation caused by the excessive monetization of the economy and increase in public deficits.

As far as one can see, it seems highly unlikely that the world economy will suffer from inflation. An increased supply of currency coupled with constrained production would put pressure on prices if the increase in demand exceeded the increase in potential output (demand inflation) or if the wage rise exceeded the increase in productivity (cost inflation). With excessive idle capacity and record-breaking unemployment rates, it is more reasonable to say that these economies run the risk of deflation, as has been noted. Therefore, the economic incentive programs, as opposed to what alarmists forecast, are on the right track to sustainable growth.

Box 1.2 – The "Post-Crisis" in Brazil: on the way to accelerating growth

As already published in Sinopse Internacional Nº. 11 (March, 2009), Brazil held several trump cards which allowed it to be more efficient, in relation to other countries, in combating negative effects of the international financial crisis on its economic performance. In comparison to other world troubled waters, Brazil managed to rely on: i) the potential of its internal market; ii) the existence of solid investment plans, mainly for infrastructure, known for their high-return and low-risk; iii) a strong, solvent banking system, subject to a clear and efficient regulation system; iv) public banks capable of adopting anti-cyclical behavior, expanding credit at a moment of lack of trust in markets; and v) external solvency which is most favorable if compared to historical standards, reflected in the record-breaking level of international reserves and a negative, net foreign debt.

Concerning credit operations, the anti-cyclical efforts of public banks was crucial to maintaining growth: There was an expansion of around 20% in the accumulated result within the12 months up to August, and the accumulated capital stock reached around 45% of GDP. From September 2008 to August 2009, public banks were accountable for 82% of the expansion of credit in the period (Chart 1.5).

In fact, after expressive GDP falls of 3.4% and 1.0%, respectively, in the forth quarter of 2008 and in the first quarter of 2009, a recovery in the level of activity was revealed by the increase of 1.9% in GDP in the second quarter of 2009 (seasonally adjusted index in relation to the previous quarter) – Chart 1.6. The main factor behind such growth was household consumption, which increased 2.1% in the period (Chart 1.7). Although investments did not increase in this comparison, they already recorded a significant recovery: after a GFCF fall of 12.3% in the first quarter, it became stable in the second quarter in comparison to the first quarter. The stable recovery in household consumption coupled with the increased use of industrial installed capacity paved the way for investment plans to be resumed in the second semester of 2009. With the positive results registered over the year, the Brazilian government projects a real GDP growth of 0.5% to 1.0% in 2009. The expectation is that, from 2010 on, the Brazilian economy will return to an accelerated level of growth with rates of 5.0% to 6.0% per year.

Foreigners believe Brazil's performance is positive, and this opinion is reflected in the sovereign risk indexes and the volume of Foreign Direct Investments (FDI). The EMBI+ index reveals that the Brazil risk is clearly different from the emerging countries' average (Chart 1.8). As for the FDI, Central Bank estimates indicate a sum of US$ 25 billion in 2009, a lower figure when compared to the US$ 45 billion record in the previous year, but expressive in a year marked by the negative effects of the crisis. Brazil is considered one of the prime targets for foreign investors (see FDI – Perspectives). It is worthy of note that the level of international reserves, over US$ 200 billion, is also at historical records and guarantees an important liquidity buffer in a moment of international financial constraint.

Chart 1.5 – Credit development (Rate Sept./08 =100)

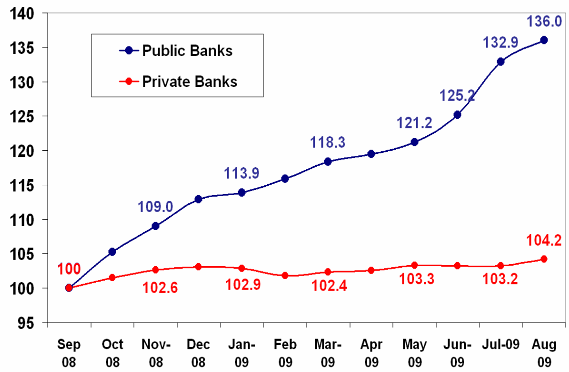


Chart 1.6 – GDP Annual Fluctuation (%)

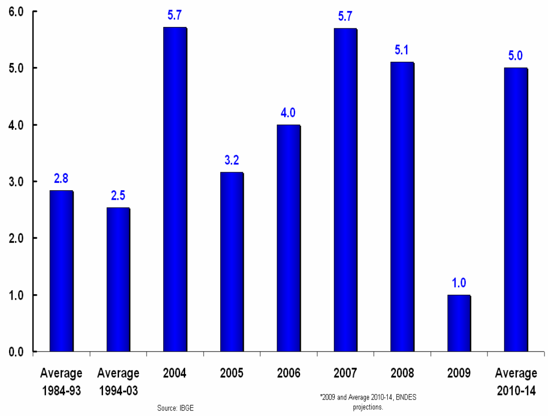


Chart 1.7 – Growth in household consumption (quarter by quarter)

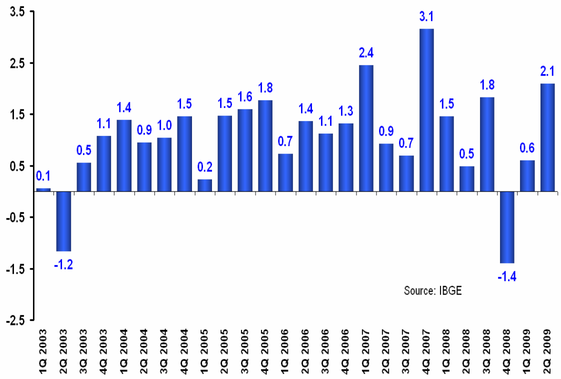
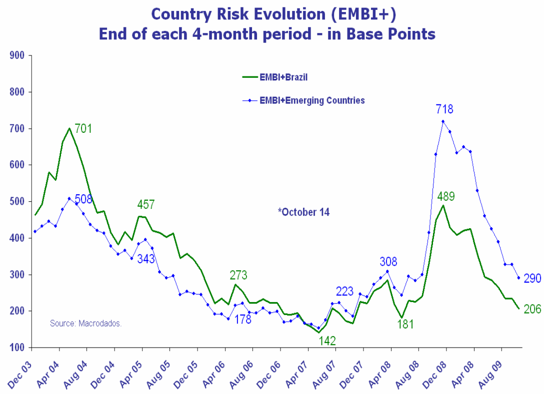


Chart 1.8 – EMBI (Brazil X Emerging)



2) Foreign Direct Investment Across the World

Recent Trends

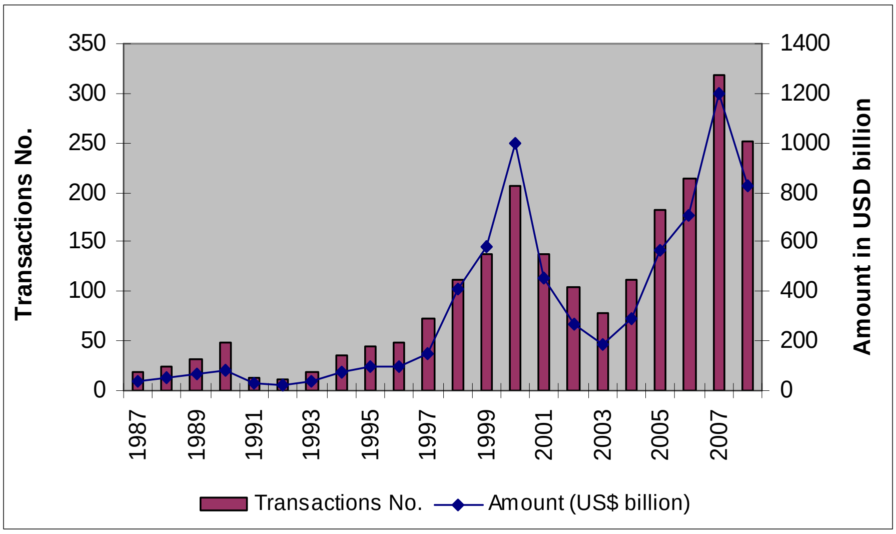
The impacts of the world crisis on foreign direct investments (FDI) have been gradually felt over the last two years by developed countries at first, and, then by other countries. As a result, after a period of continuous growth from 2003 to 2007, global direct investment fell 14% in 2008 (US$ 1.7 trillion) from a peak of US$ 2.0 trillion in the previous year. In 2009, the deceleration of investment was even more severe. Information is available in the last World Investment Report published by the United Nations Conference for Trade and Development – UNCTAD (World Investment Report, 2009).

The global financial crisis affected direct investment, although delayed, because it affected both the companies' capacity and propensity to invest. The capacity to invest was reduced because, on one hand, credit became more expensive and scarce, and on the other, profits which could be reinvested (self financing) were reduced. The disposition to invest, in its turn, fell in light of the unfavorable perspectives in consumer markets. Another transmission channel underscored by UNCTAD is the increase in companies' aversion to risk – faced with an uncertain scenario on how the crisis will unfold; companies adopted a very conservative, preventive posture.

Another interesting aspect of direct investment behavior over the period is the fact that not only new investment suffered a drop. Divestments, the flow of resources from company subsidiaries to their holdings, started to exceed the gross input of direct investment in several countries whose data are monitored by UNCTAD, resulting in a negative net flow of investment. These divestments may exist in the form of capital return to shareholders, reverse intercompany loans (from subsidiaries to holdings) and debt settlement. Although there is no confirmed cause-effect relation between crisis and divestments, it is suggestive that they have grown from the last quarter of 2008.

As for methods of investing, mergers and acquisitions fell, as well as investments in new projects (greenfield). Mergers and acquisitions among countries were seriously affected by the crisis: they fell both in number of operations, as a consequence of the credit shortage and the lack of trust, and in value, as a result of a significant drop in stock prices in a lackluster market (Chart 2.1).

Chart 2.1 – Mergers and Acquisitions between Countries (Values above US$ 1 billion) 1987-2008



Source: UNCTAD

Regional Patterns

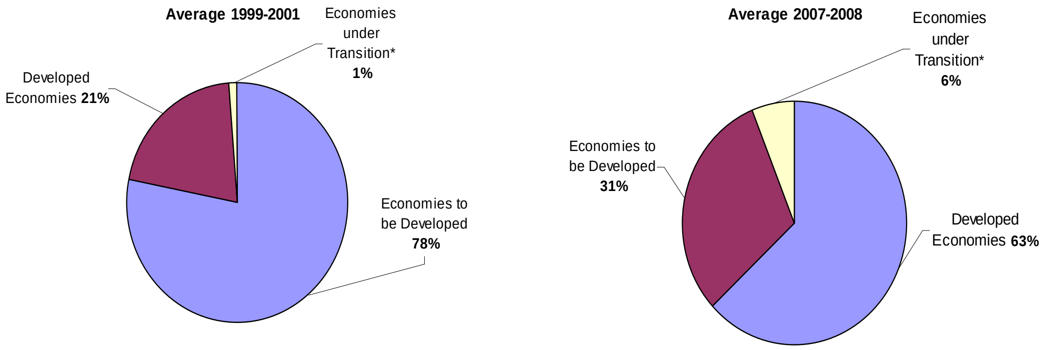
One of the most distinctive aspects of the current crisis, that is its power to affect the developed countries more severely, was also noted in relation to the flow of direct investment. In these countries, both input and output flows suffered a significant fall in 2008 (29% and 17%, respectively). This decline was accentuated by the Lehman Brothers bankruptcy in September last year. In the first semester of 2009, it is estimated that the direct investment input in developed countries fell 30%-50% when compared with the results of the second semester of 2008.

The decrease in developed countries was, above all, a result of the fall in mergers and acquisitions between countries, whose value was 39% lower than in 2008. In Europe, the fall was 56%, and in Japan, 43%. The number of new investment projects, on the other hand, increased 12.5% for developed countries in 2008, but dropped to an annual rate of 16% in the first quarter of 2009.

For the developing countries and those in transition, the direct investment input increased to record-breaking levels in 2008, although the increase of 17% was lower than that in previous years. The direct investment input increased considerably in Africa (27%), where large mergers and acquisitions happened, mainly in the building sector. In the Latin America and Caribbean region, the direct investment input had an increase of 13%, and in Asia, 17%.

Due to the increase in the direct investment input in developing countries and those in transition, and to its fall in developed countries, the former represented 43% of the FDI in 2008, against the average of 37% in 2007-2008 and 22% in the 1999-2001 period (Chart 2.2).

Chart 2.2 – FDI Destinations per Group of Countries



Source: UNCTAD
* European Southeast and the Community of Independent States

Another distinctive feature of the FDI flows to developed and developing economies is that, in the former, outputs exceeded inputs in all regions (Table 2.1). On the other hand, the 2008 foreign investment inputs in developing economies exceeded outputs in almost all regions, except for the Caribbean.

Table 2.1: FDI Flows in 2008 per region (US$ million)

	Entrance	Exit	Balance
World	1,697,353	1,857,734	-160,381
Developed economies	962,259	1,506,528	-544,269
Europe	518,339	944,460	-426,121
North America	360,824	389,463	-28,639
Other developed economies	83,095	172,605	-89,510
Economies to be developed	735,094	351,206	383,888
Africa	87,647	9,309	78,338
Latin America and Caribbean	144,377	63,207	81,170
South America	91,742	34,366	57,376
Central America	29,676	2,889	26,787
Caribbean	22,960	25,951	-2,991
Asia and Oceania	388,709	220,194	168,515
Southeast of Asia	297,573	186,455	111,118
Other Asian Countries	90,255	33,684	56,571
Oceania	881	55	826
Southeast of Europe and CEI*	114,361	58,496	55,865

Source: UNCTAD
*Community of Independent States

In 2009, however, direct investments fell in all countries, according to the preliminary data from UNCTAD. Out of a group of 96 countries for which data are available for the first quarter, 70 posted a fall in comparison with the first quarter of 2008. The total amount of direct investment was 44% lower. In developing countries, the direct investment input started to fall at the end of 2008, almost one year after the beginning of the fall in developed countries.

Sectorial Patterns

In 2008, the direct investment input and output presented noticeable differences per sector. Although most industries have suffered a fall in direct investments in 2008, there were some noticeable exceptions, especially in the primary and extraction sector and in foodstuff, beverage and tobacco industries. The evaluation was carried out by UNCTAD, since there are not enough data on direct investments separated per sector and industry for 2008. In general, there was a reduction in mergers and acquisition in the manufacturing industry and the services sector, along with a redirection to non-financial services, foodstuff, beverages and tobacco. The foodstuff industries were among the most active in relation to acquisitions of foreign companies and to mergers and acquisitions.

The value of mergers and acquisitions in the primary and extraction sector increased in 2008 in both absolute terms and as a stake in the total, which is due to the prices of oil and other commodities. In the manufacturing industry which accounts for almost one third of the world's share of direct investments, the value of mergers and acquisitions between countries fell 10% in 2008. The industry sector's behavior, however, was very heterogeneous. Textile products and clothes, plastics, rubber and metal products fell 80% on average. On the other hand, mergers and acquisitions of foodstuff, beverage and tobacco industries increased 125%, a result from only a few, but large transactions made by these sectors (over US$ 10 billion each).

In the service sector, which accounts for around two thirds of the global share of direct investment, mergers and acquisitions between countries fell 54% in 2008. Most sub-sectors were affected in the same manner. In financial services, however, the value of mergers and acquisitions fell 73%.

FDI Expectations for the 2009-2011 period

A survey carried out by UNCTAD with 240 companies on the investment perspectives for 2009-2011 (World Investment Prospects Survey) suggests that direct investments are likely to keep on falling in the short-term, but they will probably increase again as of 2011.

In general, 90% of the companies that participated in the survey were pessimist or very pessimist in relation to 2009. On the other hand, 45% claimed they were optimist or very optimist about the world business environment expected for 2011, a percentage that falls to 10% in comparison to 2010, and to zero in relation to 2009. The recovery of investments as of 2011 is expected, partly, as a result of the withdrawal of public resources from the companies rescued during the crisis, which now must create new opportunities for mergers and acquisitions. In addition, there is an expectation that the internationalization of companies continues.

When asked about the principal risks posed to this scenario, companies pointed out the worsening of the crisis, the increase of financial instability and a rise in protectionism with a change in the direct investment systems.

The expectation for a fall in the short-term and a recovery in the medium-term was a common response given by the companies in all regions; however, multinational companies from developing countries revealed they were more optimist than those in other regions in relation to the 2009-2011 period.

Concerning the preferred destinations for investments, the survey confirmed previous results – the most favorite destinations for investments are still China, followed by the United States, India, Brazil and Russia. Half of the 20 favorite destinations are emerging economies, which may be due to their greater potential to grow in the long-term. According to the survey, Brazil will be the forth destination of direct investments until 2011.

3) BRAZILIAN FOREIGN TRADE

The economic crisis continues to strongly affect world trade, but current prospects are beginning to show signs of improvement in the near future. IMF forecasts disclosed in early October indicate a reduction of 11.9% in the volume exported in 2009, with the beginning of a recovery for next year, with a growth rate of 2.5%. The previous estimate was a trade growth rate of only 1% in 2010.

In value, it is expected that the total world trade this year will fall 23% compared to 2008. According to IMF estimates, global exports of goods and services will reach US$ 15.2 trillion in 2009, after successive records which took global trade to the amount of US$ 19.7 trillion in the previous year. For 2010, the projection is for the trade of goods and services to arrive at US$ 16.5 trillion, still not regaining the value registered before the crisis, even though it already represents an improvement.

The estimate for the value of exports of goods in Brazil is US$ 158 billion for 2009, similar to that achieved in the accumulated result for the last 12 months up to September. Based on this estimate, the drop in Brazilian exports is expected to be 19% compared to the effective result in the previous year, and, therefore, below the expected rates for world trade.

From January to September 2009, Brazilian companies exported US$ 111.8 billion, representing a decrease of 25.9% compared to the first nine months of the previous year. In the same period, imports from Brazil were US$ 90.5 billion and which is 31.0% higher than that of exports. The more significant drop in imports, in comparison with exports, led to an increase in the Brazilian surplus for the first nine months of the year to US$ 21.3 billion, against the US$ 19.7 billion registered in the same period of 2008.

The global economic crisis has affected each country in varying degrees, which is reflected, in its turn, in their trade with Brazil. The only economic bloc in which Brazilian exports grew from January to September was Asia (see Table 3.1), mainly due to the behavior of the Chinese economy, which continues to show significant growth rates and, hence, maintain its demand for imports.

Table 3.1: Export, Import and Balance of Brazil per Bloc: January to September 2009 and 2008 (in US$ million FOB)

	Export		Var. %	Import		Var. %	Balance	
	2009	2008	2009/08	2009	2008	2009/08	2009	2008
Asia	29,989	28,785	4.2	25,280	35,484	-28.8	4,709	-6,699
. China	16,215	13,712	18.3	11,022	14,862	-25.8	5,193	-1,150
European Union	25,091	35,611	-29.5	20,726	27,259	-24.0	4,365	8,352
Latin America and Caribbean	24,305	38,370	-36.7	16,002	21,486	-25.5	8,303	16,884
- Mercosul	10,380	16,960	-38.8	9,200	11,201	-17.9	1,180	5,759
. Argentina	8,274	13,784	-40.0	7,907	9,937	-20.4	367	3,847
- Other de AL e Caribbean	13,925	21,410	-35.0	6,802	10,285	-33.9	7,123	11,125
US (1)	11,361	21,506	-47.2	14,826	19,109	-22.4	-3,465	2,397
Africa	6,424	7,410	-13.3	5,999	12,833	-53.3	425	-5,423
Middle East	5,522	5,904	-6.5	2,278	4,849	-53.0	3,244	1,055
Eastern Europe	2,513	4,574	-45.1	1,361	4,382	-68.9	1,152	192
Other	6,578	8,699	-24.4	4,036	5,771	-30.1	2,542	2,928
TOTAL	**111,783**	**150,859**	**-25.9**	**90,508**	**131,173**	**-31.0**	**21,275**	**19,686**

(1) including Puerto Rico.

Source: Prepared by the BNDES, based data of Secex/MDIC.

Brazilian exports to China were US$ 16.2 billion (+18.3%), representing 54.1% of Brazilian products exported to Asia. Other countries totaled US$ 13.8 billion, representing a decrease of 8.6% compared to the same period last year. Not counting China, the flow of trade between Brazil and Asia would post a deficit of US$ 484 million. For all other economic blocs, Brazil has a surplus, except for the United States.

Among the economic blocs that showed a decline in exports, we emphasize: the United States (US$ 11.3 billion; 47.2%), Eastern Europe (US$ 2.5 billion; 45.1%) and Mercosur (US$ 10.4 billion; 38.8%).

Brazilian imports per supply markets did not increase in any of the economic blocs. Among the blocs that went through a downturn, we point to: Eastern Europe (US$ 4.4 billion, 68.9% compared to the same period last year), Africa (US$ 12.8 billion, 53.3%) and Middle East (US$ 4.8 billion; 53.0%).

All categories presented a drop in exports per product types from January to September 2009: manufactured non-commodities products (US$ 41.8 billion, 32.3% compared to the same period in 2008), and basic products and other commodities ($ 67.7 billion, 20.5%).

Table 3.2: Export from Brazil per type of product: January to September 2009 and 2008 (in US$ million FOB)					
	January/September		Var. % 2009/08	Part. %	
	2009	2008		2009	2008
Basics and other Commodities	**67,712**	**85,137**	**-20.5**	**60.6**	**56.4**
Soybean grain	10,925	9,784	11.7	9.8	6.5
Iron ore	10,032	12,266	-18.2	9.0	8.1
Gross oil	6,041	9,880	-38.9	5.4	6.5
Gross and refined sugar	5,568	3,691	50.9	5.0	2.4
Soybean meal	3,659	3,375	8.4	3.3	2.2
Chicken meat	3,518	4,566	-23.0	3.1	3.0
Grain coffee	2,690	2,832	-5.0	2.4	1.9
Pulp	2,347	2,979	-21.2	2.1	2.0
Leaf tobacco	2,326	1,962	18.6	2.1	1.3
Beef	2,170	3,171	-31.6	1.9	2.1
Other	18,436	30,631	-39.8	16.5	20.3
Manufactured Non-Commodities	**41,765**	**61,726**	**-32.3**	**37.4**	**40.9**
Airplanes	2,884	3,962	-27.2	2.6	2.6
Automobiles	2,220	3,729	-40.5	2.0	2.5
Auto Parts	1,716	2,759	-37.8	1.5	1.8
Transmitters and receivers	1,323	1,947	-32.0	1.2	1.3
Engines and electric generators	1,305	1,609	-18.9	1.2	1.1
Iron and steel sheet metal	1,147	1,526	-24.8	1.0	1.0
Footwear	1,017	1,453	-30.0	0.9	1.0
Plastic polymers	1,012	1,034	-2.1	0.9	0.7
Pumps and compressors	783	1,295	-39.5	0.7	0.9
Cargo vehicles	756	1,628	-53.6	0.7	1.1
Other	27,602	40,784	-32.3	24.7	27.0
Special Operations	**2,306**	**3,996**	**-42.3**	**2.1**	**3.6**
Total	**111,783**	**150,859**	**-25.9**	**100.0**	**100.0**

Source: Produced by BNDES based on data of Secex/MDIC.

The group of products considered commodities was responsible for 60.6% of total exports between January and September 2009. Soybean (US$ 10.9 billion) was the item that stood apart from the rest. Following are the exports of iron ore (US$ 10.0 billion), crude oil (US$ 6.0 billion) and brown and refined sugar (US$ 5.6 billion). Among the leading basic products and other commodities, only the production of the following items increased: brown and refined sugar (50.9%), tobacco leaves (18.6%), soybean (11.7%) and soybean meal (8.4%).

In other manufactured goods, highlights include exports of airplanes (US$ 2.9 billion), passenger vehicles (US$ 2.2 billion), auto parts (US$ 1.7 billion) and transmission or reception devices (US $ 1.3 billion). All leading non-commodity manufactured products presented a reduction in exports between January and September 2008, especially cargo vehicles (53.6%), passenger vehicles (40.5%), pumps and compressors (39.5 %) and auto parts (37.8%).

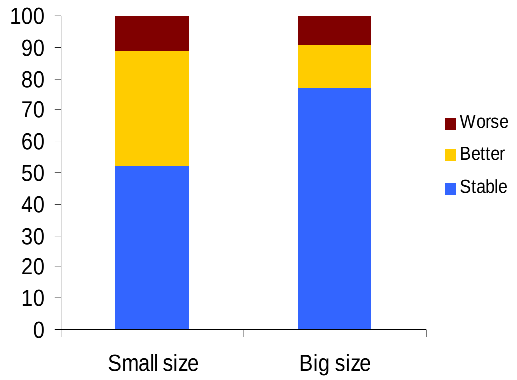
Box 3.1 – Availability of credit to exports is expected to improve

Statistics on export financing are not easy to obtain: operations are spread throughout a wide array of public and private institutions all over the world, and the tools to carry them out are quite diverse and distinct. To overcome this, studies are being carried out to measure the effects of the world economic crisis in export financing from research at institutions that operate in this market.

Credit to exports represents approximately 80% of the world trade of goods every year. This amount corresponds to US$ 12 trillion in figures for 2008. The reaction to the economic crisis in the credit market led to a shortage of export credit, which is estimated at US$ 300 billion between the end of last year and early 2009. Together with the drop in global demand for imports, the shortage of credit stands out as one of the factors to reduce world trade*.

However, the prospects outlined by the IMF's research together with BAFT, stemming from the opinion of banks operating in foreign trade, indicate that the lack of trade finance seems to have at least stopped deteriorating. For the smaller banks, precisely those that were most affected by the crisis, the research indicates that the majority expects the situation in the coming months to improve or at least not worsen - see Chart 3.1.

Chart 3.1 - Perception of the researched banks on expectations regarding the availability of export credit in the remaining months of 2009, by size of institution[1] (in % of responses)



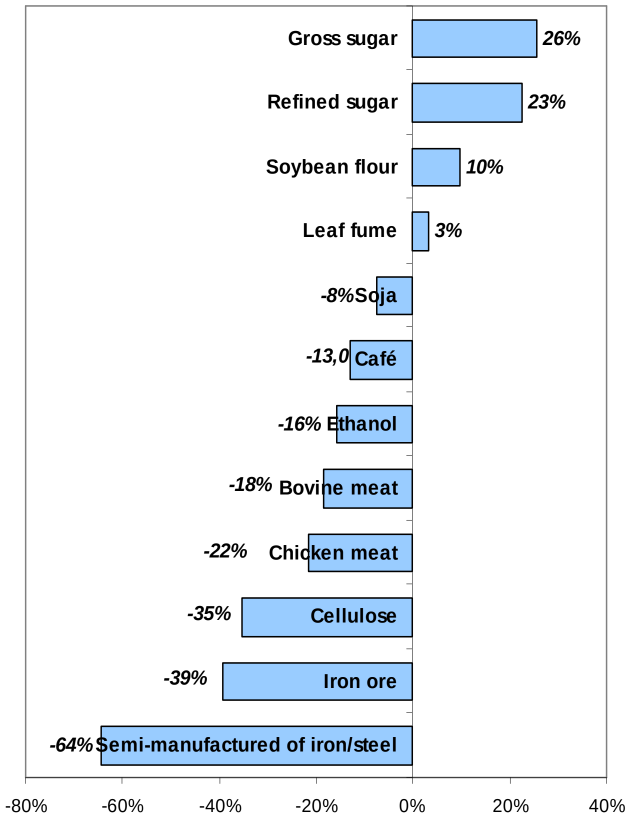
Source: IMF, *World Economic Outlook*, October 2009
1) Small: banks with total worldwide assets inferior to US$ 5 billion;
Large: with assets over US$ 100 billion.

* Auboin, M (2009) "Boosting the availability of trade finance in the current crisis: background analysis for a substrate G20 package" CPER Policy Insight, n 35.

The low prices on the international market have significantly contributed to the results of Brazilian exports.

Taking into consideration the twelve leading commodities exported by Brazil in the first nine months of 2009, except for oil, only four presented a price increase in September when compared to the same month last year. The most notable increases occurred in exports of brown and refined sugar (26% and 23% respectively) and the most significant fall, in iron and steel semi-manufactured products (64%) - see Chart 3.2. From the US$ 45.5 billion that the twelve main commodities represented for Brazilian exports, the four that presented an increase accounted for US$ 11.6 billion, or slightly more than 25% of the total.

Chart 3.2 - Changes in prices of the 12 leading commodities exported by Brazil: September 2009 / September 2008 (%)



Source: Produced by BNDES based on data of Secex/MDIC.

The fall in international prices has significantly contributed to the statistical drop in the value of Brazilian and world exports. In this vein, information on quantities can bring to light the real trend of production for exports in each country. The effect is commonly remembered in the case of commodities, but in an equally important fashion, it can distort the statistics of industrial products.

Foreign trade statistics have often demonstrated an increase in prices in the vehicle, and the machinery and equipment segments. However, in an economic crisis, in which the fall in world demand is across the board, a country can hardly be expected to effectively increase added value in their products. In other words, it is not common for that country to succeed in fine-tuning its agenda toward products with higher added value. The real answer to this question may lie in the fact that the basket of exported goods is focused on products likely to be more expensive due to loss of exports in segments with cheaper products. In general, the competition is fiercer in proportionately cheaper manufactured goods; those with high unit value tend to offer more differentiation, occupying specific niches.

In their turn, exports of a country can grow in quantity even though the international market price is forced down by the decrease of income in importing countries. In manufactured goods, the effect does not have as much importance as in basic products, but may also be relevant in some circumstances. Furthermore, there is the effect of renegotiations due to foreign-exchange variations: after depreciation of the foreign exchange rate, there is pressure to reduce prices from buyers and vice versa. Depreciation and subsequent appreciation is quite common in periods of international economic crisis, stimulating, even more, the uncertainty of signals coming from price information in international trade.

In both cases, the information on exported quantities can better indicate the real trend of exports in relation to the respective value statistics.

In Brazilian exports, the Funcex index of quantities suggests that the sectors most affected after the crisis were those related to products in the metal-mechanical segment. From January to August 2009, the last month with available data, the most significant drops occurred in exports of motor vehicles (48% over the same period last year) and machinery and equipment (43%). Only four sectors developed in the period, with emphasis on the strong growth of exports in the oil sector (49%) - see Table 3.3.

To assess the trend of quantities exported by Brazil, we used the comparison of the variation rate of July-August in relation to the same two-month period last year, with the total accrued rate in the early eight months of 2009. If the variation rate of the July-August period is greater than the average for all eight months, it appears that the sector has shown signs of improvement in its trend; if it is the contrary, then the sector has worsened. Based on this comparison it is possible to evaluate how the result of the last two months has added to the statistics from January to August, improving or worsening the average.

Table 3.3: Brazilian Export per sectors of CNAE in 2009: variation rates of quantity indexes in relation to the same period in the previous year						
CNAE Sector	First bimester	Second bimester	Third bimester	Fourth bimester	January to August	Trend of fourth quarter
Automotive vehicles, towing and bodyworks	-56%	-45%	-49%	-45%	-48%	Bettera
Machines and equipment	-39%	-37%	-48%	-48%	-43%	Worsea
Wood products	-50%	-38%	-33%	-32%	-39%	Bettera
Electronic and communication material	-40%	-28%	-39%	-30%	-34%	Bettera
Other transport equipment	-28%	-25%	-35%	-43%	-33%	Worsea
Production of clothing and accessories	-41%	-7%	-36%	-38%	-31%	Worsea
Production of non-metallic minerals	-42%	-30%	-29%	-22%	-30%	Bettera
Machines, apparatus and electric materials	-34%	-18%	-25%	-30%	-27%	Worsea
Extraction of non-metallic minerals	-35%	-20%	-27%	-15%	-24%	Bettera
Rubber and plastic products	-37%	-19%	-27%	-14%	-24%	Bettera
Metal products	-31%	-14%	-27%	-26%	-24%	Worsea
Extraction of metallic minerals	-32%	27%	-46%	-19%	-23%	Bettera
Preparation of leather, its artifacts and footwear	-33%	-27%	-19%	-13%	-23%	Bettera
Medical and precision equipment	-27%	-20%	-19%	-23%	-22%	Worsea
Furniture and several industries	-18%	-18%	-22%	-23%	-20%	Worsea
Textile products	-28%	-6%	-17%	-25%	-19%	Worsea
Basic metalwork	-31%	-4%	-23%	-17%	-19%	Bettera
Coke, oil and fuel refine	-36%	-34%	-8%	-2%	-18%	Bettera
Chemicals	-27%	4%	4%	-1%	-5%	Bettera
Food and beverages	-8%	13%	-2%	-4%	-1%	Worsea
Cellulose, paper and paper-based products	1%	40%	-1%	3%	9%	Worsea
Machines for offices and computers	-4%	35%	3%	20%	14%	Bettera
Agriculture and cattle-raising	11%	29%	36%	5%	22%	Worsea
Oil extraction	85%	324%	-22%	63%	49%	Bettera

Source: Produced by BNDES based on data of Funcex.

Based on this indicator, it seems that there is a trend of improvement in the export volume in most sectors in Brazil: 13 out of 24 sectors present a smaller decrease or higher growth in the July-August period than in relation to the total accumulated in the year. However, we must remember that the vast majority of sectors still show significant reductions, as can be seen in Table 3.3, despite the tendency to increase. The result of the indicator only tells us that, for many sectors, there seems to be a gradual reduction in the fall of export quantities.

In the two most affected sectors mentioned above, vehicles and machinery, the behavior inferred from that indicator is different. While the automobile sector is showing signs of a reduction in its fall, the machinery and equipment sector presents a trend of deterioration; its decline in the July-August period (48%) was higher than the accumulated fall of the year (43%). The recovery in sales of machinery and equipment is more difficult because they are often related to the import company's expansion of production capacity, which is not very feasible under the present circumstances in the world.

SPECIAL ARTICLE

Brazilian exports of capital goods after the world crisis started

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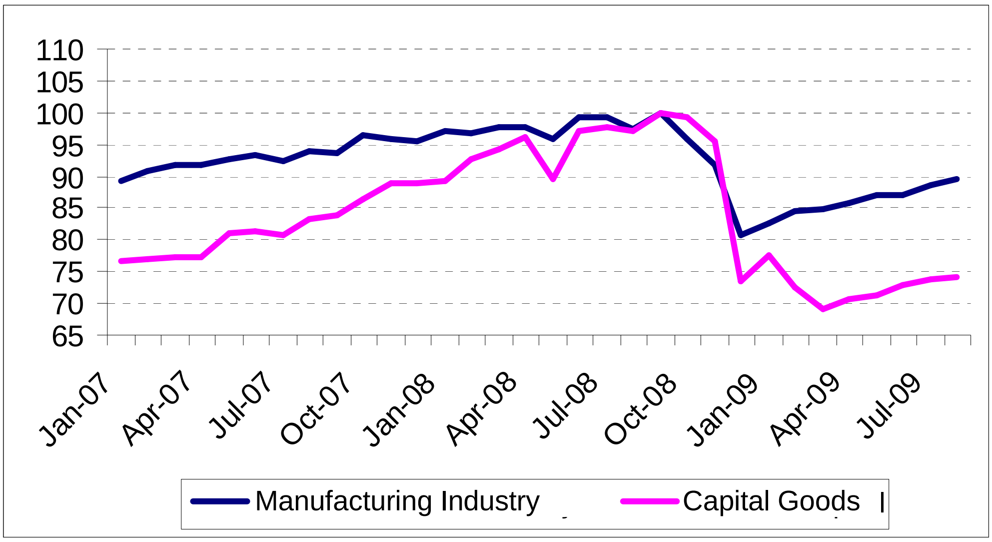
The global economic crisis strongly impacted on industrial production in the world. In a considerable number of countries, the drop in the output of industrialized goods represented averages of around 20% for the slowdown in the same periods of the previous year, reaching almost 30% in some countries. In spite of also suffering the effects of the world economic crisis, Brazilian industry presented a reduction significantly lower than these global averages.

According to the IBGE, for the first half as a whole, production in the Brazilian manufacturing industry in 2009 was 13% lower than the same period in 2008. Although there is evidence that the rate of the decline decreased through July and August, the slowdown of economic activity has affected the Brazilian capital goods industry more than general industry, with production for the first half down 22.9 % compared to the previous year. With reference to September 2008, in which both series reached their highest points, in the space of three months, capital goods production dropped 26.5%, against 19.3% in the manufacturing sector (Chart 1).

Chart 1: Production of Manufacturing and Capital Goods Sectors in Brazil (September 2009 = 100)



Source: IBGE, produced by the BNDES.

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The installed capacity in the capital goods sector also presents low usage in relation to the total for the manufacturing sector. According to the Central Bank, in September 2008, use of capacity reached 87.8% for capital goods, but dropped to 73.3% in January and 77.1% in August. In its turn, the average of the whole manufacturing sector showed a minimum of 76.7%, and last month was already working with usage levels higher than 81.5%.

Brazil's capital goods industry can compete internationally in sales in a specific group of sub-segments, as can cargo transport vehicles, road and agricultural machinery, aircraft and power generation.

Export revenues are important to many Brazilian capital goods companies, and therefore the slowdown of the international demand for such products significantly affects the drop in production and the increase of idle capacity in the country.

The purpose of this study is to analyze the behavior of Brazilian exports of capital goods comparing two very different moments for the economy, the first half of 2008 and of 2009. In the first half of 2008, the world did not understand the magnitude of the financial and economic crisis that was taking shape in the North American and European markets, much less the clear signs regarding the Brazilian economy. The first half of 2009 registered, for Brazil, the immediate effect of the drop in exports stemming from lower international demand; however, not yet showing the recovery that would begin in the following months.

The agenda per types of capital goods

Brazilian exports of capital goods have expanded significantly over the last few years: the value exported in 2008 represented more than triple that in 2002. However, this trend turned about-face in early 2009, as did other items of the Brazilian export agenda. In fact, if compared to the first half of last year, exports of capital goods decreased (31%) more than the total of Brazilian exports (23%).

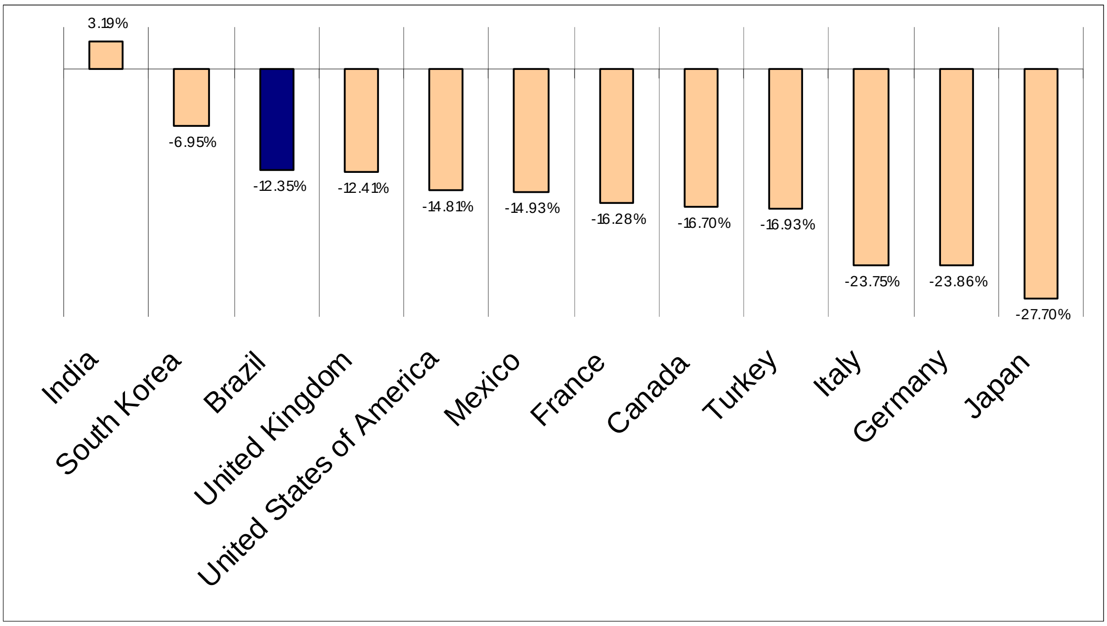
The capital goods sector is one of the most sensitive in all the economies in the world as these products are earmarked to expand capacity and/or modernize premises. With the perspective of lower demand for goods due to income reduction, the incentive for companies to require capital goods in times of economic crisis is even lower than the current drive for many consumer and intermediate goods. The perspective of reduced demand postpones investments, and, therefore, the demand for capital goods. During economic crises, the result expected for production as well as export and import of capital goods is for a more significant drop than for other goods.

Production in the manufacturing industry in the world serves as an indicator of demand for capital goods abroad. If manufacturing production as a whole drops, the demand for imports of capital goods should follow this trend.

The backlash from abrupt changes in global consumption brought on by the financial crisis included a significant decline in manufacturing activity in both developed and developing countries (Chart 2). When comparing the 2nd quarter of 2009 to the same period last year, production in the manufacturing industry dropped more than 20% in countries such as Italy, Germany and Japan. Industrial production is down in almost all countries in the world, reducing export opportunities.

Compared to other countries, the Brazilian industry decreased significantly less than the global average in the same period. While in Brazil, industry shrank 12.4%, in other developing countries it showed larger drops, such as in Mexico (14.9%) and Turkey (16.9%). India was one of the few exceptions, managing to maintain a positive variation of 3.2%.

Chart 2: Production of the manufacturing industry in selected countries, 2nd quarter of 2008 - 2009



Source: OECD, produced by the BNDES.

Table 1 shows the evolution of Brazilian exports of capital goods in the first half of 2008 and 2009, divided into categories. The value of exports in the first half of 2009 of US$ 2.76 billion in machinery and equipment is the most representative of the whole agenda, followed by aircraft at US$ 2.09 billion and buses, trucks and light commercial vehicles at US$ 1.10 billion.

Table 1: Brazilian Export of capital goods per category, first half 2008–2009 (US$ thousand)			
	2008	2009	Variação
Aircrafts	2,805,997	2,089,816	-25.52%
Vessels	29,665	76,346	157.36%
Optical, medical and surgical instruments	71,702	53,307	-25.65%
Office and computer machines	95,902	73,931	-22.91%
Machinery and equipment	3,990,145	2,757,333	-30.90%
Electric materials	1,014	497	-50.94%
Electronic and communication material	115,535	105,847	-8.39%
Metalwork and metal products	195,503	318,700	63.02%
Bus, trucks and light cars	2,369,508	1,097,558	-53.68%
Vehicles and railway equipment	77,491	122,158	57.64%
Total	**9,752,461**	**6,695,493**	**-31.35%**

Source: Prepared by the BNDES, based data of Secex/MDIC.

In relative terms, the ranking of the stakes in each category in exports of capital goods did not change when compared to the same periods in 2008 and 2009. The only sectors that were not affected by the overall drop in exports are vessels, metal industry and metal products (especially iron and steel pipes) and vehicles and railway equipment. These areas have shown great increases, but represent less significant figures in relation to the total. The improvement of these categories was not enough to significantly alter the concentration of the agenda. Together, the four major categories accounted for 94.0% of the total in 2008 and 88.8% in 2009.

Considering solely the machinery and equipment category, the highest amounts of exports in the first half of 2009 relate to the classification of motors and electric generators (US$ 567 million), earth moving and cargo lifting machinery (US$ 392 million) and other machines (US$ 245 million). This last classification includes a heterogeneous set of goods, which becomes important when combined. For example, letterpress printing machines, pneumatic and hydraulic tools and other machinery defined by excluding the remaining items of the NCM, but without a precise definition for its use.

Table 2: Brazilian Export of Machinery and Equipment, first half 2008-2009 (US$ thousand)			
	2008	2009	Variação
Engines and electric generators	696,179	567,284	-18.5%
Earthwork machines and cargo lifting	1,101,279	392,442	-64.4%
Other machines	259,079	244,819	-5.5%
Electric transformers	203,262	243,416	19.8%
Generators and turbines	94,455	232,261	145.9%
Tractors	361,652	213,875	-40.9%
Metalwork machines	168,424	161,194	-4.3%
Agricultural machines, other than trucks	323,689	152,381	-52.9%
Machines for non-metallic	215,428	124,595	-42.2%
Ovens, burners, heaters and driers	63,635	101,303	59.2%
Machines for food industry	79,131	57,582	-27.2%
Dishwasher and vessels	42,265	39,916	-5.6%
Chairs	23,528	36,490	55.1%
Compressors and pumps	132,030	34,917	-73.6%
Valves and faucets	8,370	32,054	283.0%
Other	217,737	122,804	-43.6%
Total Machinery and Equipment	**3,990,145**	**2,757,333**	**-30.9%**

Source: Prepared by the BNDES, based data of Secex/MDIC.

The highest drop in export value, when comparing the semesters, relates to compressors and pumps (73.6%), earth moving and cargo lifting machinery (64.4%) and agricultural machinery, except for tractors (52.9%). Tractors, alone, also showed a drop in exports (40.9%), which significantly decreased their participation in the agenda (from 9.1% in 2008 to 7.8% in 2009). Furthermore, valves and faucets, as well as generators and turbines showed significant increases of 283.0% and 145.9%, respectively.

Destinations of Brazilian exports of capital goods

In the breakdown per countries and continents (Table 3), Latin America and the Caribbean appear to be the largest importers of Brazilian capital goods, representing 33.4% of exports in the first six months of 2009, or US$ 2.2 billion. This amount was distributed mainly between machinery and equipment at US$ 1.1 billion, and buses, trucks and light commercial vehicles at US$ 522.7 million. However, all countries that have more representation in the region showed a strong decrease in imported values, especially Argentina, which imported US$ 1.3 billion in the first half of 2008 and US$ 649.3 million in the same period of 2009.

Exports of capital goods to North America, not including Mexico, have been affected mainly by the severe drop in purchases of the United States, the largest importer in the region. The main category of products, aircraft, reported sales 58% lower in 2009, totaling U.S. $ 544 million. Machinery and equipment had a relatively lower drop of US$ 784.6 million in 2008 to US$ 618.8 million.

Tabela 3: Brazilian Exports of capital goods per country and continent, 1st half 2008-2009 (US$ thousand)				
Continent	Importer Country	2008	2009	Variation 08-09
Latin America and Caribbean	ARGENTINA	1,341,655	649,319	-51.6%
	CHILE	493,035	275,753	-44.1%
	MEXICO	445,845	261,139	-41.4%
	VENEZUELA	240,625	218,889	-9.0%
	PERU	315,982	188,473	-40.4%
	COLOMBIA	231,178	133,913	-42.1%
	PARAGUAY	209,284	74,843	-64.2%
	BOLIVIA	79,958	73,824	-7.7%
	URUGUAY	141,303	73,228	-48.2%
	OTHER	510,874	284,464	-44.3%
	TOTAL	4,009,739	2,233,845	-44.3%
North America, other than Mexico	UNITED STATES OF AMERICA	2,132,490	1,272,780	-40.3%
	OTHER	141,159	122,718	-13.1%
	TOTAL	2,273,649	1,395,498	-38.6%
Europe	FRANCE	137,217	244,296	78.0%
	GERMANY	150,086	206,188	37.4%
	ITALY	62,983	202,235	221.1%
	SPAIN	85,527	135,101	58.0%
	OTHER	899,980	559,465	-37.8%
	TOTAL	1,335,793	1,347,285	0.9%
Asia and Oceania	CHINA	190,078	206,014	8.4%
	UNITED ARAB EMIRATES	105,606	164,054	55.3%
	JAPAN	20,468	119,771	485.2%
	OTHER	1,069,037	398,989	-62.7%
	TOTAL	1,385,189	888,828	-35.8%
Africa	ANGOLA	272,697	265,726	-2.6%
	SOUTH AFRICA	276,677	217,838	-21.3%
	EGYPT	42,038	165,496	293.7%
	NIGERIA	34,740	44,250	27.4%
	OTHER	121,939	136,727	12.1%
	TOTAL	748,091	830,037	11.0%
TOTAL		**9,752,461**	**6,695,493**	**-31.3%**

Source: Prepared by the BNDES, based data of Secex/MDIC.

Europe, the third largest importing region, virtually maintained the value of its purchases, increasing them by US$ 11.5 million, a total of US$ 1.35 billion in the first half of 2009. Among the categories of capital goods, aircraft, at US$ 837.9 million, and machinery and equipment, with US$ 387 million, are more representative. This first category is mostly responsible for supporting exports to countries in the region. Together, Spain, France and Italy, countries that displayed significant growth in imports in the comparison between semesters, purchased US$ 439.9 million in aircraft in 2009, compared to US$ 133.9 million in 2008. The substantial increase seen in the flow with Ireland also included turbojets.

Among Asian and Oceania countries, Japan displayed an important increase in imports of capital goods, equivalent to 485.2%. This variation is primarily due to purchases of aircraft made in the first half of 2009, which reached 107.30 million. China, the main destination of exports to the region, also slightly increased the value of its purchases by 8.4% compared the first half of 2008. However, the entire region, much the same as other regions, also posted a negative result in comparison to 2008, with aircraft and machinery and equipment, the two largest categories, showing a drop in export value of 30.6% and 43.1%, respectively.

The African continent stood apart, presenting the highest growth in imports of Brazilian capital goods in the comparison between semesters. The region is particularly important as a destination for exports of Brazilian buses, trucks and light commercial vehicles. Total exports of this category dropped 53.7% comparing the first semester of 2008 and of 2009. However, African imports dropped substantially less, only 9.8%, totaling US$ 293.3 million. Thus, the continent was the second most important region for this class of products in 2009, following Latin America. Machinery and equipment is the largest item in the total of exports to Africa, at $ 331.1 million.

Conclusion

Industrial production showed a strong reduction in almost all countries in the world after the onset of the economic crisis. In Brazil, there was also a drop, although smaller than the global average. Currently, recovery of economic activity in several parts of the world and also in Brazil is underway, but this has only begun to take shape in recent months. Among industry sectors, producers of capital goods were mostly affected by the crisis, since they provide goods intended to increase capacity and/or modernization of production lines. In times of crisis, such activities are strongly affected.

Brazil is an important world producer and exporter in many of the capital goods sectors. The decline of world demand affected exports of capital goods, and, to assess this development, this article used comparative statistics from the first half of 2008 and of 2009, two periods immediately preceding and following the most intense phase of the world crisis, respectively.

The adverse international scenario affected, in a similar fashion, almost all categories of exported capital goods, leaving aircraft, machinery and equipment and buses, trucks and light commercial vehicles with the highest proportion of the export agenda. Among machinery and equipment, engines and electric generators, and earth moving and cargo lifting machinery led exports in the first half of 2009. Moreover, agricultural machinery and tractors registered a severe drop in exports and lost market share this year.

Despite the importance of capital goods exported to Latin America, other markets showed significant presence. Individually, the United States, even under the effects of the crisis is still the main destination for Brazilian capital goods, and Europe maintained its import levels just above those recorded in 2008. Africa, in its turn, stands out for the significant increase in imports.