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# THE UNITED STATES SUBPRIME MORTGAGE CRISIS AND ITS IMPLICATIONS FOR THE CARIBBEAN

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## Table of contents

# THE UNITED STATES SUBPRIME MORTGAGE CRISIS AND ITS IMPLICATIONS FOR THE CARIBBEAN

## Introduction

The bursting of the property bubble – subprime mortgage crisis – in 2007 in the United States has engendered panic, recession fears and turmoil in the global financial system. Although the United States economy grew by 0.6 per cent in the last quarter of 2007, down from 4.9 per cent in the previous quarter, day by day worsening scenarios emerge, from escalating oil prices, to a depreciating dollar and financial institutions' bailout by the Federal Reserve. Many economists and policy makers share the view that a subprime-led recession – i.e. two consecutive quarters with negative growth – is inevitable and will be much deeper and longer than the 2001 dot-com downturn. Moreover, the critical situation of the financial system has driven some analysts to argue that should the monetary policy response fails to restore confidence among investors, the outcome would be the worst crisis seen since the Great Depression. This pessimism is not only among specialists. Indeed, in late March 2008 the Consumer Confidence Index in the United States recorded its lowest level since February 1992.

A recession in the United States will undoubtedly have an important impact on the world economy, despite the continuous rapid growth experienced by emerging economies, particularly China and India. The purpose of this article is threefold: first, to characterize the current situation in the United States economy; second, to discuss the economic policy responses; and finally, to elaborate on how Caribbean economies may be affected.

## The nature of the crisis

The United States economy is currently confronted with many challenges catalyzed by the property bubble bust. The collapse of real estate prices has resulted in unprecedented losses and bankruptcies of hedge funds, mortgage lenders and banks and has led to unnerving uncertainty on Wall Street and global financial markets.[1] The epicentre of this economic weakening are subprime mortgages which are highly risky mortgages issued to borrowers who could not qualify for ordinary or prime mortgages due to low incomes or bad credit history. Most subprime mortgages have adjustable interest rates, with initial fixed low interest rates for two years and then higher rates that are reset every six months based on a benchmark interest rate such as the London Inter-bank Offer Rate (LIBOR). Low interest rates and excessive risk-taking by many weakly supervised financial institutions eager to grant loans largely contributed to a sharp increase in subprime mortgages from 2.4 per cent of total mortgage loans in 2000 to 13.7 per cent in 2006. This, in addition to increased speculative demand, pushed up house prices by 80 per cent during that period, an increase only observed in the immediate post-World War II period.

[1] New Century Financial filed for Chapter 11 Bankruptcy in April, 2007; Bear Stearns bailed out two of its Hedge Funds at a cost of US$3.2 billion in June, 2007. The latter investment bank was itself bailed out in March 2008, at a price per share of around 14 per cent its value a week before.

The rapid appreciation in house prices brought about steep realization of equity from properties which stimulated consumer consumption that makes up a massive 72 per cent of United States GDP. Consequently net equity extraction from residential property spiked from 3 per cent of disposable income in 2001 to 9 per cent in 2005.[2] Once interest rates began to reset, mortgage payments increased – in some cases by 30 per cent – to amounts that many borrowers could no longer afford. By January 2008, the rate of delinquency on subprime mortgages had risen to 21 per cent. The drastic increase in housing inventory, followed by sizeable reduction in house prices, gave rise to negative equity for both subprime and prime homeowners. Being the main asset of most households, the collapse of the price of houses has had a significant negative wealth effect, which will undoubtedly reduce consumption significantly.

Highly associated with the subprime crisis is a well-defined channel of financial intermediaries (brokers, mortgage companies and special investment funds) which distributed risks extensively from banks to special investment vehicles, hedge funds, offshore banks and investors. The weak regulation of these intermediaries contributed to a marked increase in abusive and predatory lending, i.e. little or no documentation requirements, inadequate credit checks, the removal of down payment requirements, and enticing initial rates on adjustable rate mortgages. As the housing market slowed the value of mortgage-backed securities (Collateralized Debt Obligations) fell sharply and caused investors to pull back from credit markets. Banks were therefore forced to retain on their own balance sheets a higher share of subprime mortgages and, as a result during the last quarter of 2007, the financial sector suffered considerable losses to the tune of US$83.1 billion. For instance, Citibank reported US$9.83 billion net loss during this period, caused by a US$18.1 billion write down in subprime losses. As investors and financial institutions possess assets backed by subprime mortgages now estimated at US$1.3 trillion (see table 1) there is the potential that these losses will spiral upwards should these mortgages go into default. Hence, a further deterioration of banks' balance sheets and an extension of the infamous credit crunch are possible. To avoid a major financial crisis, the continuous write downs will have to be marked against equity capital hoping that it is sufficient to keep banks solvent.

**Table 1**
**Potential subprime losses**
*(U.S. dollars)*

| Description | Amount |
|---|---|
| **Subprime mortgages** | 1.3 trillion |
| **Distressed subprime mortgages** | 625 billion |
| **Foreclosed subprime mortgages** | 220 - 450 billion |
| **Current market value of subprime mortgages** | 300-900 billion |
| **Per cent subprime foreclosed** | 15%-25% |

*Source:* Federal Reserve, Moodys.com.

[2] The Market Oracle (http://www.marketoracle.co.uk/Article 2537.html).

**Economic policy responses**

At the onset of the financial market turmoil in 2007, policy makers have been industrious in trying to curb and avert a recession. Faced with the slide in the real economy and the crunch in the financial system, the Federal Reserve has taken unprecedented moves: a US$200 billion loan programme geared at the biggest banks to stem liquidity constraints and direct borrowing by security dealers previously confined only to commercial banks. Other customary measures taken by policy makers were:

a) Cuts in the federal funds rate: Since the bursting of the housing bubble in mid-2007 the Federal Reserve has cut interest rates six times from 5.25 per cent in September 2007 to 2.25 per cent on 18 March 2008. Further cuts are still expected if the economy fails to rebound;

b) Cut in the federal discount rate by a quarter point to 3.25 per cent on 17 March 2008 aimed at helping banks and thrifts;

c) Increase in money supply: Between the months of November to December 2007 the Federal Reserve injected US$81 billion into the money supply for banks to borrow at a low interest rate;

d) Economic Stimulus Package: The United States Congress and the Bush Administration have agreed on a US$150 billion ($100 for households and $50 for businesses) economic stimulus package to increase personal consumption and business investment. Approximately 117 million homes will receive a rebate of up to US$600 for individuals and up to US$1200 for married couples. Couples with children will also get an extra US$300 per child; and

e) In late March 2008 the Bush Administration announced the first reform of the financial regulatory framework which has been in place since the 1930s. Basically, the reform tries to improve coordination among the Federal Reserve and other regulatory institutions so as to avoid overlapping of functions by merging or eliminating some of them. It also extends the Federal Reserve's mandate allowing it to monitor the balance sheets of non-depository financial institutions such as investment banks, risk funds, insurance brokers, and so on. However, the proposal which needs Congressional approval is not intended to resolve the current crisis but prevent financial turmoil in the future.

Some economists believe the federal funds rate cuts and money supply injection will not yield the desired results because:

a) Most of the credit crunch is due to solvency as opposed to liquidity of many economic agents;

b) The credit problems are caused by lenders' fear of risk, information asymmetries and uncertainty rather than a money shortage or high interest rates;

c) A recession would have already occurred before the effects of monetary policy can be felt due its lag; and

d) The liquidity and credit problems affect not only banks but also non-bank entities such as broker dealers, money market funds and mortgages which do not have direct access to the Federal Reserve liquidity support.

Moreover, further interest rate cuts would not only be ineffective in restoring confidence and reviving the economy, but also will have a pernicious effect of sustaining the depreciating trend of the United States dollar that in mid-March 2008 hit a historic low against the Euro of approximately 1.6 to 1. This has put upward pressures on oil prices as they are denominated in this currency in world markets. In addition, the depreciating United States dollar has led to capital losses of central banks that have a large share of their reserves in Treasury Bonds and other greenback denominated assets. This is particularly the case of Asian – notably China – and oil exporting countries that have been financing the fiscal and current account deficits of the United States during the last years. Such capital losses can trigger a collapse of the greenback should any of these central banks sell their United States dollar denominated assets to prevent further losses and others follow suit. Probably it is because of this fear that no monetary authority has made the first move in this direction yet.

Should the problem be that of solvency rather than of liquidity, then the only way out seems to be to bailout non-performing mortgage loans altogether. However, such a financial move would amount to some US$3 trillion or 20 per cent of GDP.[3] Assuming that the United States can afford to increase its debt by this amount, the implications would be enormous. In particular, the moral hazard behaviour of financial institutions would be extremely exacerbated, as they got away with fat profits during the good times, whereas taxpayers would end up assuming the losses when things turned ghastly.

There is also scepticism about the effectiveness of the fiscal stimulus package. Although the tax rebate is richer, 1 per cent of GDP compared to the 2001 package of 0.4 per cent of GDP, it lacks a spending incentive. This is because the 2001 package was part of a 10-year reduction in income tax rates for all taxpayers as opposed to the one-time tax rebate of the 2008 package. Furthermore, the fiscal stimulus in 2001 was much more significant on the spending side, as it drove a fiscal surplus of 2.6 per cent of GDP in 2000 into a deficit of 2.2 per cent in 2002.

In addition in recent days the economic forecast has gotten gloomier triggered by the surprising takeover of Bear Stearns by J.P. Morgan Chase aided by the Federal Reserve for a mere US$236 million. Initially, the sale would have represented US$2 per share compared to nearly US$70 per share the week before and a high in the previous year of US$159 per share. In the end, the bargaining between J.P. Morgan and Bear Sterns stock holders resulted in a price of US$10 per share. This news sent chills in the financial markets as investors wonder which bank is next and about the solvency of the financial system itself. Indeed, during the first quarter of 2008, UBS and Deutsch Bank – two of the world's largest financial institutions – suffered mortgage-related write-offs of US$19 billion and nearly US$4 billion, respectively.

[3] As a share of GDP, this amount would be similar to the fiscal cost of the Japan's post-bubble cleanup. It took more than a decade to this country to overcome recession and stagnation after the bubble bust two decades ago.

An interesting issue that arises is whether central banks should not only monitor consumer prices inflation, but also asset prices. Although the Federal Reserve does not have an inflation targeting framework – i.e. control Consumer Price Index (CPI) inflation and keep unemployment low according to the circumstances – it seems that nothing was learnt from the dot com crisis at the beginning of the current decade. Had the authorities not allowed stock prices to skyrocket, then the economy would not have experienced the problems it faced in 2001 exacerbated by the September 11 attacks.

## Implications for the Caribbean

Many observers have argued that in recent years the rest of the world has become less dependent or decoupled on the business cycles in the United States. This argument is supported by the phenomenal growth rates of emerging economies in 2007 (China, 11.2 per cent; India, 8.9 per cent) and economies in transition (Russia, 7.7 per cent), which have surpassed the rate of growth in the United States (2.2 cent). However, the latter country remains the principal economic partner of all major countries or regions primarily due to deeper trade and financial linkages.

Against the backdrop of world economic growth, the Caribbean as a whole experienced positive growth rates of 3.9 per cent in 2007, down from 5.8 per cent in 2006, driven by commodity price booms in Trinidad and Tobago and tourism-related construction especially in Antigua and Barbuda and Anguilla.[4] Given the trade and financial linkages, it is very unlikely that the region will escape the slowdown in the United States economy, let alone a plain recession. Though not measurable at this time, the likely channels of transmission of any impact of a United States recession on Caribbean economic growth are trade, tourism, remittances, finance and Foreign Direct Investment (FDI).

## Trade

United States imports accounts for 15 per cent of total world trade, with 44 per cent of its imports coming from developed countries and more that 50 per cent from developing countries. The weakening of household consumption and business investment would directly initiate a curtailment of demand in the United States for foreign goods and services. The direct impact of a reduced demand will be felt most severely by countries that have a large share of their exports to the United States. Therefore, these countries' growth would suffer more from the United States crisis. In 2006, 51 per cent of the Caribbean Community's (CARICOM) total exports of goods went to the United States market. This is quite significant for Caribbean countries which are dependent on exports to improve their current account balances and foster productive employment and growth.

In the absence of a full model of economic growth for Caribbean countries that allows for an econometric estimation to assess the likely impact of a downturn in the United States on

[4] See ECLAC, *Economic Survey of the Caribbean 2006-2007*, Port of Spain, September, 2007.

economic growth in the region, table 2 shows the correlation coefficients of the United States growth rate vis-à-vis that of Caribbean countries for the period 1971-2007. Although it is well known that this indicator does not imply causality, it seems reasonable to assume that it is United States growth which influences Caribbean growth and not the other way around. Thus, the working hypothesis is that the higher the (positive) correlation coefficient, the higher the impact an eventual United States recession would have on any country's growth. Table 2 also indicates which correlation coefficients are statistically significant based on standard hypothesis testing. This effect would be expected to be greater for countries more dependent on the United States as a destination for their exports. As correlation coefficients are very sensitive to the presence of outliers, in Barbados, Jamaica and Trinidad and Tobago some "abnormal" observations were excluded from the calculations to deal with this problem (see footnotes in table 2).

As can be seen, five of the seven non-Organisation of Eastern Caribbean States (OECS) countries show high and statistically significant positive correlation coefficients ranging from 28.6 per cent in Barbados to 34.6 per cent in Trinidad and Tobago. Consistent with these findings, all of them deliver a significant proportion of their exports of goods to the United States market. During 2002-2006 these shares were between 18.8 per cent in Suriname and 62.2 per cent in Trinidad and Tobago. Surprisingly, however, Belize and Guyana exhibit correlation coefficients not statistically different from zero (and even with negative signs), despite both having the United States as an important destination for their merchandise exports - one third and one fifth of the total in 2002-2006, respectively.

On the other hand, five out of the eight OECS countries record significant correlation coefficients. The highest value is that of Saint Lucia (40.9 per cent) whereas the lowest is that of Anguilla (28.2 per cent). The former country sent 19.2 per cent of goods exports to the United States in 2002-2006. The source does not report information for the latter country. In the case of Grenada it shows a significant positive correlation coefficient despite the relatively low proportion of its goods exports to the United States market (12.9 per cent). It is worth noting that St. Kitts and Nevis, the country that delivered the highest share of its exports to the United States market (62.1 per cent) shows a correlation coefficient of 22.8 per cent but that is not statistically significant. Finally, Montserrat shows a negative value for this indicator, but it is also not statistically different from zero.

Therefore, these results indicate that the countries that would be more isolated in terms of growth from any event in the United States economy are Belize, Guyana, Dominica, Grenada and Montserrat. In the case of St. Kitts and Nevis, it is difficult to reconcile its large share of exports to the United States market with the non statistical significance of the correlation coefficient of its growth rate with that of the United States. The other countries would be expected to experience a higher negative impact on growth in the event of a recession.

**Table 2**
**Correlation coefficients between U.S. and Caribbean countries growth rates and share of total exports to the U.S. market in total exports of goods**
*(Percentage and percentage of total exports)*

| | Correlation coefficient 1971-2007 | Exports to the U.S. market 2002-2006 |
|---|---|---|
| Barbados | 28.6*[a] | 20.0 |
| The Bahamas | 29.0* | 31.8 |
| Belize | -6.0 | 34.6 |
| Guyana | -12.8 | 20.2 |
| Jamaica | 31.2*[b] | 26.9 |
| Suriname | 33.4** | 18.8 |
| Trinidad and Tobago | 34.6*[c] | 62.2 |
| **OECS** | | |
| Anguilla | 28.2* | .. |
| Antigua and Barbuda | 30.1* | .. |
| Dominica | 11.9 | 5.6 |
| Grenada | 29.7* | 12.9 |
| Montserrat | -6.0 | .. |
| St. Lucia | 40.9** | 19.2 |
| St. Kitts and Nevis | 22.8 | 62.1 |
| St. Vincent and the Grenadines | 34.1** | 6.8 |

*Source:* IMF, *Directions of Trade Statistics*, electronic version and ECLAC calculations on the basis of IMF, *International Financial Statistics*, electronic version.
* Statistically different from zero at the 10% level.
** Statistically different from zero at the 5% level.
[a] Excludes 1992, where a significant adjustment program was put in place in the context of a major economic crisis that meant a drop of 10.4 per cent in GDP that year. Without excluding this observation the correlation coefficient is 25.4%, but it is not statistically different from zero at standard significance levels.
[b] Excludes 1976 (election year, political violence and declaration of state of emergency) where GDP recorded a decline of 11.9%; 1984 (alumina crisis and closure of the Reynolds enterprise) where GDP dropped by 8.1%; 1985 (social unrest, debt crisis and closure of the Alcoa enterprise) where GDP declined by 8.7%; and 1997 (election year, political violence and severe drought) where GDP dipped by 5.5%. Without excluding these observations the correlation coefficient is 8.8% but is not statistically different from zero at usual significance levels.
c Excludes 1980 (the peak year of the second oil shock) where GDP grew by 10.6% from 0.4% in 1979; 1983-1989 (a prolonged period of economic crisis) where GDP dropped every single year recording an annual average of 9%; and 1992-1993 (profound economic policy reforms) where GDP decline averaged 4.5%. Without excluding these observations the correlation coefficient is negative (-12.4%) but not statistically significant at traditional levels of confidence.

Apart from the effects on growth via reduced volumes of exports from the Caribbean to the United States market, there could also be another effect through the trade channel, but this time through world commodity prices. For instance, though no major declines are expected in oil prices in the short run, the Organization of Petroleum Exporting Countries (OPEC) forecasts a drop during the second half of 2008 due to the downturn of economic activity in the United States and a consequent decline in world demand for crude. The same could be true for other commodities that are important in export baskets of Caribbean countries, such as alumina, banana, sugar and rice. Table 3 shows the share of these commodities in total exports in 2002-2006.

**Table 3**
**Exports of commodities, 2002-2006**
*(Percentage of total exports of goods)*

| | |
|---|---|
| Barbados (oil,[a] sugar) | 30.0 |
| The Bahamas (non crude oil[b]) | 25.7 |
| Belize (oil,[a] sugar, banana and plantain) | 33.2 |
| Guyana (aluminium ore, sugar, rice) | 38.8 |
| Jamaica (non crude oil,[b] aluminium oxide/hydroxide, aluminium ore, sugar) | 75.0 |
| Suriname (oil,[a] aluminium oxide/hydroxide, rice, banana and plantain) | 62.1 |
| Trinidad and Tobago (oil[a]) | 66.8 |
| **OECS** | |
| Dominica (banana and plantain) | 20.7 |
| St. Lucia (banana and plantain) | 25.4 |
| St. Vincent and the Grenadines (banana and plantain) | 35.2 |

*Source:* UNCTAD, *Trade Competitive Map*, electronic version.
[a] Crude and non crude oil.
[b] Non crude oil must be processed or upgraded before being refined. Examples are tar sands, shale oil, ultra-heavy oil, and natural gas liquid (a by-product of natural gas extraction and processing).

As shown, the countries more dependent on exports of commodities are Jamaica, Trinidad and Tobago and Suriname. In the former country, commodities accounted for three quarters of goods exports in 2002-2006, whereas in the latter two these amounted to around two thirds. In the other non-OECS countries, commodities totalled between 25.7 per cent of goods exports in The Bahamas and 38.8 per cent in Guyana. As regards the OECS countries, in only three of them commodities represent a big share in total exports. These are Dominica, Saint Lucia and St. Vincent and the Grenadines, where banana and plantain totalled between one fifth and one third of goods exports in the same period. Should world prices of these commodities decline, these countries would experience a negative terms of trade shock and hence a negative impact on growth, with the most severe impacts expected in Jamaica, Trinidad and Tobago and Suriname. On the contrary, an eventual decline in oil prices would be welcomed by all countries which are major importers of hydrocarbons, except Trinidad and Tobago.

However, it is worth noting that the correlation coefficients between the United States growth rate and commodity prices in general do not show a statistically significant value and most times not even positive. For instance, in the case of oil, in 1971-2007 its price and United States growth rate exhibit a value of –8.2 per cent. This value could not be "corrected" by eliminating outlier observations but may be a result of the impact of the three previous oil shocks (1973-74, 1979-80 and 1991) which were supply driven, i.e. generated by disruptions in world supply. As such, all three represented negative supply shocks to the United States economy and resulted in a decline in economic activity and increased inflationary pressures.

For the first time the current oil shock is demand driven mainly by the permanent dynamic growth, especially in China and India, with world demand surpassing that of world supply. Thus, it can be argued that unlike previous shocks, this time it is more likely that a

downturn in the United States would put significant downward pressures on crude prices. In addition, world demand for agricultural goods has recently experienced a structural upward break due to emerging and increasing demand for biofuels. Therefore, the most likely scenario, even with a recession in the United States, is that commodity prices will decline but will remain at much higher levels than those observed in 2000.

**Tourism**

Tourism is a major income earner for most Caribbean countries contributing as much as 15 per cent of GDP in countries such as Barbados and accounts for 60 per cent of service exports of the Eastern Caribbean Currency Union. In 2006, of the 29.9 million United States outbound travellers, the Caribbean received 5.7 million or 19.2 per cent[5]. Stay over visitors from the United States constituted 87 per cent in Bahamas, 74 per cent in Jamaica, 53 per cent in Guyana, 36 per cent in the OECS and Trinidad and Tobago and 24 per cent in Barbados. The negative wealth effect of the subprime crisis and increased uncertainty due to recession fears will lead to reduced travel demand from the United States and hence will affect the tourism sector and tourist related construction.

On the contrary, it can be argued that the weakening of the United States dollar – to which many Caribbean currencies are tied – may lead to an increase in travel demand from Europe, benefited by a much stronger Euro and Sterling Pound. However, this may not be able to fully compensate for the loss from the United States market and, as a result, the Caribbean needs to brace for that impact.

Table 4 shows stay over tourist arrivals from the United States and from Europe as a percentage of total stay over tourist arrivals in 2002-2006. In most cases, the United States is more important as a source of visitors than Europe. In the non-OECS countries, this is true in all cases, except for Barbados and, notably, Suriname. Apart from this latter country, in all others visitors from the United States amounted to at least one fifth of the total. The United States market is particularly significant in The Bahamas (86.2 per cent of stay over tourists) and Jamaica (72.1 per cent). In Belize and Guyana more than half of stay over visitors came from the United States, while in Antigua and Barbuda, Grenada and Montserrat the European market is more important. In all the OECS countries the United States is an important source of stay over visitors, ranging from 21.3 per cent of the total in Montserrat to 65 per cent in Anguilla. Therefore, a United States recession would undoubtedly be felt in Caribbean economies because of reduced demand from that market and therefore negatively impact tourism and overall economic growth.

Suriname constitutes an exception. Given the marginal weight of the United States as an origin of stay over visitors to this country (2.5 per cent), the effect of a recession in this economy through the tourism channel would be minimal. Actually, it could benefit from the current situation, given the peg of its currency to the United States dollar in the context of a marked depreciation of the greenback against the Euro. This could foster an increase in European tourists which is already very significant, having accounted for more than two thirds of the total in 2002-2006.

[5] Jamaica Tourist Board, Annual Trade Statistics, 2006.

**Table 4**
**Stay over tourists from the United States and Europe, 2002-2006**
*(Percentage of total stay over tourists)*

| | Stay over tourists from the U.S. | Stay over tourists from Europe |
|---|---|---|
| Barbados | 23.9 | 44.1 |
| The Bahamas | 86.2 | 5.6 |
| Belize | 58.5 | 14.3 |
| Guyana | 50.3 | 8.7 |
| Jamaica | 72.1 | 15.8 |
| Suriname | 2.5 | 68.4 |
| Trinidad and Tobago | 35.7 | 19.5 |
| **OECS** | | |
| Anguilla | 65.0 | 16.0 |
| Antigua and Barbuda | 27.6 | 43.2 |
| Dominica | 22.5 | 16.0 |
| Grenada | 24.6 | 32.0 |
| Montserrat | 21.3 | 30.8 |
| St. Lucia | 36.5 | 31.1 |
| St. Kitts and Nevis | 49.5 | 10.8 |
| St. Vincent and the Grenadines | 28.7 | 22.8 |

*Source:* Caribbean Trade Organisation.

To address the relative impact of a United States downturn through the tourism channel in the region, table 5 presents this sector output as a share of GDP in 2002-2006. Clearly, the OECS countries exhibit much more significant tourism sectors relative to aggregate output than the other CARICOM countries. These are especially the cases of Anguilla and Antigua and Barbuda where tourism accounted for 23.6 and 21.7 per cent of GDP, respectively, in the analysed period. In the other countries these figures are lower, ranging from 8.8 per cent in Grenada to 15.8 per cent in Saint Lucia. In the non-OECS countries the importance of tourism is led by The Bahamas (17.3 per cent of GDP), followed by Barbados (13.6 per cent), Belize (11 per cent), and Jamaica (9.4 per cent). In Trinidad and Tobago, Suriname and Guyana the share of tourism in GDP is below 5 per cent.

**Table 5**
**Tourism sector output, 2002-2006**
*(Percentage of GDP)*

| | |
|---|---|
| Barbados | 13.6 |
| The Bahamas | 17.3 |
| Belize | 11.0 |
| Guyana | 2.2 |
| Jamaica | 9.4 |
| Suriname | 3.1 |
| Trinidad and Tobago | 5.0 |
| **OECS** | |
| Anguilla | 23.6 |
| Antigua and Barbuda | 21.7 |
| Dominica | 8.9 |
| Grenada | 8.8 |
| Montserrat | .. |
| St. Lucia | 15.8 |
| St. Kitts and Nevis | 10.3 |
| St. Vincent and the Grenadines | 10.6 |

*Source:* World Travel & Tourism Council.

Therefore, combining the data shown in tables 4 and 5, the most likely countries which could be affected by an eventual recession in the United States and a drop in visitors would be The Bahamas, Anguilla and Antigua and Barbuda. Although with less intensity, this negative shock would also be felt in Barbados, Jamaica, Belize, Saint Lucia and St. Kitts and Nevis. In the other countries the impact would be much lower, particularly in Suriname and Guyana, where it would be practically negligible.

## Remittances

In 2006, remittances flows to the Caribbean – including Cuba and the Dominican Republic, excluding Belize, Guyana and Suriname – totalled US$8.3 billion, that is approximately one third of remittances to Mexico, the biggest recipient in Latin America and the Caribbean. Remittances to the region are highest from the United States followed by Western Europe. As a consequence of the subprime bust, the construction sector which employs a large number of immigrants has been hard hit. This would not only generate problems in the construction sector's labour demand, inasmuch subprime mortgages were particularly popular among immigrants in states such as California, New York and Florida which are the highest remittance states, assuming the Caribbean has a similar pattern to Latin America.[6] The slower job market and a housing-led recession will then have a significant impact on remittances as loss of jobs and negative wealth effects on immigrant home owners will translate into less or no money to remit. The brunt of the decline in remittances will be felt mainly by the rural population in most Caribbean islands which are usually the poorest and most marginalized. This

[6] In 2004, remittances to Latin America estimates were 32% from California, 11.9 % from New York, 10.6% from Texas and 8.2% from Florida (http://www.cbo.gov/ftpdocs/63xx/doc6366/05-19-Remittances.pdf).

would mean a drastic fall in the standard of living of many people and, by so doing, will increase the level of poverty and state dependency.

Table 6 reports remittances measured as a percentage of GDP, of exports of goods and of FDI in 2001-2005. According to the first measure, clearly Guyana and Jamaica stand out, with remittances totalling 18.8 and 15.4 per cent of GDP, respectively. The other non-OECS countries report levels below 7 per cent of GDP. This figure is particularly low in Trinidad and Tobago, where remittances were below 1 percentage point of output. In the OECS countries the level of these flows is much lower, with Grenada showing the maximum level (7.1 per cent of GDP), followed by Anguilla (4.2 per cent). In the other countries, remittances recorded levels below 2 per cent of GDP.

**Table 6**
**Remittances, 2001-2005**
*(Percentage)*

| | GDP | Exports of goods | Foreign Direct Investment |
|---|---|---|---|
| Barbados | 4.2 | 39.9 | 336.1 |
| The Bahamas | 2.1 | 9.9 | 20.7 |
| Belize | 6.7 | 21.9 | 99.4 |
| Guyana | 18.8 | 26.0 | 326.7 |
| Jamaica | 15.4 | 96.1 | 222.6 |
| Suriname | 1.9 | 3.4 | 52.2 |
| Trinidad and Tobago | 0.7 | 1.4 | 8.4 |
| **OECS** | | | |
| Anguilla | 4.2 | 44.8 | 12.2 |
| Antigua and Barbuda | 1.9 | 92.7 | 5.8 |
| Dominica | 1.5 | 4.2 | 9.8 |
| Grenada | 7.1 | 36.3 | 69.3 |
| Montserrat | 1.6 | 24.3 | 38.4 |
| St. Lucia | 0.5 | 2.8 | 3.3 |
| St. Kitts and Nevis | 1.0 | 3.5 | 2.5 |
| St. Vincent and the Grenadines | 1.0 | 4.1 | 4.6 |

*Source:* ECLAC (2007), *Economic Survey of the Caribbean 2006-2007.*

Moving on to the second measure, Jamaica retains first place within the non-OECS countries, with remittances of 96.1 per cent of goods exports in the analysed period, followed by Barbados (39.9 per cent), displacing Guyana to the third place (26 per cent). The other country where remittances are relatively high is Belize, where they amounted to more than one fifth of exports. On the other hand, in the OECS countries the ones that exhibit higher levels are Antigua and Barbuda (92.7 per cent of goods exports), Anguilla (44.8 per cent), Grenada (36.3 per cent) and Montserrat (24.3 per cent). The other countries show levels far below these figures.

Finally, as a percentage of foreign investment, three countries clearly stand out with levels of remittances either more than three times those of FDI (Barbados and Guyana) or two times (Jamaica). In the case of Belize, remittances recorded around the same level of FDI in 2001-2005. On the other hand, the OECS countries where remittances are higher as a percentage of foreign investment – though much lower than those reported by the higher recipients in the

non-OECS countries – are Grenada and Montserrat where these resources amounted to 69.3 and 38.4 per cent, respectively.

All in all, the magnitudes discussed above indicate that a downturn in the United States economy would undoubtedly have an important effect on the most dependent countries in the Caribbean. The most affected countries would be Guyana and Jamaica, the main recipients in the region. The impact would be significant but less intense in Barbados, Belize, Anguilla and Grenada. In the other countries the effect would be much lower.

It is worth noting that during the last United States recession, remittances to the Caribbean countries (including Haiti) actually increased from US$1,703 million in 2000 to US$ 1,845.2 million in 2001. This contradicted the predictions of most economists who followed a similar reasoning to the one presented above.[7] It is convenient to bear in mind this fact.

**Finance and FDI**

Thus far, the recent turmoil in the United States economy has had little impact on Caribbean financial institutions. Financial assets are less risky than they were years ago and many countries, including Barbados, are approaching investment grade status, hence improving the perception of sovereign debt. Moreover, the continuous reduction in interest rates in the United States makes the region attractive to capital inflows which will give rise to growth in asset prices. However, entities such as some central banks, commercial banks and others with investments and reserves that are United States dollar denominated are experiencing capital losses due to the depreciation of the greenback.

But most importantly, should the financial crisis worsen in the United States as some analysts fear, it would severely affect the global financial system harming particularly the more financial services dependent Caribbean countries. As mentioned above, this financial crisis could be the worse experienced since the Great Depression. Table 7 shows the financial sector output as a percentage of GDP in 2002-2006.

[7] For the Central American countries case see M. R. Agosin and R. Machado, "Efectos de los atentados del 11 de septiembre sobre las economías centroamericanas", Inter-American Development Bank, Washington, D.C., October 2001.

**Table 7**
**Financial sector output, 2002-2006**
*(Percentage of GDP)*

| | |
|---|---|
| Barbados | 17.1 |
| The Bahamas | 15.3 |
| Belize | 14.3 |
| Guyana | 5.3 |
| Jamaica | 12.0 |
| Suriname | 6.7 |
| Trinidad and Tobago | 11.6 |
| **OECS** | |
| Anguilla | 18.3 |
| Antigua and Barbuda | 10.3 |
| Dominica | 13.7 |
| Grenada | 10.9 |
| Montserrat | 11.9 |
| St. Lucia | 11.2 |
| St. Kitts and Nevis | 14.1 |
| St. Vincent and the Grenadines | 9.8 |

*Source:* ECLAC, on the basis of official data.

As shown, the non-OECS countries where the financial sector output is more important are Barbados (17.1 per cent of GDP), followed by The Bahamas (15.3 per cent) and Belize (14.3 per cent). In the case of OECS countries, the weight of the financial sector is higher in Anguilla (18.3 per cent of GDP), St. Kitts and Nevis (14.1 per cent) and Dominica (13.7 per cent). Except for the latter country, all the others have large offshore banking sectors. Therefore, a financial turmoil in the United States would impact these economies more severely. On the contrary, countries such as Guyana and Suriname would be less affected, given the lower share of their financial sectors in aggregate output. The other countries would be in an intermediate position.

Last but not least, a financial crisis in the United States would also affect FDI as banks would be more reluctant to grant loans to multinational corporations and the resulting increased uncertainty would make them less willing to invest. In this context, this would also negatively affect the Caribbean countries. Notwithstanding, it is worth noting that this effect could be offset in countries with abundant oil and mining reserves. This is true because of the unprecedented high prices these commodities have recorded recently, which make investment in these sectors highly profitable. Table 8 presents FDI as a percentage of GDP in 2002-2006.

**Table 8**
**Foreign Direct Investment, 2002-2006**
*(Percentage of GDP)*

| | |
|---|---|
| Barbados | 1.1 |
| The Bahamas | 7.4 |
| Belize | 6.0 |
| Guyana | 6.8 |
| Jamaica | 7.3 |
| Suriname | 20.0 |
| Trinidad and Tobago | 6.8 |
| **OECS** | |
| Anguilla | 48.0 |
| Antigua and Barbuda | 16.7 |
| Dominica | 10.3 |
| Grenada | 22.1 |
| Montserrat | 3.8 |
| St. Lucia | 11.1 |
| St. Kitts and Nevis | 24.6 |
| St. Vincent and the Grenadines | 13.7 |

*Sources:* UNCTAD, United Nations Statistical Division.

Clearly, except for Montserrat, FDI as a percentage of GDP is much more significant in the OECS countries than the non-OECS countries. Foreign investment is especially significant in Anguilla (almost 50 per cent) followed by St Kitts and Nevis and Grenada, where FDI amounted to approximately one quarter of GDP in 2002-2006. On the other hand, Suriname is the only non-OECS country where foreign investment reached a significant level of 20 per cent of GDP. As a consequence, the non-OECS countries would experience a lesser impact should a United States crisis prompt a contraction of these flows in world markets, while the impact will be more severe in the OECS countries.

**Policy recommendations**

Given that the Caribbean is unlikely to escape the impact of a United States recession, the following recommendations are aimed at providing a soft cushion against this downturn and, by extension, lessen the possible contraction in economic growth.

a) To soften the impact of reduced import demand from the United States, CARICOM countries must explore alternative markets for their main exports. For instance, Trinidad and Tobago needs to consider the export of oil and gas to China, Japan and India, while Jamaica and Suriname may need to consider the export of bauxite and alumina to Canada and Europe. In addition, there needs to be a deepening of intraregional trade among CARICOM countries given the fact that intraregional trade in domestic exports averaged 16 per cent over the period 2004-2006, while domestic exports to the United States averaged 52 per cent over the same period.

b) To lessen the negative impact on the tourism sector, CARICOM countries must maximise their comparative advantage in terms of their geographical location. Compared to

Europe and Asia, the Caribbean is only four to five hours from the United States by air transportation; hence, this creates an opportunity for more affordable travel. Affordable packages can be marketed competitively in the United States. The strength of the Euro also provides a great opportunity for attracting visitors from Europe, which can be enhanced through aggressive marketing.

c) There is an urgent need for Caribbean governments to become proactive in creating sustainable employment opportunities, especially for those highly dependent on remittances. The diversification of the export basket moving towards more value added products creates job opportunities for Caribbean citizens in the region through the vertical integration of industries related to the exploitation of natural resources. This will call for active industrial policies on the part of Caribbean governments.

d) Serious consideration must be given to the diversification of foreign reserves by the region's central and commercial banks. Reserves should not only be United States dollar-denominated but should also consist of a combination of other world currencies such as the Sterling Pound and the Euro.

## Conclusion

All indicators point to a recession in the United States, the duration and intensity of which is still to be determined. However, according to the current performance of the economy and the hiccups in the financial sector, it is likely that this crisis will be of significant proportions. In this context, Caribbean economies would be affected through different channels. Table 9 sums up these results.

**Table 9**
**Intensity of the effects of a U.S. recession on the Caribbean economies**

| Channel | High | Medium | Low |
|---|---|---|---|
| **Trade** | | | |
| Contraction in U.S. demand | Barbados, The Bahamas, Jamaica, Suriname, Trinidad and Tobago, Anguilla, Antigua and Barbuda, St. Lucia, St. Vincent and the Grenadines | Belize, Guyana, Grenada, St. Kitts and Nevis | Dominica, Montserrat |
| Terms of trade | Jamaica, Trinidad and Tobago, Suriname | Belize, Barbados, The Bahamas, Guyana, Dominica, St. Lucia, St. Vincent and the Grenadines | Anguilla, Antigua and Barbuda, Grenada, Montserrat, St. Kitts and Nevis |
| **Tourism** | The Bahamas, Anguilla, Antigua and Barbuda | Barbados, Belize, Jamaica, St. Lucia, St. Kitts and Nevis | Guyana, Suriname, Trinidad and Tobago, Dominica, Grenada, Montserrat, St. Vincent and the Grenadines |
| **Remittances** | Guyana, Jamaica | Barbados, Belize, Anguilla, Grenada | The Bahamas, Suriname, Trinidad and Tobago, Antigua and Barbuda, Dominica, Montserrat, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines |
| **Finance** | The Bahamas, Barbados, Belize, Anguilla, St. Kitts and Nevis | Jamaica, Trinidad and Tobago, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Lucia, St. Vincent and the Grenadines | Guyana, Suriname |
| **FDI** | Anguilla, Grenada, St Kitts and Nevis, Suriname | Antigua and Barbuda, Dominica, St Lucia, St Vincent and the Grenadines | Barbados, Belize, The Bahamas, Guyana, Jamaica, Suriname, Trinidad and Tobago, Montserrat |

*Source:* ECLAC on the basis of tables 2 to 8.

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