

Nine months after the emergence of the subprime crisis in the North-American market and the consequent introduction of adjustments in asset prices and curtailment of financial markets' leverage, the world economy is going through a period of transition. Economic activity deceleration, previously restricted to the United States, started spreading to other regions, with slowest economic expansion being registered in some Asian economies and signs of decreased activity level observed in the United Kingdom and Spain.

Against this backdrop of domestic demand retraction in the mature economies, strong adjustments observed in the prices of commodities have pushed inflation upward, thus introducing an additional challenge to the central banks' monetary policy management aimed at the maintenance of financial stability, economic growth and inflation control.

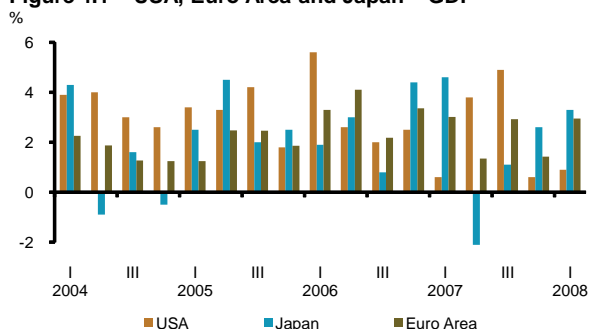
In the United States, where the risks of economic activity contraction are more intense, successive decreases in basic interest rates were introduced, while in the Euro Area and Japan, inflationary risks might not only limit the concession of monetary incentives but also lead their respective central banks to adopt a more restrictive posture.

## 4.1 Economic activity

In contrast with the expectations formed since the outbreak of the crisis in the US subprime market, the European and Japanese economies posted annual respective growth rates of 3% and 3.3% in the first quarter of 2008, results above the average registered in recent years. On the other hand, these rates reached 0.9% and 1.6% in the United States and in the United Kingdom, respectively.

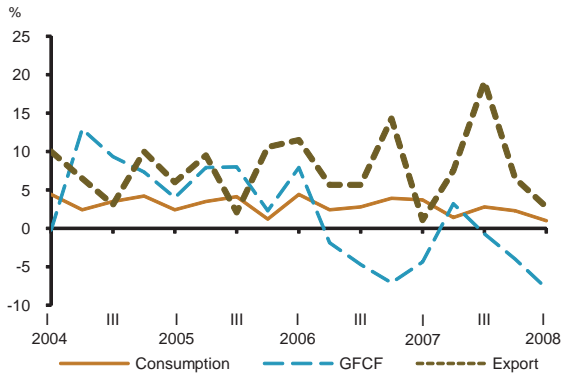
The modest result registered in the U.S. evinced, on the one hand, the negative contribution of 1.17 p.p. of the real estate market and, on the other, the positive contributions of the

**Figure 4.1 – USA, Euro Area and Japan – GDP<sup>1/</sup>**



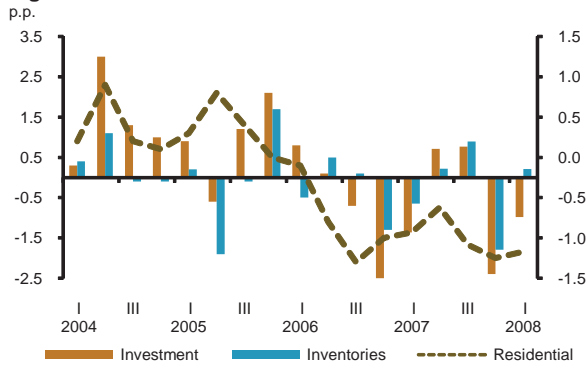
Sources: Bureau of Economic Analysis, Economic and Social Research Institute  
 1/ Quarterly growth. Seasonally adjusted annualized rates.

**Figure 4.2 – USA – GDP Components**



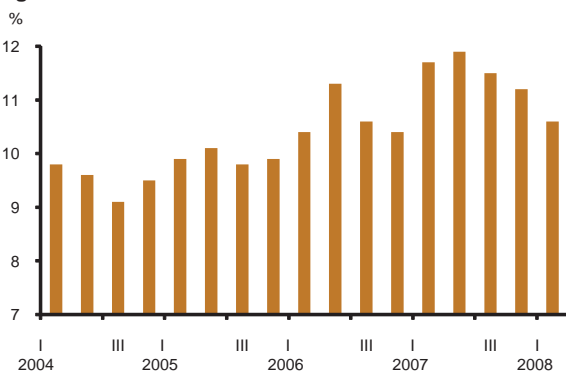
Source: Bloomberg

**Figure 4.3 – Contribution to US GDP**



Source: Bloomberg

**Figure 4.4 – China – GDP<sup>1/</sup>**



Source: Bloomberg

<sup>1/</sup> Growth rate over the same period of preceding year.

foreign sector, 0.8 p.p.; household consumption, 0.7 p.p.; and inventory expansion, 0.21 p.p.

Notwithstanding the euro appreciation, the increase in oil prices and the crisis negative impacts, the Euro Area economy registered a strong growth in the period. This performance was partially explained by the strength of the German economy, which posted an annual growth of 6.3% in the first quarter, as a result of the recovery in household spending, particularly with regard to stock accumulation. On the other hand, economic growth in Spain, where economic activity and labor market were affected by adjustments introduced in the construction sector, was limited to 1.1% in the period. One should highlight that those rates represented, in the order, the best and the worse rates registered in both economies in this basis of comparison since the introduction of the Euro.

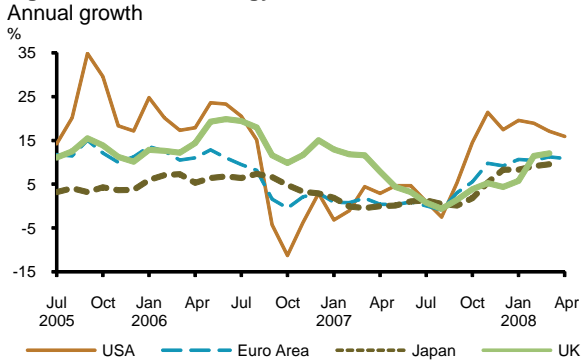
In the United Kingdom, even though the 5.3% growth rate registered in private consumption, the combined effects of the increase in the prices of imported products, the adjustments to the real estate market and the more restrictive credit conditions contributed to the shrinkage of economic growth. The performance of the real estate sector, in particular, has fueled fears of a deflation in household prices similar to that observed in the U.S. and of its potential negative effects on the financial institutions' balances.

The Japanese economy was impacted by annual increase of 3.4% in household consumption, compared to 1.7% in the previous quarter, and 19.5% in the exports of goods and services, propelled by the good performance of sales to emerging markets. One should underscore that the continuity of the Japanese GDP growth trend during the year will be conditioned by both the evolution of the price of commodities and the performance of corporate investments.

With regard to the emerging economies, it should be stressed the maintenance of annual growth rates higher than 10% in China, explained by structural changes in consumption and the maintenance of high investment levels that should contribute to sustain the country's economic growth throughout 2008.

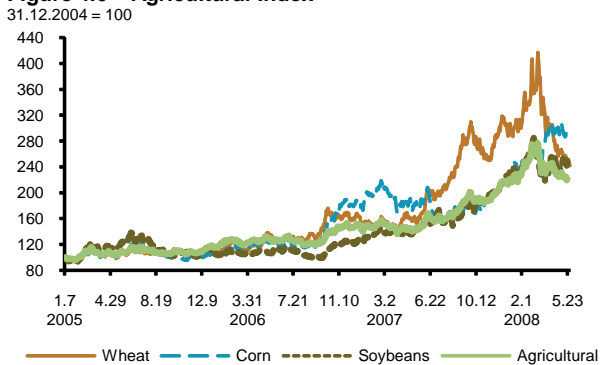
## 4.2 Inflation and monetary policies

**Figure 4.5 – USA – Energy Inflation**



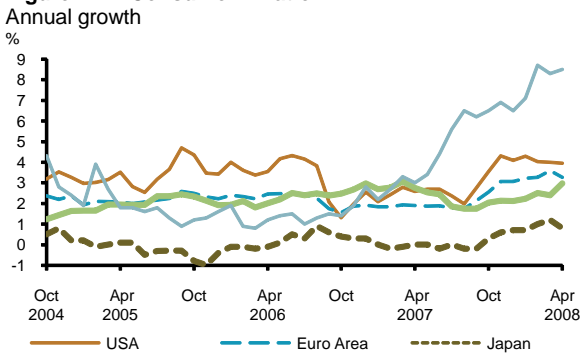
Source: Thomson Datastream

**Figure 4.6 – Agricultural Index**



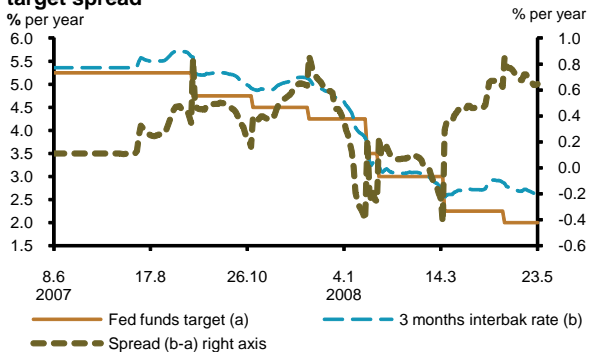
Source: Thomson Datastream

**Figure 4.7 – Consumer inflation**



Source: BLS, Eurostat, Bloomberg and ONS

**Figure 4.8 - USA: Interbank and Fed funds target spread**



Source: Thomson Datastream

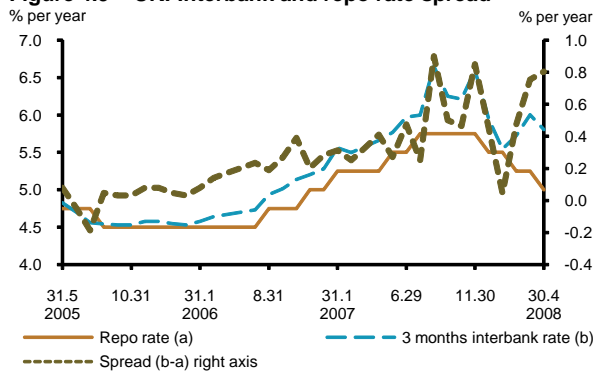
In the second quarter of 2008, the central banks in mature economies continued faced with the dilemma of choosing between fighting inflation and stimulating economic growth. Pressures on the prices of agricultural commodities resulting from the economic expansion of emerging economies, speculation on future markets and persistent tensions between supply and demand, coupled with the maintenance of high prices of oil, continue to impact inflation rates in mature and emerging or developing economies, especially in those countries where the item foodstuffs is more important.

Amidst the deterioration observed in the monetary market's liquidity conditions, as evinced by the systematic and progressive increase of spreads between 3-month and overnight interest rates on interbank markets, several Central Banks have extended their interventions to the short-term financing market by carrying out credit auctions. A series of important actions were taken by the Federal Reserve System (Fed), the Bank of England (BoE), the European Central Banks (ECB), the Swiss National Bank (SNB), and, more recently, the New Zealand Central Bank. These institutions did not only extended the terms for repurchase operations from 1 to 30 days but also started to accept mortgage-backed housing securities as collaterals.

In the U.S., the 12-month accumulated increases registered in the prices of energy, 15,9%, imported products – excluding oil – 6,2%, and foodstuffs, 5.1%, in April were responsible for the upturn in the consumer price index to 3.9%, above the Fed's comfort zone and with an upward trend. In this scenario, the Federal Open Market Committee (Fomc), in view of the perspective of a smoother than previously estimated economic slowdown, signaled the possibility of closing its cycle of loosen monetary policy after cutting Fed funds target by 100 b.p. to 2% in the quarter ended in April.

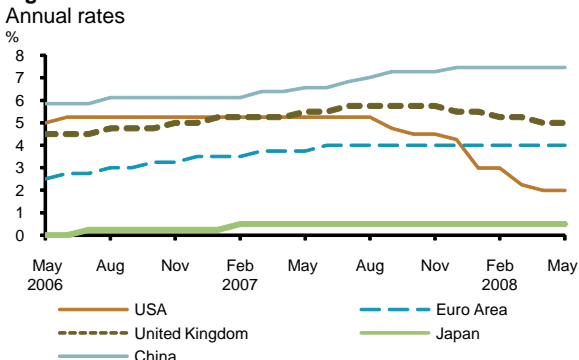
To cope with tighten credit conditions, the Fed increased the volume of resources available through the Term Auction Facility (TFA) to US\$150 billion, extended to 28 days the terms for repurchase operations, which were limited to US\$100 billion, and accepted to swap Treasuries securities for agencies debts, including mortgage-backed assets. The Fed also reduced the discount rate in order to maintain the spread between this rate and the fed funds target at 25 b.p., extending the term for these operations from 30 to 90 days. In addition, the Fed, jointly with the ECB and the SNB, in an attempt to reduce the pressure on the dollar in the offshore

**Figure 4.9 – UK: Interbank and repo rate spread**



Source: Thomson Datastream

**Figure 4.10 – Official interest rates**



Source: Fed, ECB, BoJ, Bank of England and The People's Bank of China

market, raised the swap lines to US\$50 billion (Euro Area) and to US\$12 billion (Switzerland).

In the month of March, the Fed also introduced two new liquidity assistance programs, the Term Securities Lending Facility (TSLF) and the Primary Dealer Credit Facility (PDCF). Under the TSLF, the Federal Reserve will lend up to US\$200 billion of Treasury securities to primary dealers institutions, not necessarily depositors, as required in the rediscount window and in the TAF auctions, secured for a term of 28 days in exchange for private AAA mortgage backed-securities. The PDCF, also targeted to primary dealers, consists in a temporary credit line with a wide range of collateral acceptance through which dealers receive a treatment similar to trade banks as they are provided with access to a type of rediscount. Thus, the Fed acts as a lender of last resort to institutions that do not belong to the bank's traditional scope of regulation and supervision.

In the United Kingdom, even though 12-month accumulated record expansions registered in producer and consumer price indices in the month of April, 7.5% and 3%, respectively, deteriorated credit conditions and less favorable economic growth perspectives have stimulated the BoE to reduce the basic interest rate to 5% p.y. and, at the same time, to expand the 3-month credit supply via repo operations from £10 billion, effective as of January, to £15 billion in April. Moreover, the BoE introduced, in the TSLF mode setup by the Fed, the Special Liquidity Scheme (SLS), an annual credit line of £50 billion through which banks may swap triple-A active mortgages existing until December 2007 for Treasury bonds especially issued for this purpose. For these annual swaps, renewable for two periods, requestors pay the three-month Libor rate and offer an amount of collaterals equivalent to 10% to 30% the value of the security.

In the Euro Area, the 12-month accumulated consumer price index reached 3.3% in April, after the record rate of 3.6% observed in March, as a result of pressures in the prices of foodstuffs, 6%, and energy, 10.8%. Even though this result is above the target of 2%, unfavorable perspectives for economic growth in the region has constrained the ECB to maintain the basic interest rate at 4%, in effect since June 2007. With regard to liquidity restrictions, the ECB continued its fundamental intervention on the monetary market by extending the swap agreement established with the Fed and injecting a large amount of resources through repo operations.

In Japan, the 12-month accumulated inflation, in spite of the Yen appreciation, reached 0.8% in April, while the overnight call rate has been maintained at 0.5% p.y. since February 2007. The structure of local banking system's liabilities, differently from that of the U.S. and Europe, incorporates a significant volume of long-term deposits, which contributes to attenuate the impact of the financial crisis. This allows the BoJ to act more discreetly, limiting itself to punctual injection of resources, as occurred with the allotment of ¥400 billion in March for reducing the differential between the effective overnight rate and the target for the basic interest rate.

The annual inflation rate in China, which has remained above 7% since the beginning of the year, pressured by the increase in the prices of foodstuffs, reached 8.5% in April. This led the People's Bank of China (PBC) to intensify the adoption of measures to curtail the economy's liquidity. The PBC restrictive posture has prioritized the increase in reserve requirements ratios and in discount rate, which was set at 16.5% in May. In addition, the PBC has expanded the issuance of securities for monetary sterilization and for accelerating the foreign exchange appreciation.

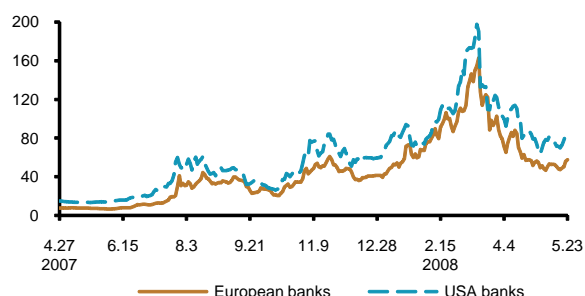
In Canada, where annual inflation is still lower than 2%, the BoC reduced the target for the basic interest rate to 3% p.y. in April and carried out new Term Purchase and Resale Agreements (TPRA) totaling C\$1.34 billion.

### 4.3 International financial markets

After the strong turbulence registered on the international financial market in the first half of March, a strong commitment by important central banks in providing liquidity for the adequate interbank market operation, coupled with the prospect that most significant losses consequent upon the mortgage market crisis has already been accounted for by financial institutions, played an important role in reducing market's volatility. Signs of recovery were observed particularly in stock and credit default swap (CDS) markets, while on interbank markets persist some punctual traces of stress as spreads relative to basic rates remain at high levels.

The bank's CDS premiums – which measure the guarantee premium against default – in line with the troublesome scenario faced by several institutions, increased in the

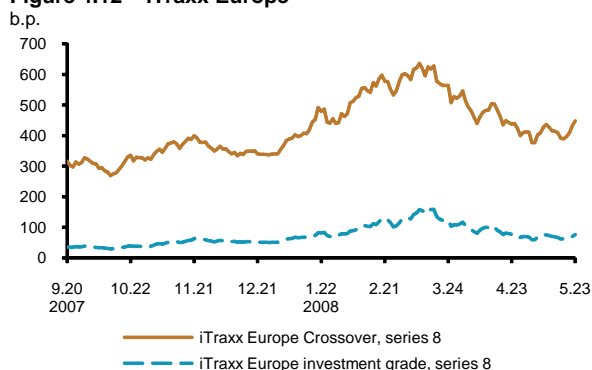
**Figure 4.11 – 5 year CDS Premiums of Major Banks<sup>1/</sup>**



Source: Thomson Datastream  
 1/ Arithmetic average of 5-year CDS premiums for major European and USA banks. Since it's not a random sample, it may not reflect the behavior of the financial system as a whole.

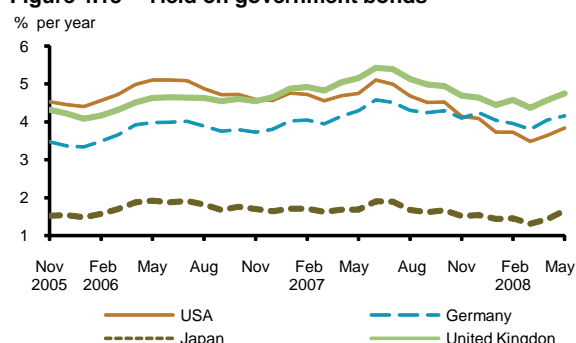
first half of March. Thus, average premiums related to five important U.S. and Europe banks registered, in the order, 197 b.p. in March 14 and 163 b.p. in March 17. The factors mentioned above, coupled with the announcement of the purchase of Bear Stearns by an important investment bank – funded by FedNY resources – and the raise of capital by some important banks sustained the low trend of CDS premiums in the quarter. In this scenario, on May 23, average premiums related to the United States and European institutions previously mentioned increased by 85.3 b.p. and 57.7 b.p, respectively.

**Figure 4.12 – iTraxx Europe**



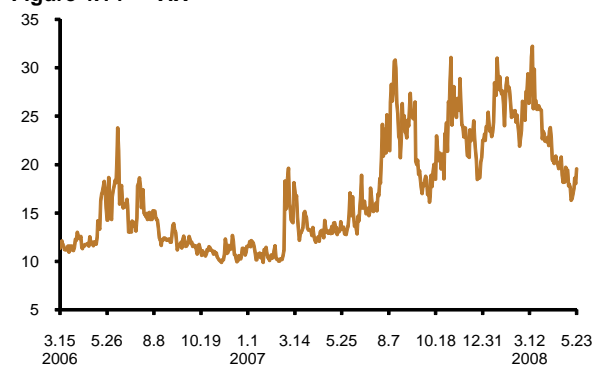
Source: Thomson Datastream

**Figure 4.13 – Yield on government bonds<sup>1/</sup>**



Source: Bloomberg  
1/ Monthly average of nominal yields on 10-year bonds, up to May 23, 2008.

**Figure 4.14 – VIX**



Source: Thomson Datastream

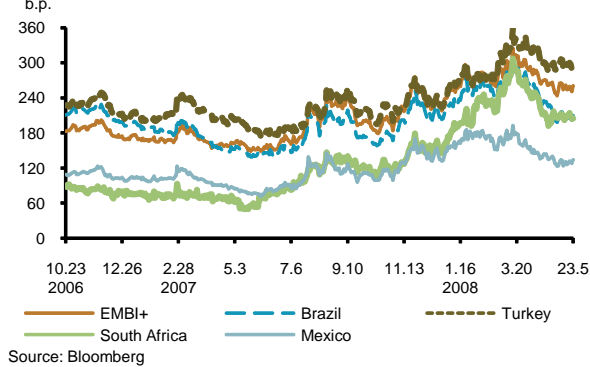
Similarly to the European and American banks' CDS, the premiums required to guarantee corporate loans – either with a high-risk or investment grade classification – in the United States and Europe, after reaching maximum points in March, started an upward trend. In Europe, the iTraxx Crossover and the iTraxx Investment Grade, which represent the required premium for corporations classified as high-risk and investment grade, increased, respectively, from 598 b.p. and 127 b.p. in February 29, to 448 b.p. and 75 b.p., in March 23, after 636 b.p. of March 10 and 160 b.p. of March 13, respectively.

The reduced demand for long-term government securities, observed since March, was associated to the falloff in risk perception by investors, who now consider these securities less attractive than other assets considered much more risky, a reversal of the previously observed “flight to quality”, as well as deteriorated inflation perspectives. In this framework, the annual earnings on 10-year securities in the U.S. and Germany, which registered minimum values of 3.31% and 3.69%, respectively, on March 17, reached, in the order, 3.84% and 4.27% on March 23, while those with similar maturities in Japan and in the United Kingdom, after reaching, in that order, 1.26% and 4.29% in March 24, registered 1.17% and 4.92% on May 23, respectively.

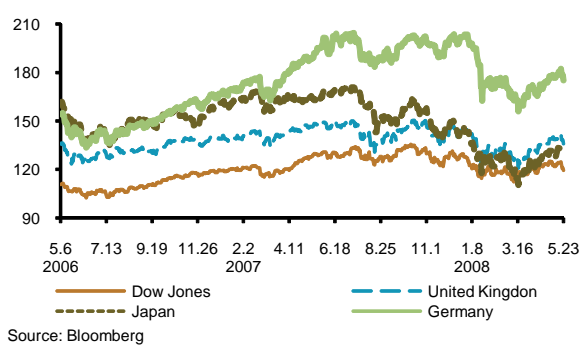
The Chicago Board Options Exchange (VIX) index, which measures the Standard and Poor's (S&P500) implicit short-term volatility and is considered a aversion to risk indicator by investors, registered a positive performance until March 17, closing at 32.2 points, and began a downward trend since then. The VIX moved from 26.5 points, on February 29, to 19.6 points on May 23.

The Emerging Market Bond Index Plus (Embi+), a risk indicator for emerging markets, after reaching 325 b.p. in March 17, the highest value registered since June 13, 2005, started to follow a downward trend, closing at 261 b.p. in

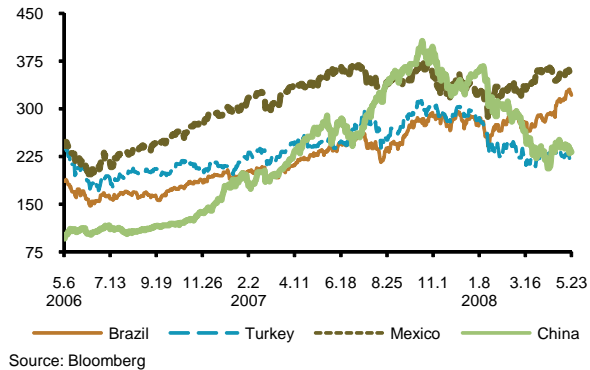
**Figure 4.15 – Emerging Markets Bond Index Plus (Embi+)**



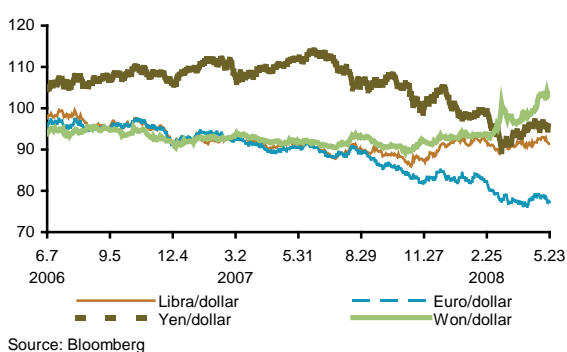
**Figure 4.16 – Stock exchanges – USA, Europe and Japan**



**Figure 4.17 – Stock exchanges – Emerging markets**



**Figure 4.18 – Dollar exchange rates**



May 23, compared to 291 b.p. observed in February 29. The indicator related to the South Africa presented an intense volatility in the period, moving from 250 b.p., in February 29, to 307 b.p., in March 17, and 205 b.p. in May 23. On the other hand, the indicator related to Brazil, on the same dates, registered 265 b.p., 305 b.p. and 210 b.p., respectively.

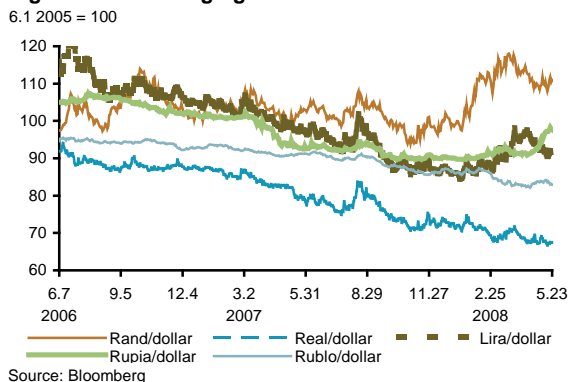
Stock markets registered a positive performance as financial markets signaled the end of the acute phase of the crisis, partially recovering the losses accumulated in the quarter ended in February. Between February 29 and May 23, the USA's Dow Jones, the Germany's *Deutscher Aktienindex* (DAX), the Japan's Nikkei and the United Kingdom's Financial Times' Securities Exchange Index (FTSE 100) grew by 1.7%, 2.9%, 3%, and 3.4%, respectively, accumulating, in the year, losses of 5.9%, 13.9%, 8.5% and 5.7%.

As in mature economies, the performance of stock market in emerging countries was favored by the cutback in the aversion to risk in financial markets. The lag among macroeconomic indicators in this group of economies was evinced by the heterogeneous results registered between February 29 and May 23, when the Turkey's Istanbul Stock Exchange National 100 Index (XU100) and the China's Shanghai Composite Index registered, in this order, losses of 10.8% and 20.1%, while the Mexico's *Indice of Precios y Cotizaciones* (IPC) and the Brazil's Ibovespa accumulated gains of 7.4% and 12.5%.

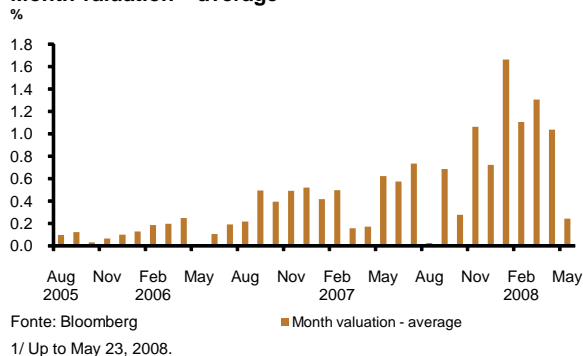
The North-American dollar exhibited different trends against the Pound Sterling, Euro and Yen in the quarter ended in May. From February 29 to May 23, continuing the trend initiated in November 2007, the U.S. currency appreciated 0.5% against the Pound. In contrast, the dollar depreciated against the Euro, 3.7%, and the Yen, 0.3%. The dollar quotation against the Japanese currency followed the degree of the investors' aversion to risk in the period, decreasing until March 17 and starting an upward trend since then. It should be mentioned that, since the Yen is used to finance carryover operations, its quotation reflects largely the degree of the investors' aversion to risk, which is reflected in the dismantling of such operations at moments of higher turbulence.

In the same period, the South Korean Won depreciated against the dollar, 11%, as a result of both the country's trade balance deterioration and the rules, effective as of 2007, restricting loan operations in foreign currency by South Korean corporations and foreign banks. In the year, until May 23, the dollar accumulated a depreciation of

**Figure 4.19 – Emerging markets currencies**



**Figure 4.20 – Renminbi/dollar exchange rate**  
Month valuation – average<sup>1/</sup>



7.4% both in relation to the Euro and the Yen, and an appreciation against the Sterling Pound, 0.3%, and the Won, 11.8%.

In contrast to the general trend observed in mature economies, several central banks in emerging economies decided to raise their respective basic interest rates, thus favoring the process of appreciation of their currencies in relation to the dollar. Meanwhile, countries like India, Turkey and South Africa, which register high deficits in their current accounts, faced less favorable financing conditions that pressured their currencies downward. Considering the period from February 29 to May 23, the dollar devaluated against the Russian Rublo, 2%, against the South African Rand, 1.9%; and against the real, 1.8%, and appreciated against the Turkish lira, 2.2%, and the Indian rupia, 6.8%. In the year, until May 23, the dollar accumulated respective appreciations of 11.9%, 8.5% and 6.6% against the rand, rupia and lira, and depreciated 4.4% and 6.7% against the rublo and the real, respectively.

China has maintained the strategy of appreciating renmimbi against the dollar, limiting the variation to 0.5% per day, up or down. Between February 29 and May 23, the renmimbi grew by 2.4% compared to the dollar, accumulating depreciation in the year, 4,9%, and in 12 months, 9,3%.

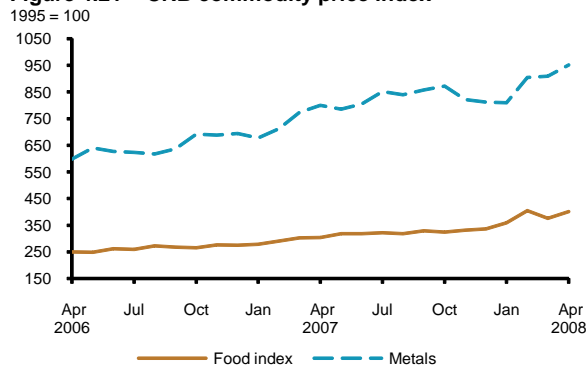
## 4.4 Commodities

Notwithstanding the cutbacks registered in recent months, international prices of commodities continue at a high level, reflecting the influence of the new stage of development achieved by emerging economies in their respective levels of consumption and investment, the process of price transfer among different commodities, the reduction of historic stock levels and the intensification of bioenergy production.

International average prices of agricultural commodities dropped about 16.7% between the end of February and May 23 because of cutbacks registered in the prices of sugar, 31.5%; wheat, 30.7%, and coffee beans, 19.7%, and increases in the prices of corn, 7.8%, and meat, 13.5%.

The North-American real estate activity downturn, coupled with the effect of corrections introduced on the market, apparently impacted by speculative activities, contributed to the 9.5% cutback registered in the prices of metallic commodities in the period, with emphasis to the drop in the prices of lead, 39.9%; nickel, 23.5%; zinc, 21.6%; and copper, 2.9%.

**Figure 4.21 – CRB commodity price index**

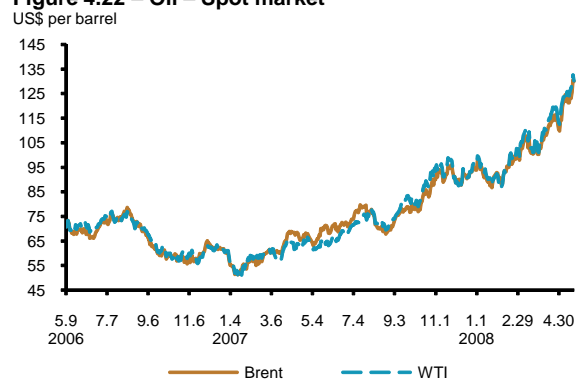




In the 12-month period ended in May, the Commodity Research Bureau (CRB) index turned in an increase of 27% in the prices of agricultural products and of 11% in the prices of metallurgy-related products.

#### 4.4.1 Oil

**Figure 4.22 – Oil – Spot market**



Source: Bloomberg

The price per barrel of oil, which continued under pressure in recent months, surpassed US\$100 in February, reaching historic records in the quarter ended in May. The price of Brent-type and West Texas intermediate (WTI) increased by 30% at the end of February and May 23, registering, in the order, US\$130.15 and US\$131.59. The upward trend observed in international oil prices reflects the tensions between the commodity supply and demand associated with the traditional geopolitical factors in the Middle East, the reduced expansion of production in the framework of the Organization of the Petroleum Exporting Countries (Opec), the North-American currency depreciation, the aggressive performance of investment funds and the Opec reluctance to increase production levels.

Prices on the futures market have been extremely volatile as a consequence of pressures on the spot market and of the performance of investment funds. The price per barrel of WTI type for contracts maturing in December 2008 and December 2009, moved from US\$98.58 and US\$95.84, at the end of March, respectively, to US\$132.37 and US\$130.84 in May 23.

## 4.5 Conclusion

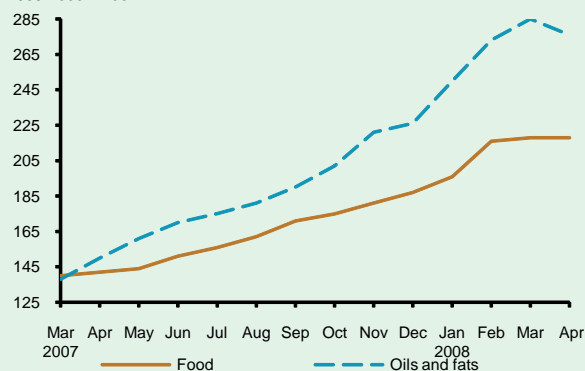
The world economy seems to be going through a transition period characterized by lower growth and higher inflation in comparison to the performance registered in recent months. The North-American economy is expected to recover with the beginning of the process of tax refund and the cumulative effects generated by successive cutbacks of interest rates. Meanwhile, expectations concerning the main European economies for the next quarters as regards both activity level and, especially, inflation rates, indicate relative deterioration.

Financial markets have already signaled a recovery from the crisis of 2007, notwithstanding a new deterioration of indicators should not be excluded. However, the persistence of high oil prices becomes an additional challenge for economic policy makers.

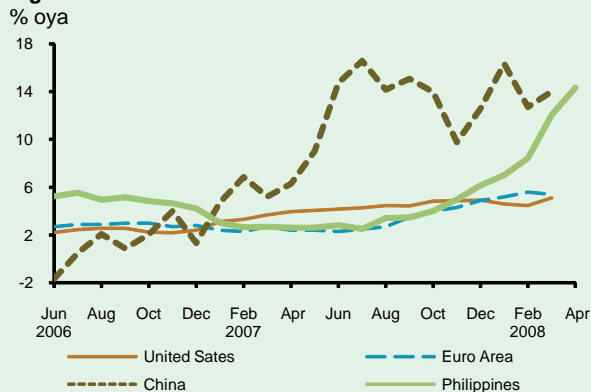
As regard emerging and developing economies, the rise in the prices of commodities and oil continue favoring the economic performance of the producing countries; however, it constitutes an additional factor affecting inflation and foreign exchange rates, especially in Asian economies.

# Food Inflation

**Figure 1 – FAO: price indexes**  
1998-2000 = 100



**Figure 2 – Food inflation**



After a long period of low inflation, partly explained by the reduced labor costs in the Southeast Asia, the world economy has been facing a process of upturn in prices since 2007. Inflationary pressures, which were restricted to the prices of oil and metallic commodities by mid-2007, now incorporates the high prices of soybeans, corn and wheat, products that exert a strong impact on the prices of meat, egg and milk. In this sense, the United Nations' Food and Agriculture Organization (UN/FAO) food price index, which includes 55 agricultural commodities, posted a 57% high between March 2007 and March 2008.

The rise in agricultural prices, captured differently by consumer price indices in mature<sup>1</sup> and emerging economies, certainly affects more severely the poorest countries. According to the UN/FAO, while food represents 10% to 20% of the baskets of consumption in mature economies, this ratio outperforms, in some cases, 80% of that in poor countries.

This inflation upward trend in a global scenario of low rates of unemployment, high rates of expansion of money supply and increased speculation with commodities, although primarily explained by pressures exerted on prices by the continued world economic growth, reflected especially in the strong demand increase observed in large emerging economies, is also conditioned by a supply shortage represented by low stocks of grains. This shortage is explained by the occurrence of adverse weather conditions in important producing regions, as well as the prevalence of inefficient patterns for allocation

1/ Cumulative 12-month inflation in the end of March 2008, considering the CPI and the food item separately, reached, respectively, 4.0% and 4.5% in the United States; 3.6% and 5.6% in the Euro Zone; 2.4% and 5.5% in the United Kingdom; and 1.2% and 1.6% in Japan..

of agricultural areas consequent upon protectionist policies, especially in mature economies.

### Demand pressures

The performance of prices of agricultural commodities reflects basically the strong demand pressures resulting from the rise in food consumption and in the production of biofuels.

The rising in food consumption,<sup>2</sup> particularly observed in emerging countries, reflects the persistent process of income gains registered in those economies with pent-up demand in this segment of goods. This movement, in view of the perspective of maintenance of growth rates in countries with high rates of population and poverty, demonstrate that pressures on food prices will continue in the upcoming years.

In the context of the emerging economies, food inflation in China, which was impacted by adverse weather conditions during last winter, has been recording high levels since December, registering 22.1% p.y. in April, as a result of strong increases in the prices of pork, 68.3%, and oil and edible fats, 46.6%. One should highlight that this evolution, notwithstanding the adoption of measures including the freezing of prices, the utilization of buffer stocks of pork and the introduction of taxes on the exports of grains, reflects the rise in the consumption of food products with high levels of animal protein – it is estimated that the average meat consumption per capita in China would go up to 50 kg in 2008, compared to approximately 20 kg in the late eighties –, a change in eating habits consequent upon the income increase coupled with the phenomenon of migration to the cities.

The second component of demand pressures refers to the growing utilization of grains in the production of bioenergy. According to F.O. Licht's World Ethanol and Biofuels Report, dated April 2008, the production of ethanol by means of grains in the U.S. and China consumed 4.5% of the total world

**Table 1 – Asia: food inflation**

	% oya			
	2004	2006	4Q 2007	Mar/2008
China	4.9	6.3	15.0	22.2
Indonesia	6.4	12.9	9.6	15.1
Hong Kong	1.7	2.6	6.5	10.4
Taiwan	3.3	-1.3	11.5	8.4
Philippines	8.1	4.7	3.8	8.0
Singapore	2.3	1.7	4.5	7.7
Thailand	4.3	6.0	3.0	6.2
Malaysia	2.9	3.0	3.0	4.9
India	2.7	8.7	2.9	3.5
Korea	4.9	1.5	4.2	1.8
Japan	1.2	0.7	0.5	0.9

Source: JPMorgan – Global Data Watch (05/02/08). Adapted.

<sup>2/</sup> Economic Council of the White House estimates show that food consumption in emerging countries grew about 45% between 2001/2007 and 1991/2000.

supply of grains in 2007. In China, even though corn production has grown by 21.9% between 2001 and 2005, local factories demand has expanded 84%, to 23 million tons. In the U.S., while the demand for corn utilized in the production of ethanol increased from 41 million tons, in the 2005/2006 harvest, to around 81 million tons in the 2007/2008 period, the corn cultivated area expanded only 19% during last harvest.

Similarly, the demand for fats and oils, which prices, according to the UN/FAO, registered an average increase of 98% between the first quarter of 2008 and 2007, has been strongly impacted by the production of biodiesel – in fact, the demand for vegetable oils for this purpose increased from 3.7% of total supply in 2006 to 5.9% in 2007.<sup>3</sup> One should also mention the pressures resulting from the reduction in the cultivation of soybean because of the growing urbanization in China and the replacement of soybean cultivation for corn in the U.S., where, according to the U.S. Department of Agriculture (USDA), the cultivated area diminished by 16% in 2007. Therefore, the price of soybeans, a product which global stocks represent only 10% of current world demand, stands at its highest level over the last 34 years.

### **Supply Components**

With regard to supply pressures, it is important to highlight the rise in the costs of production faced by the food industry, the recurring crop failures in world grain production and the decimation of livestock in Asia.

The rise in the costs of production is explained by two factors. The first refers to the impact exerted by the high prices of oil on the prices of fertilizers, which have expanded sharply from 2007 onwards; on the prices of energy, since modern agriculture is increasingly energy-intensive; and on the costs of transportation, which not only affects the prices of food at the field, but also at the storage, processing and distribution stages.

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3/ F.O. Licht's World Ethanol and Biofuels Report, op. cit.

The second component of cost pressure refers to the increasing consumption of grain in the production of agro-energy and the consequent reduction in the availability of these grains or their closest substitutes, which reflects not only on the prices of grains but also on the prices of animal feed and, as consequence, on the final prices of meat and dairy products. From this perspective, it is important to highlight the Brazilian contribution to alleviate some of these tensions, for instance, by expanding from 13.9 million hectares in 2001 to 22 million hectares in 2007 the area cultivated with soybeans.

It is also worth mentioning the occurrence of epidemics, like the outbreak of foot-and-mouth diseases and avian influenza in Asia, and adverse weather conditions, for instance the repeated severe droughts in Australia, the recent floods in Argentina, Malaysia, South Korea and India, the snowstorms in China, poor harvests in the United States, and the impact of drought on productivity on the dairy industry in New Zealand. In China, for example, the severity of the last winter was responsible for the death of nearly 16 million animals and the freezing of tons of vegetables, which contributed to aggravate the unbalance between supply and demand and raise inflation to a record level in more than a decade.<sup>4</sup> India and Malaysia, on the other hand, have had to deal with the shortage of edible oils, wheat and rice. UN/FAO also expressed its concerns that the current difficulties in Russia, Ukraine and United States harvests may add potentially negative pressures on food prices in the short term.

The food inflation also demonstrates the inadequate volume of world stocks of grains. In this sense, the stocks of wheat, which, according to the International Monetary Fund's (IMF) World Economic Outlook, were at their lowest levels over the last 26 years in the end of 2006 and beginning of 2007, were reduced from around 30% of world's demand in 2000 to 15% in 2007, according to the USDA. Even though UN/FAO estimates point to record grain harvests for 2008, the increasing demand for corn and wheat certainly will exceed their supply growth, thus exerting additional pressures on prices. This

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<sup>4/</sup> Data published by the China Ministry of Agriculture

**Table 2 – Corn & Wheat – World Supply and Stocks**

	Millions of tons			
	2004/2005	2005/2006	2006/2007	2007/2008
Corn				
Supply	715	696	704	769
Stock	131	123	106	109
Wheat				
Supply	627	622	594	602
Stock	151	148	124	110

Source: World Bank - Development Prospect Group (Dec/2007). Adapted.

assessment is corroborated by the World Bank, which sustains that the stocks of wheat will likely to be reduced in the short and medium term to the lowest levels since 1960.

Moreover, it should not be forgotten the turbulence introduced on the markets of agricultural commodities by the action of speculators, which, in an environment of uncertainty in global financial markets and declining activity in mature economies, have migrated to the market of real assets.

In summary, the upward trend of food prices is not due only to the effects of demand pressures resulting from the expanded consumption in large emerging economies and the production of biofuels in areas with restricted land availability, but also to the rising production costs and the rigidity in food supply, which effects, in some cases, are reinforced by non-commercial demand. In this sense, it should be highlighted the mismatch between the growth in world population and in food production: while global population grew by 25.7% between 1990 and 2007, food production increased merely 12.7%.<sup>5</sup>

In this scenario in which the most vulnerable countries are those more dependant on the imports of oil and agricultural products, and, in particular, the share of food prices in inflation is more pronounced, the action of central banks in the short term has been characterized by the adoption of a more restrictive posture, either through raising interest rates or interrupting the cycles of loosen monetary policy, notwithstanding the global economic slowdown, in an attempt to prevent that the process of adjustment in relative prices turns into uncontrolled inflation.

5/ Bradesco, daily highlights, December 14, 2007.