1) WORLD SCENARIO

The recovery of what has been considered the worst economic and financial world crisis since the 1930s still presents a volatile path, leading to belief that a premature abandonment of policies aimed at stimulating the added demand might bring the slow rise to a halt, or even sink the world economy under a new wave of recession. Continuous stimulation in struggling economies is still expected as a way to prevent a deflationary tailspin and deteriorating expectations of private agents.

According to the World Economic Outlook (WEO) of the International Monetary Fund (IMF), in the first half of 2010, the world economy has experienced growth at an annualized rate of 5.3% compared with same period last year.
Industrial production grew at a rate of 15%, and world trade, at 40% in this period. The group of advanced economies expressed a growth rate well below that in the world for the same period, which posted an increase of 3.5%. Emerging economies are still playing the role of fueling the world's economic growth, which in the first half of the year grew at a rate of 8%. However, even within this group, growth patterns were quite heterogeneous.

Compared with earlier projections, the October edition of the WEO showed no significant changes in the projections for growth rates for the 2010-11 biennium (Table 1.1), but sees higher risks for the period, which may negatively change future forecasts. Uncertainty in financial markets, expectations of a slower pace in the reconstitution of stocks and a reduction of fiscal policies are other factors adverse to recovery.

<table>
<thead>
<tr>
<th></th>
<th>IMF Forecast</th>
<th>IIF Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
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<td>4.8 4.2</td>
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<tr>
<td>Advanced Economies</td>
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<td>2.7 2.2 2.7</td>
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<td>2.6 2.3 2.6</td>
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<tr>
<td>Euro Zone</td>
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<td>1.7 1.5 1.7</td>
</tr>
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<td>Germany</td>
<td>3.3 2.0 3.3</td>
<td>2.8 2.3</td>
</tr>
<tr>
<td>France</td>
<td>1.6 1.6 1.6</td>
<td>1.6 1.6 1.6</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.7 2.0 1.7</td>
<td>1.7 2.0 1.7</td>
</tr>
<tr>
<td>Japan</td>
<td>2.8 1.5 2.8</td>
<td>3.0 1.0</td>
</tr>
<tr>
<td>Developing Economies</td>
<td>7.1 6.4 7.1</td>
<td>6.4 7.1 6.4</td>
</tr>
<tr>
<td>Mexico</td>
<td>5.0 3.9 5.0</td>
<td>4.4 3.5</td>
</tr>
<tr>
<td>Brazil</td>
<td>7.5 4.1 7.5</td>
<td>7.7 4.8</td>
</tr>
<tr>
<td>China</td>
<td>10.5 9.6 10.5</td>
<td>10.0 9.5</td>
</tr>
<tr>
<td>India</td>
<td>9.7 8.4 9.7</td>
<td>8.5 8.3</td>
</tr>
<tr>
<td>Russia</td>
<td>4.0 4.3 4.0</td>
<td>3.5 3.6</td>
</tr>
</tbody>
</table>

Source: IMF and IIF

Even with the majority of countries emerging from recession in the second and fourth quarters of 2009, unemployment has not yet abated substantially in many of these countries (Chart 1.1). This has been regarded as the main issue governments must face, considering that, besides the social conflicts associated to unemployment, sustainment of high levels of world demand predicates a solution for such a problem.
The process of global recovery is still regarded as fragile because some imbalances have not yet been resettled. Among these imbalances, two stand out as fundamental for the world economy to return to a path of sustainable growth: an internal and an external imbalance.

The internal imbalance is the inability for national governments to ensure and maintain the levels of domestic demand through their own resources in a constant and sustainable manner. The solution should permeate a gradual replacement of public demand with private demand so as to allow fiscal consolidation of national governments, the reduction of public deficits and the rollover of debt.

If there was consensus at the outbreak of the crisis on the need for government intervention in the economy on the issue of demand and the urgency for countercyclical policies of an unprecedented magnitude, there does not seem to be any consensus nor a recipe for political authorities with regard to reducing such government participation or the pace for transition as proposed by these authorities. Timing to reduce fiscal intervention is the topic that has been heating up the main debates on economic policy in the world.

Most emerging economies are already at advanced stages of the process to withdraw fiscal stimulus packages launched during the economic crisis. This solution was made possible by the return of private investment, which has po-
The global financial markets (Chart 1.2) underwent another wave of turbulence during the second quarter due to the destabilization of European sovereign debt markets. There was high volatility in stock markets and a smaller appetite for risk when it was realized that the probability of debt default in economies with greater difficulty could contaminate the European banking system again.

There are signs of normalization in these markets and greater peace in the world markets can also be perceived. The results of stress tests, conducted by the Committee of European Banking Supervisors, managed to reduce the risk premiums of the securities from these banks and offered a return to the levels of bank deposits prior to the turbulence.

The Trade and Development Report (TDR) of UNCTAD reaffirms that the choice for more severe tax policies aimed at gaining the confidence of investors who finance the European sovereign debts may pose a greater risk to the public accounts of these countries than the actual continuity of fiscal stimuli. Severe fiscal policies can make the economy of the European bloc take a path to a dou-
ble dip, consequently reducing the tax revenue base and more substantial public deficits.

Regardless of the level of internal imbalance experienced and the stage in the withdrawal process of fiscal packages, a consensus for the economic policy authorities is the need to move forward in terms of regulation of financial markets, especially in advanced economies.

The International Monetary Fund (IMF)'s Global Financial Stability Report claims that the problems highlighted by the crisis were not adequately addressed, leaving the entire system vulnerable. The report considers the progress of US banks in recognizing incurred losses and in rebuilding their capital, but still sees non-negligible risks in the exposure of the real economy, especially when analyzing the small and medium-sized financial institutions, which are the main credit suppliers to small and medium-sized companies. The latter, in turn, are the largest employers. The report states that European banks face funding and profitability frailties, in addition to the aforementioned exposure to sovereign risk and loans to businesses.

The countries that have experienced more significant damages to the financial system, such as Ireland, Great Britain and Spain, have advanced in regulatory measures, but there is still room for measures aimed at cleaning up the banks' balance sheets. Until safer ground is reached in the financial markets, the public sector will remain heavily involved in financial intermediation by performing a wider role than that usually played.

In addition to financial regulation, Central Banks have, in most cases, maintained the accommodative monetary policy, and the basic interest rates of advanced economies remain close to zero. The perception that there is still a deflationary trend in prices, and the very ties that have been imposed by some economic policy makers to fiscal policy, highlight the importance of the expansionary monetary policy. However, as interest rates in advanced economies are already close to zero, there is little maneuvering margin for open market operations. In addition, operating expansionary monetary policy through mandatory deposits or the rediscount deposits rates could go against the goals of increased financial regulation.

In emerging economies, in addition to the gradual reduction of fiscal stimuli packages, there was the adoption of tighter monetary policies. Some of them (Brazil, India, Peru,...) have already established successive high basic interest rates at levels their monetary authorities deemed more realistic for the context of a reheat. Others took advantage of increasing capital requirements such as China, India and Turkey. China has also resorted to stringent constraints on
the growth of credit. The pace of this monetary droop is not expected to con-
tinue intensively as there is a deflationary trend at the general price levels.

Likewise, prices of commodities, which by April 2010 had recovered part
of the slump they suffered from the crisis, no longer show a clear upward trend.
Foodstuff has suffered some consecutive supply shocks, and metal prices oscil-
late depending on the recovery news in industries worldwide (Chart 1.3).

In turn, external imbalance consists of some countries maintaining a per-
sistent deficit yet growing balances in current accounts, while others maintain
surplus balances that are higher every year. This situation has been identified as
one of the reasons the crisis spread and for the sheer magnitude it reached.
However, the crisis itself played the role of correcting a part of these imbal-
ances, if not reversing the current account balances, or at least reducing their
scale.

The economic crisis highlighted a trend that had already been identified
over the last decade: emerging countries are expanding their participation in
world trade (Table 1.2), while advanced economies are reducing theirs. In 2009,
the declines recorded both in imports and exports were much severe in ad-
vanced economies. Add this to the fact that the projected growth for imports
and exports is higher for emerging markets this year and the next.
No matter how much the purchasing power of the Chinese may grow at a fast pace and how much the Chinese surpluses in current account are successively reduced, these facts would not be sufficient to offset the reduction in US demand, which still suffers from the negative wealth effect, credit restrictions and the slow economic recovery.

To sustain levels of world aggregate demand, articulation of national economic policies will be needed. However, policy coordination seen immediately after the crisis and driven by the G-20 summit has lost clout, and it is already possible to see, for example, a change in the attitude of European countries, which, facing the threat of debt crises, have started a cycle of restraining measures.

During the first half, due to the turbulence in European financial markets, the euro depreciated against other currencies, which, in turn, accentuated the imbalances outside the monetary union zone. With the depreciation of the euro, the zone was even less inclined to absorb products from other regions and the gain in artificial competitiveness through the exchange rate resulted in exporting European unemployment.

In contrast, the US monetary authority also seeks to depreciate the dollar by aggressively purchasing government bonds and by additional quantitative easing measures. The US policy aims to reverse its foreign deficit, which translates into large current account deficits.

Contributing to the American purpose are the recent rises in interest rates in some emerging economies, which provide remuneration differentials for capital that migrates to such economies, appreciating their currencies against the dollar. The rates of growth in these countries are attractive to Foreign Direct Investment, a flow with the same effect on the exchange rate.

Added to this is the Chinese government's decision, earlier this year, to allow an appreciation of its currency, giving in to pressures exerted by American

<table>
<thead>
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<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Trade</strong></td>
<td>-11.0</td>
<td>11.4</td>
<td>7.0</td>
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<tr>
<td><strong>Imports</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Economies</td>
<td>-12.7</td>
<td>10.1</td>
<td>5.2</td>
</tr>
<tr>
<td>Emerging Economies</td>
<td>-8.2</td>
<td>14.3</td>
<td>9.9</td>
</tr>
<tr>
<td><strong>Exports</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Economies</td>
<td>-12.4</td>
<td>11.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Emerging Economies</td>
<td>-7.8</td>
<td>11.9</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Source: World Economic Outlook, IMF, October 2010
diplomats, and the process of diversifying investments of international reserves. (For a broader analysis of the exchange rate between dollar and renminbi, see the Special Report in this edition.) With expectations that the dollar will depreciate, stocks tend to migrate to currencies with positive expectations, reinforcing the deterioration of the dollar as a kind of "self-fulfilling prophecy."

In recent months, the dollar fell sharply against most currencies, including reversing its momentum against the euro, which had lost value over the first half. Chart 1.4 shows the depreciation of the dollar against most currencies in the comparison of the average exchange rates in the first week of July with the exchange rate in the first week of October.

Within the dynamics of currencies, the lack, on a global scale, of economic policy coordination is also evident. Advanced economies, irrespective of their situations in current accounts, aim to depreciate their currencies in order to ensure competitiveness for their exports and boost their recovery. Emerging economies also partially defend their currencies by buying reserves, avoiding excessive appreciation of the exchange rate.

The fall in US domestic demand has left a gap on the world scenario, highlighting the need to replace it with other relevant domestic demand. However, the national strategies for economic recovery, if taken as a whole, do not present a solution to the global problem. The positive pay-off in this game of power is revealed as that in which the economies cooperate mutually for a more favorable scenario.
The Brazilian economy on the International Scenario

The Brazilian economy has been actively involved in ensuring support for global aggregate demand. The strengthening of its huge domestic market was one of the reasons Brazil was one of the last countries affected by the crisis and one of the first to surpass its adverse effects (Figure 1.5). The Brazilian economy still sustains high growth rates. In the second quarter, GDP grew 8.8% in comparison with same quarter the year before, boosted by the 26.5% increase in the Gross Formation of Fixed Capital (Chart 1.6).

![Graph 1.5 - Breakdown of GDP Growth (% p.a.)]

Source: IBGE

![Graph 1.6 - Quarterly GDP growth and its components (variation % compared to same quarter in the previous year)]

Source: IBGE
Estimates point towards the continued growth in investment rates, including public investment, with no harm to public accounts (Chart 1.7, 1.8 and 1.9).
Another highlight was the 6.7% increase in household consumption, the 27th positive rate at this basis of comparison. This result was favored by the increase in total salaries, by the increase in the balance of credit operations with free resources to individuals (Chart 1.10 and 1.11), as well as by the reduction in unemployment and income inequalities, which gave millions of Brazilians who lived in poverty access to the market economy (Chart 1.12 and 1.13).

Considering supply, industry achieved the highest performance, up 13.8% with greater contribution from the civil construction sub-sector. The Monthly
Industrial Survey in August 2010 shows that, from the categories used, durable goods have accumulated the largest expansion in the 12 months accumulated, up 15.5%, followed by capital goods with a high of 14.2%. This corroborates the projections for economic growth, which has been led by basic household consumption, housing and durable goods.

On the international scenario, Brazilian companies are on the rise, which translates into good foundations for the Brazilian economy. Brazil’s foreign debt had been experiencing a downward trend, interrupted in 2008 by the crisis. However, in that same year, international reserves exceeded the foreign debt, turning Brazil into a foreign creditor. (Chart 1.14). Following the improvement of the Brazilian foreign indebtedness indicators, there was a significant reduction on Brazil’s Risk. (Chart 1.15)

Despite the drop in Foreign Direct Investment in 2009 and 2010 due to reduced international liquidity, FDI projections as of 2010 are for vigorous growth (see Chart 1.16 and section "Developments in Foreign direct Investments in the world, as follows).
From the analysis of the indicators presented, it appears that the Brazilian economy is able to continue growing at a rapid pace. Foreign vulnerability does not present a threat to the sustainability of this growth, and such an environment can be construed as favorable for financing Brazilian companies.

2) EVOLUTION OF FOREIGN DIRECT INVESTMENTS IN THE WORLD

UNCTAD’s estimates show gradual investment recovery

Flows of foreign direct investment (FDI) worldwide consolidated the recovery trend in the first half of 2010 after the steep decline in the 2008-2009 biennium. They are expected to maintain gradual growth in the coming years. The recovery to the pre-crisis level, however, should not occur before 2012.

The assessment was made by the United Nations Conference on Trade and Development (UNCTAD), which is responsible for the leading and most comprehensive survey on direct investment in the world.

According to the report from the latest survey conducted by UNCTAD (World Investment Report 2010), the sum of direct investment inflows in the world should exceed US$ 1.2 trillion in 2010, surpassing the total of a little over US$ 1 trillion last year. For 2011, the expectation is for a new rise to between US$ 1.3 trillion and US$ 1.5 trillion, which should then be followed by a new increase in 2012 when the total investment may, at the upper limit of the estimate, return to the level of US$ 2 trillion registered in 2007, before the global financial crisis. The estimate for sustained increase in direct investment is com-
mon to the three alternative scenarios with which UNCTAD works (pessimistic, optimistic and basic), varying only in growth intensity.

These estimates are based on the recent performance of investment flows, which showed moderate recovery in the first half of 2010, and an expected increase in the pace of world economic activity, especially in emerging countries, which continue gaining ground in terms of destination and, to a lesser extent, origin of investments (Table 2.1).

### TABLE 2.1:
**FDI flows by region, 2007-2009 (US$ billion and %)**

<table>
<thead>
<tr>
<th>Região</th>
<th>Entrada de IED</th>
<th>Saída de IED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2008</td>
</tr>
<tr>
<td>Mundo</td>
<td>2.10</td>
<td>1.77</td>
</tr>
<tr>
<td>Economias desenvolvidas</td>
<td>1.44</td>
<td>1.01</td>
</tr>
<tr>
<td>Economias em desenvolvimento</td>
<td>0.65</td>
<td>0.30</td>
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<tr>
<td>África</td>
<td>1.10</td>
<td>0.72</td>
</tr>
<tr>
<td>América Latina e Caribe</td>
<td>1.46</td>
<td>1.13</td>
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<tr>
<td>Oriente Médio</td>
<td>0.73</td>
<td>0.90</td>
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<tr>
<td>Sul, Leste e Sudeste da Ásia</td>
<td>1.07</td>
<td>0.92</td>
</tr>
<tr>
<td>Sudeste da Europa e CIS*</td>
<td>0.92</td>
<td>0.73</td>
</tr>
</tbody>
</table>

**Memo: participação % nos fluxos mundiais de IED**

<table>
<thead>
<tr>
<th>Região</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>Economias desenvolvidas</td>
<td>50.8</td>
<td>50.8</td>
<td>50.8</td>
</tr>
<tr>
<td>Economias em desenvolvimento</td>
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<td>42.9</td>
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<td>África</td>
<td>3.0</td>
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<td>5.3</td>
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<td>10.5</td>
<td>10.5</td>
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<tr>
<td>Oriente Médio</td>
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<td>6.1</td>
<td>6.1</td>
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<tr>
<td>Sul, Leste e Sudeste da Ásia</td>
<td>1.2</td>
<td>2.0</td>
<td>2.0</td>
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<tr>
<td>Sudeste da Europa e CIS*</td>
<td>4.3</td>
<td>6.9</td>
<td>6.3</td>
</tr>
</tbody>
</table>

*Fonte: UNCTAD

*Commonwealth of Independent States (reúne ex-membros da República Soviética)*

Recovery occurs in all components of direct investment – investment in shares, intercompany loans and profits reinvested – and under the two forms of input – mergers and acquisitions and new projects (greenfield). Mergers and acquisitions rose 36% in value in the first five months of 2010, compared to the same period in 2009, and led the recovery in inflows. The increase in international liquidity and the existence of optimum opportunities to buy companies are at the root of this movement.

One of UNCTAD's important findings, which also sustains its estimates, is the fact that the crisis has not halted the growing internationalization of production. Instead, the drop in sales and added value of foreign affiliates of multinational companies in 2009 was lower than the drop in the world economy, resulting in an increase of its share in global GDP (from 9.6% in 2005 to 10.6% in 2009; Chart 2.1).
The public policies adopted in recent years also appear to have played a role in the recovery of direct investments. Of 102 new measures that could affect foreign investment identified by UNCTAD in 2009, some 71 aimed to liberalize and stimulate investment. Among these measures, one can cite the opening of previously closed sectors to foreign capital, liberalization of land acquisition, dismantling of monopolies and the privatization of government-owned companies. In addition, over 200 international investment accords, such as double taxation agreements and investment protection, were signed in 2009, a pace that was kept in 2010.

Developing countries and transition economies together accounted for half of the inflow of direct investment in 2009, since the drop in flows to these destinations was less marked than for developed countries. As recovery is also more intense when the destinations are these markets, expectations are for the gain in participation to continue in the coming years.

Among the recipients of foreign investment, China has moved into second place behind the US. Half of the six main destinations for direct investment flows are now developing countries or those in transition. The participation of this group in mergers and acquisitions between countries rose from 26% in 2007 to 31% last year and attracted more than 50% of the greenfield projects in 2009.
As a source of foreign investment, developing countries, especially the large emerging economies, have also performed above average, thanks to the growth of multinational corporations. In 2009, they accounted for approximately 25% of the total investment outflows. Hong Kong, China and Russia are among the 20 largest investors in the world.

From a sectorial standpoint, UNCTAD's prediction is for industry's recent trend in losing relative importance continues as a destination for investment vis-à-vis the primary sectors and that of services. With few exceptions (electrical and electronic equipment) in 2009, mergers and acquisitions across borders dropped in all industries and with more intensity than in other sectors (77% against 47% in the primary sector, and 57% in the services sector). In services, the steep drop in some sectors was partially offset by increased activity in mergers and acquisitions in distributing electricity, gas and water supply, as well as construction.

In Brazil, FDI growth in 2010 is already almost 8%

Although it has faced a decline in the inflow of investments above the average for Latin America and the Caribbean, Brazil remained the main destination for investments in the region. Among the top 20 in 2009, the country appears in 14th position, with an inflow of US $ 25.9 billion. In 2010 up to August, FDIs in Brazil amounted to US $ 17.1 billion, an amount almost 8% above that in the same period the year before, but with a remarkable change in composition: while investments in shares grew 56%, intercompany loans fell 96% in the period.

Brazil’s Central Bank estimates a total inflow of US $ 30.0 billion in FDIs in 2010, and US $ 45.0 billion in 2011. The estimate is reinforced by the investment intention research for period 2010-2012, also conducted by UNCTAD, which placed the country among the preferred destinations for investors (see Box 2.1).

Regarding the outflow of investment, the result was negative for Brazil in 2009 (there was an inflow of US $ 10.1 billion), since the Brazilian transnational companies have resorted to loans from their foreign subsidiaries as a source of financing. For 2010 and 2011, Central Bank's forecasts are for an outflow of US$ 12.0 billion (US$ 5.6 billion up to August) and US$ 16.0 billion, respectively.

In 2009, according to UNCTAD's estimates, the stock of FDIs in Brazil was US$ 401 billion, and Brazilian investment abroad was US$ 158 billion.
Box 2.1: According to UNCTAD's investment intention research, Brazil may be the third largest destination for FDIs in coming years

Since 1995, UNCTAD has regularly conducted research with the largest non-financial transnational corporations in order to grasp the future trends in foreign direct investment. The most recent study was published in September and refers to the investment intentions of a group of 236 companies for the 2010-2012 period, in addition to also considering more than a hundred answers received together with the investment promotion agencies (World Investment Prospects Survey 2010-2012).

In general, the research reveals caution in investment intentions for 2010 and unreserved confidence in relation to 2012.

One of the highlights of this edition of the survey is that Brazil ranks third among countries most often cited as a priority destination for foreign investment in the 2010-2012 period, behind only China and India. For the first time, the four BRIC countries were ranked among the top five destinations (Russia ranked fifth, behind the United States).

Other highlights from the survey results:

- The percentage of companies that confessed to being pessimistic about the business environment in 2010 dropped from 47% in last year's survey to 36% this year.
- Optimism increases significantly in the near future: if only 13% say they are optimistic about 2010, this percentage rises to 47% with respect to 2011 and to 62% with regard to 2012.
- The crisis did not structurally change the internationalization strategy of companies: a minority (18%) claimed to have sold or closed a significant portion of their international operations. Additionally, 47% declared the intention to apply more than half of their investments abroad in 2012, against

Table 2.2
Foreign Direct Investment in Brazil (US$ billion)

<table>
<thead>
<tr>
<th></th>
<th>Jan-Aug 2009</th>
<th>Jan-Aug 2010</th>
<th>Var. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Foreign Investment</td>
<td>15.9</td>
<td>17.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Participation in capital</td>
<td>10.8</td>
<td>16.9</td>
<td>56.5</td>
</tr>
<tr>
<td>Intercompany loans</td>
<td>5.0</td>
<td>0.2</td>
<td>-96.0</td>
</tr>
</tbody>
</table>

Source: Brazil's Central Bank
39% in 2009. Finally, while only 33% of the replying companies described themselves as globalized in 2009, 41% declared that they will be so in 2012. Some 58% of the companies intend to increase their international investments in 2011 and 2012.

- Among the 20 most promising investing countries, as assessed by the investment promotion agencies, about half are developing countries or countries in transition. China ranks second; India, sixth, and Russia, ninth. From the BRICs, only Brazil does not appear among the 20 largest investors.

The primary sector, which, in UNCTAD's classification, includes the mining industry, is the most promising of prospects, followed by the services sector.

3) BRAZILIAN FOREIGN TRADE

Brazilian exports boom after the international financial crisis

Brazilian exports continue on the path to recovery from the worst phase of the international crisis. In the January to September accumulation, Brazilian exports totaled US$ 145 billion, representing a growth of 29% over the previous year. The three main types of products exported by Brazilian companies were: iron ore (US$ 19.2 billion; up 91% compared to the daily average from January to September 2009); crude oil (US$ 11.3 billion; up 86%) and soybeans (US$ 10.3 billion; down 6%).

The growth in Brazilian exports is partly due to higher international prices of some basic products, but there has been a boom in many segments of consumer durable goods, especially those related to the transport sector. In the first nine months of 2010, exports sales of automobiles increased 43% and the total amount of the product exported (US$ 3.2 billion) represented the main category of manufactured goods. Auto parts also stood out (up 45%; US$ 2.5 billion), vehicle engines (up 77%; US$ 1.8 billion) and cargo vehicles (up 86%; US$ 1.2 billion).

Analyzing the growth in Brazil’s export numbers, foreign sales of more sophisticated industrial products stand apart.

The recovery of Brazilian foreign trade is similar to global flows. Using quantum statistics for exported goods to expunge the price effect generally associated with commodities, the average of the indexes from January to July
2010, which is the most recent data available on monthly exports in the world\(^1\), shows a growth of 18% in comparison with the same period in the previous year. In Brazil, the second Funcex indicator, quantities exported rose by 7.3% in the accumulated result in the period, but in quite a different fashion per sector. While exports of capital goods grew at a rate of 11.5%, and durable consumer products, 34.3%, non-durable consumer goods and fuels remained virtually stable (up 0.6% and down 0.7%, respectively). In other words, the main rise in Brazilian exports, when considering quantities, not prices, were more sophisticated industrial products.

The largest growth in Brazilian exports in more sophisticated industrial segments follows what has been happening in the world, and, in turn, this is a phenomenon that also partly explains why international trade currently shows growth rates that are much higher than those associated with production in the world.

Estimates show that world imports grew 25% in the first quarter of 2010, against a growth rate of 5% in the world’s GDP rate. During the most acute phase of crisis, the collapse of world imports was, similarly, also much larger than the GDP of countries (see Chart 3.1). In the third quarter of 2009, world trade presented a 35% decline, while world product dropped 5%.

![Chart 3.1](chart.png)

**Chart 3.1**

Real variation rate of world GDP and imports

(quarter in relation to the previous quarter, seasonally adjusted and weighted by purchasing power parity)

Source: IMF, World Economic Outlook

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\(^1\) CPB Netherlands Bureau Of Economic Analysis, September bulletin.
The explanation for foreign trade presenting variations (up or down) that are much higher than GDP in the world involves the actual composition per type of products in global flows of imports, as well as the fact that the crisis has affected sectors differently, hitting the durable goods segments harder (see Chart 3.2A). IMF estimates indicate that durable goods present a much greater importance in the breakdown of trade flows than in the total demand of a country (see Chart 3.2B), which made countries’ imports decline much more than domestic demand. That is, if there is, in imports, a higher participation of durable goods and these present the most significant fall in demand because of the crisis, imports will drop more than the total demand in the country. The largest share of nondurable goods and services in the GDP breakdown of countries softens their fall. For example, the total demand (domestic + foreign) for durable goods in the United States and the European Union fell by over 30% and 20%, respectively, in the worst period of the crisis. Meanwhile, the demand for nondurable goods and services decreased by only 1% to 3%.

Chart 3.2
Total final demand (domestic + foreign) and imports:
United States and European Union

(A) Contraction in demand final total by sector
First quarter of 2009/First quarter of 2008 (variation %)

US
-32%

EU
-23%

(B) Sector weight in the composition of total final demand and gross imports (participation %)

<table>
<thead>
<tr>
<th>Total final demand</th>
<th>Foreign trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>EU</td>
</tr>
<tr>
<td>Durable</td>
<td>Non durable</td>
</tr>
<tr>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>35</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: IMF, World Economic Outlook

The biggest decline in the international trade of durable goods stems from the fact that many of them represent consumption that can be postponed.
Included in this category are passenger automobiles and consumer electronic goods. However, the effect also occurs particularly in sales of capital goods, which are associated with investments. Given the downturn in demand for products that would be manufactured by such investments, these will be deferred and, therefore, the purchases of capital goods, in turn, will be cancelled. During periods of crisis, investment decisions are among the most affected: without the perspective of good demand conditions for goods that would be produced from new investments, the propensity to invest becomes very low. In general, not even the previously installed capacity can be used at levels that considered to be appropriate.

Following the world’s path, in Brazil, exports of capital goods showed the largest drop during the worst phase of the world economic crisis and have taken longer to recover. Brazilian exports of capital goods even fell 42% in the second 4-month period in 2009 compared to the same months in the previous year. In the first four months of 2010, they grew only 6%, while total exports presented an expansion of 25%. In the following period, exports of capital goods appear to have already found the same growth pace as the rest. In the last four months, which ended in August, the expansion of Brazilian foreign sales of capital goods was higher than the total manufactured (see Chart 3.3). It should be remembered that the quantum statistics, mentioned some paragraphs ago, also show higher growth rates in the last few months.

**Chart 3.3**

**Total Brazilian exports, manufactured and capital goods**

( % variation of the amount in US$ in regard to the same period last year)

![Chart 3.3](chart.png)

Source: Own the Preparation as of MDIC / Secex data
According to destinations, the main buyers of Brazilian capital goods are traditionally Latin American countries. From January to September 2010, imports from these countries were US$ 5.9 billion, which represented over half of all Brazilian exports of capital goods during the period (US$ 11.2 billion). Argentina was the main destination (US$ 2.2 billion), followed by Chile (US$ 819 million). In the rest of the world, the United States also remained important this year, buying US$ 1.2 billion in capital goods from Brazil.

China was the main destination for Brazilian exports from January to September 2010

In total Brazilian exports, China was the main destination, as well as the main source of imports for the January-September 2010 period. The country also represented the second main origin of Brazil's trade surplus (US$ 4.98 billion from January to September 2010). The highest Brazilian trade surplus in the period was Holland, reaching US$ 6.0 billion. Other important sources of the trade balance are Argentina and Venezuela, but with a very different composition per product type. While China and Holland are major buyers of commodities in Brazil, Argentina and Venezuela are relevant in trading manufactured goods, especially in capital goods sectors, as seen in the previous paragraph.

Table 3.1
Brazilian exports and imports by destinations and origins: January to September 2010 (in US$ million)

<table>
<thead>
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<tbody>
<tr>
<td>Latin America and th</td>
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<td></td>
</tr>
<tr>
<td>. Argentina</td>
<td>13,033</td>
<td>8,280</td>
<td>57.4</td>
<td>10,596</td>
<td>7,907</td>
<td>34.0</td>
<td>2,437</td>
<td>373</td>
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<td>2,931</td>
<td>1,809</td>
<td>62.0</td>
<td>2,881</td>
<td>1,885</td>
<td>52.8</td>
<td>523</td>
<td>-77</td>
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<tr>
<td>. Venezuela</td>
<td>2,848</td>
<td>2,580</td>
<td>10.4</td>
<td>681</td>
<td>388</td>
<td>75.7</td>
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<td>2,192</td>
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<td>Asia</td>
<td>40,768</td>
<td>31,043</td>
<td>31.3</td>
<td>40,614</td>
<td>25,279</td>
<td>60.7</td>
<td>153</td>
<td>5,764</td>
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<td>. China</td>
<td>23,192</td>
<td>17,264</td>
<td>34.3</td>
<td>18,210</td>
<td>11,022</td>
<td>65.2</td>
<td>4,982</td>
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<td>4,954</td>
<td>3,030</td>
<td>63.5</td>
<td>5,038</td>
<td>4,057</td>
<td>24.2</td>
<td>-84</td>
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<td>2,621</td>
<td>2,053</td>
<td>27.7</td>
<td>6,377</td>
<td>3,308</td>
<td>92.8</td>
<td>-3,756</td>
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<tr>
<td>EU</td>
<td>30,785</td>
<td>25,093</td>
<td>22.7</td>
<td>28,682</td>
<td>20,737</td>
<td>38.3</td>
<td>2,104</td>
<td>4,356</td>
</tr>
<tr>
<td>. The Netherlands</td>
<td>7,335</td>
<td>5,930</td>
<td>23.7</td>
<td>1,287</td>
<td>701</td>
<td>83.5</td>
<td>6,048</td>
<td>5,228</td>
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<td>. Germany</td>
<td>5,926</td>
<td>4,340</td>
<td>36.5</td>
<td>9,084</td>
<td>7,075</td>
<td>28.4</td>
<td>-3,158</td>
<td>-2,735</td>
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<td>. United Kingdom</td>
<td>3,145</td>
<td>2,692</td>
<td>16.8</td>
<td>2,368</td>
<td>1,465</td>
<td>61.6</td>
<td>777</td>
<td>1,227</td>
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<tr>
<td>US (1)</td>
<td>14,155</td>
<td>11,362</td>
<td>24.6</td>
<td>19,788</td>
<td>14,718</td>
<td>34.4</td>
<td>-5,633</td>
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<td>Middle East</td>
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<td>5,522</td>
<td>35.0</td>
<td>3,245</td>
<td>2,278</td>
<td>42.4</td>
<td>4,211</td>
<td>3,244</td>
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<td>. Saudi Arabia</td>
<td>2,209</td>
<td>1,483</td>
<td>48.9</td>
<td>1,446</td>
<td>1,190</td>
<td>21.5</td>
<td>763</td>
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<td>. Iran</td>
<td>1,542</td>
<td>622</td>
<td>87.6</td>
<td>114</td>
<td>18</td>
<td>552.2</td>
<td>1,428</td>
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<td>. UAE</td>
<td>1,267</td>
<td>1,301</td>
<td>-2.6</td>
<td>133</td>
<td>83</td>
<td>60.3</td>
<td>1,134</td>
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<td>Africa</td>
<td>6,555</td>
<td>6,424</td>
<td>2.0</td>
<td>8,692</td>
<td>6,000</td>
<td>44.9</td>
<td>-2,137</td>
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<td>. Egypt</td>
<td>1,396</td>
<td>1,068</td>
<td>30.7</td>
<td>114</td>
<td>52</td>
<td>117.7</td>
<td>1,282</td>
<td>1,016</td>
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<tr>
<td>. South Africa</td>
<td>977</td>
<td>931</td>
<td>5.0</td>
<td>561</td>
<td>306</td>
<td>83.2</td>
<td>416</td>
<td>625</td>
</tr>
<tr>
<td>. Angola</td>
<td>671</td>
<td>1,065</td>
<td>-37.0</td>
<td>351</td>
<td>76</td>
<td>358.9</td>
<td>320</td>
<td>989</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>3,560</td>
<td>2,513</td>
<td>41.7</td>
<td>2,063</td>
<td>1,364</td>
<td>51.2</td>
<td>1,497</td>
<td>1,148</td>
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<td>. Russia</td>
<td>3,081</td>
<td>2,156</td>
<td>42.9</td>
<td>1,324</td>
<td>859</td>
<td>54.2</td>
<td>1,756</td>
<td>1,297</td>
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<td>. Ukraine</td>
<td>220</td>
<td>162</td>
<td>36.1</td>
<td>205</td>
<td>104</td>
<td>96.8</td>
<td>15</td>
<td>58</td>
</tr>
<tr>
<td>Other</td>
<td>7,487</td>
<td>5,528</td>
<td>35.4</td>
<td>6,882</td>
<td>4,161</td>
<td>65.4</td>
<td>605</td>
<td>1,367</td>
</tr>
<tr>
<td>TOTAL</td>
<td>144,929</td>
<td>111,798</td>
<td>29.6</td>
<td>132,156</td>
<td>90,618</td>
<td>45.8</td>
<td>12,773</td>
<td>21,179</td>
</tr>
</tbody>
</table>

(1) Including Puerto Rico
Source: Elaborated by MDIC / Secex data
Box 3.1: Exports of engineering services stand out in Brazil’s export total

Brazilian exports of engineering services have shown strong growth over the last few years and have not been affected by the global economic crisis in the same way the trade of goods was. Revenues from these external services were practically the same in 2008 and 2009 and equivalent to numbers almost three times higher than five years ago (see Chart 3.4). From January to August 2010, engineering services exports presented a small rise (3%) in relation to the same period in the year before.

This result is unique in the Brazilian balance of payments presenting an expressive surplus, and it is the result of the expansion of Brazilian construction activities in works around the world. Exports of engineering services presented a more stable path than that of goods because they are largely associated to sizeable infrastructure works and, consequently, to long-term decisions and governmental expenditures of importing countries. Such expenditures are not canceled or postponed with the same ease that orders are withdrawn; for example, orders for capital goods for industry.

Chart 3.4
Revenues and expenses of engineering and architecture services in Brazil's Balance of Payments: 2000 to 2010 (in US$ million)

Source: Elaborated from data of the Central Bank of Brazil
SPECIAL REPORT

Estimates for depreciation of the Chinese currency and impacts on the US economy

Alexandre Lautenschlager
Fabricio Catermol

Introduction

During the last decade, the heterogeneity of the global economy was, for the most part, relegated to a secondary plan in the context of what was coined "The Great Moderation": years of unusually low volatility of key economic variables in the developed world. However, the burst of the subprime housing bubble, which spread to the real sector through the debt structure of American households along with the exposure of large financial institutions to highly complex derivatives, gave rise to a turbulent situation which in turn urged the need to consider the nature of the extensive imbalances that, already in the recovery phase, still persist.

In the last update of its World Economic Outlook, the International Monetary Fund (IMF, 2010) provides a good assessment of the structure of the post-crisis world. While the group of "advanced economies" has projected GDP growth at 2.7% in 2010 and 2.2% in 2011, those categorized as "emerging and developing" have rates from 7.1% to 6.4%, respectively. Both included and considered determining factors of such a contrast, two of the world’s economies, the United States and China, can be seen as opposite sides of the same coin, linked by intense trade flows. According to data from the Bureau of Economic Analysis (BEA), bilateral transactions of goods and services recorded an annual average of US$ 299.2 billion between 2000 and 2009, with repeated surpluses for the Asian nation (Chart 1). During the first half of 2010 alone, its balance was positive at US$ 115.3 billion, a variation of 15.4% in relation to the previous year.

2 Economists from the BNDES’ Foreign Trade Area
The numbers are particularly relevant considering the North American unemployment rate records, which reached 9.6% of the economically active population last September. Public opinion in the country has long expressed a concern with the loss of jobs, mainly in the industrial sector because of low wages in Asia. Facing the limited effectiveness of monetary instruments and the lack of willingness to enough implement fiscal stimulus to trigger domestic demand, both Republican and Democrat politicians have seized the moment to demonstrate their commitment to improving the economic area, increasing the tone of their rhetoric against what they identify as "distortions" promoted by the Chinese government.

Undoubtedly, the topic that mostly attracts criticism is the Chinese currency policy, which keeps the rate of the renminbi within a narrow range defined by reference to the dollar. The rule was adopted in 1994 and remained even during the Asian crisis, when most countries in the region severely depreciated their currencies\(^3\). From July 2005, the range that delimits the intervention of the monetary authority began allowing for greater fluctuations, which gradually accumulated and lead to an appreciation of approximately 20% up to June

\(^3\) It is possible to argue that the Chinese attitude, which appreciated its currency in comparison to neighboring countries, was important in promoting regional stability in a particularly tumultuous period.
2008. However, amidst the uncertain environment of the last two years, the process was effectively frozen by fixing the rate at 6.8 CNY / USD.

Since China has maintained robust growth while much of the developed world has suffered more marked downturns (in many cases, reductions), for many, the appreciation of its currency would be a natural consequence of market adjustment mechanisms. Thus, the stability of the exchange rate, supported by extensive capital controls and accumulated international reserve can be understood as an indicator of the reluctance that economic policy makers in Beijing have in allowing the establishment of a new balance. According to this interpretation, at a time when many countries suffer from a lack of demand and excess installed capacity, "pursuing a policy of depreciated exchange rates, China is attracting part of the low demand in other nations, which harms growth practically everywhere" (Krugman, 2009a).

Officially, the United States have refrained from adopting drastic measures to force a change in position on the other side of the Pacific, preferring to give diplomacy a chance. The US Treasury, for example, still does not refer to China as a country that "manipulates the exchange rate" in its biannual report. The strategy was seen as correct when, last June, Chinese authorities announced what appeared to be the beginning of a new period of recovery. However, since then, the movement in this direction has been less than 2.5%, destroying our most optimistic expectations.

Prompted by sluggish progress, the US Congress, in October, voted in order to allow President Obama to impose a general increase in tariffs on imports of Chinese products. If the measures are implemented, analysts are concerned about possible retaliations and the beginning of a trade war, similar to what undermined the beginning of the global recovery after the Great Depression. At the same time, in the absence of coordination among key stakeholders, other countries have made unilateral efforts to avoid raising the value of their currencies against the renminbi.

Given the clear importance of the topic, this special report is dedicated to exploring a specific aspect of the debate on the Chinese exchange rate: the correction or not of the diagnosis on the harmful effects of the current value of the

4 On the occasion, the Chinese Central Bank, when defining parity, started to adopt a basket of currencies of its main commercial partners. However, the weights used are not publicly known and, in practical terms, decisions still seem to be guided by the path of the dollar.

5 Indeed, once the impact of the official communication had passed, it was clear that the commitment to appreciation was no less than vague (Duy, 2010a and b). The statement that “With BP’s [current] account moving closer to a balance, the basis for a larger-scale RMB appreciation does not exist” (PBC, 2010) particularly calls attention.
renminbi on the recovery of the US economy. For such, in addition to this introduction, the next two sections discuss, in order and grounded on a preliminary survey of related work, estimates of the degree of depreciation of the renminbi and possible effects of a change in its value on American employment and economic activities\(^6\). In the last part, the conclusion takes stock of the evidence presented and suggests possible developments.

Depreciation models of the Chinese currency.

As previously mentioned, the most common diagnosis concerning the depreciation of the renminbi is based on the stability of its exchange rate with the dollar, even where the latter currency loses value against other US trading partners and China records economic growth rates above most of the world, combined with expressive surpluses in the current account of the balance of payments. This policy is made possible by the Chinese central bank constantly purchasing US assets, added to the country’s massive international reserves, which currently total close to US$ 2.5 trillion.

Under a formal methodological perspective, most of the comments on the Chinese exchange rate refer to the work of Cline and Williamson (2010). The authors estimate the so-called fundamental equilibrium exchange rate, defined as the parity, multilaterally consistent, that allows 34 countries\(^7\) of their sample to reach a given credible target for the current account balance as a GDP percentage. The essential mechanism of the model used is the transmission of changes in the effective real rate in the current result, mediated by the price elasticity of exports and the participation of foreign sales in GDP. Once calculations have been made, the authors conclude that the consolidation of a scenario in which individual deficits and surpluses do not exceed 3% would require a 24% appreciation of the renminbi against the dollar or 14% in effective terms.

An alternative measure is to deviate the nominal exchange rate given by the purchase power parity (PPP). From this viewpoint, in 2008, Chinese products and services were about 60% cheaper than their international equivalents. However, the number should suffer a major correction under the so-called "Balassa-Samuelson effect": countries with lower income per capita have depreciated prices, particularly in the non-tradable products sector, but this difference is diluted along its convergence path. This is because tradable products, which follow international prices more closely, expand their productivity at a relatively faster rate, generating an income that is then spent on services. With the con-

\(^6\) A large part of the articles cited can be found in the e-book “The US-Sino Currency Dispute: New Insights from Economics, Politics and Law” (Evenett, 2010), from VoxEu (http://www.voxeu.org/).

\(^7\) Economies excluded from the sample are grouped as if they formed a single country, which responds to “the rest of the world”. 
sequent increase in prices in that sector, the exchange rate appreciates in real terms. Therefore, the relevant comparison should consider the magnitude of the related Chinese economic downturn. Studies along this line unveil, then, a "mismatch" (downwards) of the yuan renminbi-dollar exchange rate of around 12% (Reisen, 2010) or 30% (Subramanian, 2010) compared to that projected by regressions.

Cheung, Chinn and Fuji (2010) present a rather comprehensive summary of these and other studies estimating the Chinese equilibrium exchange rate. In addition to the numbers already reproduced, the authors also cite their own estimates (Cheung, Chinn and Fuji, 2009), that working from a simple model of time series that capture, more directly, the differences in productivity growth, the undervaluation of the renminbi in 2004 would be set at an interval of 6.1% to 4.0%. The methodology can be improved by incorporating additional variables and the adjustment of one of the constants, such as performed by consultants Goldman Sachs. In this case, the variation of the exchange rate would be as small as 2.7% against the dollar, but 23% against the Euro (Stupnytska, Stolper and Meechan, 2009, cited in Cheung, Chinn and Fuji, 2010).

A final argument that should be explored is that presented, for example, in Krugman (2010B), according to which the essential proof of Chinese exchange rate manipulation is the huge exports of capital from the country. Put in other words, before the big returns on domestic developments, it would be paradoxical that Chinese savings were invested in US bonds with interest rates close to zero. However, Song, Storesletten, and Zilibotti (2010) propose a different understanding of the problem, which renders the intervention hypothesis unnecessary. Recalling similar experiences in Korea and Taiwan, the authors attribute the net outflow of capital from China to asymmetric imperfections in the local financial market. Chinese banks, mostly State-owned, would favor public companies in their loans, forcing the private sector to become self-financing. These latter companies are more productive, because they use more modern technology, and account for an ever-increasing share of employment. In recent years, State-owned firms have been downsized, decreasing the possibilities bank investment, precisely at the time when deposits (savings coming from private businesses and households) are expanding rapidly. These idle resources are then directed to the US public debt.

**Impacts of a change in the US-China trade balance**

Assuming that the Chinese exchange rate is truly depreciated at some measure, we must then question the likely effects that such a change in policy

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8 Subramanian (2010) considers that an undervaluation of 30% is the most precise, for it considers and corrects problems in the World Bank’s estimates of China’s GDP PPP.
would have on the US economy. One can imagine that the most direct avenue for any change is the balance of trade between the two countries. In this sense, Krugman (2010) argues that maintaining the parity value below its "true" value implies double protectionism by ensuring a price subsidy to domestic producers and imposing taxes on imports in the same way as a higher external tariff. However, it is important to quantify the impact of this attitude on the economic activity of countries.

If, on one hand, the US trade deficit with China is persistent and high in absolute terms, when assessed within the context of the volume of US trade, its importance is relative. Considering the average over the last nine years, imports of goods and services from China account for 12% of total purchases from overseas and 32.1% of the negative balance result (Chart 2). At its peaks, last year, the amounts were 15.7% and 58.5%, respectively.

**Chart 2: Chinese participation in American imports of goods and services, 2001-2009**

Thorbecke (2010) draws attention to the significant increase in Chinese participation in the US deficit during the crisis. Over the 12 months following the failure of the Lehman Brothers’ bank, the deficit with countries outside East Asia declined 76%, while the balance with China fell by only 12%. In his article, the author develops a gravitational model of trade flows between several countries, in which he reveals a significant deviation of Chinese sales to the United States in relation to what was expected, suggesting the influence of forces from outside the market.
The magnitude of the appreciation of the Chinese currency, required for a decrease in the same proportions as the US trade deficit, shows significant variation in the studies available so far. Using quarterly data from 1993 to 2006, Cheung, Chinn and Fuji (2009) suggest that a 10% appreciation in the renminbi reduces Chinese exports to the United States between 8% and 20%, while Thorbeck (2006), using the quarterly information from 1988 to 2005 as a basis, reports that such movement would imply a drop from 4% to 14%. Using a shorter period from the first quarter in 2001 to the last in 2009 (which covers approximately China's participation in the WTO), Chinn (2010) performs approximate calculations of the elasticity of trade flows in both directions. His results show that, if the parities of other trading partners are kept, the same valuation of 10% reduces Chinese exports by 10% and increase US sales by 16%. Adding the effect of a decrease in import value (exchange rate pass-through), the impact on the bilateral balance would be less than US$ 45 billion.

With regard to the consequences of the current pattern of trade on the US economy, Krugman's "simplified" calculation (back-of-the-envelope) (2009b) is that 1.4 million jobs will be lost over the next few years due to Chinese "mercantilism". Bergstern (2010), in turn, argues that "under conditions of high unemployment", a 20% appreciation of the renminbi, to improve the trade balance between US$ 50 billion and US$ 120 billion, would create 300,000 to 700,000 jobs in the United States, approximately half of them located in the manufacturing sector, with salaries above the national average.

As a counterargument, Francois (2010) notes that the general classification of imports from China has changed significantly over the last two decades, moving from mainly textiles and clothing to computer products and electrical machinery. The change is significant because it highlights a new role for Chinese purchases as the origin of intermediate inputs to produce goods and services which the US then exports to other countries, and even those products intended for direct consumption (such as many types of electronics) frequently carry American added value. Therefore, changes in the dollar cost of imports may have consequences on the competitiveness of the US export sector. Mindful of such interdependencies, the author simulates appreciation of 5% and 10% of the renminbi in a CGE model (Computable General Equilibrium), seeking its effect on lower or higher-skilled employment in the US. Calculations return estimates of a total reduction of 231,000 and 423,000 jobs in each scenario, with more significant decreases for less skilled portion (Table 1).
Gagnon (2010) disputes these findings by stating that the implementation of the model was essentially wrong because it did not consider the particularities of the current situation, in which the economy is expected to continue working below its potential for several years. Under more realistic conditions of a fixed nominal wage, the 10% recovery would bring a gain of "at least" 670,000 jobs. Similarly, Cline (2010) uses the relationship of the input-product table of the US manufacturing industry to calculate that a change of such magnitude in the exchange rate would include 320,000 more jobs due to an improved trade balance and would subtract only 32,000 jobs by increasing the cost of imported inputs.

Conclusion

The brief appraisal of references made in this special report shows that, although there is reasonable consensus in the main lines of "rebalancing" the global economy, quantitative assessments of present deviations are still quite variable. While most estimates indicate that the Chinese currency is depreciated to some extent, the aforementioned studies calculate that over the past few years, the "right" exchange rate against the dollar may be in a range as wide as between 30% and 2.7% more appreciated, depending on the study. In terms of its effects, the fact that transactions with China in 2009 accounted for over half of the considerable US deficit in goods and services draws attention, but while some studies have reported that changes in the balance to favor the United States would bring great net gains in jobs, other investigators find substantial losses due to the reduction in international competitiveness of American exports. In fact, these results are not surprising, insofar as one should expect difficulty when the analysis involves an economy with intervention and planning mechanisms to challenge the fundamental assumptions of many economic theories.9

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9 Scissors (2010), for instance, reminds that if the Chinese exchange behavior is really a industrial policy instrument, any attempt to drastically alter it will only force the authorities to resort to more direct methods of subsidy to the domestic industry.

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Table 1: Estimates for variation in US employment, scenarios of appreciation of the renminbi

<table>
<thead>
<tr>
<th></th>
<th>change % less skilled employment</th>
<th>change % more skilled employment</th>
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<tbody>
<tr>
<td>Appreciation of 5%</td>
<td>-0.183</td>
<td>-0.170</td>
<td>-231,008</td>
</tr>
<tr>
<td>Appreciation of 10%</td>
<td>-0.336</td>
<td>-0.312</td>
<td>-423,919</td>
</tr>
</tbody>
</table>

Source: adapted from Francois, 2010.
Thus, in view of the range of arguments presented, it seems clear that the Chinese exchange rate policy deserves to be treated primarily by forums and institutions with global reach\(^\text{10}\), because consequences are not so individualized that they warrant severe unilateral actions that could easily develop in quite the opposite manner to that intended. In this vein, studies that manage to detail the likely characteristics of a scenario with a "strong" renminbi for a large number of countries would be an important buttress for international cooperation efforts. Recent events indicate that the United States is no longer willing to be the "consumer of what is leftover" for the rest of the world, at least not at the same pace of expansion in the last decade, and China could be the most obvious candidate to take on such a role, at least in part. However, there is no reason to imagine that its demands will be identical; after all, the products it requires do not seem to follow the same pattern as US consumption. The way that international labor will be divvied up to meet such demand is the important issue that needs attention in the coming years.

References


\(^\text{10}\) It is a necessary complement that such organizations have at their disposal the tools to guarantee that the decisions taken will be effectively applied.


