

國立政治大學金融學系碩士班碩士論文

全球金融危機對拉丁美洲國家經濟表現之影響  
“The effects of the Global Financial Crisis in Latin  
American countries’ economic performance”

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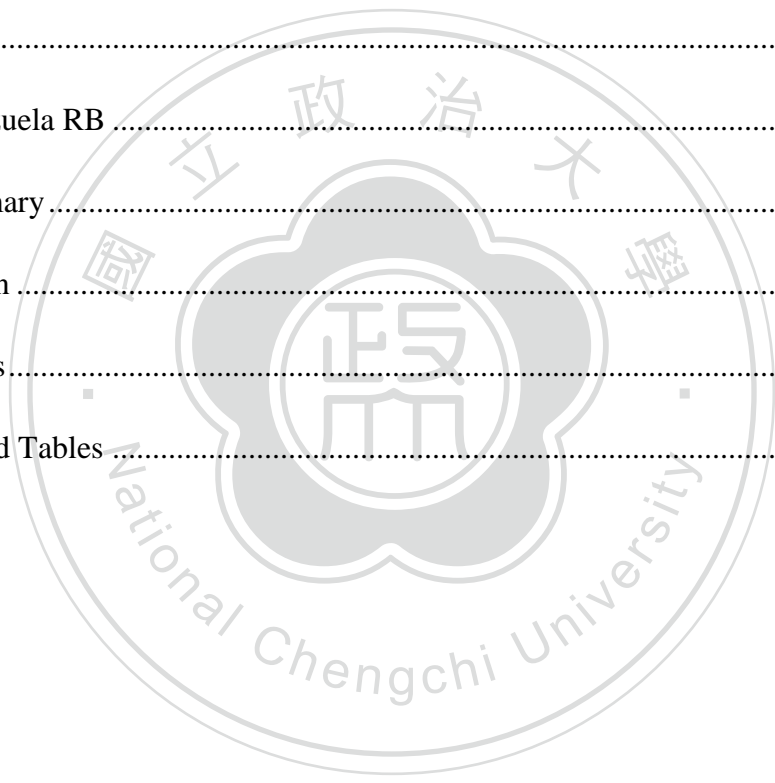
## **Abstract**

The global financial crisis has been catalogued as one of the worst economical recessions since the Great Depression in 1930's. The history in Latin America has shown that the region has been turbulent in respect of economic crisis. They were three main channels, which are divided in contagion and/or interdependent to Latin America; first the remittances saw a drop, the smallest countries like the Central Americans countries were the most affected by this channel. The second channel was in the export with the freeze in the international trade market. And the third channel was the financial shock with global finances and credit constraint. For the seven biggest economies; Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela; the second and third channel were the ones that most affected them. There is not proof that within the region toxic assets were acquired; this is the main reason that we have take macroeconomics variables to measure the impact of the crisis. Thanks to the propitious economic circumstances in the past years made Latin American countries had a great economic growth, this helped them to grow their international reserves and have a healthier fiscal system. Those two tools were fundamental to fight against the crisis with counter cyclical policies. Also most of the countries have started to diversify they exports to other regions, focusing more in Asia especially the gigantic Republic Peoples of China. Some countries apply this strategy more aggressively than others, and as a result they bounced back quicker than other countries. It has been said, that this kind of economic depressions only happens once every one hundred years. Latin America suffered as the entire world did, but they were better prepare and their strategies worked to reactivate their local economies. Some countries have been economically performing better and have kept their inflation and unemployment rates at the same level as before the crisis started.

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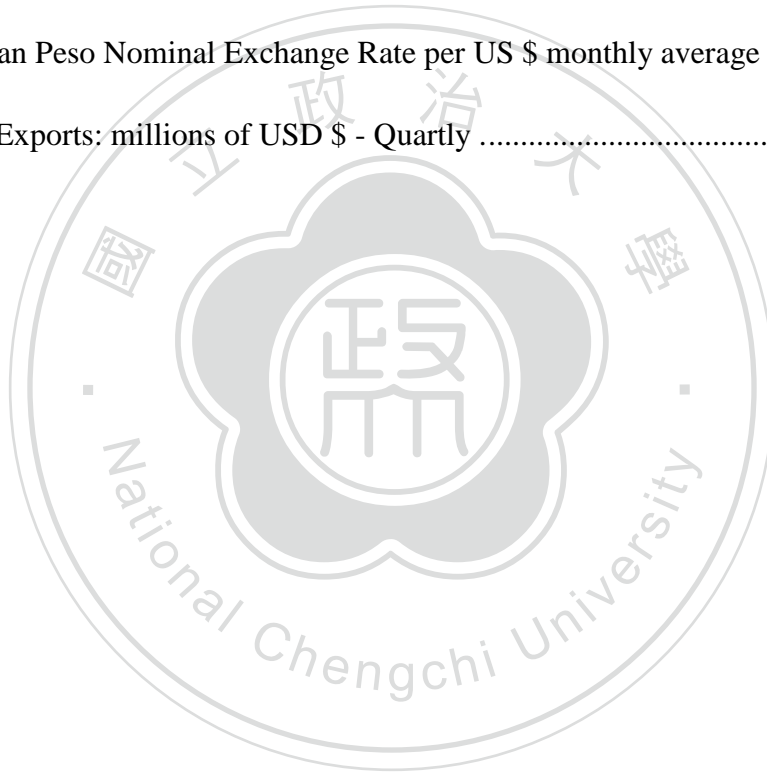
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# 1 Introduction

The Global Financial Crisis marked the international financial industry and in some ways it also marked peoples life. In my case, due the crisis and the effects in the employment sector; after I finished to study my bachelor degree, I did not have any job offer or neither could find one. For that reason I decided to continue with higher education studies. Such a big event not only marked my life, it also marked my career. That is the main reason that motivated me to study the impact of the global financial crisis in the region that I am coming from.

The global financial crisis started in the United States of America, by the magnitude of its impact it has been compared against the great depression during the 1930s. All over the world the financial markets staggered after the collapse of Lehman and Brothers in 2008; the financial system looked to be doom, many other banks were at the expectative of having the same destiny as Lehman's' if it would not have been from the bailout from the Federal Reserve.

The world was watching how Wall Street was falling down. Back then; one of the world's principal financial centers became the epicenter of chaos. Some economist, and countries did not take too long to discover what was going on. And when finally The United States of America was officially declared in an economy recession, many already knew the effect that they would have.

In Latin America, the region where I come from, there is not information and trace that banks in the region and central governments had acquired toxic asset, which were so destructive in the United States. This action might make everybody think that without the purchase of toxic assets, Latin America was exempt of the Financial Crisis, but not it is not the case. The global financial crisis started in 2007 with the housing bubble and the plummet of mortgage back securities, but the Lehman and Brothers bankruptcy triggered a domino effect that affected all the economies.

For this study we have selected the seven biggest economies in Latin America. The seven biggest economies in Latin America are: Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela RB; also known as LAC-7. Due there is not any register

that toxic assets were acquired in the region, the study has recollected macroeconomics variables to analyze the effect, the performance and the effectiveness of the actions taken by each country.





## 2 Literature Review

We reviewed studies related to the topic with similar points of view but with small discrepancies. It has been said that when The United States of America's economy has a "cold", Latin America's economies have "pneumonia". In this particular case, Latin America suffered in three different channels. The three studies (Ocampo, 2009; Moreno and Tovar, 2009; Jara, Fernandez and Montiel, 2009) agreed that the first channel to be affected was the remittance, it experienced a slowdown in many Latin America countries; however the smallest countries in Latin America were the most affected from this channel, mainly Central American countries as well as Mexico and Colombia in a smaller part.

Also the trade shock was the second channel of transmission, Latin America is a strong lead export region, the freezing of the international trade markets and the collapse of commodity prices, caused a dramatic shock which might explain the quick reduction in GDP in all the countries. Even so Ocampo, 2009 believes that this was the main channel of transmission.

The third channel of transmission was the financial shock; the global financial crisis also brought with itself a credit crisis, which meant a credit constraint around the world. The increase of the cost external financing, usually US dollars, took several forms. They were particular cases in Mexico and Brazil, Jara et al. 2009; where companies saw disruptions in the foreign exchange swap market, and when the market changed they were affected. Other saw liquidity lines dried up or become too expensive.

It is important to mention that during the last period from 2003 to 2007 of Latin American experienced a remarkable period of economic growth due a combination of factors like high commodity prices, booming of international trade, exceptional financing conditions and high levels of remittances. This was relevant because the region could accumulate large foreign exchange reserves.

The importance of this was that central banks could use those reserves to inject liquidity to the market. But this was not the only reason that helped to go through the crisis, Jara et al. 2009 emphasize the importance of the healthier fiscal system that many of the countries had, this helped them to apply counter cyclical policies to ignite the local economy. One of them was the devaluation of currency, even though Ocampo, 2009 mentions that those devaluation was part of the correction of the strong appreciation pressures that some of them had during the past decade and was not a counter cyclical policy as Jara et al. 2009.

Having accumulated reserves and having a healthier fiscal system have been two positive things for the governments but Jara et al. 2009 believes that they need to be careful selecting which tool to use for finance their counter cyclical policies. Drowning the reserves is a risky strategy; it would leave countries exposed to future liquidity risks and could cause a stronger depreciation in the currencies. However issue new debt would be more expensive than expected, especially in the situations that the market is.

In the past Latin America has been prone to contagion of economic recessions or currency crisis, but in comparison to others in previous two episodes, the transmission in this crisis has been more moderate. It seems Latin American countries were better prepared for any mishap that could, and it did.

### **3 The effects of the global financial crisis in Latin American countries' economic performance**

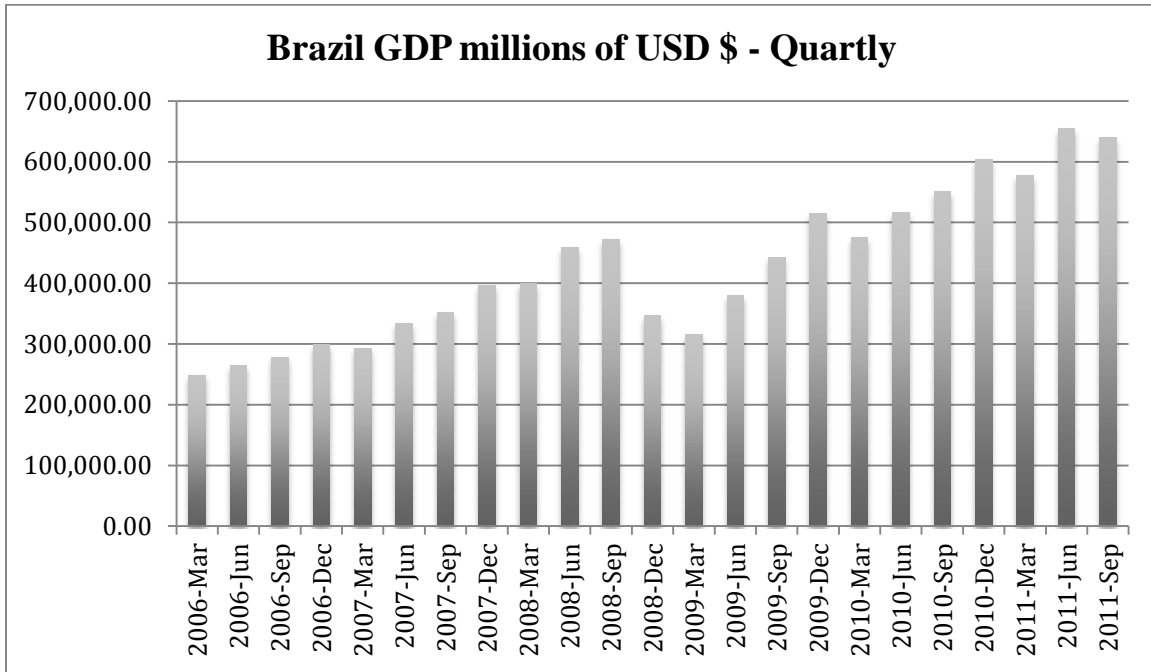
#### **3.1 Argentina**

Argentina was having a steady growth in appears that from 2006 the second semester Argentina was having a double digit GDP Growth. After the collapse of Lehman and Brothers; the GPD went negative for two periods in a row having decreasing -9.09% in the last quarter of the year and decreasing -14.55% in the first quarter of 2009 Table 2. Their exports moved in a similar way, in this case in the past two years, Argentina was having excellent forth quarters looking a steady growth. But in the forth quarter after the collapse, the exports decreased -32.78% and in the first quarter of March 2009 it decreased by -30.74% Table 1. The argentine peso was stable before the crisis, which was a challenge from the government after the crisis they had. But in after in September 2008 their currency had almost a 8% depreciation in a month and continued depreciating during the next periods Graph 11.

#### **3.2 Brazil**

Brazil was having one of the most amazing economic growths in the region. From the first quarter of 2006 to the third quarter of 2008; Brazil almost had a 50% growth in their GPD Graph 1. Not soon after the collapse of Lehman's the GDP decreased -36.28% in the forth quarter of 2008 and in decreased -10.03% by the first semester of 2009. Their exports moved in a similar way, but the unique difference with the GDP, is that the export were having a good third quarter and the GDP was having a better forth quarter. And later the third quarter of 2008 decreased -24.87% and in the first quarter decreased -46.65% Table 4.

**Graph 1.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

The Brazilian government has had several problems trying to control the inflation during the last years. The Brazilian Real appreciated almost 40% in the last two years previous the crisis, but soon after in just took less than three months to depreciate to a lower price in comparison of the price from two years ago; in one month the currency depreciated -16% Graph 15. However the inflation rate changed in the opposite direction.

### 3.3 Chile

Chile was not having an amazing growth, although it was steady and stable. From the first quarter of 2006 to the second quarter of 2008 they had almost a 32% of growth. The main difference of Chile is that the decrease in their GDP started in the third quarter of 2008, in the same semester that Lehman's bankruptcy. The GDP decreased by -17.05% in the third quarter, -24.19% in the fourth quarter of 2008 and in the first quarter of 2009 it did not move too much, just 1% Table 6. More important the exports started to decrease one quarter even before the collapse of Lehman it decreased by -4.53% in the second quarter, by 10.87% in the third quarter, by -29.16% in the fourth quarter of 2008

and by -6.92% in the first quarter of 2009; this was basically on complete year of decrease in their export Table 5. The Chilean peso was appreciating in a small slowly but during the beginning of 2008 appreciated in a faster pace, until after collapse suddenly depreciated by almost 15% in one month Graph 20.

### **3.4 Colombia**

Colombia was having a quarter-by-quarter growth; most of the countries were having a steady growth but having a small decrease at the forth or first quarter; however Colombia every quarter was growing until the collapse of Lehman. The Colombian economy experienced a rapid decline of the Gross Domestic Product. It declined slowly in the third quarter of 2008 by -4.05%, then in decreased substantially with -21.40% and finally in the first quarter of 2009 it decreased by -4.81% Table 8. The exports suffered a decrease of -3.36% in the year Table 7. The Colombian Peso had a big appreciation during the past two years, but it only took several months to get in the same level as two years ago; it depreciated by 10% in only one month Graph 25. The inflation also fell during the crisis Graph 29.

### **3.5 Mexico**

Mexico was having an acceptable GDP growth; after the collapse of Lehman, their GDP decreased by -27.85% in the forth quarter of 2008 and by -19.48% in the first quarter of 2009, one of the deeper declines in comparison with others economies Table 10. The exports were gaining a big momentum until the collapse of Lehman, in the same quarter as the Lehman went to bankruptcy; Mexico had a slight decrease in their export with -1.77% but it was until the third quarter of 2008 where they had a -22.41% of decrease and in the first quarter of 2009 they had a -24.84% decline Table 9. Mexican Peso has been know for its volatility, but before the crisis started it maintained pretty stable, it reached its best price before the collapse and the it depreciated almost 35% during the next 3 months, the currency devaluated 15% in only one month Graph 33.

### **3.6 Peru**

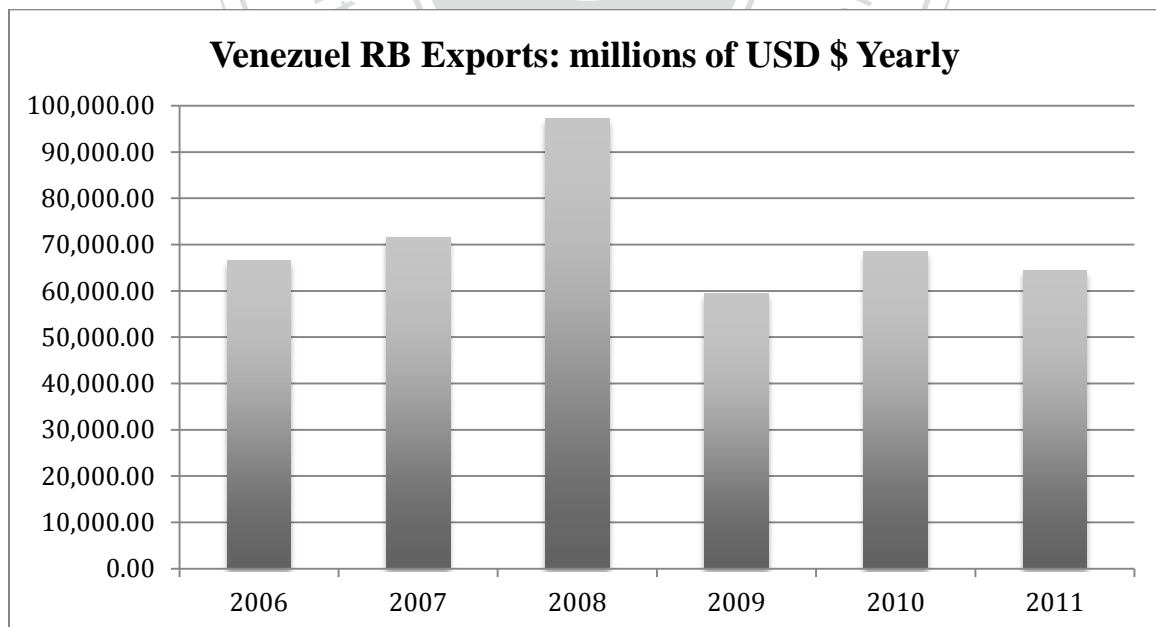
Peru was having a gradual growth of their Gross Domestic Product, and after the collapse of Lehman, the GDP also decreased gradually. In the third quarter of 2008 it

decreased -7.50%, in the fourth quarter of 2008 it decreased -7.6% and in the first quarter of 2009 it decreased by -6.95% Table 12. However the export did not fluctuate in the same way; it was until the third quarter of 2008 that the exports suffered a cutting decrease of -34.06% and in the first quarter of 2009 a decrease of -14.55% Table 11. The Peruvian Nuevo Sol did not fluctuate; it only depreciated 4% as a consequence of the crisis Graph 40. Instead the inflation reached rooftop of 6.50% during the first quarter of 2009 Table 42.

### 3.7 Venezuela RB

Venezuela is a particular case in Latin America, not only in Latin America but also in the world. Venezuela did not decline its yearly GDP, in 2009 they had a moderate growth of 4.60% Table 14. However in their yearly exports it decreased -63.40% in 2009. Their currency did not depreciate soon after, it was until January 2009 when the government decided to apply 1:2 currency devaluation, and this means 50% depreciation in one day Graph 5.

**Graph 2.**



Source: Open Data, World Bank

## **4 How the 7 biggest Latin American's governments reacted to the crisis**

### **4.1 Argentina**

Argentina, in their monetary and financial policies, they lowered their legal reserve in dollars and reduced their legal reserve in local currency. They launched a program of daily automatic repurchase of securities issued by the Central Bank of Argentina maturing within six months. Also, the Central Bank of Argentina tripled the line of credit to local banks. And the refinancing of liabilities issued by the government in 2001 (during their crisis).

In their fiscal policies, 20% reduction in withholding taxes on exports of wheat and corn. An additional one-point reduction for every million tons of production above the recent average. And 50% reduction in withholding taxes on exports of all fresh fruits and vegetables. This was an important policy to establish, because this sector was the hardest hit Exports declined by almost 19 per cent reduction during the first semester of 2009 (mainly through declines in sales from the automotive sector).

They also applied a reduction in employer contributions. All firms creating or regularizing jobs pay 50% of contributions for the first year and 75% for the second. The administration of retirees and pension funds was unified by state regimen.

In their exchange rate and foreign-trade policy, bigger controls over foreign currency demand were adjusted, alteration of rules for the purchase of public securities liquidated overseas. The Customs authorities imposed tighter controls on products sensitive for national industry, such as textiles, footwear, metallurgical goods, white goods and motorcycles.

Argentina, made an important moves in the sectorial policies, they separated the Ministry of Production from the Ministry of Economy & Production. The public works program will focus mostly on housing projects, hospitals, sewerage systems and roads.

And in their labor and social policies; they had regularization of unregistered employment, waivers of all debts and interest owed for regularization of the employment situation of up to 10 workers. No reliable unemployment data was found for make any graph representing either or not there was an improvement in the employment sector.

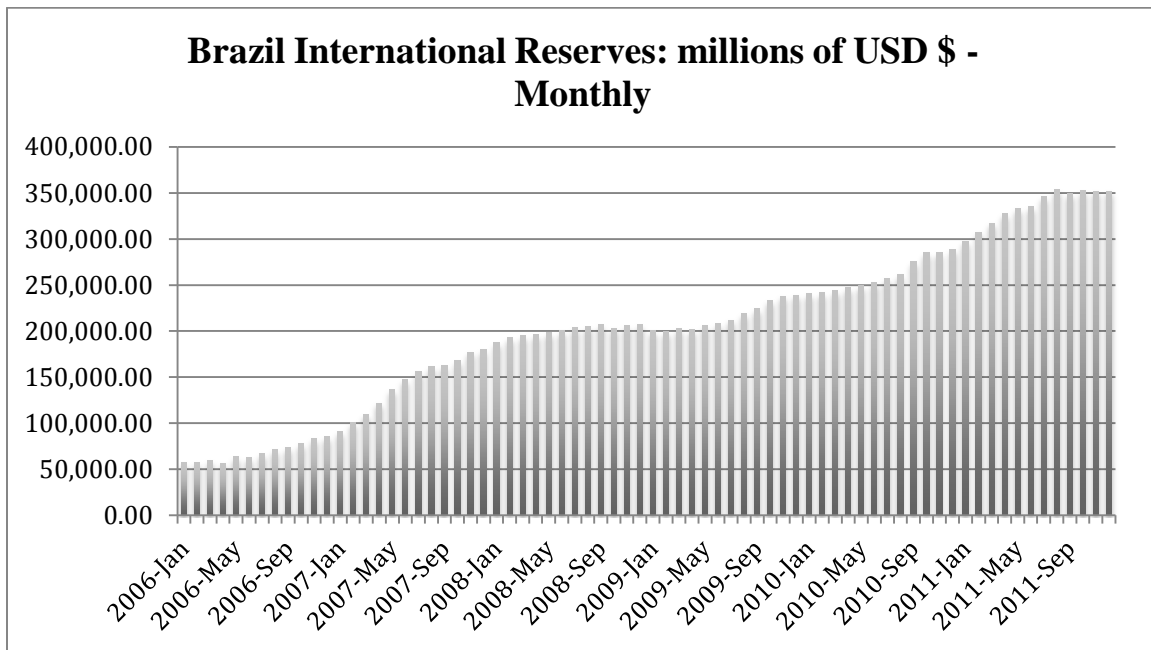
## **4.2 Brazil**

Brazil, in their monetary and financial policies, they reduced their legal reserve, authorized bigger banks to obtain portfolios from medium and small bank and to extend loans in foreign currency. They gave broader powers for the central bank to intervene in failing financial institutions, as well as they gave the authorization to the Bank of Brazil and the “Caja Economica Federa” to buy financial institutions in difficulties (as well as insurance and social security enterprises). The central bank has offered loans to companies to facilitate refinancing of their external debts (allocating up to US\$ 20 billion of the country’s reserves). As well, the central bank announced that they are willing to use until 36.000 millions of US dollars from their international reserves to enterprises with difficulties to re-finances their debt in the foreign market. This proved that Brazil is committed and flexible in terms of keeping the health in their local financial market, as well as the local economy.

In their fiscal policies, the government reduced their goal of surplus. The public investment capacity may be increased (by US\$ 8.8 billion). The sectors worst hit by the crisis may be granted fresh tax cuts and more resources. The government pumped of over US\$ 43.8 billion to keep up consumption levels; as well as they will spend the US\$ 6.3 billion reserved for the Sovereign Fund on projects to maintain overall demand and the government to launch an advertising campaign to stimulate consumption.



**Graph 3.**



*Source:* Latin Macro Watch (LMW), Inter-American Development Bank

As well, Federal government and some States Government have extended the time allowed for monthly tax payments, thus easing pressure on corporate cash flows. A series of tax cuts have been announced. The tax on financial operations will be cut from 3% to 1.5% for direct consumer credit operations. The tax on industrialized products was temporarily cut, especially for automotive sector.

In their exchange rate and foreign-trade policy, the central bank has the possibility to give straight loans to private banks in foreign currency, but they need to be use only in foreign trade. The central bank reassumed the foreign exchange swap auctions in order to provide liquidity to importers. The devaluation of the Brazilian real would not lead, to any type of fiscal pressure on the government. On the contrary, the resulting foreign exchange gains led to a reduction of the debt initially.

The government has adopted a series of non-tariff import restrictions. Although, importers from the 17 sectors, will have to request an import license beforehand. This will have the greatest effects on wheat, plastics, copper, aluminium, iron, capital goods,

electrical and electronic equipment, auto parts, motor vehicles and transport equipment in general. (The measure was temporarily suspended on 28 January 2009)

In their sectorial policies, the Agricultural received US\$ 6.5 billion in support; in the Oil sector, the state/private company PETROBRAS was allowed to expand their borrowing capacity the National Bank for Economic and Social Development (BNDES) to keep up planned investment levels. the Housing sector, implemented a policy to create a real estate credit line for public servants (including staff of public enterprises and mixed public-private firms), as a means to stimulate civil building work. Banco do Brazil and the Federal Economic Fund to grant real estate loans at below-market rates. In their labor and social policies, the government announced the continuance of the unemployment insurance, particularly for economies sectors which have had massive employment cuts.

As we have mention before he Brazilian economy was affected the most in three industry sectors. The exports were highly affected due a sharp drop in sales to emerging countries (Argentina and Mexico were the best markets in terms of national car sales). This mixed with the drop a in the global commodity prices caused a big upward in Brazilian economy.

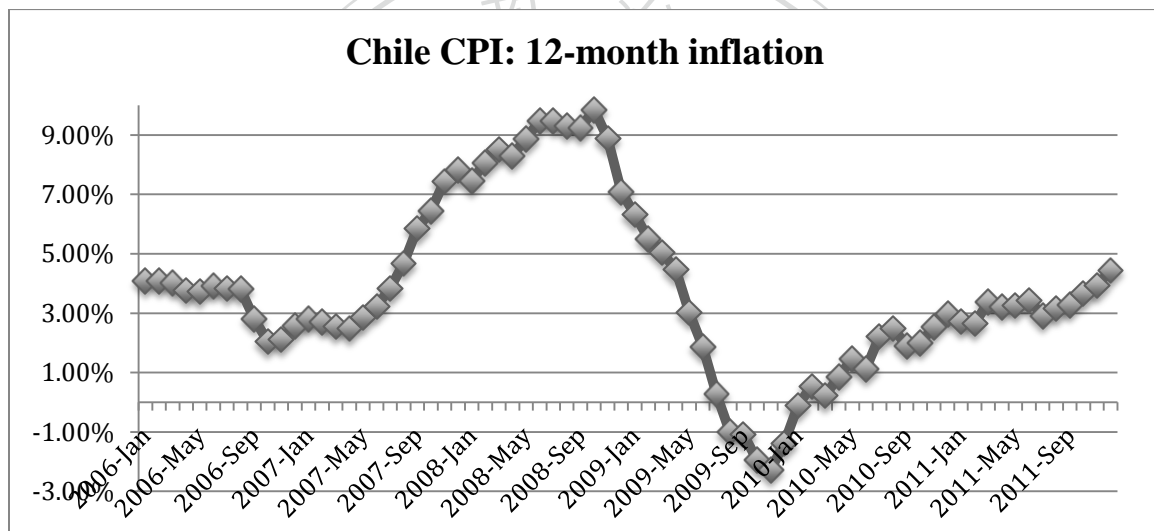
### **4.3 Chile**

Chile, in their monetary and financial policies, the 8 January 2009 the central bank announced cut its monetary policy rate by 100 basis points (from 8.25% to 7.25%) and that there may be further cuts in future, depending on inflation. And asked fiscal resources in foreign currency for local banks. The Chilean government has taken a series of measures to ensure that financial markets are protected with higher liquidity and flexibility. This thanks to he government has made a large scale of public savings from recent years' commodity boom with record prices for copper and other mining products. Providing a solid financial system, with competitive and well-capitalized banks, appropriately regulated and supervised.

Chile had big changes in their fiscal policies; they applied a countercyclical policy in the national budget. They increased their spending in infrastructure, social spending and their total spending. An economic stimulus program (US\$ 1.15 billion) was applied,

to encourage house purchases and support financing of small companies. Another US\$ 7 billion will be spent on public investment. For fiscal stimulation, it is the first time for the Economic and Social Stabilization Fund to be used. Other revenue will come from the debt issue authorized in the 2009 budget (with a maximum of US\$ 3 billion) and from a reduction in the fiscal regulation target. And an economic incentive plan (totaling US\$ 4 billion, equivalent to 2.8% of GDP) its purpose is to stimulate growth and employment through the application of short-term measures and structural reforms.

**Graph 4.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

Temporary reductions in businesses' monthly interim corporate income tax payments on the basis of their past profits. In 2009, 15%, and those of larger businesses will reduce payments by small and medium-sized enterprises by 7%. In their exchange rate and foreign-trade policy, the exchange rate intervention ended. A program covering bank loans to exporters was enhanced. The drop in copper prices has hit Chile especially hard.

In their sectorial policies, the medium and small enterprises sector received additional resources (USD\$ 500 millions) for Investment Guarantee Fund (FOGAIN) and to enhance the Guaranty Fund for Small Enterprises (FOGAPE). The housing sector

received a subsidy for medium sectors. The industry helped the Capitalization of “Corporación Nacional del Cobre de Chile” (CODELCO) for US\$ 1 billion to boost its investment plan.

In their labor and social policies, it is planned an additional budgetary allocation for labor-intensive employment. Also a labor subsidy was planned for low-wage workers between the ages of 18 and 24. And it was planned to broaden the Unemployment Solidarity Fund to give access to all unemployed workers, not only those with permanent contracts.

#### **4.4 Colombia**

Colombia, in their monetary and financial policies, decreased the need of reserves in banks for current and savings account (from 11,5% to 11%) and also for term deposits under 18 months (from 6.0% to 4.5%). On 19 December 2008, the central bank cut its intervention rate by 50 basis points to 9.5%. (When the central bank of Colombia cuts its intervention rate it means that the market interest rate, the exchange rate and credit cost suffer a change). This to provide more liquidity in the market, and let banks to work more freely.

In their fiscal policies, they created a new “Infrastructure Fund” with the support of the IADB and CAF (Andean Cooperation Fund), which has the objective to develop infrastructure (the fund is about USD\$ 500 millions). Plan from the national central government investments of over US\$ 2.5 billion in public works. Investment in infrastructure (concessions, major highways, departmental roads, tertiary roads, housing, drinking water and basic sanitation) will become a priority. The government was able to pre-finance their deficit with the issuance of international bonds and disbursement from multilateral banks, that way taxpayers will benefit by a tax reduction.

In their exchange-rate and foreign-trade policy, decided to assure resources with external financing from international multilateral banks (IADB, World Bank, and CAF) for US\$ 2.4 billion. Assurance of US\$ 650 million in resources for the Foreign Trade Bank of Colombia (Bancoldex), by means of a government-backed loan from IDB.

Also. The exports were the most affected in Colombia, as well as the price of Coffee. Colombia is one of the major coffee producers and exporters in the world, and coffee export has become the third largest foreign exchange earner for the country and is a good employment resources. The government raised coffee's basic selling price and provided interest-free loans and discounted fertilizer to medium and small-sized coffee planters to protect their interests.

In their Sectorial policies, as mention before, they were focusing in a strong investment plan for public works: road building, housing and irrigation districts. And their labor and social polices, they were seeking to protection the social investment despite public spending cuts. The minimum wage was raised to US\$ 217 this means a 7.67% increase. And they expect an increase of 1.5 million families covered by the “Families in Action” Program.

In 2010, inflation is likely to remain within the central bank’s target range of 2% to 4%, because the effects of El Niño, which can loses in the agricultural, particular coffee production and likely to be offset by the output gap and the appreciation of the peso.

#### **4.5 Mexico**

Mexico, in their monetary and financial policies, they provided additional short-term credit lines to banks. They allowed a temporary authorization to banks to inject liquidity into their own investment funds. The government announced a plan to buy back medium- and long-term government securities for up to US\$ 3.1 billion, know also as Quantitative easing. And the Central Bank created a forward swap program, which will enable banks to swap the exposure of instruments with long-term fixed rates for variable-rate short-term securities. As other countries in Latin America, in Mexico the purpose of these auctions was to provide liquidity to the market in a timely way in order to meet the demand for US dollars that emerged during the last quarter of 2008

In their Fiscal policies, they created reforms to expedite spending on infrastructure (Fiscal stimulus for US\$ 6.9 billion) and government purchase program from small and medium enterprises. The government edged the national production of oil against price fluctuation, this ensure the 90% of oil barrel exports. And in a national agreement, they

established that the price of fuel petrol prices would be frozen, the price of liquefied petroleum gas would be cut by 10% and the price of electric power would be lowered.

In their exchange-rate and foreign-trade policy, With the main objective of reducing the exchange volatility, the Central Bank of Mexico intervened directly in the market with an extraordinary selling of 1.060 billions of USD. And with the Secretariat of Finance and Public Credit and the central bank announced a cut in long-term debt issues and the launch of a forward swap mechanism to inject money into the markets. The Central Bank created a forward swap program for US\$ 6 billion, which will enable banks to swap the exposure of instruments with long-term fixed rates for variable-rate short-term securities. On 16 January 2009, the central bank announced a cut of 50 basis points in its monetary-policy rate, lowering it to 7.75%. Although the currency depreciation brought considerable financial problems for a number of leading corporations.

The Mexican government cuts in tariffs, particularly for products imported from countries with which Mexico has no free trade agreement. Mexico's biggest trade partner is United States of America, and as the economy and consumption shrinks as well the exports in Mexico. And Mexico competes head to head with China on nine out of its ten top export products to the U.S. primarily.

In their Sectorial policies, in the Oil sector, it was a reform in the investment scheme of "Petroleos Mexicanos" (PEMEX). And the transport sector would receive federal support for mass transit with an investment of US\$ 1.3 billion. Mexico was very smart in hedging against the declines in oil prices. And so it was able to protect itself during this year setting the price at \$70 per barrel even as it dropped considerably. Although it is a good strategy, it is no a long-term strategy; so this is a very big concern of the government even before the crisis began.

In their Labor and social polices, the national employment and training system received on March 2008, US\$ 50 million to be used to broaden coverage and quality of the National Employment Service. A new program was launched to support workers affected by the cut in industries (Preservation of Employment Program). The program

aimed to provide 0.5 million employment sources with 505 millions USD. Then the government has started two initiatives.

The first one, to improve the flexibility for people to retire. And second is to improve the flexibility, of the National Fund of Housing for the Workers', so for a part of their contributions can be redistributed for retirement savings.

## **4.6 Peru**

Peru, in their monetary and financial policies, the reserves requirement were adjusted in four occasions for national currency deposits and three times for foreign currency deposits. The Central Bank of Peru (BCRP) provide extended the maturity of its credit to some financial institutions and also reduced their interest rate. And they have focused to maintain liquidity in the financial system for national and foreign currency.

In their Fiscals Policies, they considerable increased their public investment, approximately in a 60%. They planned to finance their deficit with the Stabilization Fiscal Fund. Also by applied a economical stimulus plan (3.2 billion US \$), which included paid the debt with oil refineries that caused a downturn of fuel prices, an increase in the drawback tax rate and transfer economic support to local governments. In their Exchange rate and foreign-trade policies, the tariffs were cut or eliminated for 571 food items, in order to soften the inflationary impact of rising international prices.

In their Sectorial policies, the government will allocate some US\$ 6 billion to boost the construction industry, make it easier to obtain mortgage loans and develop housing and sanitation plans. Additional, US\$ 1 billion were pumped in the construction market, mainly directed to housing social programs. And funds were approved (around US\$ 440 millions) for support to small and medium enterprises and the export sector.

And in their Labor and social polices, they implemented funds toward social programs (US\$ 97 million) to support workers; to improve the quality of life for the poorest sectors and those who are most vulnerable to the world situation.

## 4.7 Venezuela RB

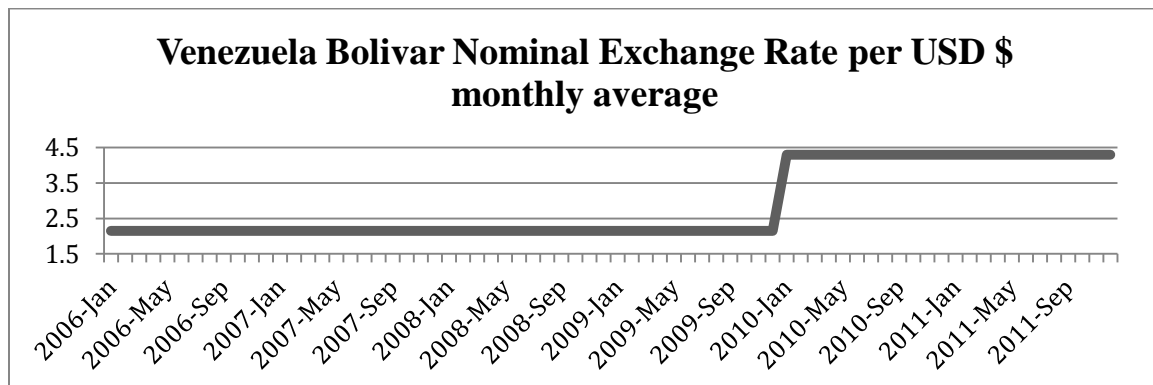
Venezuela in their Fiscal policy, the government has indicated its intention to maintain an active public investment program; the investment is about some \$400 billion USD in health, education, housing, and agriculture in the past 10 years.

Then, they have done public any other action in their monetary and financial policies, Exchange rate and foreign-trade policies, Sectorial policies and Labor and social polices. The ruling government has built up considerable reserves from the last few years' high oil prices. The bulk of Venezuela's \$43 billion international cash reserve has been deposited since 2005 with the Bank for International Settlements in Basel, Switzerland. The president claims that this the central bank of the world's central banks, and if their would have been in an American private bank, they would have nothing by now.

Venezuela, has suffered the consequences of the commodity prices, especially Oil. Which is the 90% of their exports. More important they did not edge the price if their barrels, like Mexico did. They went trough their reserves to try to maintain the price of the currency. Also the fall price in Oil means a reduction in the budgeted expenditure.

The President introduced currency controls in 2003 in a bid to prevent capital flight during a period of political turmoil in the South American oil-exporter. He fixed the bolivar at 1,600 to the dollar and put restrictions on foreign currency purchases.

**Graph 5.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank



The President vowed to fight speculation and price increases that could result from the devaluation, which raises the price of imports. Harried by recession and sliding popularity, The President weakened the bolivar to 4.3 per dollar from 2.15 in a bid to shore up government finances, which have been hit by weaker oil prices, and to stimulate economic growth ahead of key elections.



## **5 Effect after the reaction**

### **5.1 Argentina**

The main goal for Argentina's Government was to inject liquidity in the local market. As a result of their monetary politics their national inflation was controlled in the turbulence period Graph 12; this was able to generate employment

Although the decline in the GDP lasted three quarters the economy as been able to bounce back thanks to the revival of growth in some of Argentina's export markets, notably to Brazil and China Graph 9. In particular, the rebound was particular strong in manufacturing and agriculture (International Labor Office, 2010) the impact of the crisis was mitigated mainly through job retention measures and through policies aimed at increasing workers revenues, thus boosting demand and reviving economic growth. Although the Argentine Pesos has not come back to the price were it was before the crisis Graph 10, this looks like the biggest challenge for the national government, however the international reserves have stay steady.

### **5.2 Brazil**

Also as we could see the international US\$ funding was hard for all the companies around the world, in Brazil the sector was severely hit. But as we could analyze, the Central Bank of Brazil and the government did an excellent job to inject capital to the market and maintain the health of the national financial industry.

And now the foreign exchange has achieved the same rate as before the crisis started. Thanks to the cautious monetary policy that was consolidated by the revaluation of the Brazilian Real Graph 14. As well the international reserves have reached historical high Graph 3.

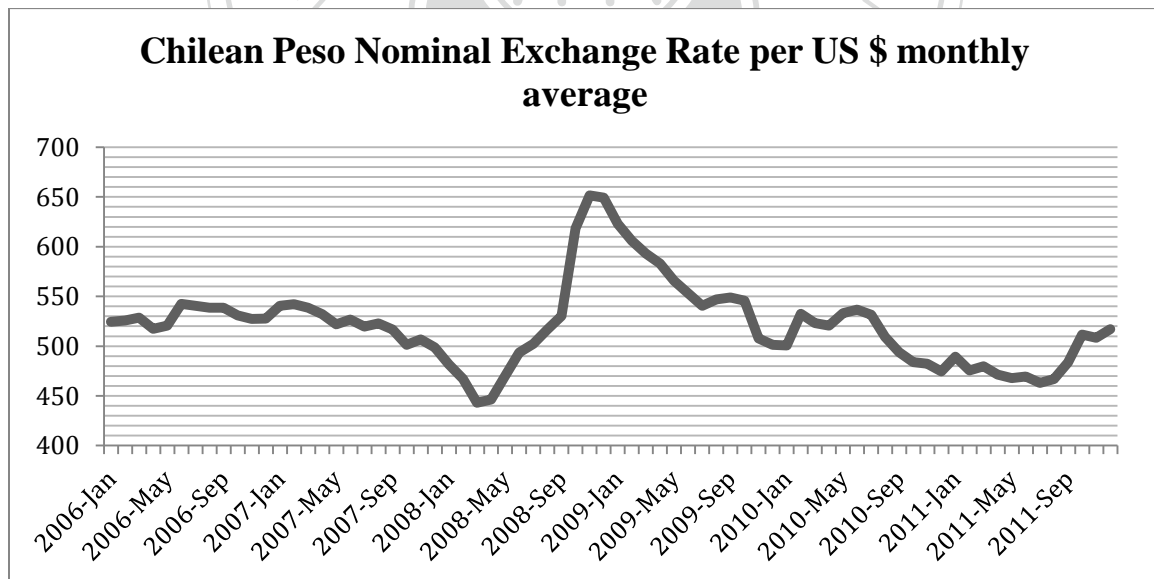
One of the most important factors was the perception that inflation, the eternal enemy during recessions in Brazil, would continue to fall. But the level has not reached the ones before the crisis started. Inflation declined when the economy constraint, which is a positive result from the monetary policies taken by the government. But now, it started to go up with out a reasonable explanation Graph 18.

Brazilian exports began to enjoy a positive knock-on effect. Specially thanks from the strong recovery of the Chinese economy. After its GDP growth fell to 6% at the beginning of the year, the economy of the Asian giant, stimulated by its spectacular investment package, grew from 7.9% to 8.95% in the second and third quarter, respectively. Therefore, the exports recovered Graph 17. In 2009 China became the largest trade partner of Brazil and was the destination for 13% of national exports.

### 5.3 Chile

Although the decline in oil price provides some inflation and costs relief, the government with the monetary policies has been able to control it to records levels. The monetary policy conducted by the central bank, which uses an inflation-targeting regime supported by a floating exchange rate, has pay-off Graph 4. The currency price has reached the same level as before the crisis Graph 6. And as well as the unemployment rate Graph 22.

**Graph 6.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

Chile is considered one of the most transparent, safe, and stable countries in Latin America, with one of the healthiest Fiscal system in Latin America. Chile has been a

model for how a small developing country should conduct its economic affairs. Chile wouldn't be this far along without its huge reserves of copper. Most importantly, they realized that copper, Chile's main export, is highly cyclical. Thus, with this they built up an Economic and Social Stabilization Fund, to which copper revenues are committed when prices are high. And helped to stimulate their local economy and public investments. After the crisis Chile has a steady growth in their Gross Domestic Product, surpassing their levels before the crisis as well Graph 23. With the GDP growth also the international reserves have reached high records since January 2011, they did not move too much, did not feel dramatically but neither grew.

#### **5.4 Colombia**

The economic slowdown had a positive impact on inflation, which fell to 2% in 2009, from 7.7% at the end of 2008. Food price inflation fell to zero in 2009 and inflation levels have been kept in lower levels, even lower than rates before the crisis started Graph 29. The Colombian Peso also has reached the same level it had before the crisis Graph 25, and their international reserves have started to grow, also reaching record high Graph 24.

The Colombian economy experienced rapid decline of Gross Domestic Product, but also a rapid recovery in 2011 they a double-digit growth in their GDP Graph 30. Considering the low-level globalization of Colombia's economy, and taking in consideration other countries strategies Colombian companies should explore new markets in the world and diversify their exports to counter the impact of the crisis.

#### **5.5 Mexico**

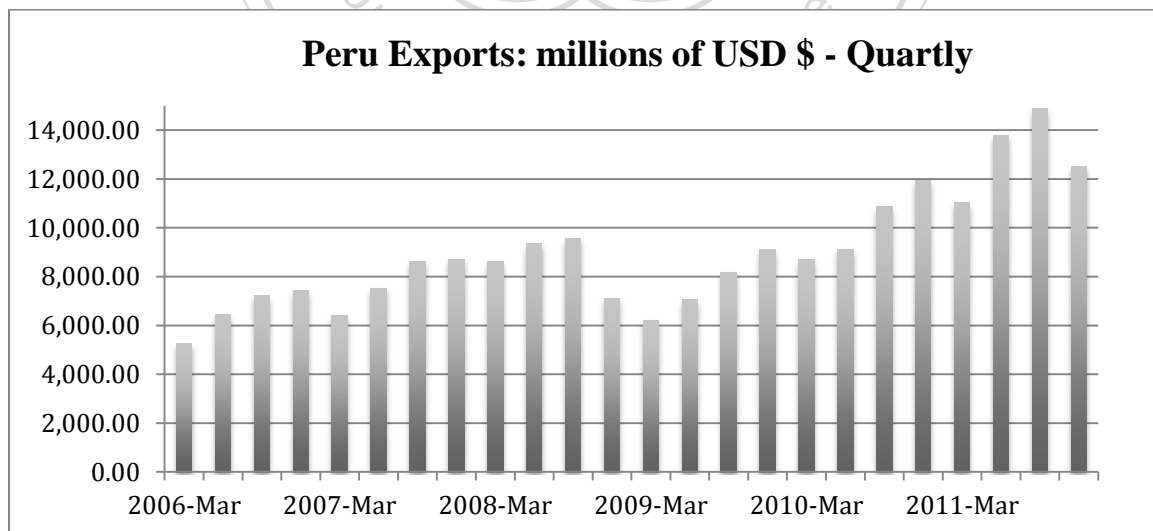
As for the monetary policy stance, given the rise in the price level caused by the depreciation of the exchange rate, it was important to prevent inflation expectations from deteriorating, as this would have led to a further worsening of the inflation outcome Graph 36. The Mexican Peso has not reached the levels that they had before the crisis started Graph 32, neither the inflation rate has come back to the same levels Graph 36, and their international reserves slowly decreased in 2009 but it dramatically increased since January 2010 reaching also records high Graph 31.

In the case of Mexico, the particular features of its economy magnified the impact of these shocks, which explains why Mexico entered into a deeper recession than other economies. Perhaps the most important of those features is its high dependence on exports to the United States, as well as their composition. Soon after the deeply decline of Gross Domestic Product the GDP started to growth slowly again Graph 37.

## 5.6 Peru

Peru has expanded their export products the started to provide textiles, manufactured goods, and agribusiness. But they have become more international openness signing trade agreements with countries such as Thailand, Colombia, Canada and China. China-Peru agreement is the first free trade agreement package China signed with a Latin American country. As a result of that we can see that Peru has had one of the most amazing come backs, they have had a double digits growth in three consecutive quarters in 2009 and in the first quarter of 2011 they have an impressive 20% growth Graph 7. The Gross Domestic Product has been reflected positively to this with a steady growth Graph 43.

**Graph 7.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

Has we can see, the monetary policies applied by the national government were successful in controlling the inflation. The inflation reached it highest level in the same period as Lehman collapse but gradually fell to almost 0% levels during the next year. But in 2010 started to grow again, but not reaching high levels as before Graph 42. The currency did not move too much and has stay in the same price as in past, gradually appreciating Graph 39. Their international reserves gradually decreased during 2009 but as well as the exports they had bounced back stronger reaching record high Graph 38.

Peru was affected by the crisis, as all the other countries, but they bounced back. Most important they bounced back stronger. The diversification in their global trade, seems to been impacting positively the exports hence also the economy.

## **5.7 Venezuela RB**

Although Venezuela could be suffering due their monetary and economical policies. The global importance of Oil is what has made the country have a reasonable GDP growth not decreasing in 2009 as many others did and having a 16.77% in 2011 Graph 47.

The exports suffered a big downturn in 2009 a decrease of -63.40% and in the following years, they have not been able to reach the same levels as before. Venezuela also has been focusing to sell more barrels of oil to China, now they are approximately selling 500,000 per day. Although the reduction in exports is not reflected in the GDP, it might be because of the price of commodities, specially the oil price.

The inclusive social policies, which are the basis of the Venezuelan social economic model, have not provided any stability in their economy. Certainly the people is not very happy with the devaluation of the currency Graph 5, (some news reports have reported that the US Dollar can be sold in a much higher price in the black market), neither with the inflation that caused Graph 46. Venezuela in comparison to other countries, had a decreased in their international reserves but has not been able to increased after Graph 43, which is alarming.

## 5.8 Summary

All the countries were affected by the crisis, but some were better prepared than others. Chile has one of the most effective counter cyclical policies in the regions, and had a discipline to implemented although election occurred. The “Economic and Social Stabilization Fund” should be s tool that all the countries should also create to be preparing for economic downturns like this. Brazil also had an excellent performance, it is the biggest economy in the region but, it took the leadership to start diversifying their products to others region, like China. Peru was for having an average performance in the region, but after the crisis they move aggressively to expand their market. It has been said that in a economical financial crisis situation, new opportunities appear, and Peru is one of the biggest example of this having a impressing come back performance.

Venezuela BR has one of the worst performances in Latin America; the reliance in the oil does not look as a long-term strategy, although it is a powerful tool. Venezuela RB could be in a much better position. Many people blame the administration of the actual president and his insistence with his social economical system. Venezuela has not been able to refuel their international reserves as other countries have done it, which put them in a scary liquidity position. Venezuela should take lessons from Chile fiscal system administration.

## 6 Conclusion

It is clear that the Global Financial Crisis hit seriously Latin America; due the freeze in the global trade market, leading export countries suffered more than any other. In the other side, many countries were prepared in case of an economy turndown. The large international reserves accumulated from the past and a healthier fiscal system; became the most important tools to fight against this adversity.

Each country, due it necessities, have a different strategy to fight against this challenge. Most of them focused supporting the channels worst affected; export and financial. The international reserves and the fiscal system were the main two weapon that countries used to inject liquidity into their market. And in some cases like Brazil and Mexico they received additional financing from other resources like International Banks and swap agreements with the United States Government. The health in their external balance sheet and fiscal space provided a wider range of policies to be implemented, most of them targeted to small and medium enterprises. Many reforms and fiscal stimulus were for short-term solvency, this helped local economies to have a less pronounced decline.

After the crisis triggered in September 2008, the main strategy for most of the countries was to use their reserves to inject liquidity. We can see in most of the charts, those months after, how the reserves declined, in some cases a more pronounced decline in some other cases a more prolonged. This means that some countries used more of them, some other used less. But once the market started to stabilize and the exports and Gross Domestic Products started to growth as well countries started to accumulate international reserves once again.

The strategy to fight against the international credit constraint worked. To support the export channel countries looked to diversify their products into new regions and quit the dependency in westerns countries and focused more in the Asia region, especially in the giant economy of Republic People of China. The strategy seemed to work, Brazil now has a principal trade partner China. Although the most interesting case is Peru, they aggressively expanded to the Asian market not only making a trade agreement with



China but also expanding their relation to Thailand and other countries. As a result Peru export bounced back stronger and harder, it has been said that some people see new opportunities recessions and Peru has clearly see it.

Brazil is the biggest economy in Latin America in terms of volume; they have an acceptable performance during the crisis and were able to bounce back quick. But it has been Chile, the country that best performed against the crisis. Chile has been internationally known by the healthiest fiscal system in the region, this and their discipline to create the Economic and Social Stabilization Fund, in case of adversity time helped to survive. The government was able to stabilize the inflation rate and the unemployment rate at the same level before the crisis. Providing a better life quality to their habitants, something that Brazil has had problems doing. In the other hand Venezuela RB has been the worst affected by the crisis, not only because the channels affected but also because the bad administration of its leaders. Chile and Venezuela are similar in their export both for selling a commodity; Chile has beneficiated from Copper and Venezuela from Oil. But the lack of preservation of a healthier fiscal system, the corruption and the ineffectiveness of the social policies implemented has created a devaluation of their currency with a high inflation.

Latin America was better prepared for this global crisis; the effects of the crisis were not as disruptive as it was expected to be. The responses from the governments have a positive effect in the local economies. Due the benefits and the importance that had, the governments have continued in a policy of saving more international reserves.

It has been said, that this kind of economic depressions only happens once every one hundred years. Latin America was able to dodge the worst effects of it, and was economically better prepare. If any of other economic downturn look soon to come, Latin America seems to be prepare to affront it has it did in the past.

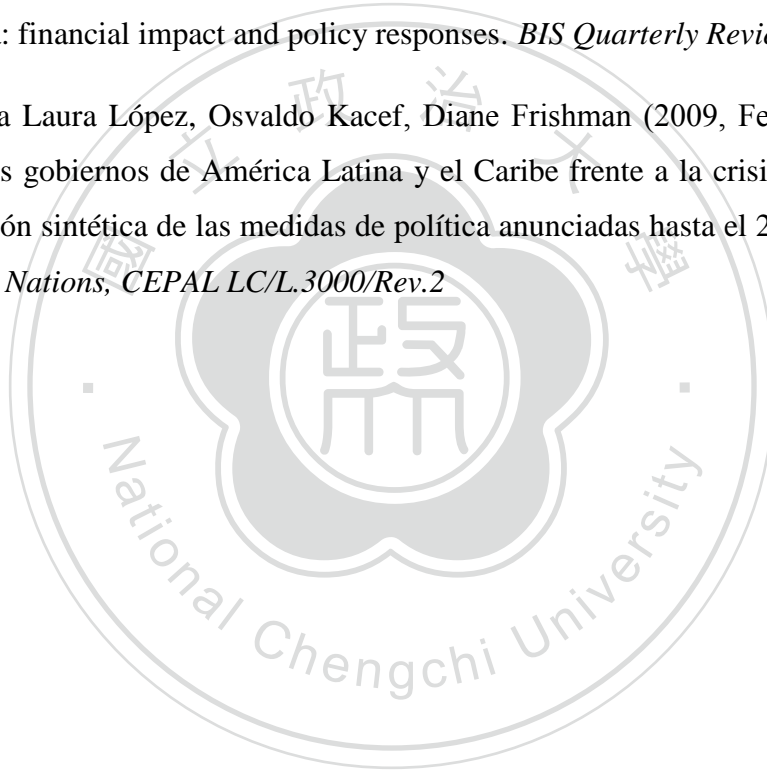
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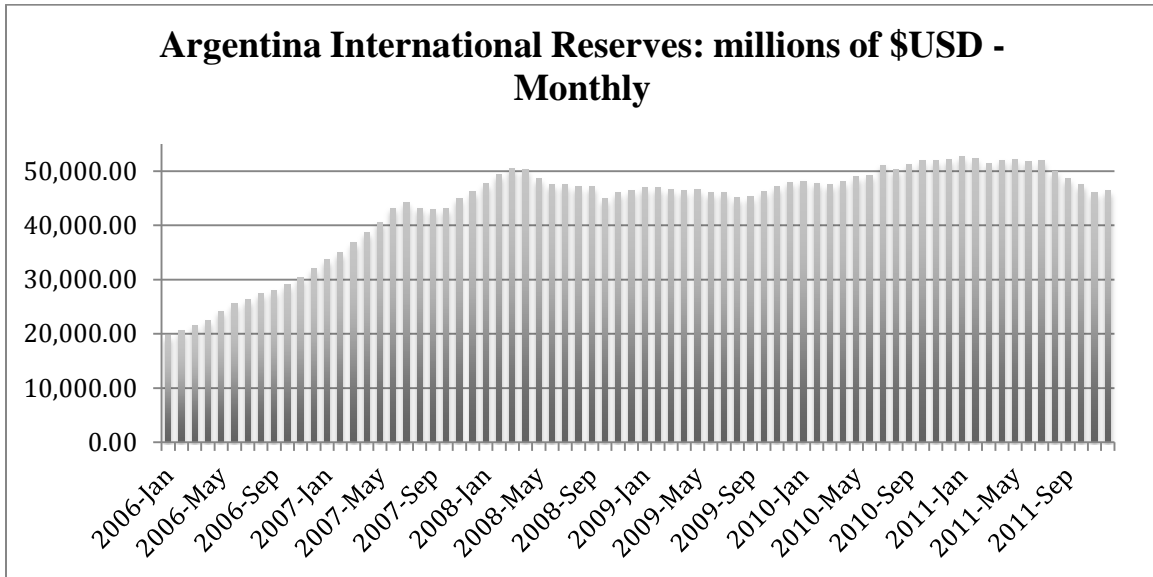
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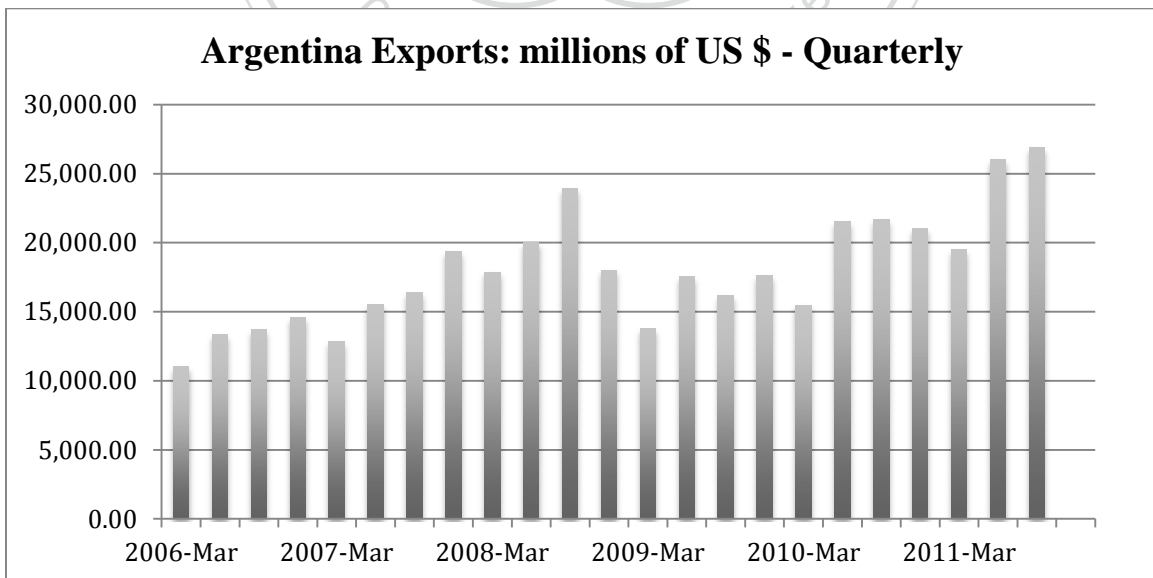
## 8 Graphs and Tables

**Graph 8.**



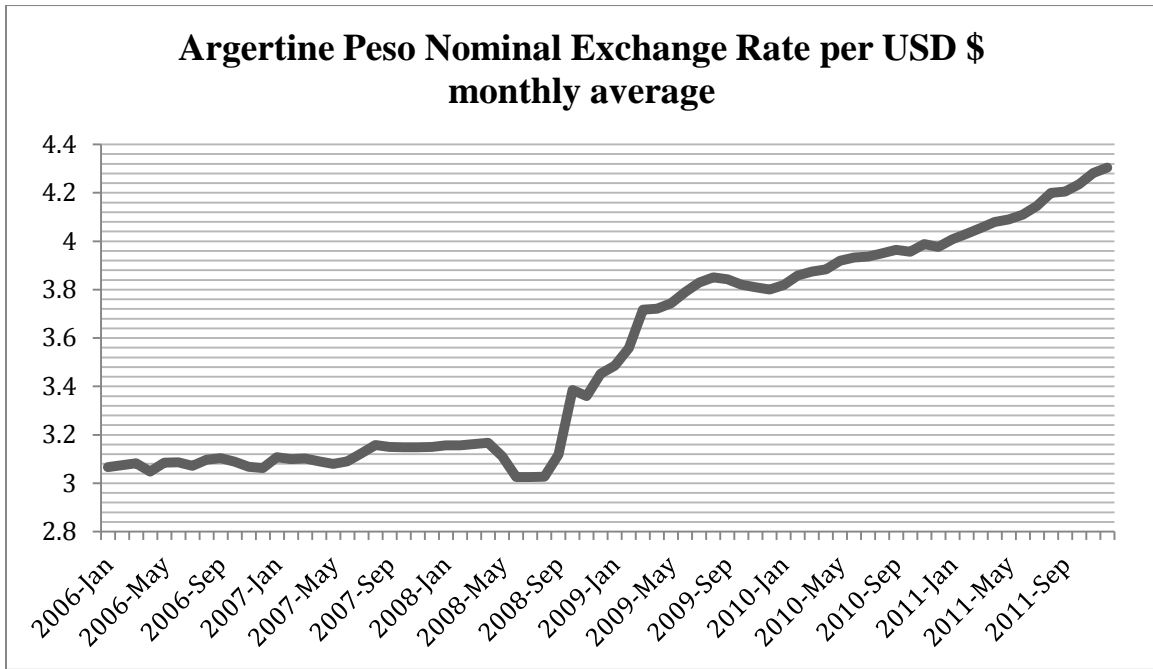
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 9.**



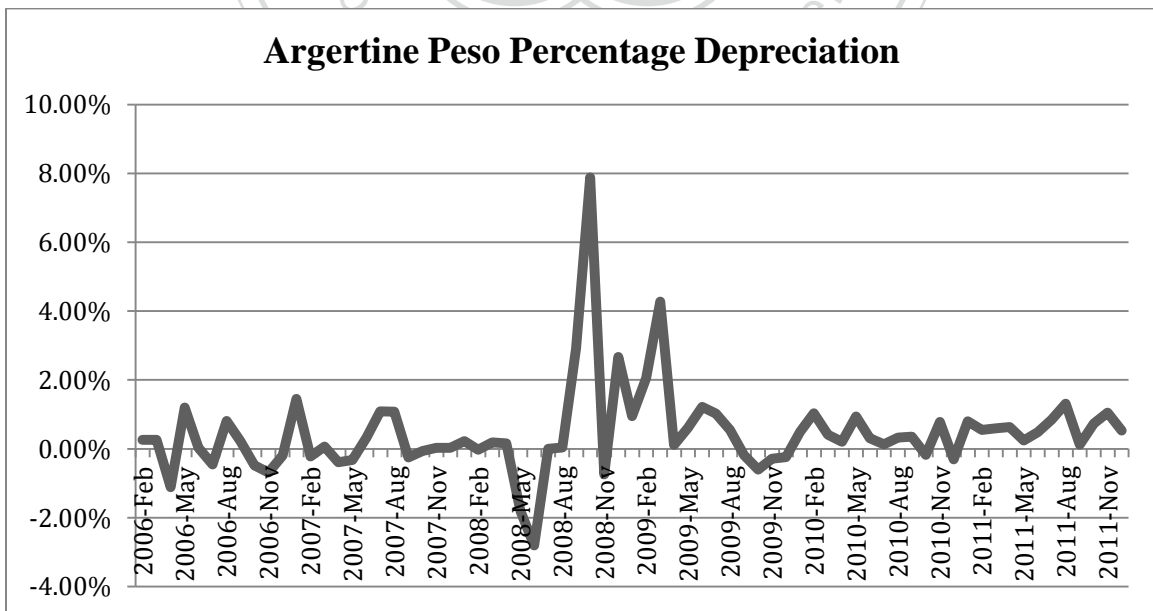
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 10.**



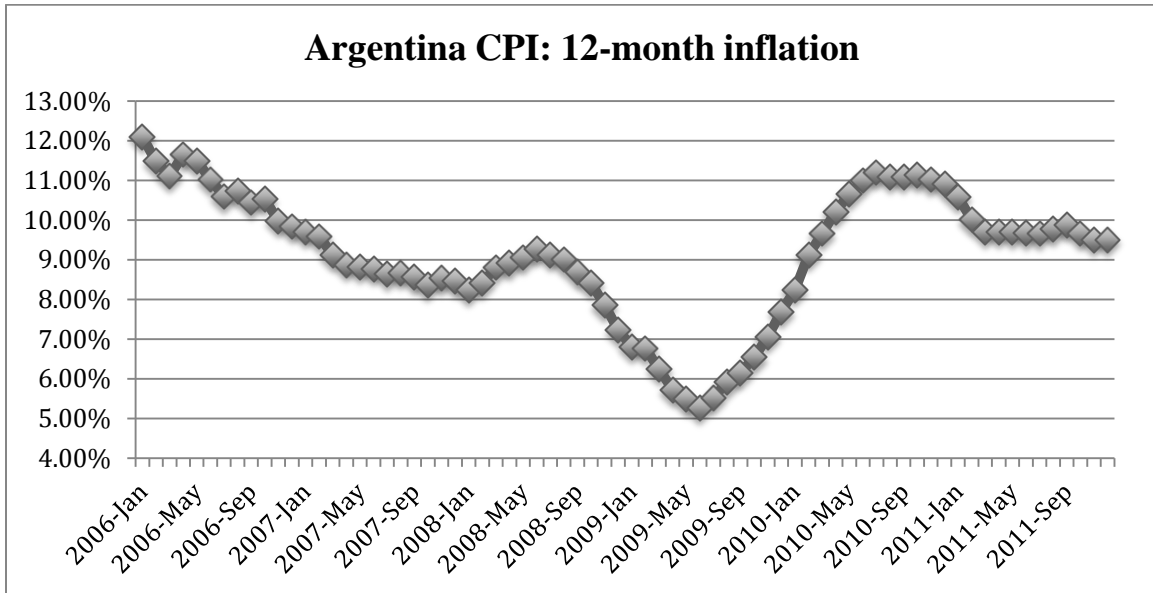
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 11.**



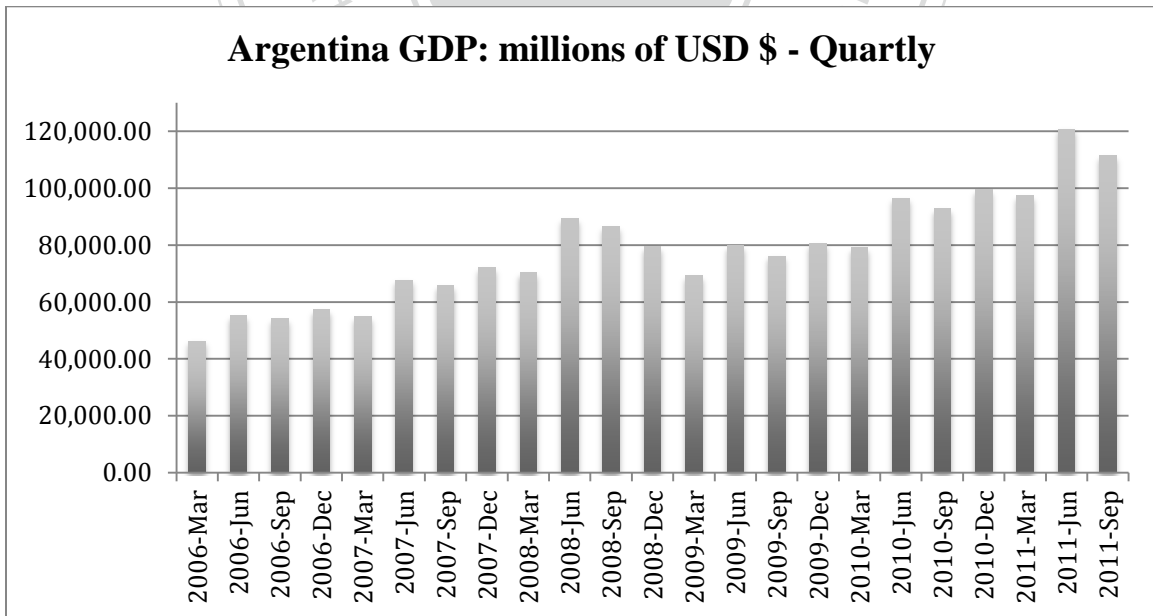
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 12.**



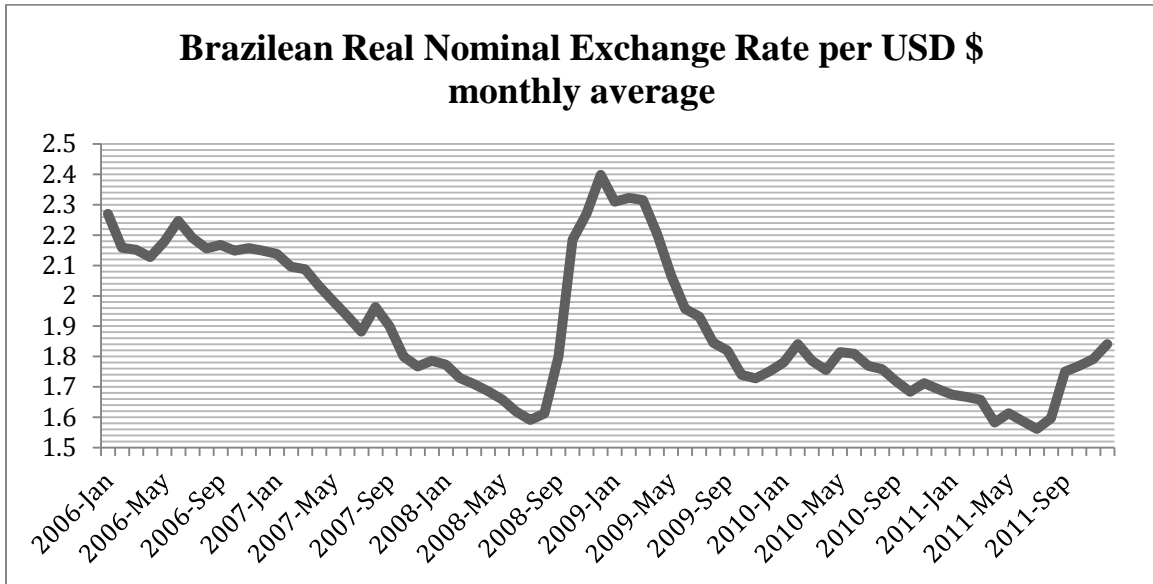
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 13.**



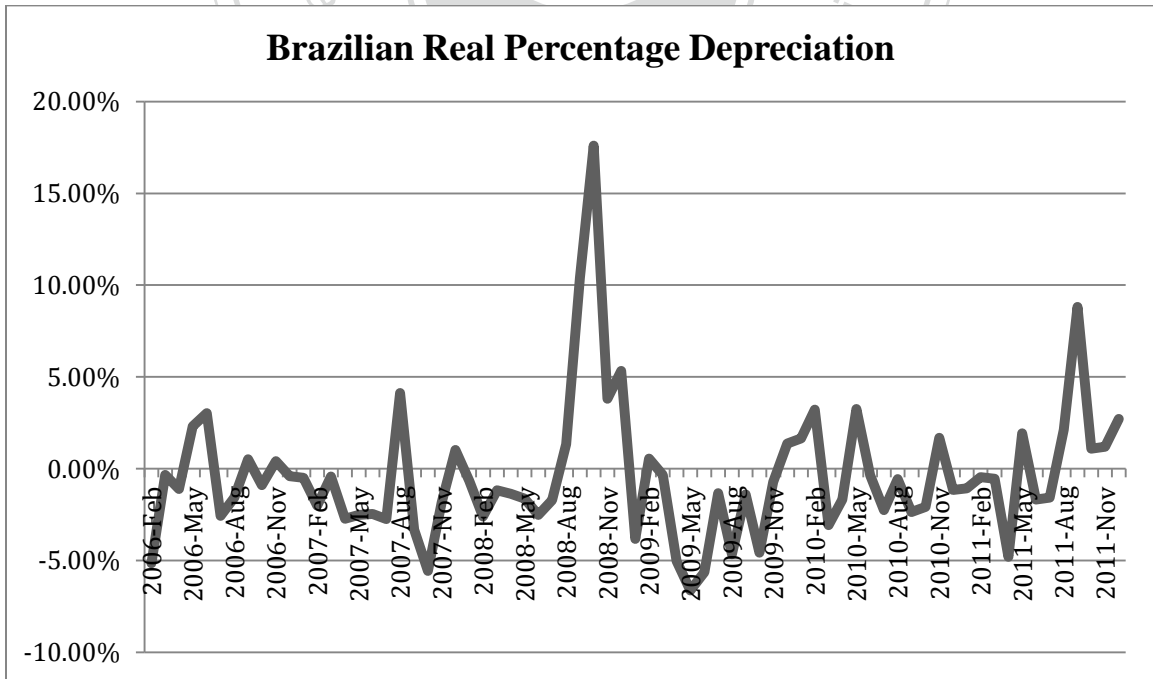
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 14.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 15.**



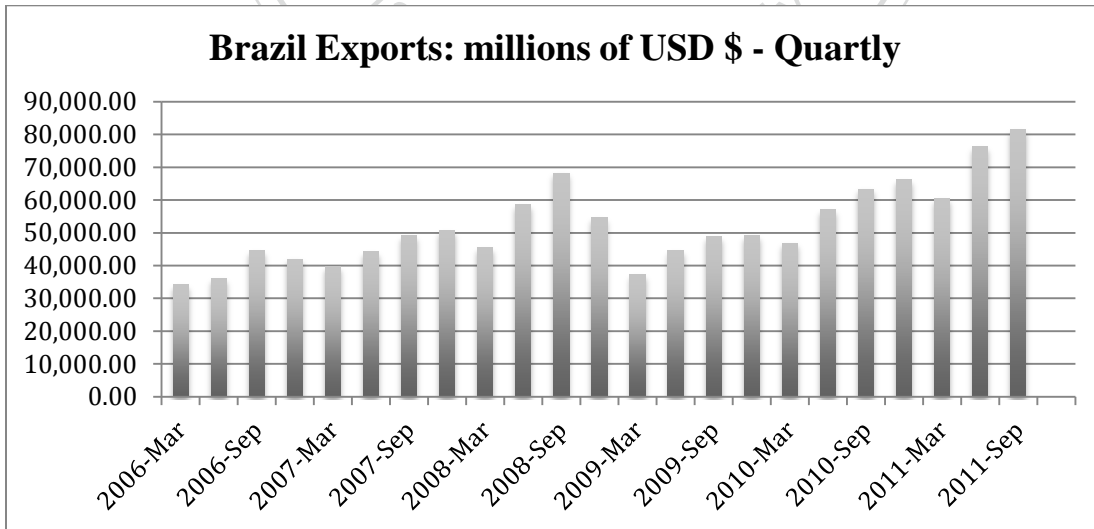
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 16.**



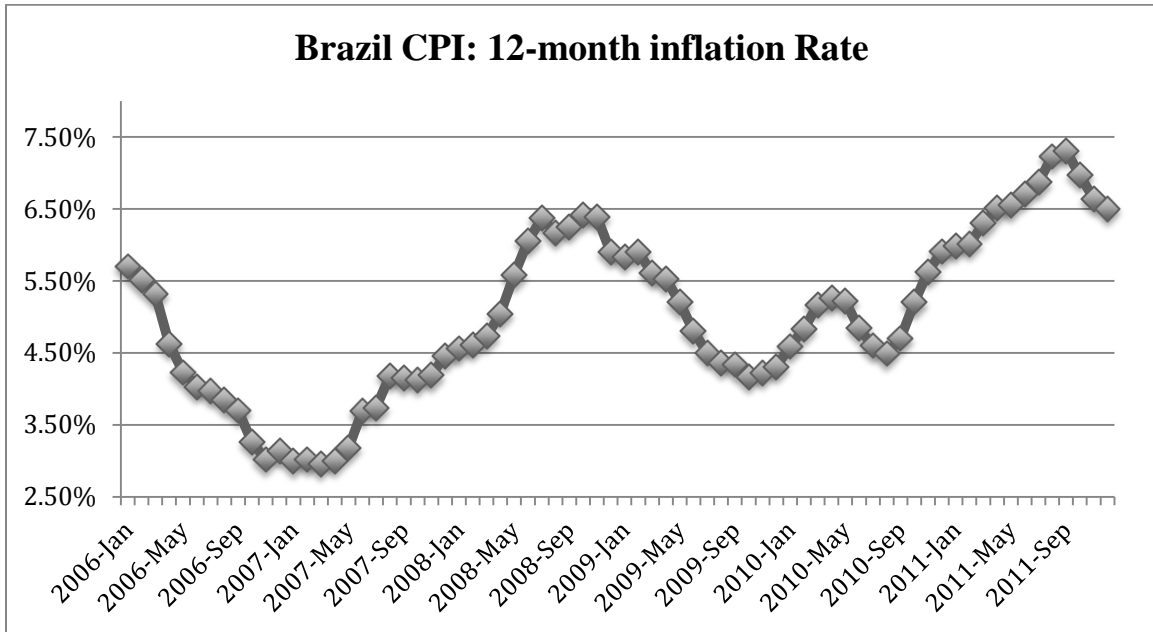
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 17.**



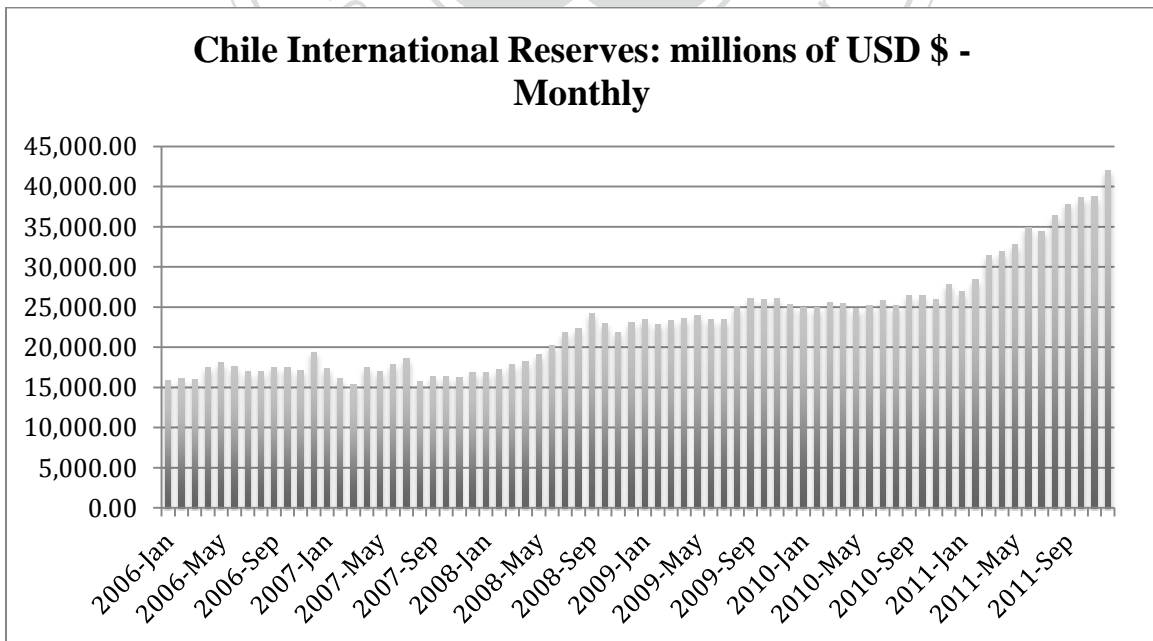
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 18.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

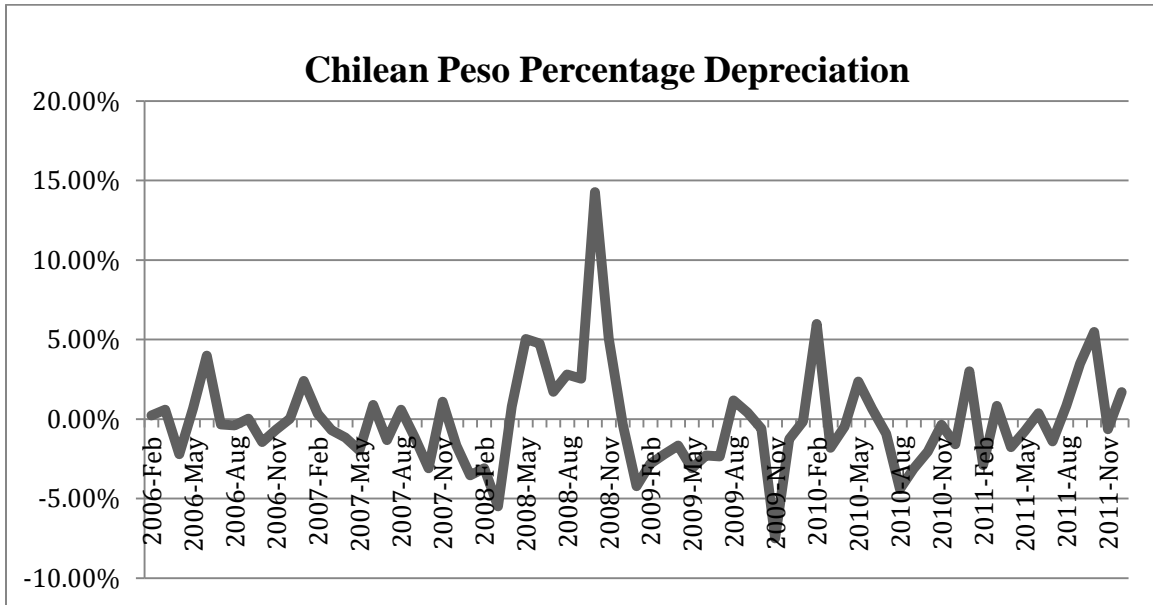
**Graph 19.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

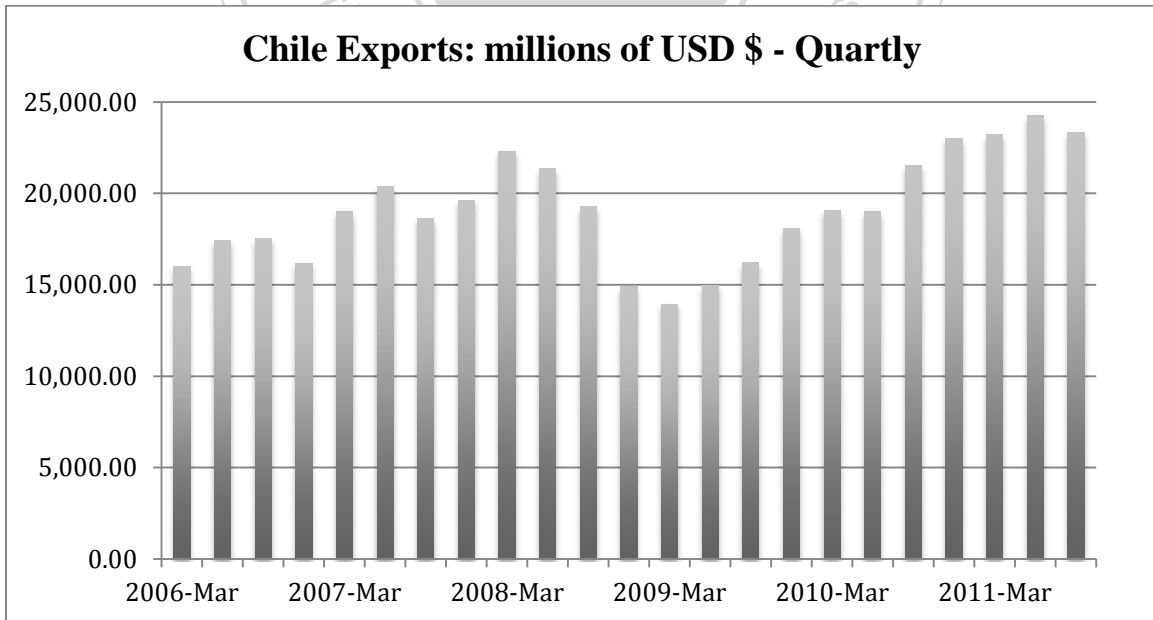


**Graph 20.**



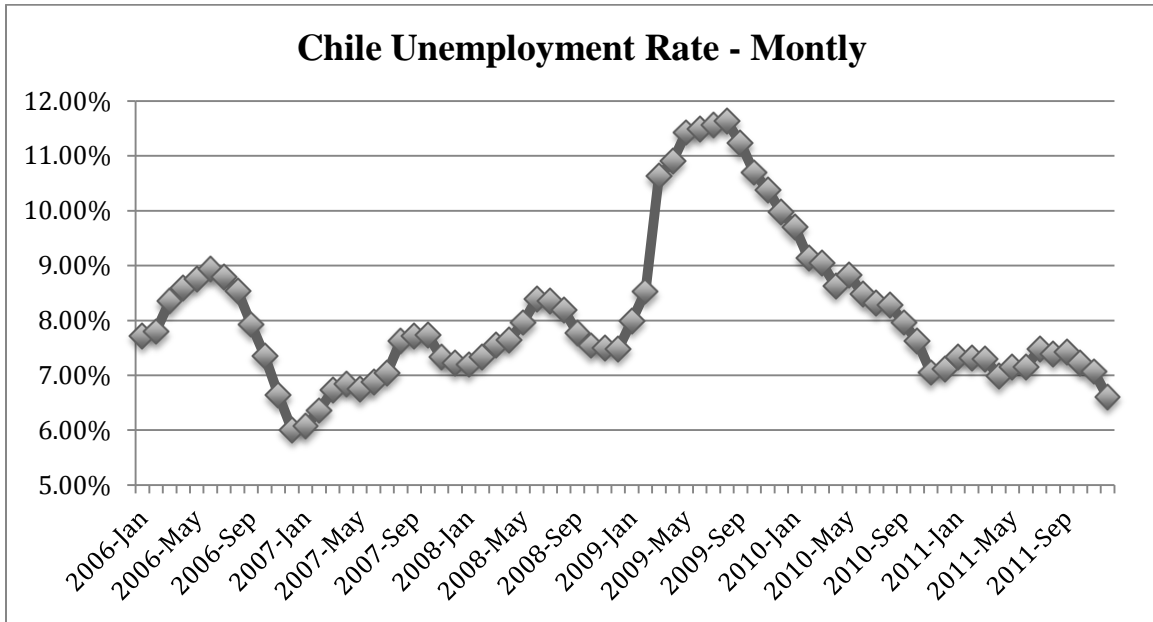
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 21.**



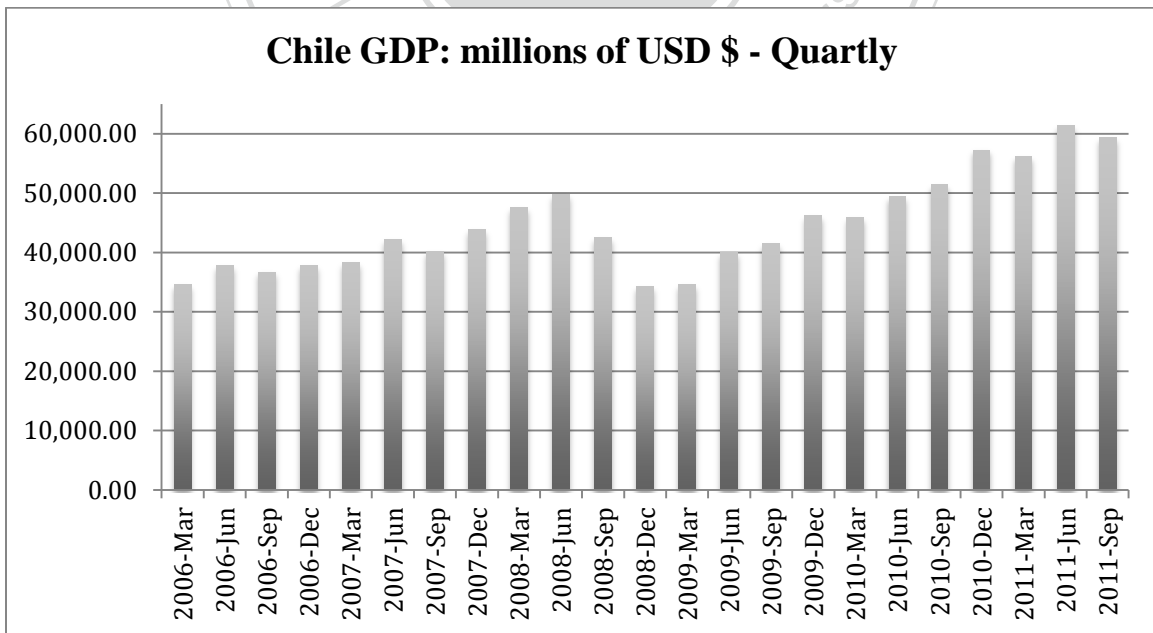
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 22.**



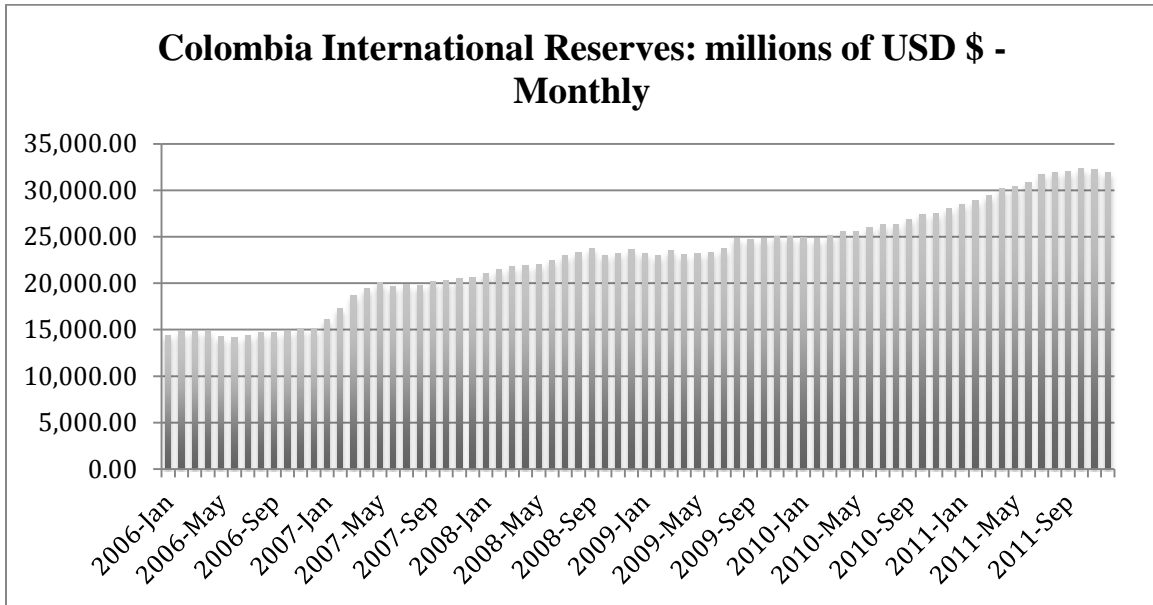
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 23.**



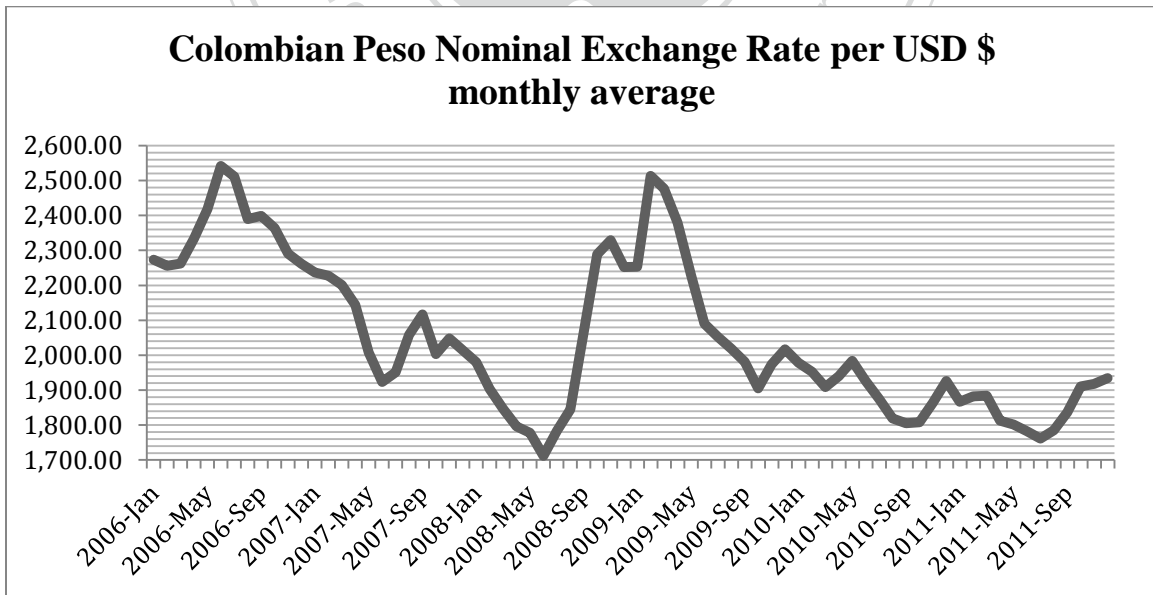
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 24.**



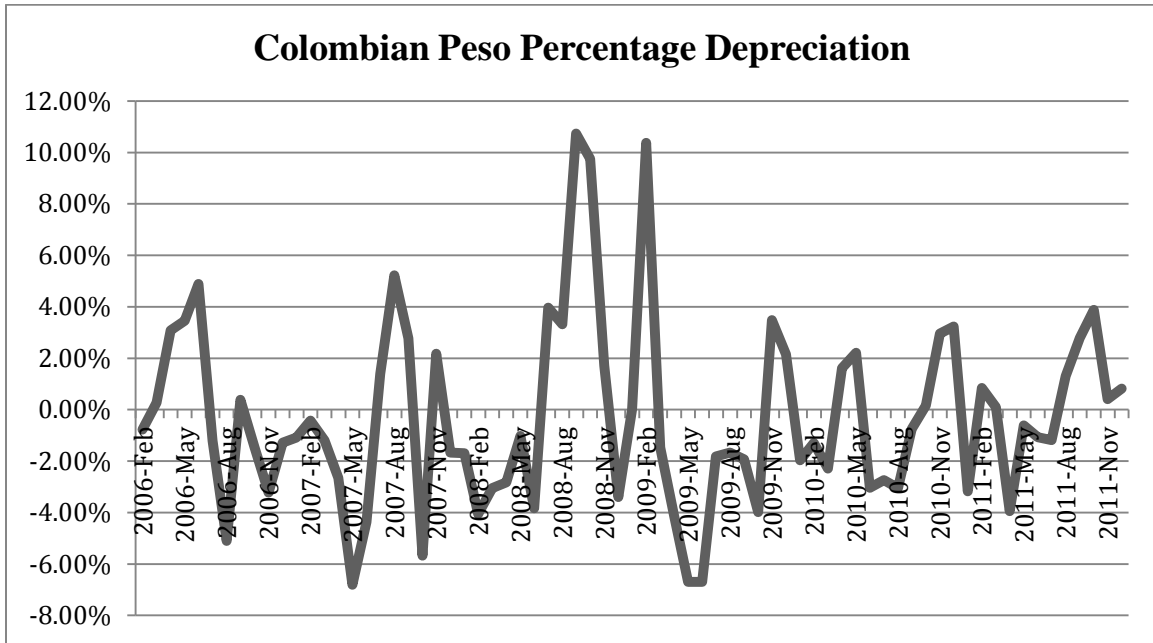
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 25.**



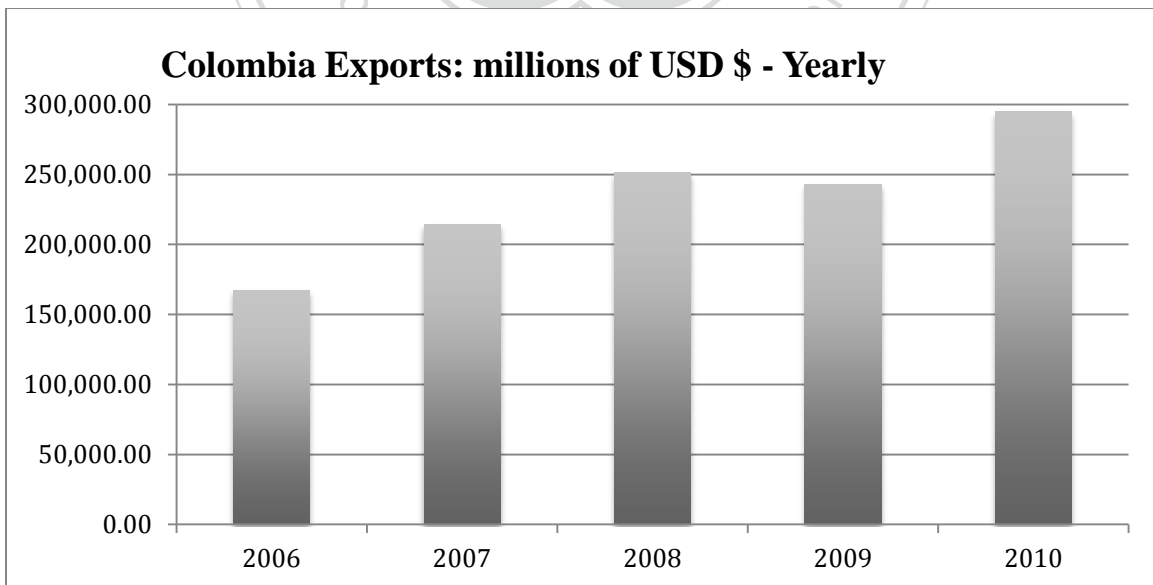
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 26.**



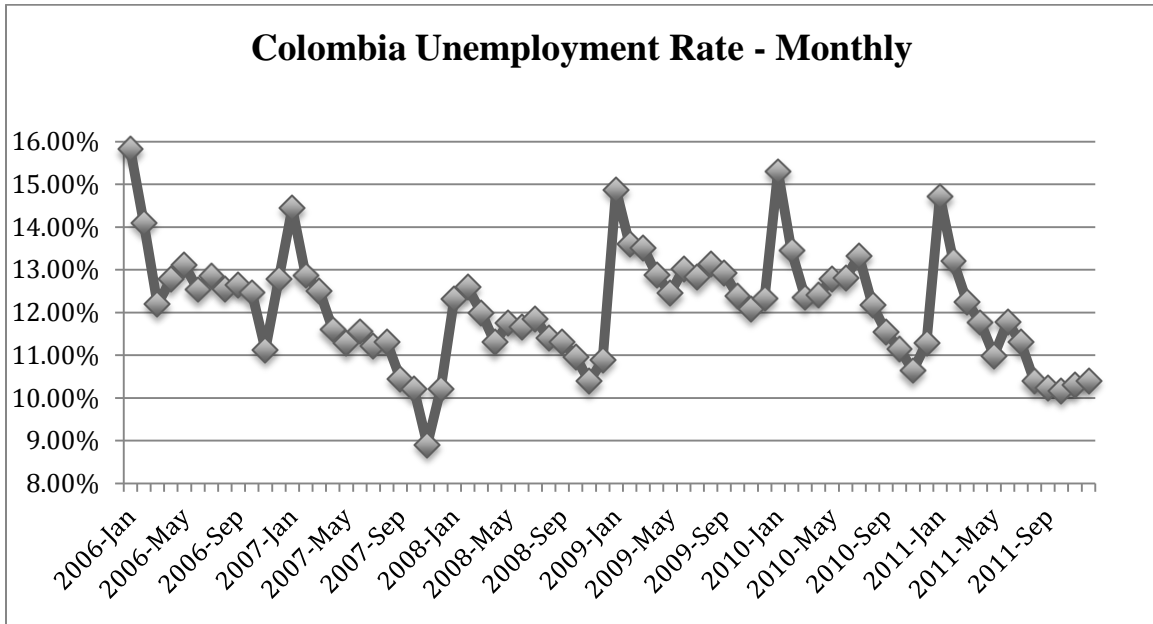
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 27.**



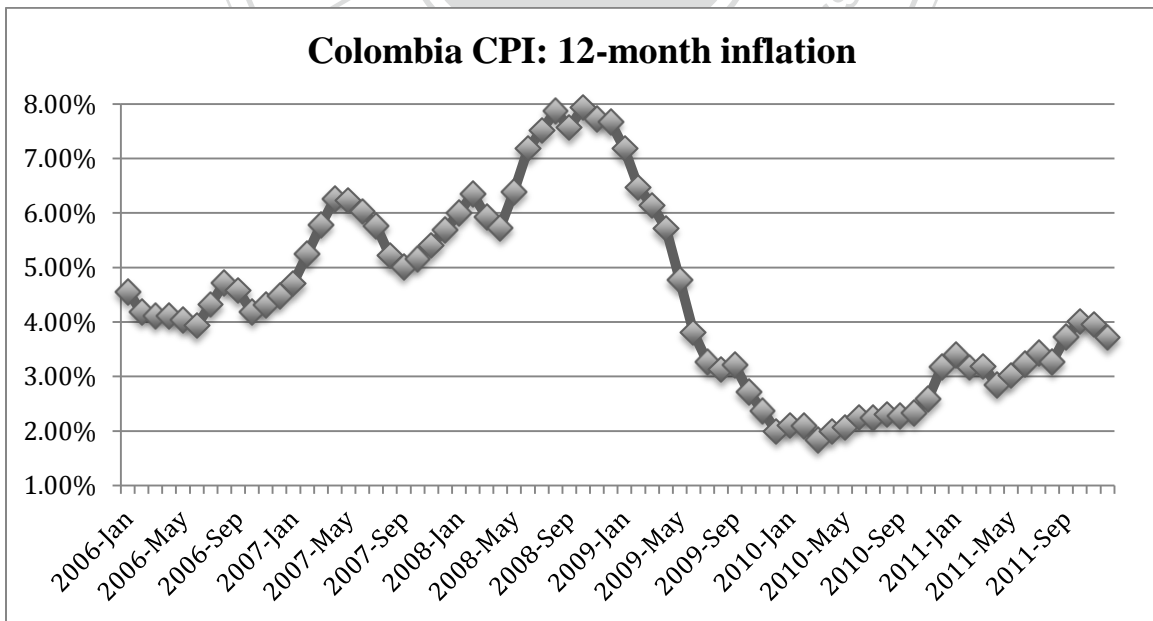
Source: Open Data, World Bank

**Graph 28.**



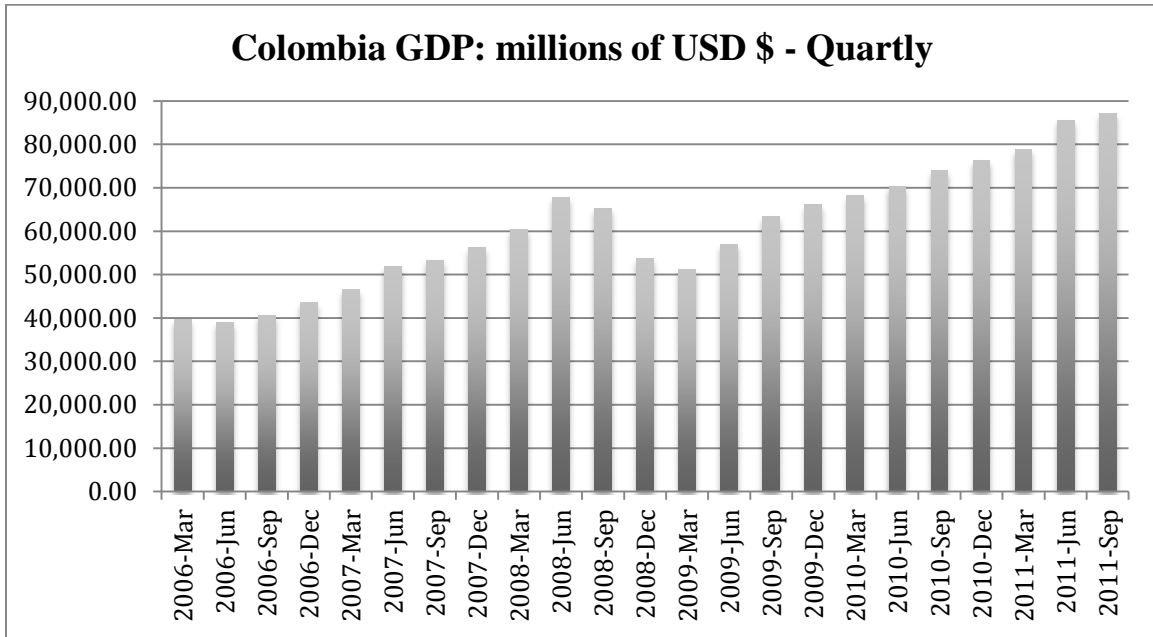
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**Graph 29.**



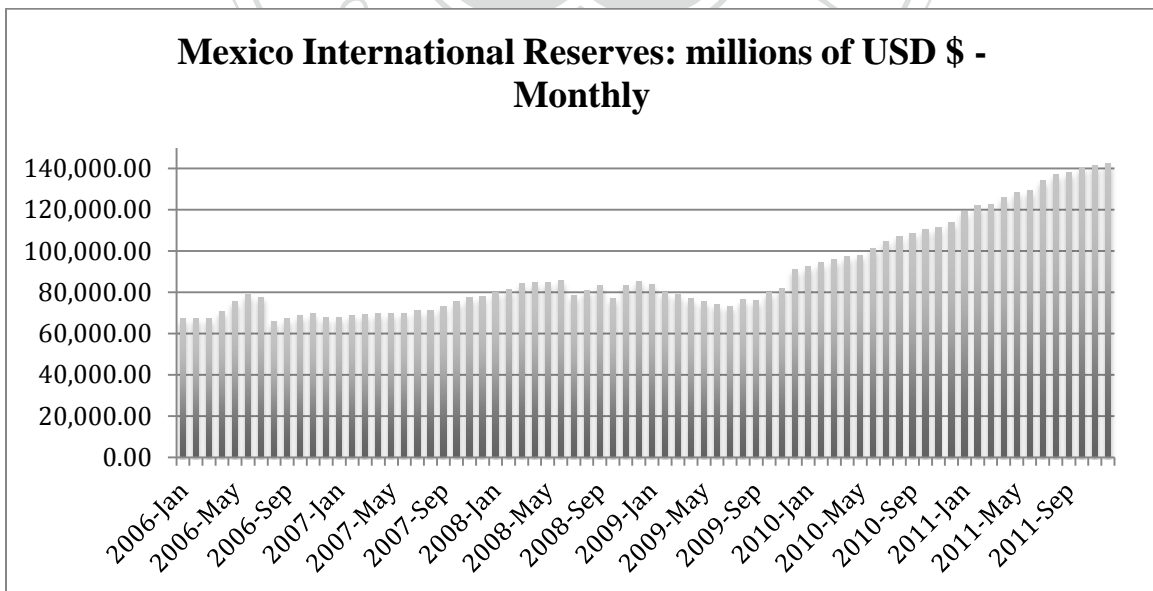
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 30.**



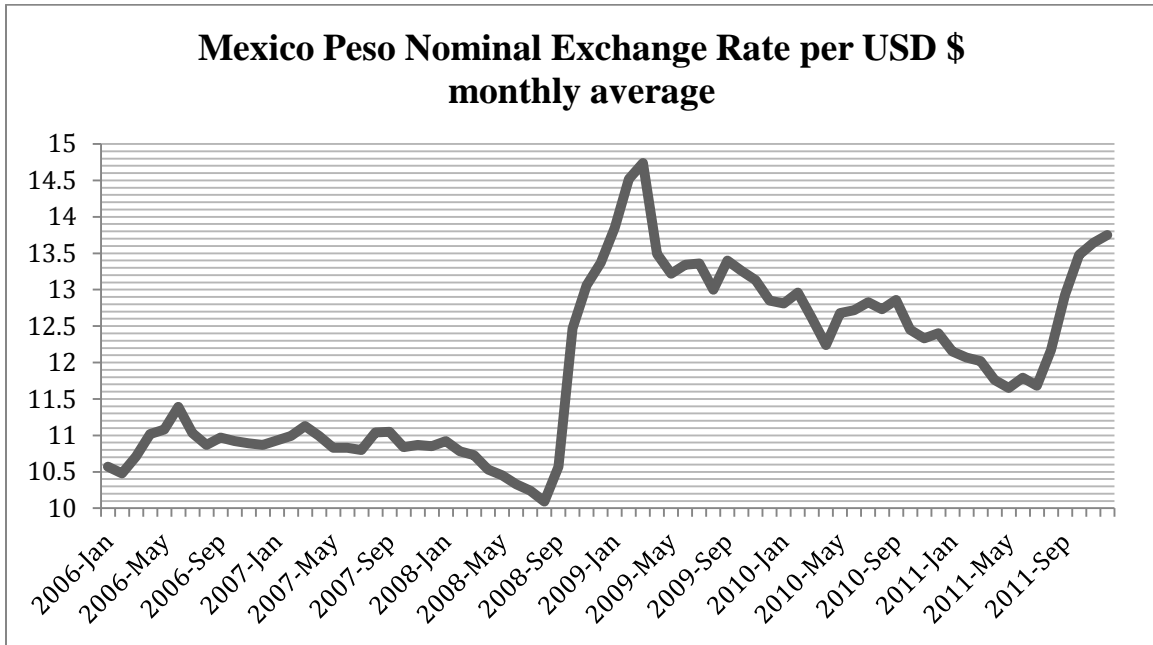
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**Graph 31.**



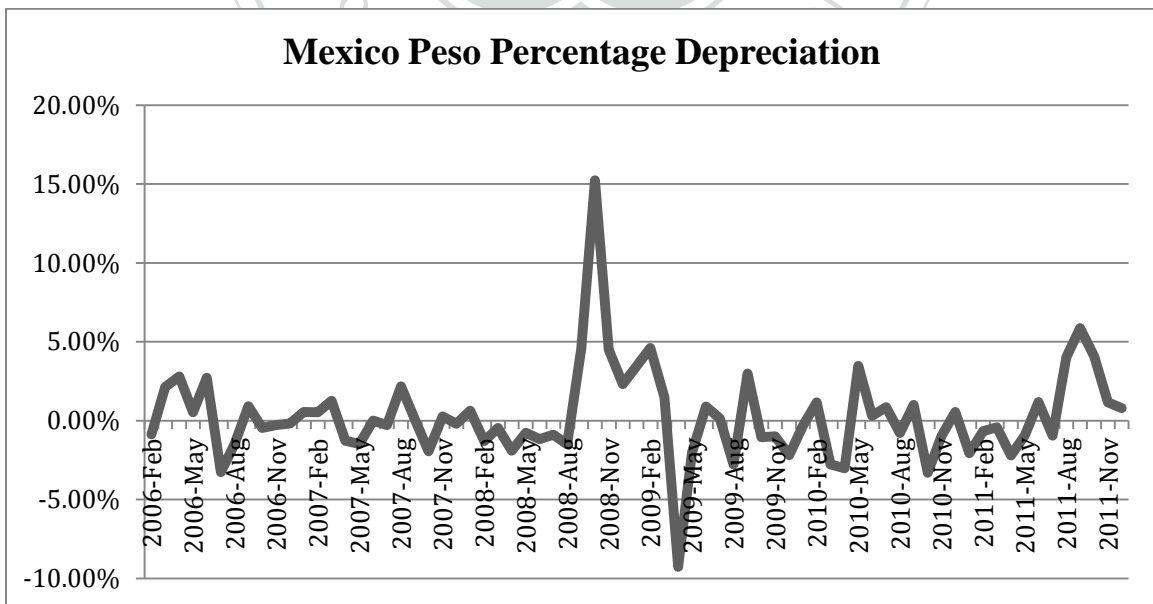
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**Graph 32.**



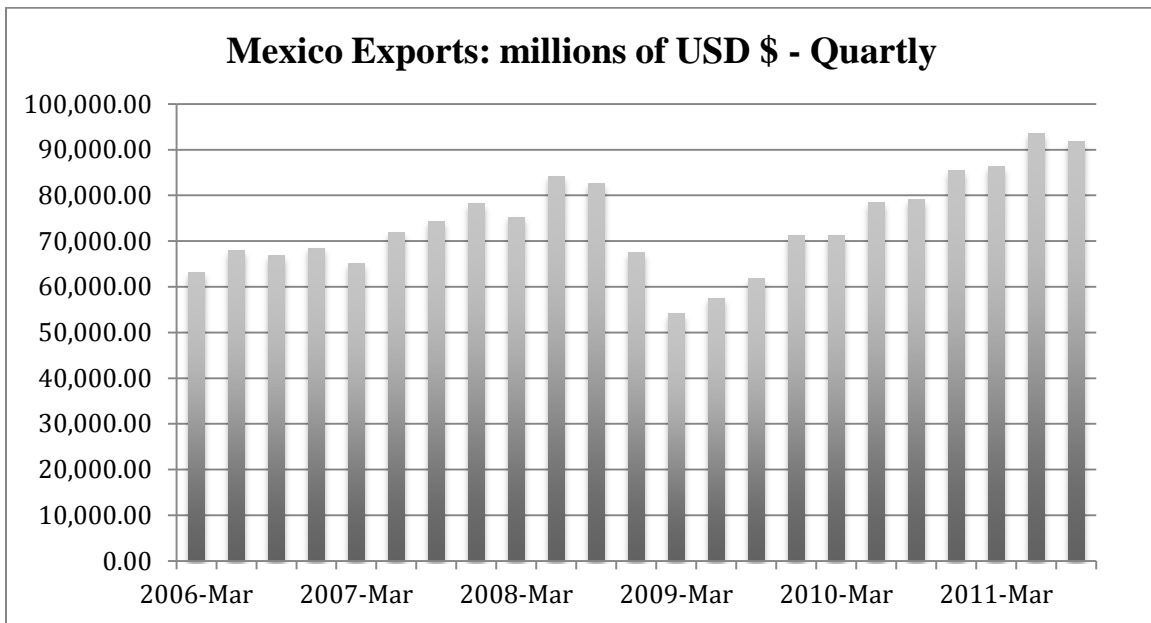
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**Graph 33.**



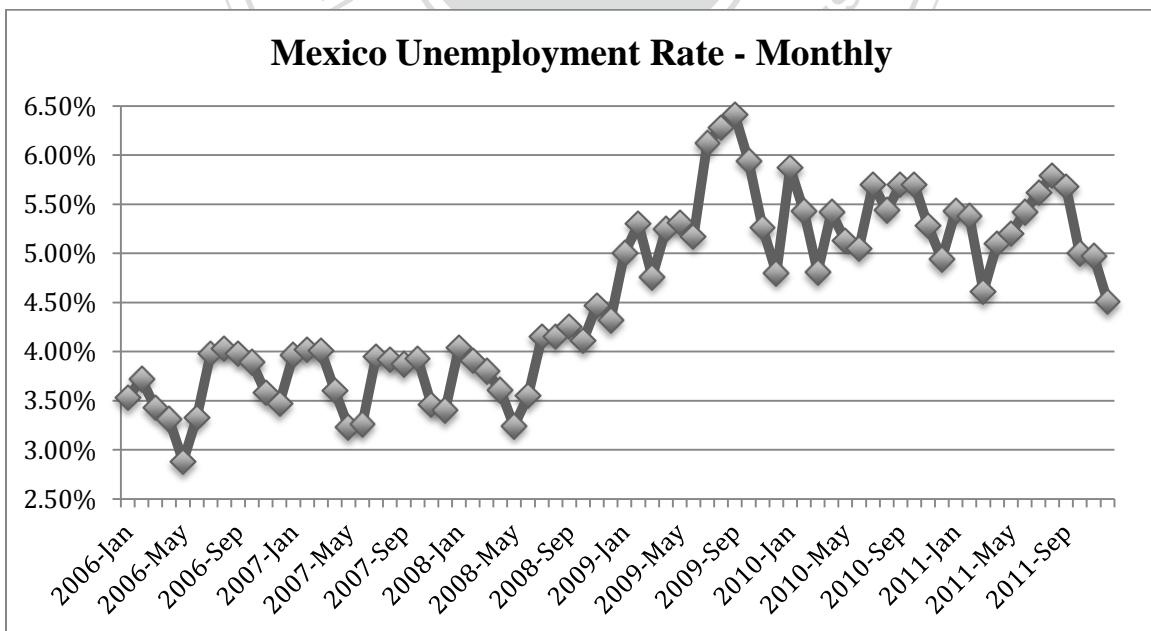
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 34.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

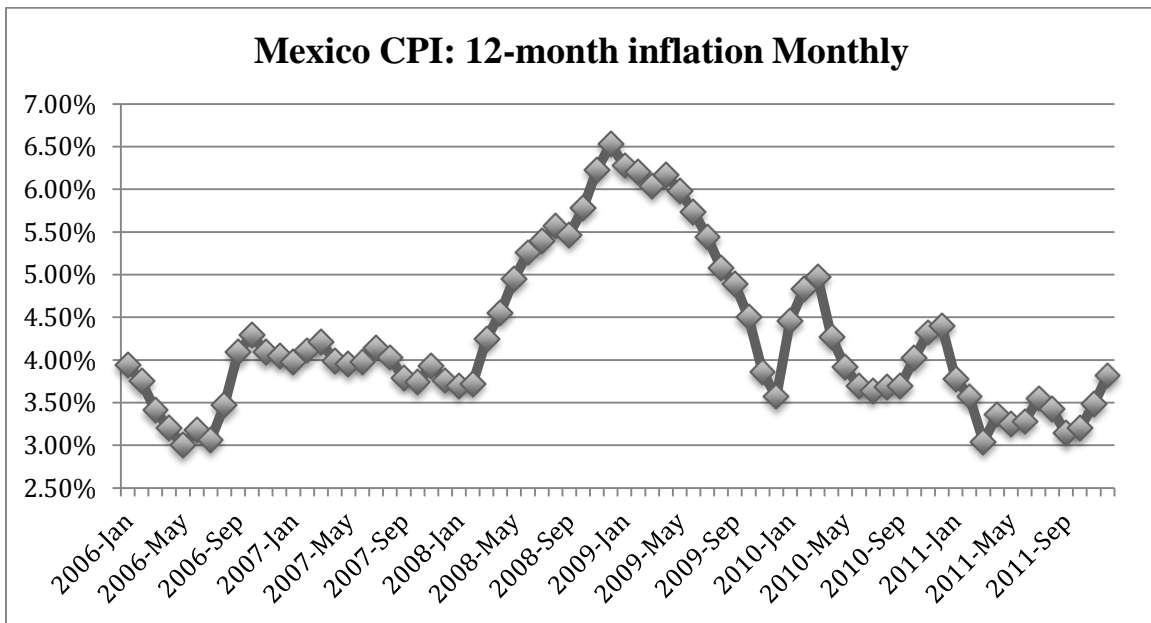
**Graph 35.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

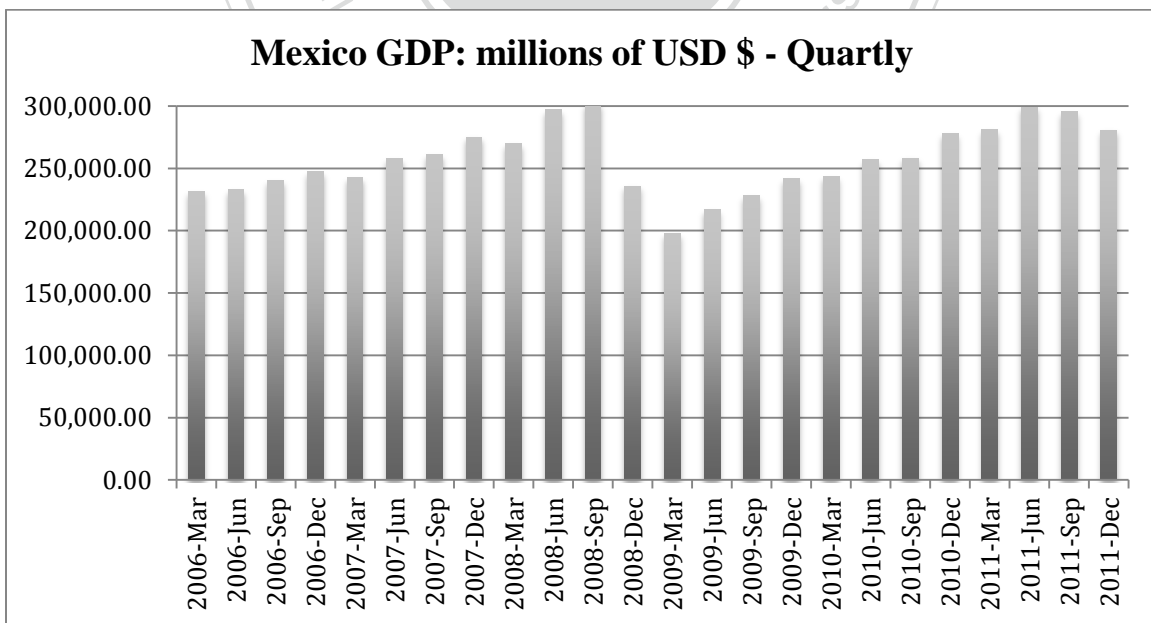


**Graph 36.**



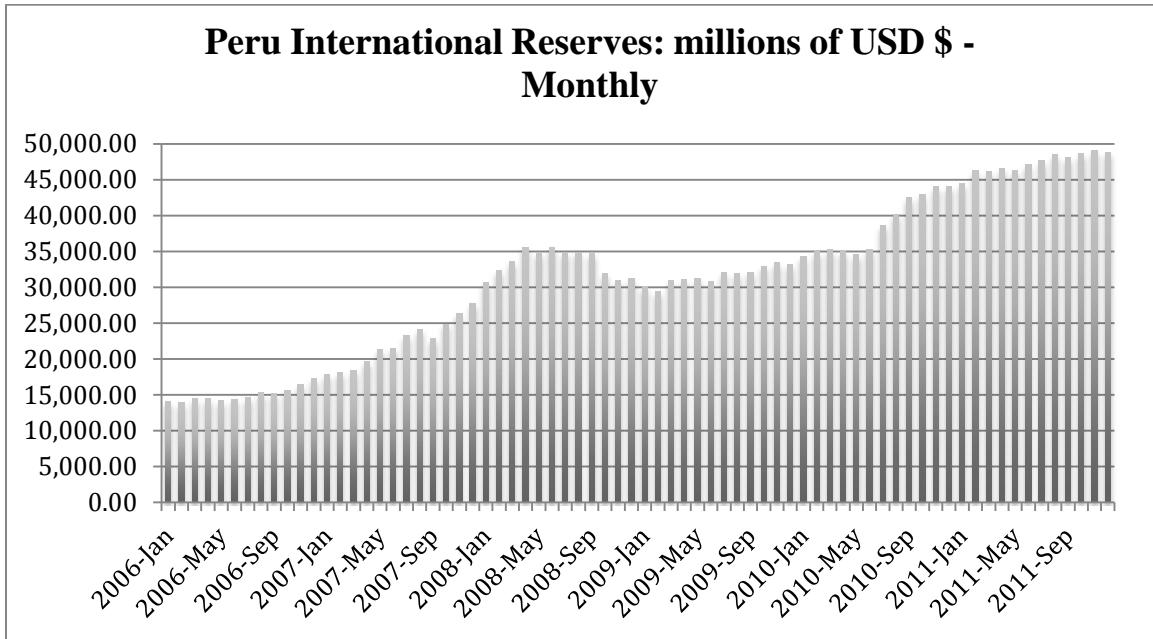
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**Graph 37.**



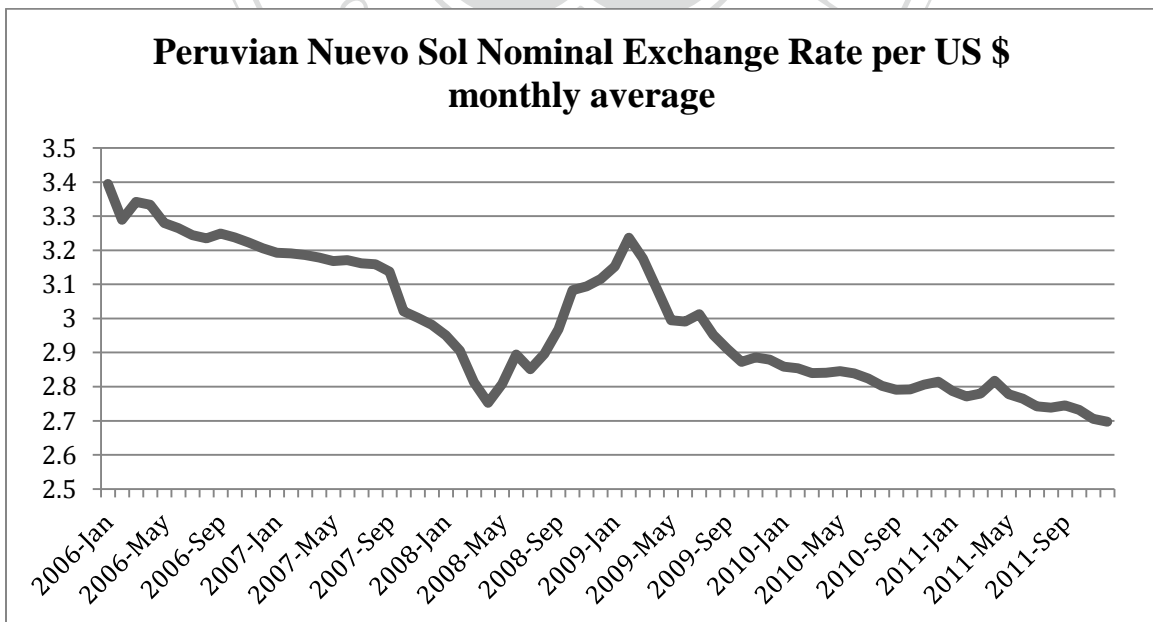
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**Graph 38.**



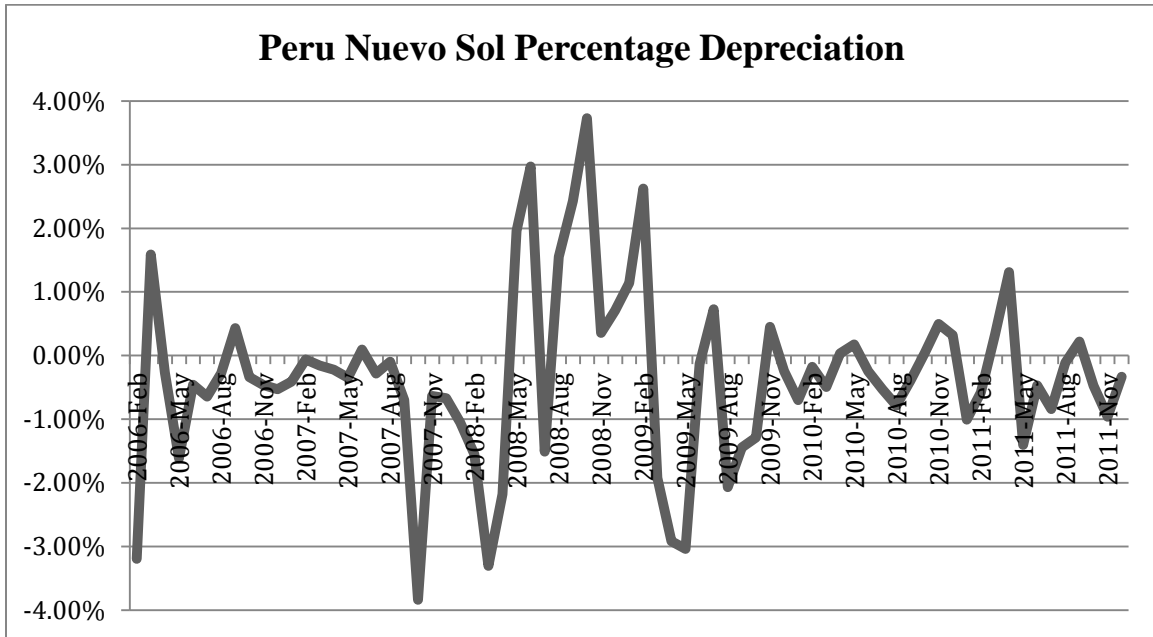
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**Graph 39.**



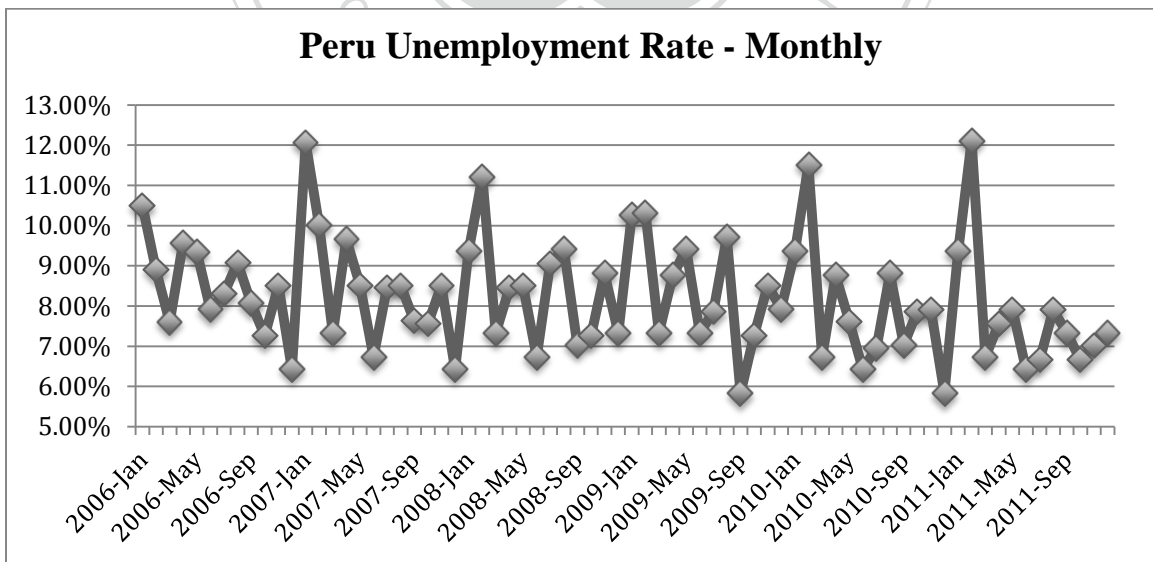
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**Graph 40.**



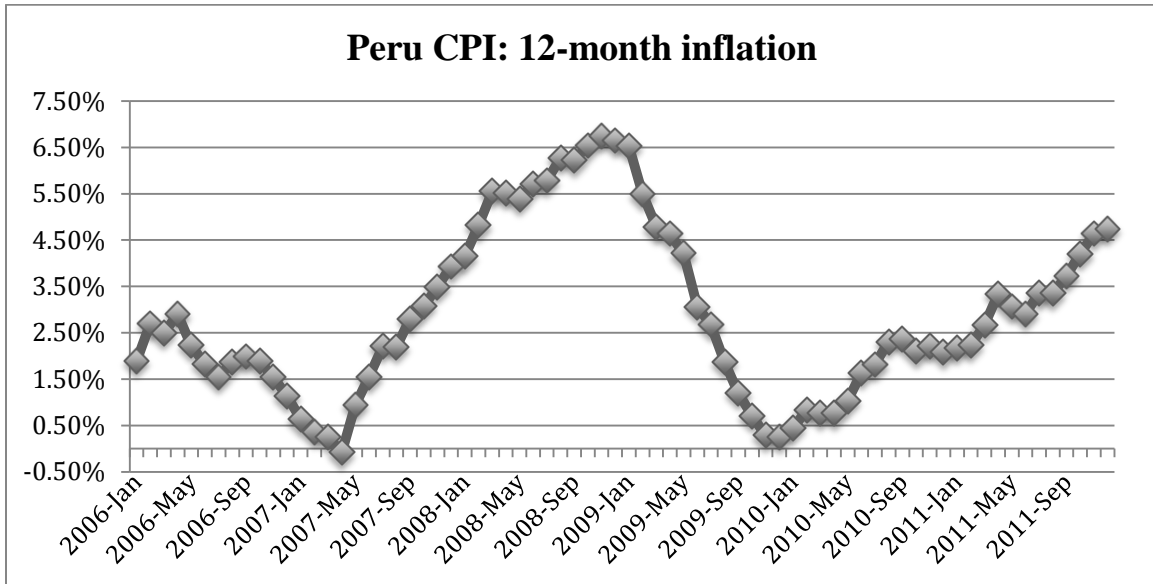
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 41.**



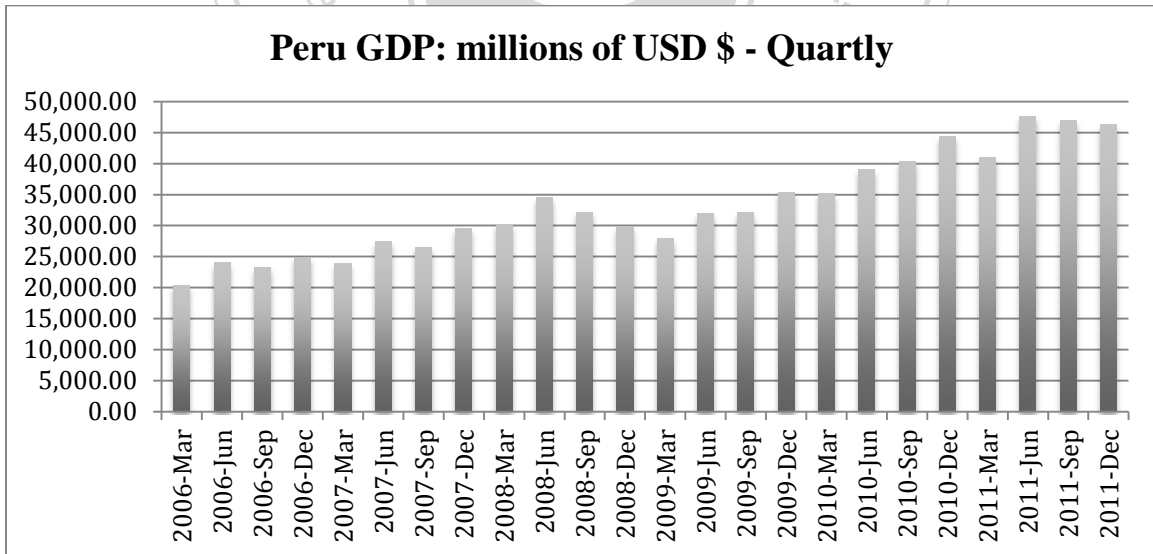
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 42.**



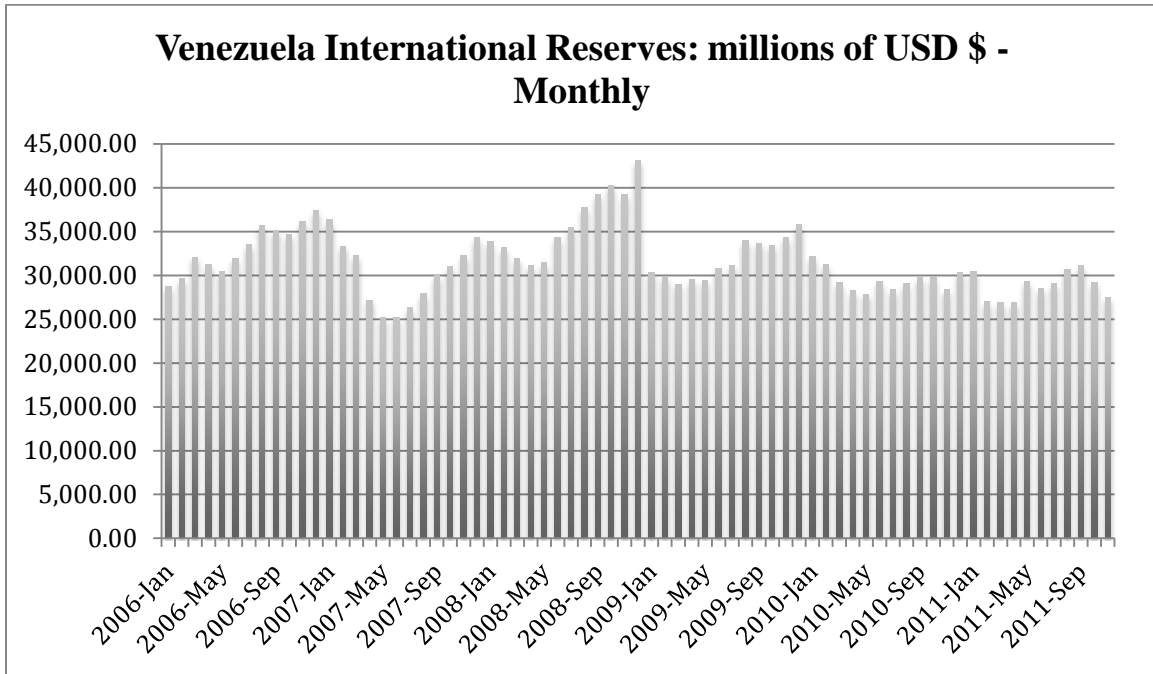
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**Graph 43.**



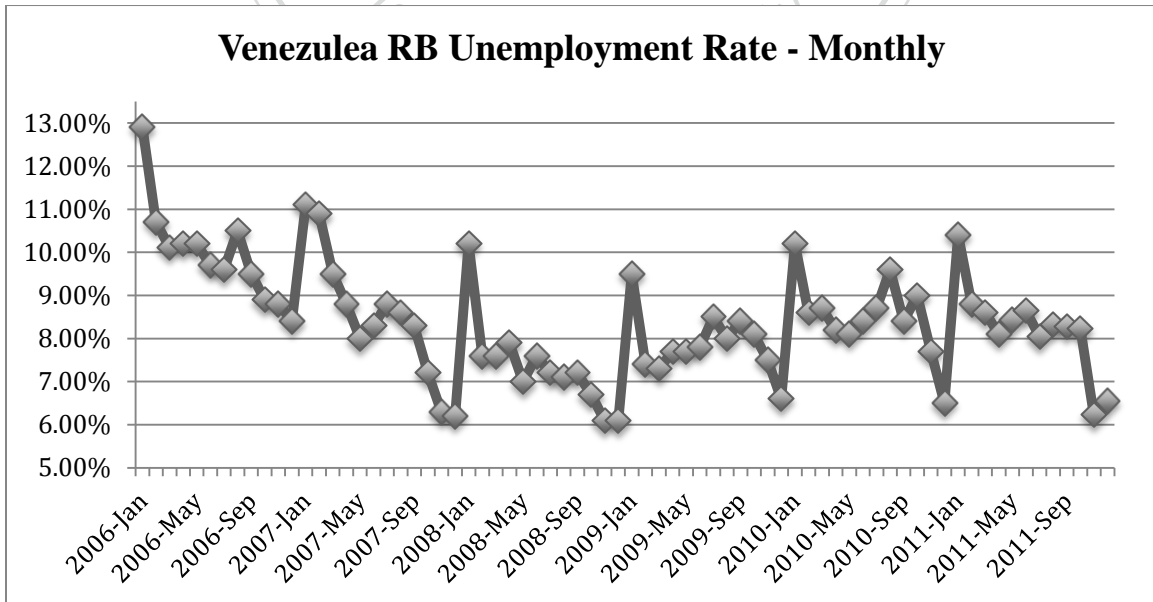
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**Graph 44.**



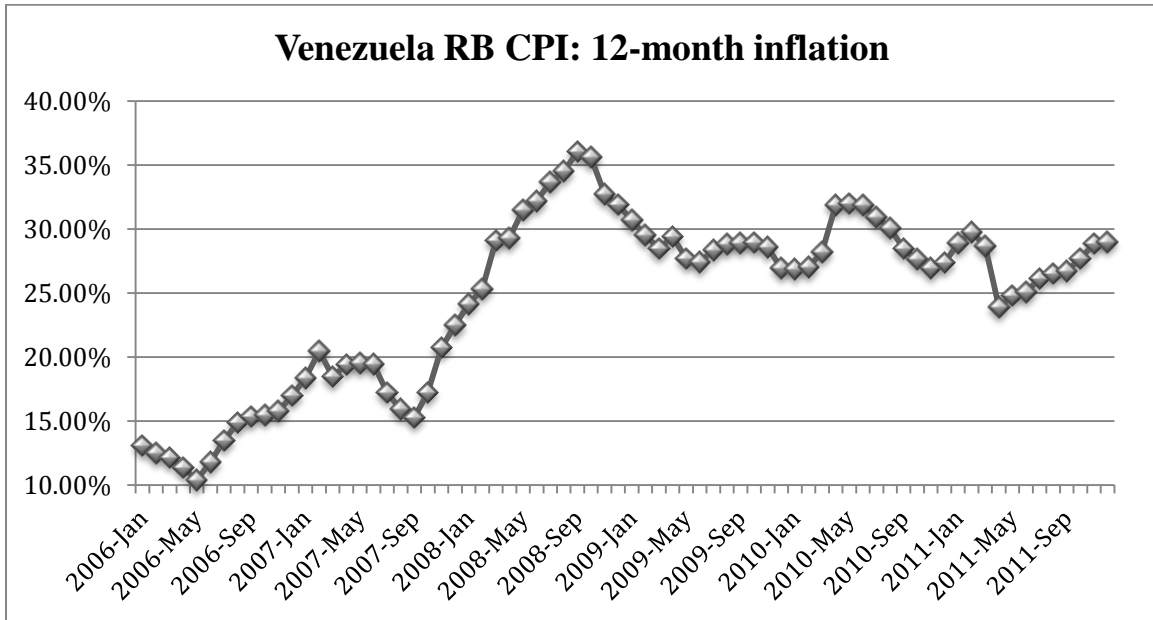
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 45.**



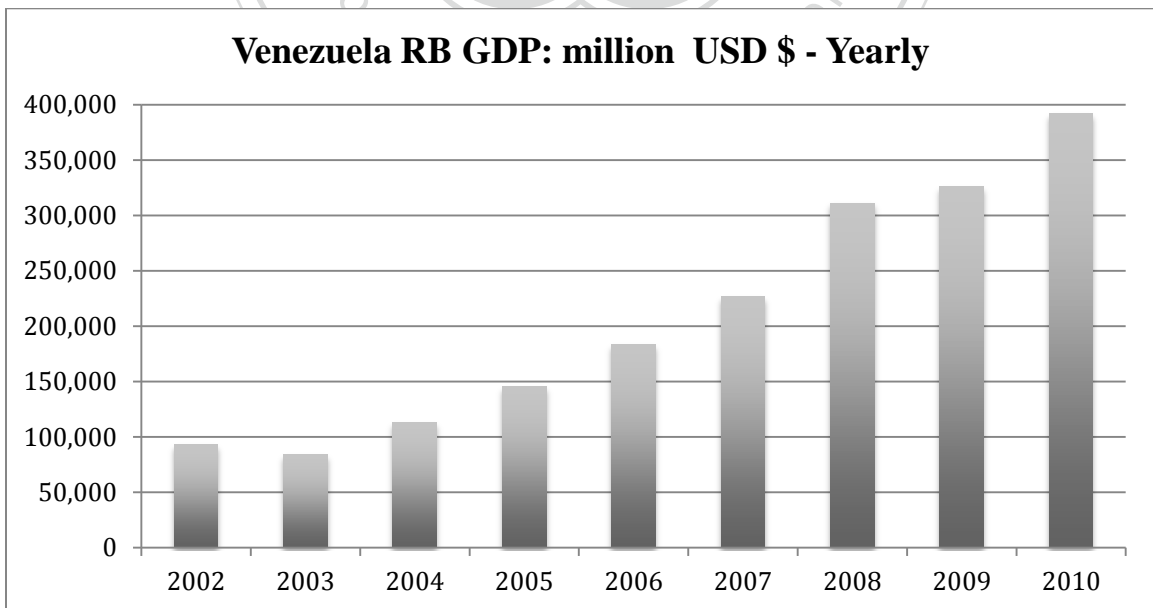
Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 46.**



Source: Latin Macro Watch (LMW), Inter-American Development Bank

**Graph 47.**



Source: Open Data, World Bank

**Table 1.**

**Argentina Exports percentage change - Quarterly**

2006-Jun	17.46%	Q 2	2009-Mar	-30.74%	Q 1
2006-Sep	2.30%	Q 3	2009-Jun	21.44%	Q 2
2006-Dec	6.18%	Q 4	2009-Sep	-8.31%	Q 3
2007-Mar	-13.56%	Q 1	2009-Dec	8.29%	Q 4
2007-Jun	17.20%	Q 2	2010-Mar	-14.02%	Q 1
2007-Sep	5.36%	Q 3	2010-Jun	28.13%	Q 2
2007-Dec	15.29%	Q 4	2010-Sep	0.64%	Q 3
2008-Mar	-8.20%	Q 1	2010-Dec	-2.96%	Q 4
2008-Jun	10.65%	Q 2	2011-Mar	-7.90%	Q 1
2008-Sep	16.34%	Q 3	2011-Jun	25.03%	Q 2
2008-Dec	-32.78%	Q 4	2011-Sep	3.22%	Q 3

**Table 2.**

**Argentina GDP percentage growth - Quartly**

2006-Jun	17.46%	Q 2	2009-Mar	-30.74%	Q 1
2006-Sep	2.30%	Q 3	2009-Jun	21.44%	Q 2
2006-Dec	6.18%	Q 4	2009-Sep	-8.31%	Q 3
2007-Mar	-13.56%	Q 1	2009-Dec	8.29%	Q 4
2007-Jun	17.20%	Q 2	2010-Mar	-14.02%	Q 1
2007-Sep	5.36%	Q 3	2010-Jun	28.13%	Q 2
2007-Dec	15.29%	Q 4	2010-Sep	0.64%	Q 3
2008-Mar	-8.20%	Q 1	2010-Dec	-2.96%	Q 4
2008-Jun	10.65%	Q 2	2011-Mar	-7.90%	Q 1
2008-Sep	16.34%	Q 3	2011-Jun	25.03%	Q 2
2008-Dec	-32.78%	Q 4	2011-Sep	3.22%	Q 3

**Table 3.**

**Brazil Exports percentage change - Quarterly**

2006-Jun	4.99%	Q 2	2009-Mar	-46.65%	Q 1
2006-Sep	19.58%	Q 3	2009-Jun	16.45%	Q 2
2006-Dec	-6.34%	Q 4	2009-Sep	9.00%	Q 3
2007-Mar	-5.94%	Q 1	2009-Dec	0.61%	Q 4
2007-Jun	10.60%	Q 2	2010-Mar	-5.10%	Q 1
2007-Sep	9.65%	Q 3	2010-Jun	17.76%	Q 2
2007-Dec	3.12%	Q 4	2010-Sep	10.02%	Q 3
2008-Mar	-11.17%	Q 1	2010-Dec	4.50%	Q 4
2008-Jun	22.18%	Q 2	2011-Mar	-9.81%	Q 1
2008-Sep	14.12%	Q 3	2011-Jun	20.76%	Q 2
2008-Dec	-24.87%	Q 4	2011-Sep	6.48%	Q 3

**Table 4.**

**Brazil GDP percentage change – Quarterly**

2006-Jun	5.86%	Q 2	2009-Mar	-10.03%	Q 1
2006-Sep	4.93%	Q 3	2009-Jun	17.01%	Q 2
2006-Dec	6.92%	Q 4	2009-Sep	14.33%	Q 3
2007-Mar	-1.88%	Q 1	2009-Dec	13.93%	Q 4
2007-Jun	12.19%	Q 2	2010-Mar	-8.44%	Q 1
2007-Sep	5.02%	Q 3	2010-Jun	8.18%	Q 2
2007-Dec	11.42%	Q 4	2010-Sep	6.16%	Q 3
2008-Mar	0.71%	Q 1	2010-Dec	8.74%	Q 4
2008-Jun	12.82%	Q 2	2011-Mar	-4.58%	Q 1
2008-Sep	2.93%	Q 3	2011-Jun	11.82%	Q 2
2008-Dec	-36.28%	Q 4	2011-Sep	-2.32%	Q 3



**Table 5.****Chile Exports percentage change – Quarterly**

2006-Jun	8.13%	Q 2	2009-Mar	-6.92%	Q 1
2006-Sep	0.73%	Q 3	2009-Jun	6.76%	Q 2
2006-Dec	-8.41%	Q 4	2009-Sep	7.68%	Q 3
2007-Mar	14.90%	Q 1	2009-Dec	10.36%	Q 4
2007-Jun	6.65%	Q 2	2010-Mar	5.23%	Q 1
2007-Sep	-9.36%	Q 3	2010-Jun	-0.25%	Q 2
2007-Dec	5.07%	Q 4	2010-Sep	11.55%	Q 3
2008-Mar	12.05%	Q 1	2010-Dec	6.51%	Q 4
2008-Jun	-4.53%	Q 2	2011-Mar	0.96%	Q 1
2008-Sep	-10.87%	Q 3	2011-Jun	4.29%	Q 2
2008-Dec	-29.16%	Q 4	2011-Sep	-4.14%	Q 3

**Table 6.****Chile GDP percentage change - Quarterly**

2006-Jun	8.48%	Q 2	2009-Mar	1.19%	Q 1
2006-Sep	-2.96%	Q 3	2009-Jun	13.39%	Q 2
2006-Dec	2.92%	Q 4	2009-Sep	3.70%	Q 3
2007-Mar	1.37%	Q 1	2009-Dec	10.21%	Q 4
2007-Jun	9.01%	Q 2	2010-Mar	-0.68%	Q 1
2007-Sep	-4.68%	Q 3	2010-Jun	7.08%	Q 2
2007-Dec	8.42%	Q 4	2010-Sep	4.08%	Q 3
2008-Mar	7.71%	Q 1	2010-Dec	10.10%	Q 4
2008-Jun	4.22%	Q 2	2011-Mar	-2.01%	Q 1
2008-Sep	-17.05%	Q 3	2011-Jun	8.62%	Q 2
2008-Dec	-24.19%	Q 4	2011-Sep	-3.59%	Q 3

**Table 7.**

**Colombia Exports Percentage Change - Yearly**

2007	2008	2009	2010
21.96%	14.64%	-3.36%	17.69%

**Table 8.**

**Colombia GDP Percentage Change - Yearly**

2006-Jun	-1.84%	Q 2	2009-Mar	-4.81%	Q 1
2006-Sep	4.09%	Q 3	2009-Jun	9.96%	Q 2
2006-Dec	6.63%	Q 4	2009-Sep	10.37%	Q 3
2007-Mar	6.37%	Q 1	2009-Dec	4.14%	Q 4
2007-Jun	10.44%	Q 2	2010-Mar	3.16%	Q 1
2007-Sep	2.68%	Q 3	2010-Jun	2.76%	Q 2
2007-Dec	5.18%	Q 4	2010-Sep	5.14%	Q 3
2008-Mar	6.67%	Q 1	2010-Dec	3.01%	Q 4
2008-Jun	11.07%	Q 2	2011-Mar	3.06%	Q 1
2008-Sep	-4.05%	Q 3	2011-Jun	7.89%	Q 2
2008-Dec	-21.40%	Q 4	2011-Sep	1.78%	Q 3

**Table 9.**

**Mexico Exports Percentage Change - Quarterly**

2006-Jun	7.11%	Q 2	2009-Mar	-24.84%	Q 1
2006-Sep	-1.55%	Q 3	2009-Jun	6.03%	Q 2
2006-Dec	2.40%	Q 4	2009-Sep	6.91%	Q 3
2007-Mar	-5.19%	Q 1	2009-Dec	13.31%	Q 4
2007-Jun	9.34%	Q 2	2010-Mar	-0.22%	Q 1
2007-Sep	3.27%	Q 3	2010-Jun	9.31%	Q 2
2007-Dec	5.14%	Q 4	2010-Sep	0.87%	Q 3
2008-Mar	-3.99%	Q 1	2010-Dec	7.31%	Q 4
2008-Jun	10.46%	Q 2	2011-Mar	1.05%	Q 1
2008-Sep	-1.77%	Q 3	2011-Jun	7.72%	Q 2
2008-Dec	-22.41%	Q 4	2011-Sep	-1.83%	Q 3

**Table 10.**

**Mexico GDP Percentage Change - Quarterly**

2006-Jun	0.79%	Q 2	2009-Jun	9.08%	Q 2
2006-Sep	3.07%	Q 3	2009-Sep	4.89%	Q 3
2006-Dec	2.76%	Q 4	2009-Dec	5.69%	Q 4
2007-Mar	-1.86%	Q 1	2010-Mar	0.45%	Q 1
2007-Jun	5.73%	Q 2	2010-Jun	5.46%	Q 2
2007-Sep	1.22%	Q 3	2010-Sep	0.44%	Q 3
2007-Dec	5.20%	Q 4	2010-Dec	7.10%	Q 4
2008-Mar	-2.00%	Q 1	2011-Mar	1.07%	Q 1
2008-Jun	9.28%	Q 2	2011-Jun	6.07%	Q 2
2008-Sep	1.39%	Q 3	2011-Sep	-1.15%	Q 3
2008-Dec	-27.85%	Q 4	2011-Dec	-5.39%	Q 4
2009-Mar	-19.48%	Q 1			

**Table 11.**

**Peru Exports Percentage Change- Quarterly**

2006-Jun	18.41%	Q 2	2009-Jun	12.07%	Q 2
2006-Sep	11.02%	Q 3	2009-Sep	13.60%	Q 3
2006-Dec	2.56%	Q 4	2009-Dec	10.09%	Q 4
2007-Mar	-16.20%	Q 1	2010-Mar	-4.66%	Q 1
2007-Jun	14.99%	Q 2	2010-Jun	4.68%	Q 2
2007-Sep	12.52%	Q 3	2010-Sep	16.03%	Q 3
2007-Dec	1.35%	Q 4	2010-Dec	9.01%	Q 4
2008-Mar	-1.08%	Q 1	2011-Mar	-8.22%	Q 1
2008-Jun	7.84%	Q 2	2011-Jun	19.99%	Q 2
2008-Sep	2.02%	Q 3	2011-Sep	7.20%	Q 3
2008-Dec	-34.06%	Q 4	2011-Dec	-18.95%	Q 4
2009-Mar	-14.55%	Q 1			

**Table 12.**

**Peru GDP Percentage Change- Quartly**

2006-Jun	15.75%	Q 2	2009-Jun	12.53%	Q 2
2006-Sep	-3.91%	Q 3	2009-Sep	0.37%	Q 3
2006-Dec	6.40%	Q 4	2009-Dec	9.28%	Q 4
2007-Mar	-3.99%	Q 1	2010-Mar	-0.26%	Q 1
2007-Jun	13.14%	Q 2	2010-Jun	9.75%	Q 2
2007-Sep	-3.30%	Q 3	2010-Sep	3.25%	Q 3
2007-Dec	10.18%	Q 4	2010-Dec	8.97%	Q 4
2008-Mar	2.29%	Q 1	2011-Mar	-8.31%	Q 1
2008-Jun	12.53%	Q 2	2011-Jun	13.89%	Q 2
2008-Sep	-7.50%	Q 3	2011-Sep	-1.22%	Q 3
2008-Dec	-7.67%	Q 4	2011-Dec	-1.54%	Q 4
2009-Mar	-6.95%	Q 1			

**Table 13.**

**Venezuela RB Export percentage change - Yearly**

2007	2008	2009	2010	2011
6.96%	26.28%	-63.40%	13.09%	-6.18%

**Table 14.**

**Venezuela RB GDP percentage change - Yearly**

2003	2004	2005	2006	2007	2008	2009	2010
-11.08%	25.64%	22.72%	20.69%	19.01%	27.19%	4.60%	16.77%