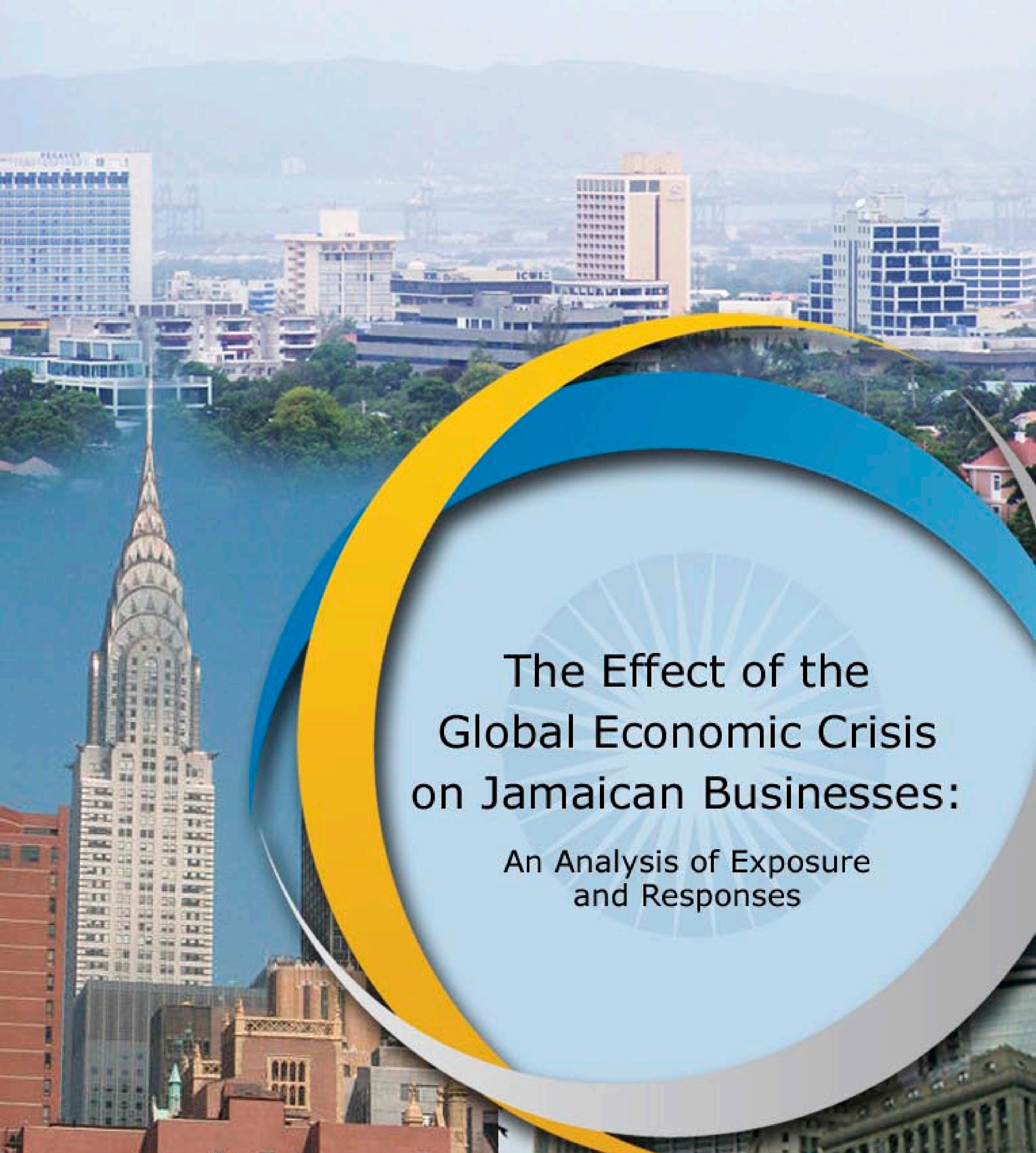

The Effect of the Global Economic Crisis on Jamaican Businesses:

An Analysis of Exposure and Responses

Caribbean Policy Research Institute

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EXECUTIVE SUMMARY

As the global economic crisis continues to unfold, this report seeks to rigorously assess the degree of exposure of different types of business to the crisis, evaluate the implications of extant and future adjustments being made by businesses in response to the crisis, and examine the potential efficacy of the government's response to the crisis. This study has been conducted using primary data collected in Jamaica, and, although context specific, the results contribute to the broader debate on issues such as the resilience of real sector businesses to financial crises, and appropriate private and public sector responses to such crises. Very few countries have been spared the effects of this crisis, and so the lessons learned across the world should be expeditiously and rigorously derived and shared as the global community responds to a truly global crisis.

EXPOSURE TO THE CRISIS

The report first assessed the degree of vulnerability of local businesses to the effects of the global crisis. This was done by examining their exposure to both direct and indirect threats to their operations. Direct exposure was defined as having deposits or investments in financial institutions overseas and particularly in distressed foreign institutions. The survey results indicate that direct exposure was minimal, as only approximately 5% of all respondents had deposits or investments with financial institutions overseas, and only four of 285 businesses had deposits/investments with distressed institutions. Most of these businesses had such small proportions of their total deposits/investments in these institutions that they could easily survive without them.

Threats to businesses may, however, also come in the form of reduced access to, or more stringent terms of credit, due to the global credit crunch. The results indicate, though, that in Jamaica indirect exposure through lines of credit from foreign financial institutions and suppliers was also small, as businesses did not rely heavily on credit from foreign financial institutions. Also, even though credit from foreign suppliers was important to medium-sized firms from the manufacturing and trade & distribution sectors, worsening of conditions for such credit lines had not yet been experienced. Expectations, however, were generally negative, with more stringent borrowing conditions expected in the medium to long term, as the global crisis is prolonged.

The greater reliance on local sources of credit does not imply that there is no exposure to the global crisis, as although credit from local financial institutions has been relatively stable, increased interest rates has heightened the cost of credit. The terms of credit from local suppliers seem to have exhibited more variability, but a small majority of respondents indicated that they experienced no changes since the crisis. Expectations for local sources of credit in the medium to long term were, however, also negative, with local financial institutions clearly expected to reduce the availability of credit, local suppliers expected to decrease the length of loans offered, and both expected to increase the cost of credit.

Having identified these avenues of exposure through financial channels, we turned our attention to the real sector economic impacts of the crisis. Many developed and developing countries are in recession, and as such are importing less. Reduced demand for imports from Jamaica can in turn lead to the reduction in the quantity and price of goods and services sold/offered by Jamaican businesses. These are indirect sources of exposure to the crisis that were explored.

The survey results indicate a heavy reliance by Jamaican businesses on goods sold and services provided in the local market, primarily in the form of basic necessities and intermediate goods. This suggests a low degree of immediate exposure to the global recession. It, however, also highlights the threat of contagion that exists if the local economy undergoes a prolonged recession in which unemployment rises, key medium-sized and large businesses close, and entrepreneurs and self-employed workers lose their livelihoods.

The results suggest a fairly low degree of exposure of Jamaican businesses to the higher-than-average volatility typically associated with luxury goods and services, consumer durables, and medium cost non-essential goods and services. Unique vulnerabilities however exist in certain sectors such as tourism and mining, which are heavily reliant on foreign markets, particularly in the US and UK, both of which are experiencing periods of recession.

To deepen our analysis of indirect exposure through real sector channels, we also examined whether or not Jamaican businesses have already experienced or expect changes in the prices and quantity of goods and services sold in local and foreign markets. The experience and expectations of Jamaican businesses with respect to the quantities and prices of their goods and services is surprising. The intuition that the adverse effects of the global economic crisis would be transmitted to the real sectors of the Jamaican economy first through worsened conditions in export markets was not evidenced. While bauxite/alumina exports has declined substantially and this undoubtedly has a knock-on effect on the domestic economy, our survey results indicate that there has not been a general decline in our export markets. On the other hand, local markets were perceived as exhibiting deteriorating conditions.

The deteriorating conditions in local markets have serious implications for the vulnerability of Jamaican businesses, as most are heavily reliant on the local market and have very little diversification with respect to their output markets. Further, the fact that many businesses supply intermediate goods, suggests that contagion in the local economy will be transmitted very quickly, as the failure of a few firms will impact many others.

The reasons for the local market exhibiting more quickly deteriorating conditions than the export markets require further explanation. Comparison across countries would be useful to determine whether this is a uniquely Jamaican phenomenon, related to local events and conditions, or whether other countries have similar experiences. If the latter, then questions as to the prevalence of a paradox of thrift[1] would have to be raised.

In addition to the exposure to the global crisis through financial channels and output markets, it must be noted that the instability associated with periods of crisis can also affect the availability of key inputs. The survey results, however, indicate that exposure to the global economic crisis through the input market is limited, as the availability of key foreign and local inputs is largely expected to remain stable.

Businesses' Response to the Crisis

Exposure to the current global crisis is likely to precipitate adjustment by business owners and managers, with the type of adjustment being dependent on the extent and nature of exposure. An analysis of such adjustments is important, as the ways in which businesses react to the crisis determine the ultimate impact on social and economic development in a country.

In the Jamaican context, only 19 of 285 businesses indicated a need to shut down operations in response to the global economic crisis, suggesting that most Jamaican firms expect to weather the storm. These businesses were spread across most sectors belonging to micro, small and medium-sized establishments, confirming the relative stability of larger companies, as they are able to absorb greater shocks for longer periods.

The possibility of large-scale layoffs and other staff-related adjustments in response to the crisis has precipitated government intervention in many countries. In Jamaica, however, approximately two-thirds of the businesses surveyed noted that they were unlikely to undertake layoffs, while about a third was likely or very likely to do so. Most likely to undertake layoffs were large businesses in the mining, transportation, storage & communication and agriculture sectors. Least likely are businesses from

[1] The paradox of thrift (or the paradox of saving) results when people begin to save more money in times of recession and thereby consume less. This however leads to a reduction in overall demand for goods and services in the economy which leads to worsening conditions since it will result in even slower economic growth. As economic growth slows, people will generate less income which in turn will lower their total savings.

the electricity, gas & water and, surprisingly, tourism sectors. The reduction of wages is also not highlighted as a likely alternative to laying-off workers by 77% of the businesses surveyed. Only large businesses, mining companies and construction & installation businesses had a significant proportion of their respondents considering this possibility. Instead, over half of the businesses surveyed were more likely to reduce other benefits to staff. This view was most prevalent within the real estate & business services, financial services, manufacturing, trade & distribution and agriculture sectors, and with medium-sized enterprises.

There was also a much greater willingness by most of the respondents to consider the reduction of non-staff related expenses as a means of adjusting to the crisis, with very little variation across size and sector. This, however, does not involve the reduced use of local and foreign inputs and services by most businesses. Only the transportation, storage & communication sector was likely to reduce foreign inputs, while large companies and the mining sector were likely to reduce local inputs. Local suppliers to large companies and to the mining industry can expect to be adversely affected, thus highlighting the vulnerability of the considerable number of Jamaican firms supplying intermediate goods, particularly to large companies.

This emphasizes the importance of businesses having a diversified market for their output, a lesson which seems not to be lost on Jamaican companies, as two-thirds of the businesses surveyed indicated that they were likely or very likely to seek alternative markets as a means of adjusting to the crisis, with large companies exhibiting the greatest dynamism in this respect. There was more ambivalence with respect to seeking alternative means of financing as an adjustment strategy, with about half of the respondents being likely or very likely to pursue this option, and the other half being unlikely. Reluctance to pursue this strategy was clearly related to the size of the entity, with a larger proportion of micro and small businesses being unlikely to pursue this option. This confirms the difficulties faced by micro and small businesses in accessing finance. Businesses in the trade & distribution, finance, and transportation, storage & communication sectors were also more reluctant to seek alternative means of financing.

The Government's Response to the Crisis

Governmental responses to the current crisis in many countries have involved an easing of fiscal and monetary policies, aimed at stimulating consumption and production. The Jamaican government's response presents an interesting case study, as although there was a desire to acquiesce to intense business lobbying for a stimulus package, fiscal constraints and exchange rate volatility necessitated a course of action that was different in key respects from responses in other countries.

A depreciating currency precipitated a monetary policy response of increased interest rates, which was heavily criticized by the business community, as being too harsh in a period of crisis. Notwithstanding this, about two-thirds of the businesses surveyed noted that this policy response did not result in unmanageable increases in the cost of working capital and debt repayment. The construction and installation industry is, however, uniquely adversely impacted in this respect, as a higher-than-average proportion of respondents from this sector noted that they would be affected by large and unmanageable increases in the cost of working capital and debt repayment.

On the fiscal side, a stimulus package, estimated to cost between J$4.6 billion - J$5.3 billion was announced by the government to mitigate against job losses and closure of businesses, provide assistance to persons made redundant, and to aid households affected by the crisis in meeting basic expenditures. The initiatives for the most part involved support to specific sectors of the economy. Businesses from targeted sectors were largely optimistic about reaping benefits from the respective initiatives, but were primarily concerned about their ability to access the benefits, the narrow concentration of many of the initiatives, and the adequacy of the initiatives in addressing fundamental problems affecting the economy.

The results also indicated that the expected benefits from the stimulus package are more likely to lead to improved profitability of the businesses, and less likely to reduce job losses. This raises questions as to whether the stimulus package is able to achieve the announced objectives, which primarily relate to alleviating the effects of job losses and closure of businesses. This is particularly so in a context within which most businesses have noted that layoffs and closures are not likely.

The results of simulation exercises conducted by CaPRI as part of its research also raised questions about the efficacy of the government's stimulus package, as it was found that this package will not have a major impact on a range of social and economic issues affecting the country. Very similar outcomes are however derived from the modeling exercises even if the money had been used differently, or if no money had been spent. This suggests that the stimulus package is too modest to have any great effect. Stimulus packages typically involve injections equivalent to fairly large percentages of GDP, but in Jamaica, the fiscal constraints preclude injections of a sufficiently high value to create the desired impact. It is important to note, though, that while the gains from the stimulus package will be small, if it leads to increased confidence within the business community in a period of heightened pessimism, this alone could possibly be used as an argument to justify its implementation.

Recommendations for Businesses:

Be vigilant with where you save and/or invest your money. Be careful not to panic in the face of the global financial crisis and invest all your funds in one 'safe' place. As the current crisis illustrates, even the largest and most 'reputable' institutions can fail.

Have a diversified portfolio of savings and investments, and monitor that portfolio rigorously.

Explore all available options to diversify lines of credit and seek alternative sources of finance. As both foreign and local credit conditions are expected to worsen in the medium to long term, businesses with internal reserves and/or retained earnings are now better positioned.

Grow your business, as increased size reduces vulnerability, as larger companies can absorb losses for longer periods of time.

Diversify the location of your output markets, as overreliance on the domestic market makes businesses more vulnerable to prolonged periods of recession and harsh domestic conditions. Overreliance on the USA and the UK similarly increases vulnerability to volatility in those markets.

Diversify your product line and/or customer base. While the supply of intermediate goods is traditionally viewed as stable, because the demand for such goods is relatively inelastic, in times of crisis when even large businesses are adversely affected, overreliance on such goods can be detrimental, as the closure of a few large firms completely eradicates your market. Reliance on revenues from luxury or medium cost non-essential goods/services is even more risky, and should be hedged against by market diversification and product differentiation.

Recommendations for the Government:

As financial systems evolve, financial regulation must do so as well. Hence the government should ensure that there is improved regulation of the Jamaican financial system on a continuous basis.

In periods of crisis ensure that continued support (within reason) is provided to the financial sector so as to avoid panic and loss of confidence. This is exemplified by the BOJ's provision of liquidity support to the financial system in the current crisis.

In periods of financial panic and reduced business and consumer confidence, the Government should adopt a moderate approach aimed at restoring public confidence. This has to be done within the confines of the fiscal realities and draconian measures during periods of crisis should be avoided.

As a longer-term objective, because Keynesian-type stimulus measures are useful in responding to crises, governments should aim to manage their budgets so as to enable them to have the fiscal space to implement a meaningful response when the need arises. The government's medium-term strategy must therefore accord the highest priority to eliminating the fiscal deficit and reducing its debt burden.

Because the business community is heavily dependent on the local market, stimulus measures should focus on increasing domestic spending. Direct support to consumers may therefore be more effective than support to targeted business sectors, especially if the latter is the result of lobbying efforts and cronyism. As learned from previous crisis response efforts in South East Asia and Jamaica, such support should seek to, *inter alia*, ensure food security, maintain the purchasing power of vulnerable households, and maintain economic and social services for the poor, including education and healthcare.

Facilitating the increased access of micro and small businesses to financing is critical, since if a prolonged recession leads to further layoffs, self-employment will increase and will need to be a viable alternative for individuals. This must be accompanied by carefully planned strategies to enhance the productive capacity as well as the export capabilities of these firms.

INTRODUCTION

The global economic crisis has affected Jamaican economic growth forecasts, as well as business confidence indices. Consumers, businesses and the government have had to adjust accordingly. Analysts predict that as the crisis prolongs, many developing countries like Jamaica, will have to confront spin-off effects of varied magnitudes, manifested in, *inter alia,* reduced private and official capital flows, including remittances, and adverse changes in the *real* economy. In a crisis environment, wherein there is a palpable decline in confidence, anticipated outcomes and the associated adjustments thereto, must also be carefully monitored. As businesses and individuals anticipate reductions in their income streams or lines of credit due to the global economic crisis, they are likely to decrease spending and/or investments, which may hasten the adverse effects of the crisis.

As the crisis unfolds, Jamaican decision-makers need to be armed with the results of rigorous research which assesses:

- The degree of exposure of different types of business to both the financial crisis and global recession;
- Extant and future adjustments being made by businesses in response to the crisis, and the expected spin-off effects of such adjustments; and
- The potential efficacy of the government's response to the crisis in alleviating social and economic dislocation by providing support to the local business community.

By addressing these critical issues through the analysis of the most recently-available primary and secondary data, this study provides cutting-edge information on the crisis and post-crisis business environment and prospects in Jamaica. This report exemplifies CaPRI's steadfast efforts to provide unbiased research based on data and rigorous analysis. To this end, multiple approaches were used throughout this five month study, including an extensive business survey, systematic costing exercises, a comprehensive literature review, interviews with stakeholders within the private and public sectors, and a dynamic simulation exercise using sophisticated modeling techniques.[2] These would not have been possible without the United Kingdom Department for International Development (DFID) which provided sponsorship and the Planning Institute of Jamaica (PIOJ) which gave technical support.

The report comprises five additional sections. An overview of the causes and magnitude of the global economic crisis and a review of Jamaican economic performance between 2006 and 2008 are presented next so as to set the context for the study. This is followed by an assessment of local businesses' vulnerability to changing conditions emanating from the crisis. The adjustment strategies being considered by businesses in response to their exposure to the crisis are presented and

[2] Details on the methodology used are presented in the appendices.

analyzed next, followed by an evaluation of the Government of Jamaica's announced policy response. The final section of this report concludes and presents the recommendations made.

BACKGROUND

Overview of the US/Global Crisis and Spin-Off Effects

Causes

The global economic crisis was triggered by adverse developments in the subprime mortgage market, which precipitated instability, uncertainty and illiquidity in the global market for credit and capital. Following the 'dot-com' crisis of the late 1990s, [3] the Federal Reserve lowered interest rates, thereby enabling existing homeowners to benefit from cheaper mortgage payments. This stimulated increased demand for mortgages and led to an increase in house prices and personal debt.

The increased demand for mortgages was also fuelled by sub-prime lending. The subprime market, which was introduced in late 2005, made it possible for borrowers who did not qualify by virtue of their high levels of risk, to access loans from mortgage institutions.[4] This arrangement was facilitated by the securitization of these high-risk debts into investment products such as mortgage backed securities (MBSs) and Collateralized Debt Obligations (CDOs).[5]

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[3] This crisis ended in the spring of 2000 as the value of equities in many high-technology companies collapsed. *See*, Nanto, Dick et. al. (2008), "The US Financial Crisis: the Global Dimension with Implications for US policy," prepared by the Congressional Research Services (CRS) November 2008, pg.25. Accessed January 15, 2009. [http://www.fas.org/sgp/crs/misc/RL34742.pdf] and the New York Times, "Credit Crisis - The Essentials," Online Article January 16, 2009. Times Online, accessed January 16, 2009. [http://topics.nytimes.com/topics/reference/timestopics/subjects/c/credit_crisis/]

[4] The main risk factors were based on income levels, size of down payment made, credit history and employment status.

[5] Securitization is the process of taking an illiquid asset, or group of assets, and through financial engineering, transforming them into a security. A typical example of securitization is a mortgage-backed security (MBS), which is a type of asset-backed security that is secured by a collection of mortgages. The process works as follows: First, a regulated and authorized financial institution originates numerous mortgages, which are secured by claims against the various properties the mortgagors purchase. Then, all of the individual mortgages are bundled together into a mortgage pool, which is held in trust as the collateral for an MBS. The MBS can be issued by a third-party financial company, such as a large investment banking firm, or by the same bank that originated the mortgages in the first place. Mortgage-backed securities are also issued by aggregators such as Fannie Mae or Freddie Mac. Collateralized Debt Obligations (CDOs) are similar financial tools that repackage individual loans into a product that can be sold on the secondary market. They are called collateralized because they have some type of

By 2006 the American housing bubble had burst. On the demand side, high interest rates and rising defaults on mortgage payments precipitated increased foreclosure on properties. On the supply side, there was an oversupply of houses. House prices decreased, and the unwillingness of home builders to sell at the reduced prices led to a build-up of inventory and a fall in sales volume, which eventually caused a decline in the value of housing and consequent huge mortgage losses.[6]

Many financial institutions were left with increasingly large levels of bad debts, due to the falling value of their mortgage bonds and plummeting asset bases. This raised concerns about the credit quality of especially subprime mortgages, and led to the unwillingness of some creditors to supply credit.[7] By late 2006 into 2007, because of the bursting of the housing bubble, liquidity in the market for credit began to constrict,[8] leading to a credit crisis that soon reverberated throughout the entire US economy.

Following the fallout in the US financial system, investors all around the world began to shift investments away from financial instruments that were linked to securitized mortgages.[9] There was also a global credit crunch, as the lack of confidence made banks reluctant to lend to each other. The global real economy was quickly affected, as there was also a reduction in lines of credit that were previously used to finance

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collateral behind them. CDOs allow banks to sell off debt, which frees up more capital to invest or loan. However, the downside of CDOs is that it allows the originators of the loans to avoid having to collect on them when they become due, since the loans are now owned by other investors. This may make them less disciplined in adhering to strict lending standards. The estimated securitized share of subprime mortgages (the amount passed on to third parties) stood at 75% in 2006 an increase from 54% in 2001.

[6] According to the New York Times, hundreds of billions in mortgage-related investments went bad. (See, New York Times, "Credit Crisis - The Essentials," Online Article January 16, 2009. Times Online, accessed January 16, 2009.
[http://topics.nytimes.com/topics/reference/timestopics/subjects/c/credit_crisis/)

[7] On the other hand, those creditors who were willing to lend did so at high interest rates and benefited from wide spreads.

[8] US Federal Reserve Board Chairman Ben Bernanke explains that since 2007, few securities backed by subprime mortgages have been issued while the New York Times reports that both consumers and businesses – small and large -- had difficulties accessing crucial funds. (*See* Ben Bernanke (October 2007), "The recent financial turmoil and its economic and policy consequences," speech presented at the Economic Club of New York, NY and New York Times, "Credit Crisis - The Essentials," Online Article January 16, 2009. Times Online, accessed January 16, 2009.
[http://www.federalreserve.gov/newsevents/speech/bernanke20071015a.htm).

[9] Liquidity and credit risk concerns also surfaced in markets in which the impact of securitization was limited. Ben Bernanke (October 2007), "The recent financial turmoil and its economic and policy consequences," speech presented at the Economic Club of New York.

business operations.[10] The US sub-prime crisis thus quickly mushroomed into a global financial and economic crisis, affecting consumers, producers and governments.

Magnitude

Many financial institutions in the US have been adversely affected by the sub-prime crisis.[11] The institutions most heavily impacted are those with significant amounts of mortgage backed securities and collateralized debt obligations. It is estimated that losses on financial assets that can be traced back to the US totalled US$1,577 billion as of October 2008.[12] Many real estate investment trusts (REITs), hedge funds and banks suffered immensely as a result of mortgage payment defaults or mortgage asset devaluations and their subsequent inability to access sufficient credit to either protect assets or cover mortgage related losses.

Box 1:

Post-Crisis Economic Outlook of the USA

The financial crisis has precipitated a recession in the US economy. The projected real GDP growth rate for 2009 is -2.8%, based on the recent projections of the International Monetary Fund. This negative growth is explained by a gradual reduction in business activities due mainly to lack of credit. As banks reduce loans to businesses, funding for working capital as well as for major investments is stymied. The anticipated decline in consumer spending on items such as housing, automobiles, appliances and other durables, will also reduce prospects for economic growth. It is reported that the decline in residential investment directly subtracted about ¾ percentage points from the average pace of the US economic growth over the past year and a half.

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[10] By September 2008, the cost of borrowing increased for companies. *See* Bajaj, Vikas (2008), "Financial Crisis Enters New Phase," Online Article September 18, 2008. Accessed December 2009. [http://www.nytimes.com/2008/09/18/business/18markets.html.].

[11] It is believed that the housing disequilibrium has taken a more visible toll on the financial system which is less true for the general economy. *See* Ben Bernanke (October 2007), "The recent financial turmoil and its economic and policy consequences," speech presented at the Economic Club of New York, NY.)

[12] Nanto, Dick et. al. (2008), "The US Financial Crisis: the Global Dimension with Implications for US policy," prepared by the Congressional Research Services (CRS) November 2008, pg.25. Accessed January 15, 2009. [http://www.fas.org/sgp/crs/misc/RL34742.pdf.]

By April 2007, New Century Financial, the second largest lender of sub-prime loans, filed for bankruptcy. The subsequent collapse of Bear Sterns signaled a steady deterioration of credit conditions, leading to a number of bank failures.[13] In September 2007 Merrill Lynch was sold to the Bank of America for considerably less than its previous stock value, Lehman Brothers filed for bankruptcy,[14] and AIG, the world's largest insurance company, faced difficulty in accessing capital and was forced to sell 80 per cent of its stocks to the Federal Reserve in an effort to raise US$85 billion in credit.[15] Other major financial institutions that were affected include: Swiss Bank UBS;[16] Citigroup; Indy Mac;[17] Fannie Mae and Freddie Mac; and Wachovia. While these firms found it difficult to source credit, other entities which issue corporate and municipal bonds (e.g. GE, AT&T and the State of Massachusetts) have found it difficult to source enough buyers of their bond issues, due to higher corporate borrowing costs.[18] Not surprisingly, stock markets have performed at their worst since the 1800s and have been unstable since the crisis.[19]

More broadly, the financial crisis has had a severe impact on the US economy. Numerous individuals have lost their homes due to foreclosure. During 2007, over 2.2 million foreclosure filings were reported for 1.3 million properties, an increase in foreclosure rates from 75% in 2006 to 79% in 2007.[20]

It must be noted though that a possible positive impact of the crisis to be accrued over the medium to long-term, is the fact that increased investor scrutiny is likely to result in greater transparency and improvements in credit-rating process.

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[13] Schmuer, Charles and Carolyn Maloney (2008), "From Wall Street to Main Street: Understanding How the Crisis Affects You," Online Article, October 3, 2008, pg.5. Accessed January 15, 2009. [http://www.google.com/search?q=from+wall+street+to+main+street&rls=com.microsoft:*:IE-SearchBox&ie=UTF-8&oe=UTF-8&sourceid=ie7&rlz=1I7ADBR_en].

[14] Ibid, pg. 5.

[15] Ibid, pg.6.

[16] The world's largest manager of private wealth assets.

[17] USA's second largest bank

[18] This outcome is strongly linked to rapid withdrawals among money market investors. *See*, Schmuer, Charles and Carolyn Maloney (2008), "From Wall Street to Main Street: Understanding How the Crisis Affects You," Online Article, October 3, 2008, pg.5. Accessed January 15, 2009. [http://www.google.com/search?q=from+wall+street+to+main+street&rls=com.microsoft:*:IE-SearchBox&ie=UTF-8&oe=UTF-8&sourceid=ie7&rlz=1I7ADBR_en].

[19] Available from: The Economist, January 6 2009 "Booms and busts" http://www.economist.com/daily/chartgallery/displayStory.cfm?story_id=12811306&source=features_box4

[20] These foreclosure filings involve bank repossessions, default notices and auction sale notices which can all lead to multiple notices on the same property.

Additionally, over 65,400 jobs were lost in the US financial sector between August 2007 and August 2008. Across the US economy the number of unemployed persons increased by 851,000 to 12.5 million by February 2009, and the unemployment rate rose to 8.1 percent, an increase of 3.3 per cent over the last twelve months.[21]

The other sectors most heavily impacted by the financial crisis include the manufacturing, automobile and textiles industries. Exports from the manufacturing sector fell to its lowest level in 20 years in October 2008.[22] The automobile industry has been heavily hit by the global credit crunch, with three of the largest companies, General Motors, Ford and Chrysler, requiring support from the government to avoid bankruptcy.[23] The textile industry has also reported reduced output, which can have even more far-reaching implications since the US is a key importer of textiles from developing countries.[24] The IMF suggests that the sum result of all of these factors is a projected decline in US GDP by 2.6 per cent in 2009.[25]

Spin-Off Effects on Other Developed and Developing Economies

The current financial crisis has highlighted the interconnectedness of the world's economic system, as many financial institutions and real sector businesses outside of the US have been adversely impacted. In the effort to minimize such adverse impacts, a number of countries have spent millions of dollars through various stimulus initiatives. Stock markets have, however, continued to plummet, and commercial credit has contracted significantly across and between developed and developing countries.

The latest growth projection reported by the IMF indicates that for 2009 the global economy will contract by 1.3 percent but is expected to show improvement by 2010,

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[21] United States Department of Labour. 2009. Available from: http://www.bls.gov/news.release/empsit.nr0.htm Obtained March 27, 2009.

[22] Nanto, Dick et. al. (2008), "The US Financial Crisis: the Global Dimension with Implications for US policy," prepared by the Congressional Research Services (CRS) November 2008, pg. 59. Accessed January 15, 2009. [http://www.fas.org/sgp/crs/misc/RL34742.pdf]

[23] Gonzalez Garcia, Luisa Maria "Osvaldo Martinez: "The crisis is not an anomaly of capitalism" Obtained April 3, 2009. Available from:http://alainet.org/active/29506&lang=en

[24] "US import more garments and clothing from other developing nations in high volumes than any other country. Hence the financial crisis in the USA economy will have an impact on textiles import also which have dropped the market sentiments in overseas market since the last few months." Obtained April 3, 2009 Available from: http://www.fibre2fashion.com/industry-article/15/1493/financial-crisis-and-global-textile-industries1.asp

[25] See "IMF sees 'deep recessions' for advanced countries. March 19, 2009. Available from: http://www.france24.com/en/20090319-imf-sees-deep-recessions-advanced-countries-2009-g7-world-economy. Obtained April 9, 2009.

although with an overall growth forecast of zero per cent.[26] This follows projected growth rates of 4.1 per cent for 2008 and 4.8 per cent in 2007.[27] 2009 will also see noticeable changes in world trade figures as the IMF projects world trade volumes will contract by 11% but 2010 is expected to meager growth in trade volumes.[28]

Already many developed economies are in recession. Japan, for instance, is facing its worst meltdown since the 1970s oil crises and has the highest forecasted contraction of -6.2 percent for 2009. Other major economies are expected to experience negative growth by the end of 2009, including France (-3.0 percent), UK (- 4.1 percent) and the US (-2.8 percent).[29] Through the transmission mechanisms of reduced financing, low external demand and falling commodity prices, developing and emerging economies are also expected to experience negative growth rates. Projections are for an overall contracted growth for low-income economies of 3¼ percent for 2009.[30]

Slower growth will cause higher levels of unemployment in both developed and developing countries. World unemployment figures have skyrocketed, with the International Labour Organization (ILO) estimating that approximately 20 million people could be unemployed by the end of 2009.[31] Many developing countries will see a marked reduction in remittance inflows due to the higher rates of unemployment in developed countries, as earnings by migrants is expected to decrease.[32] Already

[26] The IMF also posits that "recovery in developing and emerging market countries will propel the world economy back into positive growth in 2010, albeit at a relatively weak level of 1.9%." (see Steve Schifferes. (2009) " Deeper' recession ahead says IMF". April 22, 2009. Available from: http://news.bbc.co.uk/1/hi/business/8011907.stm.

[27] http://www.imf.org/external/pubs/ft/weo/2008/update/01/

[28] See Steve Schifferes. (2009) " Deeper' recession ahead says IMF". April 22, 2009. Available from: http://news.bbc.co.uk/1/hi/business/8011907.stm.

[29] See Steve Schifferes. (2009) " Deeper' recession ahead says IMF". April 22, 2009. Available from: http://news.bbc.co.uk/1/hi/business/8011907.stm.

[30] International Monetary Fund 2009."The Implications of the Global Financial Crisis for Low-Income Countries. Available from: http://www.imf.org/external/pubs/ft/books/2009/globalfin/globalfin.pdf. Obtained April 9, 2009.

[31] Commission for Social Development 2009. Follow-up to the World Summit for Social Development and the twenty-fourth special session of the General Assembly: emerging issues: "The global crises and their impact on social development." http://www.un.org/esa/socdev/csd/2009/documents/crp2.pdf. February 22, 2009. In fact "the global slowdown in economic growth is expected to lead to significantly higher levels of unemployment. In major developed countries and export-oriented developing countries, unemployment is already on the rise as activities in finance, construction, automotive, manufacturing for export, tourism, services and real estate slow notably. The International Labour Organization (ILO) estimated that the number of unemployed could rise by 20 million, reaching 210 million women and men by the end of 2009."

Justin Yifu Lin "The Impact of the Financial Crisis on Developing Countries." October 2008. Korea Development Institute. Available from: http://74.125.47.132/search?q=cache:6V_4enLZtQQJ:crisistalk.worldbank.org/files/Oct_31_JustinLin_KDI_remarks.pdf+justin+yifu+lin+and+the+impact+of+the+financial+crisis+on+develo remittances have experienced a flat growth rate in 2008, with the IMF predicting negative growth for 2009.[33] The effect of the decrease in remittances will be felt most severely in developing countries, where remittances act as a buffer against poverty, and, in some countries, are the largest source of foreign exchange earnings.[34]

As the global financial crisis unfolds, developing countries will also face contractions in other major sources of foreign exchange, such as foreign direct investments (FDI), tourism, foreign aid and commodity exports. The UN World Tourism Organization (UNWTO), has predicted adverse effects for the global tourism industry, as the global financial crisis continues to cause decreased consumer demand.[35] As global credit tightens, the availability of foreign investments to developing economies will also decline, and even where available, the cost of such financial flows will increase, as investors become more risk averse.[36] Adverse effects on foreign aid to developing countries will also occur, because, as noted by the Overseas Development Institute, the global credit crunch has forced developed country governments to look inward and allocate funds to assist ailing sectors of their economies, while simultaneously reducing the assistance provided to low-income countries.[37] Finally, revenues from exports, particularly from developing country commodity exports, are also expected to decline. The IMF has reported a fall in world commodity prices due to reduced consumer demand in the advanced economies most severely affected by the crisis, such as the United States and Europe. Exporters with large shares of their market concentrated in these countries and commodities will therefore feel the immediate and severe impact of reduced prices and demand.[38]

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ping+countries&hl=en&ct=clnk&cd=1. Accordingly, "as labour markets slacken, foreign workers are likely to suffer disproportionate impacts on their earnings, which will reduce remittances."

[33] International Monetary Fund 2009."The Implications of the Global Financial Crisis for Low-Income Countries. Available from: http://www.imf.org/external/pubs/ft/books/2009/globalfin/globalfin.pdf. Obtained April 9, 2009.

[34] World Bank. 2008. "Global Financial Crisis and Implications for Developing Countries." http://www.worldbank.org/html/extdr/financialcrisis/pdf.

[35] See http://www.africapoint.net/general/global-tourism-feeling-effects-of-financial-crisis/. Obtained March 31, 2009.

[36] Justin Yifu Lin "The Impact of the Financial Crisis on Developing Countries." October 2008. Korea Development Institute. Available from: http://74.125.47.132/search?q=cache:6V_4enLZtQQJ:crisistalk.worldbank.org/files/Oct_31_JustinLin_KDI_remarks.pdf+justin+yifu+lin+and+the+impact+of+the+financial+crisis+on+developing+countries&hl=en&ct=clnk&cd=1.
"The crisis will deal a negative shock to investment in emerging markets....portfolio investment will fall, as greater risk aversion keeps capital closer to home." p. 10.

[37]See http://www.odi.org.uk/events/report.asp?id=329&title=credit-crunch-developing-countries-lessons-financial-regulation. Obtained March 27, 2009.

[38] Every country will be in some way impacted by the financial crisis as a result of global economic integration. The IMF, however suggests that some developing countries in Africa and other emerging economies, through restructuring of macro-economic policies, will be able to cushion the effects of the crisis, and thus sustain their growth rates at or above levels that have been obtained from past global downturns

Review of Jamaican Economic and Financial Indicators

Pre-US Crisis

A pre-crisis assessment of the Jamaican economy reveals modest growth performance throughout 2006. Real GDP growth was 2.7 percent in 2006 – more than double the amount for 2005 – with sectors such as Agriculture, Transport, Storage & Communication and Tourism registering the strongest overall growth performance (see Figure 1). This growth performance occurred against the background of an upsurge in hotel construction activities, and the preparations for Cricket World Cup 2007, both of which impacted favourably on the Construction & Installation Industry towards the end of the year. There were also positive performances in agricultural outputs of coffee,[39] cocoa and banana following the downturn of the previous year, which resulted from hurricane Ivan and drought conditions. Challenges such as shortages in supply of cement[40] and industrial unrest, however, negatively affected the performance of the Construction & Installation and the Mining & Quarrying sectors respectively, mainly over the first half of the year.[41]

Real GDP growth began to decelerate by 2007. Jamaica's growth in real GDP per capita fell to 1.4 percent at the end of 2007,[42] in spite of relatively strong performances in Transport, Storage & Communication, Finance & Insurance Services, Construction & Installation, Real Estate, Renting & Business Activities and Wholesale & Retail Trade (see Figure 1). The Mining & Quarrying sector performed poorly, evidenced by declining output which began in the second quarter of 2007 and continued throughout the year. This outcome was attributable to mechanical disruptions in June and the closure of the St. Ann Bauxite Company due to the onset of hurricane Dean in August.[43] The Tourism sector also experienced decline over the first half of the year, with a fall in stopover arrivals of 2.1 per cent in the first quarter and 4.7 per cent in the second quarter. By the end of 2007, however, there was an increase in stopover arrivals, which, *inter alia,* resulted in growth of 2.4 per cent and 3.7 per cent respectively, over the last two quarters of 2007.

(http://www.imf.org/external/pubs/ft/weo/2009/update/01/pdf/0109.pdf. Obtained March 27, 2009).

[39] Coffee production was at its highest third quarter output in eight years (PIOJ, Press Release November 2006 (http://www.pioj.gov.jm/Documents/Articles/9.pdf)..

[40] This led to a shutdown of some construction sites across the island, loss of jobs for construction workers and a downturn in the production of concrete and blocks.

[41] PIOJ, Quarterly Press Release 2006).(http://www.pioj.gov.jm/Documents/Articles/9.pdf).

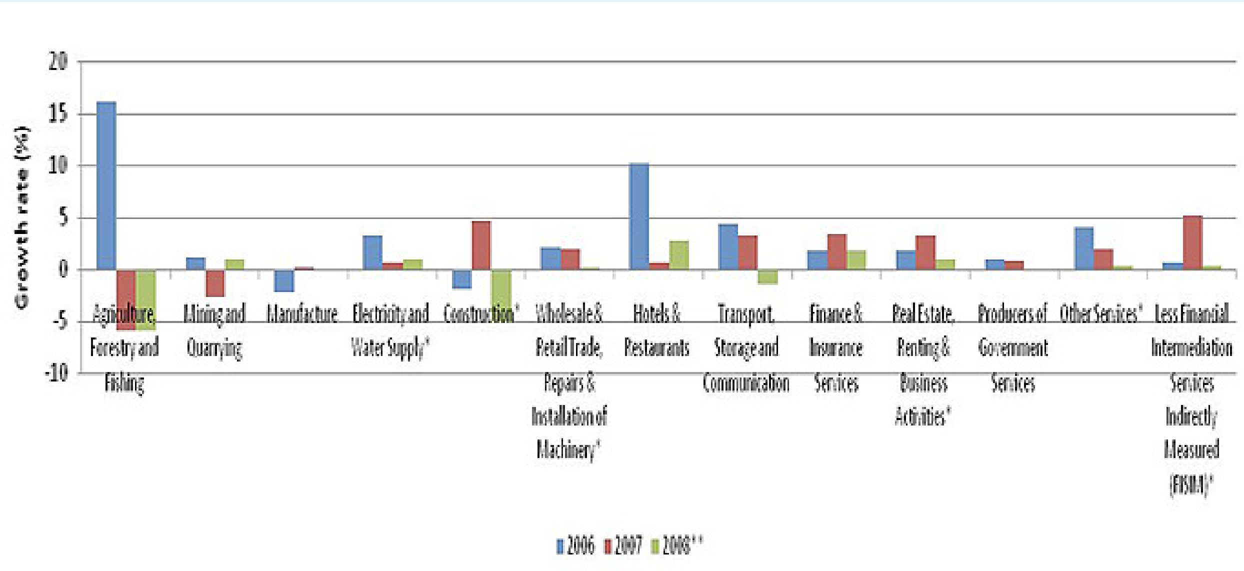
[42] The last quarter of 2007 showed GDP growth of 0.0 percent, relative to the corresponding quarter in 2006. (PIOJ, Press Release February 2008 (http://www.pioj.gov.jm/Documents/Articles/49.pdf). .

[43] The closure of the St. Ann Bauxite Company was said to have negatively impacted the total production of bauxite, which fell by 6.9%, reflecting a decline in crude bauxite production (down 5.3%). Alumina production also fell by 9.5%. (PIOJ, Press Release April and July 2007 (http://www.pioj.gov.jm/Documents/Articles/47.pdf). .

Labour market indicators suggested marginal improvement in the job market between 2006 and 2007. There was a marginal decrease in the unemployment rate between October 2006 and October 2007, although the rate of job-seeking also increased slightly over the same period (see Table 2 in Appendix).

FIGURE 1

Rate of Growth of Gross Domestic Product Value Added By Industry at Constant (2003) Prices



Developments in the capital market resulted in positive growth performances in the Finance and Insurance sector, especially in 2007. Expansion in loan activities primarily at commercial banks was an important contributory factor towards this positive outcome. Commercial banks and finance houses increased the amount of loans and advances issued between 2006 and 2007, even though there were small reductions in credit to a few sectors such as Agriculture and Mining (see Table 3 in Appendix). New mortgage loans issued by building societies also increased gradually throughout 2007 and peaked at approximately $5,468,510,000 by December of that year (Chart 1 in Appendix). In addition, outstanding loans owed to the credit unions increased steadily since 2005 (Chart 2 in Appendix). Higher net premium income in the insurance industry was another important factor contributing to the growth of the Finance and Insurance sector.[44]

[44] (PIOJ, Press Release 2007 (http://www.pioj.gov.jm/Documents/Articles/47.pdf).

The improvements in the real and financial sectors of the Jamaican economy occurred in a relatively stable but deteriorating macroeconomic environment. Throughout 2006, the exchange rate remained relatively stable and annual inflation fell to 5.7 per cent from 12.6 per cent in 2005. There was, however, relative volatility in the real exchange rate in the last three quarters of 2007, with a depreciation of 0.7 per cent in the second quarter, an appreciation of 1.0 per cent in the third quarter and an appreciation of 4.7 per cent in the last quarter of 2007. The onset of rising food prices and hurricane Dean precipitated increasing inflation rates towards the end of the year and an increase in the annual rate of inflation to 16.8 per cent.[45]

Economic Conditions in Jamaica (2008)

Preliminary data provided by the PIOJ indicated negative growth for the Jamaican economy of -0.6% at the end of 2008.[46] Between January and September 2008, there was a reduction in output from the agriculture, forestry & fishing, construction, and transport, storage & communication sectors, while output remained flat in the manufacturing, wholesale & retail trade, repairs & installation, producers of government services, and other services sectors. Only a few sectors recorded modest growth, including electricity & water supply, hotels & restaurants, finance & insurance services, and real estate, renting & business activities (see Figure 1).

As expected with a decline in GDP growth, labour market indicators reflected worsening conditions in the job market. The unemployment rate increased from 9.3 percent in October 2007 to 10.3 percent in October 2008, and the rate of job-seeking also increased from 5.9 percent to 6.3 percent.[47]

The macroeconomic deterioration exhibited at the end of 2007 continued into 2008. The annual inflation rate was again 16.8 percent, with projections of between 15%-17% for the 2008/2009 fiscal year.[48] The inflationary movements were primarily impacted by downward impulses such as reduced commodity and crude oil prices, and upward impulses including an increased demand for food and beverages and depreciation in the Jamaican dollar which partially offset the favourable contribution of imported prices to domestic prices.[49] There was also modest real exchange rate volatility throughout the year, with an appreciation of 3.3% in the first quarter, followed by further appreciations of 2.7%[50] and 3.7%[51] in the second and third quarters respectively, and a1.9% depreciation in the last quarter.

[45] Bank of Jamaica (2008). Statistical Digest Online accessed February 2009.
[46]See, http://www.pioj.gov.jm/Documents/Articles/70.pdf.)
[47] http://www.statinja.com/stats.html#3.
[48] BOJ, Statistical Digest December 2008, available at: http://www.boj.org.jm/uploads/pdf/stats_digest/stats_digest_dec2008.pdf
[49](PIOJ, Press Release 2008 (http://www.pioj.gov.jm/Documents/Articles/70.pdf.) and BOJ Quarterly Monetary Policy Report October-December 2008 (www.boj.org.jm/uploads/pdf/qmp_report/qmp_report_october_december2008.pdf)
[50] (PIOJ Press Release (http://www.pioj.gov.jm/Documents/Articles/55.pdf.)
[51] (PIOJ, Press Release 2008 (http://www.pioj.gov.jm/Documents/Articles/59.ppt.)

Developments in the capital market reflect variable conditions, with a slight contraction in credit from some sources and increases from others. Finance houses and building societies exhibited a reduction in loans and advances and the number of new mortgages offered, respectively. Commercial banks increased loans and advances to all sectors, while total loans outstanding by credit unions also increased slightly.

The country's economic outlook was revised from stable to negative by Standard and Poors, which cited the ongoing depreciation of the Jamaica currency and the country's enormous debt burden as reasons for the change.[52] This was followed by Moody's downgrade of the country's debt rating from B1 to B2, bringing it five levels below investment grade.[53]

Jamaican Businesses' Exposure To The US/Global Crisis

One of the most important questions on the minds of the government and people of Jamaica is the degree to which the Jamaican economy is vulnerable to the adverse effects of the global economic crisis. To answer this question, we assessed the degree of vulnerability of local businesses, by examining their exposure to direct and indirect threats to their operations, emanating from the crisis. Using a carefully designed survey instrument, which was administered to managers of a random sample of Jamaican businesses,[54] we highlighted and assessed the degree of exposure by rigorously interrogating the managers' experience, perceptions and expectations. Conformity of the managers' responses to theoretical and intuitive norms was examined and probable explanations for divergences are provided.

Direct Exposure - Deposits/Investments[55] in Foreign Financial Institutions

The failure of financial institutions in many countries following the sub-prime crisis could make it increasingly difficult for local businesses with deposits and investments in foreign financial institutions to access these funds, especially in the short-term. Businesses with foreign deposits and investments thus face *direct risks* to the global economic crisis, and even more so if these deposits and investments are in distressed financial institutions. The exposure would be exacerbated if such deposits and

[52] See "Standard and Poors lowers country's rating." October 2008. Available from: http://www.radiojamaica.com/content/view/12567/26/

[53] See "No surprise in JA downgrade to B2 by Moody – Chung". March 2009. Available from: http://www.radiojamaica.com/content/view/16049/52/.

[54] The random sample was stratified by business size and sector.

[55] In this context, investments are defined as bonds or other forms of financial instruments.

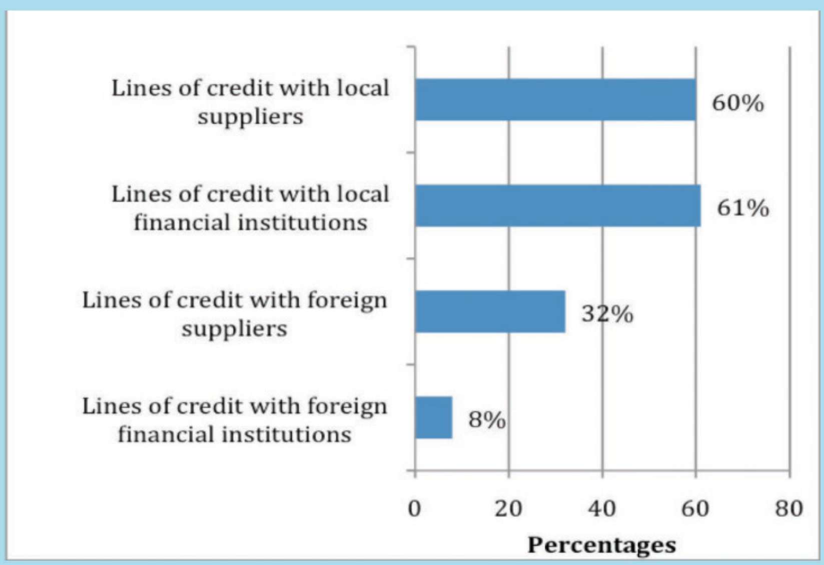
investments represent a significant proportion of their total deposits/investments, and/or are critical to the survival of their businesses.

The survey results indicate that only approximately 5% of all respondents had deposits or investments with financial institutions overseas. [56] These businesses were of all sizes (with two being *micro-businesses*, three *small*, five *medium* and two *large).*[57] The businesses were spread across five sectors (including *trade & distribution, manufacturing, social & personal services, finance and real estate & business services).*

The majority of these businesses had less than 10% of their total deposits/ investments in foreign financial institutions. That is, of the 10 businesses that were willing to provide information on the percentage of total deposits held outside of Jamaica, more than half of these investors [6] said their deposits represent less than 10 per cent of total deposits and investments.[58] Two businesses *(one large and one small, from the trade & distribution and manufacturing sectors)* had deposits in foreign financial institutions worth a little over 50% of total deposits and investments; another business from the *trade & distribution* sector had between 80% and 89% of its deposits/investments in foreign institutions, while only one *micro-business* respondent from the *real estate & business services sector* said the value of the deposits in these institutions is worth over 90% of its total deposits and investments.

FIGURE 2

Proportion of Respondents with Lines of Credit with Local and Foreign Creditors and Suppliers



Also noteworthy is the fact that of the 13 businesses with deposits/investments in foreign financial institutions, the majority of them (7 of 13) indicated that these deposits and investments are not important to the liquidity of their businesses and that they can easily

[56] This accounts for 13 of the 285 businesses surveyed
[57] The other institution was not classified.
[58]These businesses were from the financial [3], social and personal services [1], trade/distribution [1] and manufacturing [1] sectors, and were predominantly medium-sized entities....

survive without them.[59] Most of these businesses (8 in 13) also noted that they have not experienced reduced access to such funds since the start of the crisis, neither have they seen any change in interest rates.[60]

Not surprisingly, further probing about the degree of exposure to *distressed* foreign financial institutions, revealed that only four businesses had deposits/investments in such institutions. The ratio of deposits/investments in distressed foreign institutions to total deposits/investments for three of these businesses was less than 10%.[61] Only one business (from the *trade & distribution sector)* had deposits/ investments in distressed foreign institutions worth over 90% of its total deposits/investments.

Indirect Exposure - Lines of Credit (Foreign versus Local Creditors and Suppliers)

Although, as shown above, direct exposure to the global financial crisis may be low, threats to Jamaican businesses may also come in the form of reduced access to, or more stringent terms of credit, due to the global credit crunch. If Jamaican businesses cannot access credit on good terms for either working capital or medium to long-term investment purposes, their survival may be affected.

Vulnerability to such exposure can be first assessed by examining and ranking different sources of credit. In this study, credit was broadly classified as being sourced from foreign financial institutions, foreign suppliers, local financial institutions and local suppliers. Because the crisis began overseas, and because local financial institutions have, to date, been spared the worst effects, we argue that exposure to the crisis is more likely to emanate from foreign lines of credit – first from foreign financial institutions, followed closely by exposure through foreign suppliers. The relative importance of such lines of credit to business operations must therefore be carefully examined.

We, however, do not argue that lines of credit sourced locally are risk-free. All lines of credit can be affected in a global credit crunch. To account for this, our assessment also examines whether the terms and conditions of all the respective lines of credit have changed since July 2008, or are expected to change in the medium to long term, as the American government and global economy continues to adjust to the crisis.

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[59] It is important to note that three of the businesses which regard their deposits and investments as important to the liquidity of their business were from the trade/distribution sector.

[60] This means that only 3 of the 13 businesses which have deposits and investments overseas have experienced difficulties accessing their funds since the start of the crisis and this same number of respondents have seen a reduction in interest rates on these investments.

[61] Two of these businesses are from the financial sector and the other is from the trade/distribution sector.

Lines of Credit with Foreign Financial Institutions and Suppliers:

Degree of Reliance

The results indicate that only 8% [24] of the businesses surveyed have existing lines of credit with foreign financial institutions (see Figure 2), suggesting a low degree of indirect exposure from this source. It must be noted, however, that even though few businesses are affected, those which are, seem to be heavily exposed, with more than three-quarters of these businesses indicating that even though they can survive without the lines of credit from foreign financial institutions, such credit sources were important to their business operations.[62]

Attempts to identify the types of business most heavily impacted, revealed that businesses of all sizes and in most sectors had lines of credit with foreign financial institutions. The distribution by size was as follows: 1 of the respondents was a micro-business [which represented 1% of all the micro-businesses surveyed); 6 were small [representing 6% of the total number of small businesses surveyed]; 9 were medium-sized [14% of medium-sized businesses]; and 4 were large [33% of the large companies surveyed]. No businesses in the agriculture, construction & installation and gas, electricity & water sectors had lines of credit with foreign financial institutions. The 24 businesses were thus distributed as follows: 11 from trade & distribution [representing 11% of the businesses surveyed from this sector]; 1 from mining [representing 50% of the two mining companies surveyed]; 4 from manufacturing [8% of manufacturing companies surveyed]; 1 from social & personal services [6.7%]; 3 from the financial services sector [23%]; 2 from transportation, storage & communication [12%]; 1 from tourism [4%]; and 1 from real estate & business services [3%].

Exposure by virtue of having lines of credit with foreign suppliers is potentially much greater, as Figure 2 indicates that the number of respondents with such lines of credit is four times larger than those with credit from foreign financial institutions. Almost a third [32%, representing 92 companies] of all the businesses surveyed have lines of credit with foreign suppliers, and more than half [50] these businesses considered these lines of credit to be so critical to the solvency of their business that they cannot survive without them.

The types of business most vulnerable to exposure through lines of credit with foreign suppliers tended to be medium-sized firms from the manufacturing and trade &

[62] A little less than a half of these businesses [11] have reported that their lines of credit with foreign financial institutions are critical to the solvency of their businesses and they cannot survive without it, while just over a quarter of them [7] said that these lines of credit are very important.

distribution sectors. This is evidenced by the fact that 59% [37] of all medium-sized enterprises surveyed had lines of credit with foreign suppliers, which was followed most closely by small businesses, 28% [28] of which had similar lines of credit. Whereas there was only slight variation in the proportion of respondents from each sector which had lines of credit with foreign suppliers, the exceptions to this rule were the manufacturing sector, with 59% [30] of all firms surveyed from this sector indicating exposure, and the trade & distribution sector with 34% [34] of businesses from this sector responding similarly.

Changes in Conditions Already Experienced

As indicated in Figures 3-6, the risk of exposure to the global crisis by virtue of having lines of credit with foreign financial institutions has to date not produced adverse effects in the majority of businesses with such lines of credit. This is because considerably more than half of the respondents with such lines of credit have not yet experienced worsened terms and conditions.

54.2% [13] of the businesses with lines of credit from foreign financial institutions reported no change in the maturity of such loans, while 25% [6] reported decreases in maturity;

50% [12] of these businesses indicated no change in the cost of credit, while 29% [7] reported increases or large increases;

45.8% [11] reported no change in the availability of credit; while 40% [10] indicated decreases or large decreases; and

58.3% [14] indicated no change in the size of loans; while 12.5% [3] reported decreases.[63]

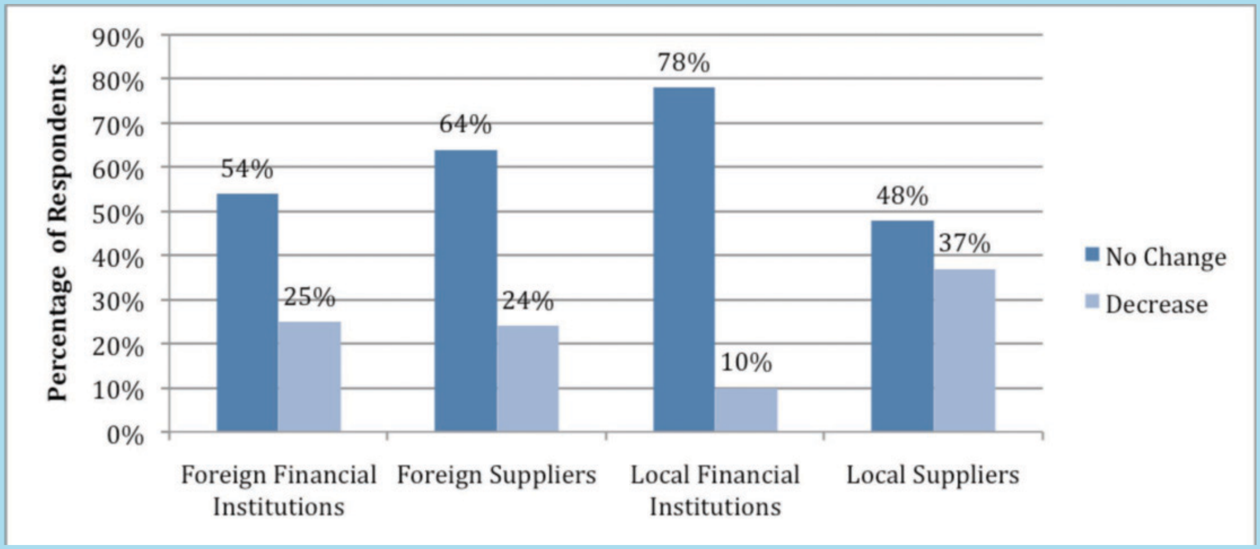
[63] The sectoral and size breakdown of the businesses with lines of credit from foreign financial institutions experiencing worsening loan conditions is provided below.

- Decreased maturity of loans particularly experienced by 45% [5] respondents from *trade/distribution* and 50% [1] from *transportation, storage & communication* and over a quarter of *small to large businesses* have also had this experience.
- Increased interest rate, experienced by 27% [3] from *trade/distribution*, 100% [1] from *social & personal services*, 33% [1] from the *financial services sector,* 50% [1] from *transportation, storage & communication*, 33% [3] from *medium-sized businesses* and 50% [2] *large businesses.*
- Decreased availability of loans, particularly for 36% [4] from *trade/distribution*, 75%[63] [3] from *manufacturing*, 33% [1] from the *financial sector,* 50% [1] from *transportation, storage & communication* and 17% [1] from *small businesses*, 56% [5] from *medium-sized* and 50% [2] from *large businesses.*
- Decreased size of loan, experienced by 18% [2] from *trade/distribution, 33% [1] from financial sector and 33% [3] medium-sized enterprises.*

This argument is even stronger for lines of credit from foreign suppliers, as approximately 60% of respondents with such lines of credit have to date experienced no change in the maturity, cost, availability and size of loans.

FIGURE 3

Changes in Conditions Already Experienced with Lines of Credit – Maturity of Loans



64% [59] of the businesses with lines of credit from foreign suppliers reported no change in the maturity of such loans, while 24% [22] reported decreases or large decreases in maturity;

65.2% [60] of these businesses indicated no change in the cost of credit, while 20.7% [19] reported increases or large increases;

58.7% [54] reported no change in the availability of credit; while 36% [33] indicated decreases or large decreases; and

57.6% [53] indicated no change in the size of loans; while 19.5% [18] reported decreases.[64]

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[64] The sectoral and size breakdown of the businesses with lines of credit from foreign suppliers experiencing worsening loan conditions is provided below.

- Decreased maturity of loans, experienced mainly by 21% [7] from *trade/distribution, 27% [8] from manufacturing, 25% [1] from construction & installation* and *20% [1] from transportation, storage & communication.* Also, 33% [1] from *agriculture* and 25% [1] from c*onstruction & installation* have witnesses a large decrease in the maturity of their loans.
- Increased interest rates, particularly 21% [7] from *trade/distribution, 27% [8] from manufacturing, 25% [1] from construction & installation, 50% [1] from social & personal services* and *50% [1] from financial services* - 33% [1] from *agriculture* have experienced a large increase in interest rates.

FIGURE 4:

Changes in Conditions Already Experienced with Lines of Credit – Cost of Loans

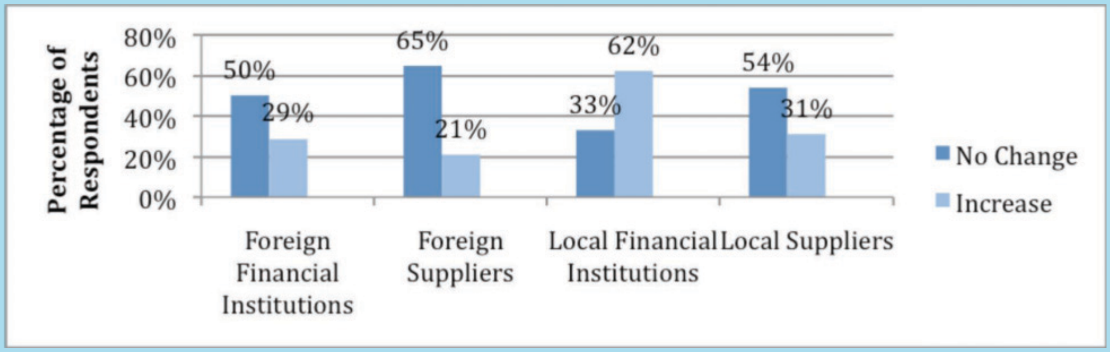
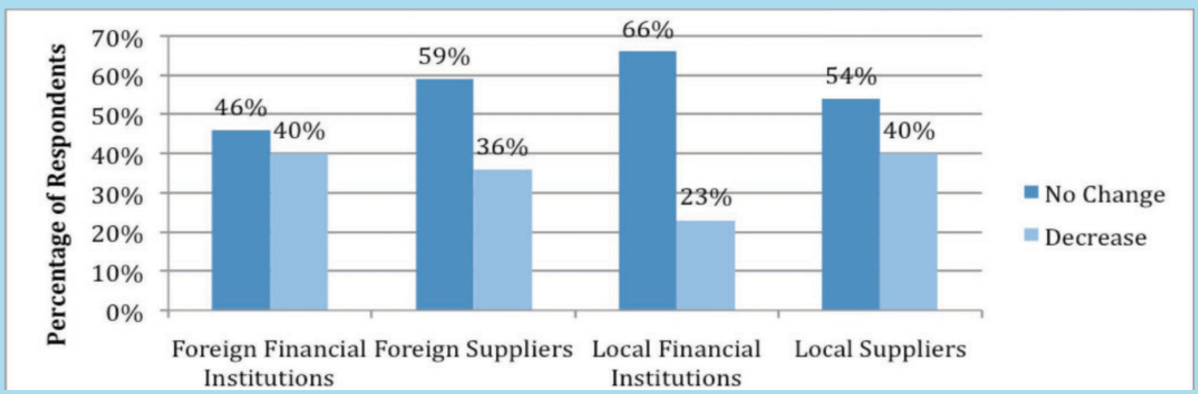


FIGURE 5:

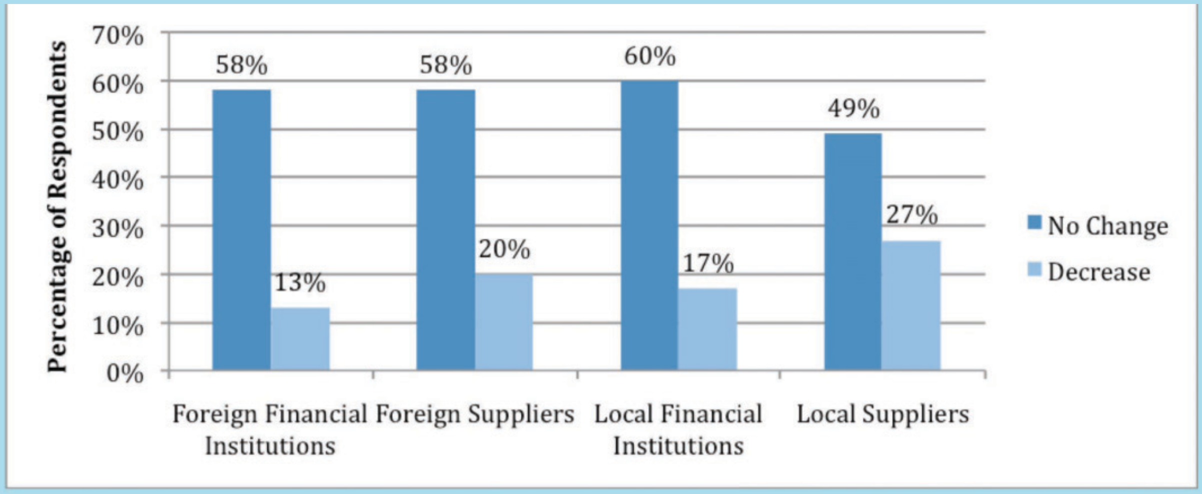
Changes in Conditions Already Experienced with Lines of Credit – Availability of Credit



- Decreased availability of credit, experienced by *33% [1] from agriculture, 27% [9] from trade/distribution, 43% [13] from manufacturing* and *20% [1] from transportation, storage & communication.* Large decrease was also experienced by *33% [1] from agriculture, 25% [1] from construction & installation* and *50% [1] from social &personal services.*
- Decreased size of loans, experienced by *33% [1] agriculture, 18% [6] from transportation, storage & communication, 17% [5] from manufacturing, 25% [1] construction & installation and 17% [1] from real estate or business services.* In addition, *3% [1]* of the respondents with these lines of credit from *trade/distribution* have seen a large decrease, so did *7% [2] from manufacturing and 25% [1] from construction & installation.*

FIGURE 6:

Changes in Conditions Already Experienced with Lines of Credit – Size of Loans



Expectations of Future Conditions

Figures 7-10 indicate that the majority of respondents with lines of credit from foreign financial institutions expect the terms and conditions of those loans to worsen in the medium to long term, as the American government and global economy continue to adjust to the crisis.

50% [12] of the businesses with lines of credit from foreign financial institutions expect either decreases or large decreases in the maturity of such loans,[65] while 41.7% [10] expect no changes in maturity;

54% [13] of these businesses expect increases or large increases in the cost of credit,[66] while 33% [8] expect no change;

54% [13] expect decreases or large decreases in the availability of credit,[67] while 45.8% [11] expect no change; and

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[65] This expectation was spread across the sectors, with the exception of the *mining, transportation, storage & communication, tourism and real estate or business services sectors, wherein no businesses indicated an expected decrease..*

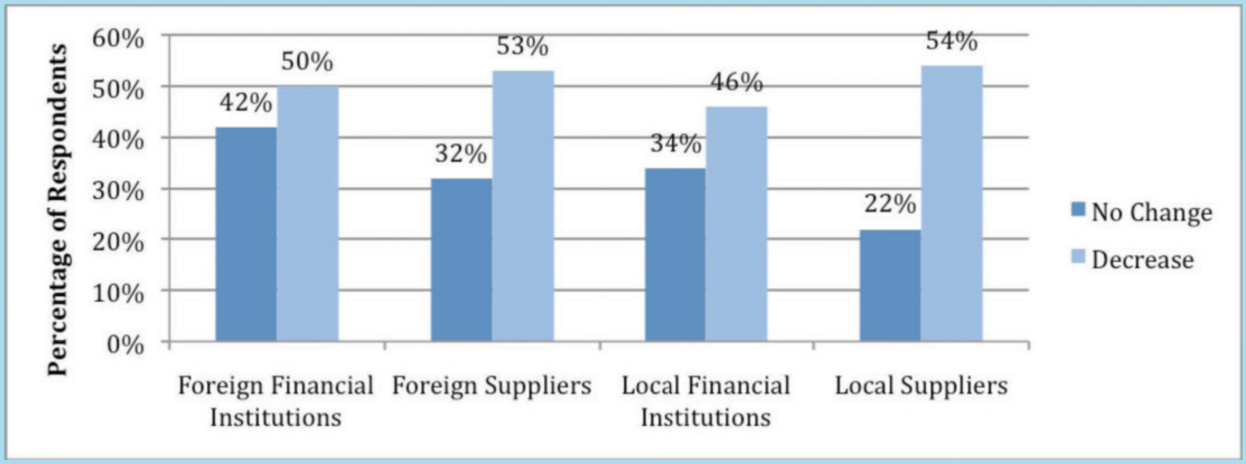
[66] This expectation was spread across the sectors, with the exception of the *socialor personal , transportation, storage & communication* and *tourism sectors, wherein no businesses indicated an expected increase.*

[67] This expectation was spread across the sectors, with the exception of the mining, social & personal services and transportation, storage & communication *sectors, wherein no businesses indicated an expected decrease.*

41.7% [10] expect a decrease in the size of loans,[68] while 33% [8] expect no change.

FIGURE 7:

Changes in Conditions Already Experienced with Lines of Credit – Maturity of Loans



Respondents with lines of credit from foreign suppliers are more ambivalent with regards to their expectations about the future terms and conditions to be associated with these loans. Generally though, a larger proportion of the respondents expect worsening conditions than those who expect conditions to remain the same.

53.2% [49] of the businesses with lines of credit from foreign suppliers expect either decreases or large decreases in the maturity of such loans,[69] while 32% [29] expect no changes in maturity;

39% [36] of these businesses expect increases or large increases in the cost of credit,[70] while 33% [30] expect no change;

58.7% [54] expect decreases or large decreases in the availability of credit,[71] while 29.3% [27] expect no change; and

[68] This expectation was spread across the sectors, with the exception of the *mining, social & personal services, financial services* and *transportation, storage & communication, wherein no businesses indicated an expected decrease.*

[69] This expectation was spread across the sectors, with the exception of the social & personal services *sector, wherein no businesses indicated an expected decrease.*

[70]This expectation was spread across the sectors, with the exception of the agriculture *sector, wherein no businesses indicated an expected increase.*

[71] This expectation was spread across the sectors, with the exception of the social & personal services *sector, wherein no businesses indicated an expected decrease.*

41.3% [38] expect decreases or large decreases in the size of loans,[72] while 27% [25] expect no change.

Figure 8:

Expected Changes in Conditions with Lines of Credit – Cost of Credit

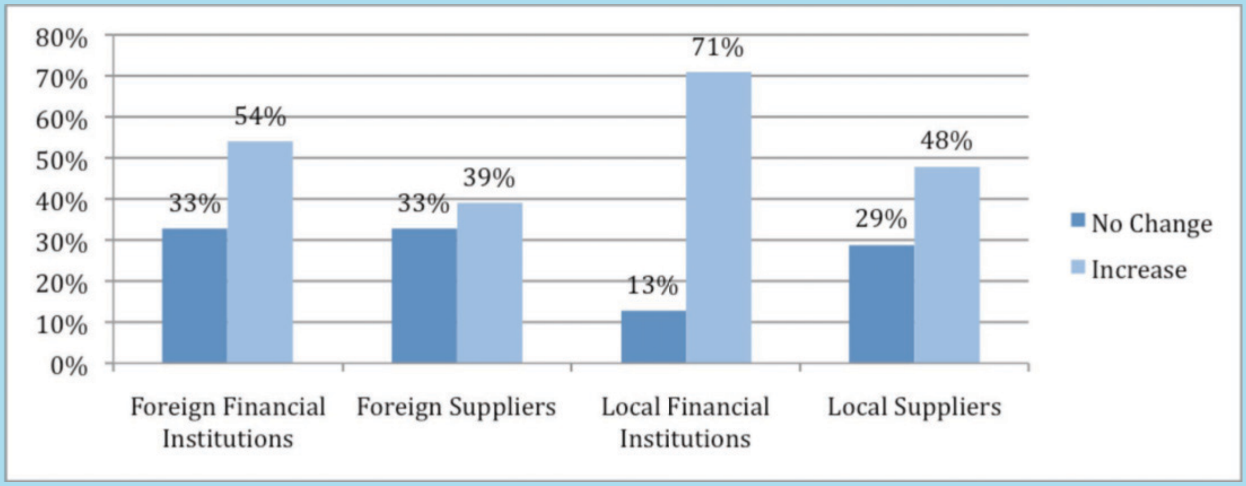
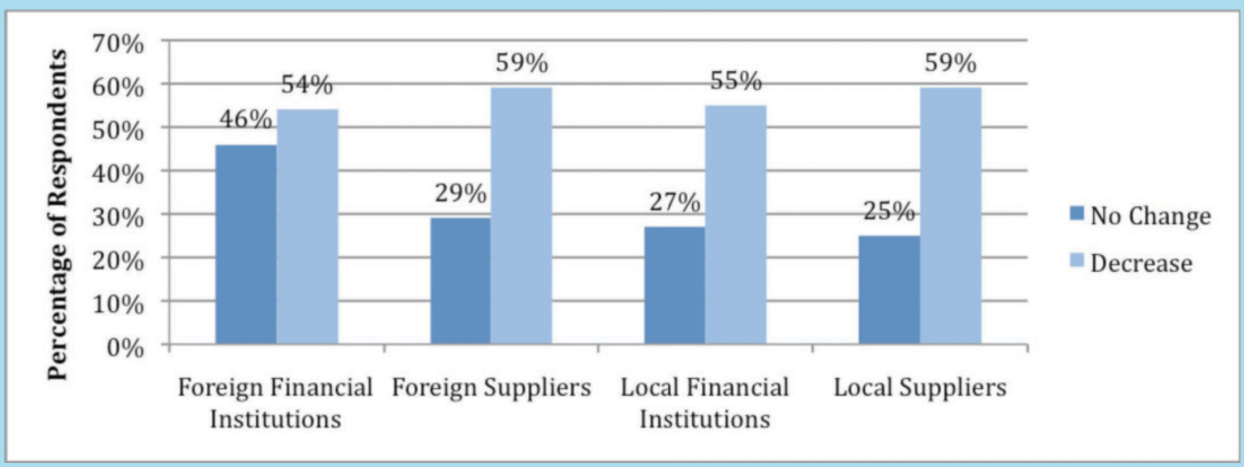


Figure 9:

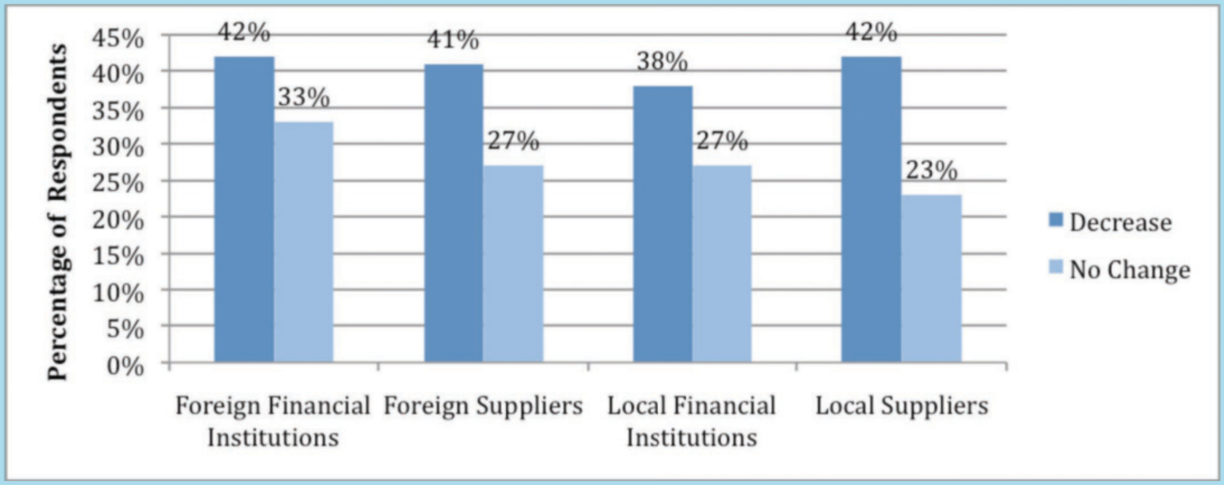
Expected Changes in Conditions with Lines of Credit – Availability of Credit



[72] This expectation was spread across the sectors, with the exception of the *agriculture, mining and social & personal services sectors, wherein no businesses indicated an expected decrease.*

FIGURE 10:

Expected Changes in Conditions with Lines of Credit – Size of Loans



LINES OF CREDIT WITH LOCAL CREDITORS AND SUPPLIERS

Degree of Reliance

Jamaican businesses do not rely very heavily on foreign sources of credit because most of their credit is sourced locally. Almost two-thirds of the businesses surveyed [61%, representing 173 businesses] have lines of credit with local financial institutions. Almost all of the respondents viewed these lines of credit as important to their business operations, with 41% [70] indicating that they are essential to the survival of their business; 32% [55] noting that they are very important; and 22% [38] indicating that they are important.

Large businesses tended to be most heavily reliant on credit from local financial institutions, with 92% [11] of all large businesses surveyed having such lines of credit. Considerably smaller proportions of micro [48%], small [65%] and medium-sized entities [65%] had similar lines of credit,[73] confirming the perennial problem faced by MSMEs in accessing credit from formal financial institutions.

The sectoral distribution of businesses with lines of credit from local financial institutions was fairly even. Close to two-thirds of the respondents from the trade & distribution (67% [67]), manufacturing (69% [35]), construction & installation (78% [14]), social & personal services (60% [9]), and gas, electricity & water (67% [2]) sectors had such lines of credit. Agriculture (43% [6]), mining (50% [1]), financial services 54%

[73] Representing 41, 64 and 41 businesses, respectively.

[7]), transportation, storage & communication (59% [10]), tourism (39.1% [9]) and real estate & business services (45% [13]), all had close to half of the total number of businesses surveyed in the respective sectors with such lines of credit. The few remaining sectors had a much smaller proportion of respondents with these credit arrangements.

The degree of reliance on credit from local suppliers is similarly high. Approximately two-thirds of all the businesses surveyed have lines of credit with local suppliers (see Figure 2). Also, about 90% of the respondents with such lines of credit indicated that these credit arrangements are critical to their business operations.

The distribution by size reflects a similar distribution as for credit from local financial institutions, with the proportion of businesses with lines of credit from local suppliers decreasing with the size of the firm (large 91.7%, medium 71.4%, small 56.6% and micro 48.2%).[74] The distribution by sector indicates only slight variations in the proportion of respondents from each sector with these credit arrangements, with the only exception being the *financial services sector* for which only 15% of the respondents had lines of credit with local suppliers.

Changes in Conditions Already Experienced

Although a high degree of reliance on local credit in the current context is viewed as being less of a threat than similar reliance on foreign credit, the terms associated with such loans must be carefully examined to ascertain whether increasingly stringent conditions are being applied, or whether more stability is being experienced in the local market.

With respect to lines of credit from local financial institutions, the following results were derived:

- 78% [135] of the businesses with lines of credit from local financial institutions reported no change in the maturity of such loans,[75] while 10.4% [18] reported decreases in maturity;
- 33% [57] of these businesses indicated no change in the cost of credit, while 61.5% [108] reported increases or large increases;[76]

[74] Representing 11, 45, 56 and 41 businesses, respectively.
[75] There were only slight variations among sectors and categories of sizes.
[76] These increases have affected mostly businesses from *agriculture, trade/distribution, manufacturing, construction & installation, transportation, storage & communication as well as micro, small and medium businesses*

- 66% [114] reported no change in the availability of credit;[77] while 23% [40] indicated decreases or large decreases; and
- 60% [104] indicated no change in the size of loans;[78] while 16.7% [29] reported decreases or large decreases.[79]

The results indicate that the conditions associated with credit from local financial institutions have been relatively stable, as for all but one variable, most respondents indicated that they experienced no changes. The cost of credit was the exception, with almost two-thirds of the respondents noting increases or large increases. This result conforms to macroeconomic trends in Jamaica, as the central bank increased interest rates in an effort to protect the Jamaican dollar, which was depreciating as a result of increased demand for US dollars.

There was more variability in respondents' experiences with the terms and conditions associated with lines of credit from local suppliers.

47.6% [81] of the businesses with lines of credit from local suppliers reported no change in the maturity of such loans, while 37% [63] reported decreases in maturity;[80]

54% [92] of these businesses indicated no change in the cost of credit, while 30.6% [52] reported increases or large increases;[81]

54% [92] reported no change in the availability of credit; while 40% [68] indicated decreases or large decreases;[82] and

49% [83] indicated no change in the size of loans; while 27% [46] reported decreases of large decreases.[83]

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[77] From all sectors and categories of size
[78] Including businesses across all sectors and categories of size
[79] Businesses in the *financial services, transportation, storage & communications and tourism sectors seemed to be particularly affected.*
[80] Between 30% and 57% of respondents belonging to sectors such as *agriculture, mining, manufacturing, construction and installation, social and personal services, gas, electricity and water* and especially *small businesses* have already experienced a reduction in the length of credit offered by local suppliers
[81] Businesses particularly from *trade/distribution, real estate/business services, gas, electricity & water and medium-sized enterprises* experienced these increases.
[82] Sectors such as *mining, manufacturing, construction & installation and tourism* seem to have encountered particular difficulties accessing credit.
[83] Businesses in sectors such as *mining, construction & installation, social & personal services, tourism and real estate/business services and gas, electricity & water* experienced such decreases.

In all cases, the difference between the proportion of respondents highlighting no change in conditions, and those indicating a worsening of conditions was relatively small. This indicates that suppliers have not adopted a standard approach in adjusting (or not adjusting) to the conditions associated with their respective lines of credit in response to the crisis.

Expectations of Future Conditions

Jamaican businesses largely expect that the terms and conditions of local lines of credit will worsen in the medium to long run, as the global crisis runs its course.

The expectations regarding lines of credit from local financial institutions are as follows:

- 46.2% [80] of the businesses with lines of credit from local financial institutions expect either decreases or large decreases in the maturity of such loans, while 33.5% [58] expect no changes in maturity;
- 70.5% [122] of these businesses expect increases or large increases in the cost of credit, while 12.7% [22] expect no change;
- 55% [95] expect decreases or large decreases in the availability of credit, while 26.6% [46] expect no change; and
- 37.6% [65] expect a decrease in the size of loans, while 26.6% [46] expect no change.[84]

The cost and availability of credit are clearly expected to worsen. There is, however, more ambivalence surrounding expectations for the maturity and size of loans from local financial institutions.

As indicated below, there is no such ambivalence with regards to conditions associated with lines of credit from local suppliers:

- 54% [92] of the businesses with lines of credit from local suppliers expect either decreases or large decreases in the maturity of such loans, while 22% [37] expect no changes in maturity;
- 48.3% [82] of these businesses expect increases or large increases in the cost of credit, while 29.4% [50] expect no change;

[84] With very few exceptions, there is little variation in the results for all the conditions across sectors.

- 59.4% [101] expect decreases or large decreases in the availability of credit, while 24.7% [42] expect no change; and
- 42.3% [72] expect decreases or large decreases in the size of loans, while 23% [39] expect no change.[85]

The majority of respondents expect the maturity and cost of credit from local suppliers to worsen. While less than half of the respondents expect worsening of cost and size of such credit, these respondents nonetheless significantly outnumber those expecting no change.

Other Channels of Indirect Exposure

The previous sections examined the exposure of Jamaican businesses to the global crisis through various financial channels. It was found that direct exposure through deposits and investments in foreign financial institutions was limited. Indirect exposure through lines of credit from foreign financial institutions and suppliers was also small, as Jamaican businesses did not rely heavily on credit from foreign financial institutions. Also, even though credit from foreign suppliers was important to medium-sized firms from the manufacturing and trade & distribution sectors, worsening of conditions for such credit lines had not yet been experienced. Expectations, though, were generally negative, with more stringent borrowing conditions expected in the medium to long term, as the global crisis is prolonged.

The greater reliance on local sources of credit does not, however, imply that there is no exposure to the global crisis, as although credit from local financial institutions has been relatively stable, increased interest rates has heightened the cost of credit. The terms of credit from local suppliers seems to have exhibited more variability, but a small majority of respondents in most instances indicated that they experienced no changes since the crisis. Expectations for local sources of credit in the medium to long term were, however, also negative, with local financial institutions clearly expected to reduce the availability of credit, local suppliers expected to decrease the length of loans offered, and both expected to increase the cost of credit.

Having identified these avenues of exposure through financial channels, we must also be careful not to overlook the real sector economic impacts of the crisis. Many developed and developing countries are in recession, and as such are importing less. Reduced demand for Jamaican exports can in turn lead to the reduction in the quantity and price of goods and services sold/offered by Jamaican businesses. These are indirect but very tangible sources of exposure to the crisis that must also be explored.

[85] With very few exceptions, there is little variation in the results for all the conditions across sectors.

The degree of exposure to the crisis through these channels is assessed by first examining the extent to which the revenue of Jamaican businesses is dependent on the sale of goods, provision of services and earnings from investment instruments in overseas markets or on categories of clients viewed as particularly vulnerable to the adverse effects of the global crisis.

Our assessment also examines whether the quantities and prices of foreign and local outputs from and inputs to the production processes of Jamaican businesses have changed since July 2008, or are expected to change in the medium to long term, as the American government and global economy continue to adjust to the crisis.

Location of markets

Most (85.6%) of the businesses surveyed have over 90% of their total market located in Jamaica. This indicates very little diversification across markets, but in the current environment also suggests limited exposure to recessions in other countries. Over 90% of businesses only had 0-9% of their total market in each of the following countries: USA, UK, Canada, the Caribbean, Latin America, Asia and Africa.

Attempts to identify the types of business most vulnerable by virtue of the location of their markets revealed that *medium-sized* and *large businesses* are more vulnerable to changes in the external demand for their goods and services, with over 40% of these businesses having up to 60% of their markets in foreign countries.[86] Small and micro-businesses are less vulnerable in this respect, with only a few businesses having relatively small proportions of their markets overseas.[87]

The results also confirm the expected relatively high degree of vulnerability of the tourism sector to potential decreases in demand from overseas markets. Almost two-thirds [60%, representing 14 firms] of the respondents from this sector have between

[86] 45% [28] of *medium businesses* have between 10% and 49% of their markets in either Latin America, the Caribbean region, Canada, UK and the USA and 2% [1] of them have a little more than 60% of their market in the UK; and
41% [5] of *large businesses* have 10% to 29% of their markets in either Latin America, the Caribbean region, the UK and the US.

[87] 20% [20] of *small businesses* have 10%-39% of their markets in either the Latin America region, Caribbean region, UK, Canada or the US, 1% [1] had between 80% and 89% of its market in the UK and 2% [2] of them have between 80% and 89% of their markets in US or the UK; and 5% [5] of *micro-businesses* have between 10% and 19% of their markets overseas (in either Asia, Latin America, Caribbean, Canada or UK) another 1% [1] has over 90% of its market in the US and 2% [2] have a little more than 50% of its markets in the US.

10% and 19% of their markets in either Asia, Latin America, the Caribbean region, Canada, the UK and the US; another 17% [4] have between 20% and 29% of their markets in Canada, the UK and the US; and a further 38% [9] from the sector have 30% to 79% of their market in the US. At the other end of the spectrum, c*onstruction & installation* and *financial services* are the only sectors which have less than 10% of their total market overseas.[88]

Sources of revenue

In this study we broadly classified businesses' sources of revenue as including earnings from investments in local and foreign financial instruments, sale of goods in local and foreign markets, as well as the provision of services both locally and internationally. The global crisis is expected to have differential impacts on each of these revenue sources, with all revenue sources from overseas viewed as more exposed than their local counterparts, and with earnings from financial instruments being viewed as more vulnerable than either the sale of goods or the provision of services.

Earnings from investment in foreign financial instruments represent less than 10 per cent of total revenue for 96.5% [274] of the businesses surveyed (see figure 11a & b). This indicates a low degree of exposure through this avenue. There was no evidence to suggest that any particular type of business was more or less vulnerable to exposure from investments in foreign financial instruments, as there was very little variation across sectors or size of business.[89]

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[88] The market distribution for other sectors is summarized below:

- 60% [10] of the respondents from *transportation, storage & communication* have 10% to 39% of their markets in Asia, Latin America, the Caribbean region, the UK and the US.
- 2% [2] of the respondents from *trade/distribution* have between 80% and 89% of their markets in Asia and the US and 7% [7] of them have between 10% and 29% of their markets in Latin America, the Caribbean, the UK and the US.
- 7% [1] of the businesses from *agriculture* have between 10% and 19% of its market in the Caribbean and another 7% [1] has 50% to 59% of its market in the US.
- 24% [12] of the businesses from *manufacturing* have 10% to 39% of their markets in the Caribbean, Canada and the US, while 6% [3] of them have 40% to 79% of their markets in the UK and the Caribbean.
- 14% [2] of the respondents from *social & personal services* have up to 49% of their businesses in the Caribbean and the US.
- 6% [2] of the respondents from *real estate & business services* have 10% to 19% of their markets in the Caribbean and the UK and another 3% [1] has 40%-49% of its market in the US.
- 50% [1] of the *mining* companies has between 80% and 89% of its markets in the UK.

[89] Over 80% of the respondents from *construction & installation, trade/distribution, , social & personal services, tourism, manufacturing and real estate or business services earned less than 10% of their revenues from this source.* A smaller proportion of respondents from *mining (50% [1]) financial services and gas, electricity & water (67%)* earn this same amount of their revenue from investments in foreign financial instruments.[89] Respondents from a*griculture, transportation, storage & communication*, do not earn any revenues from investments in foreign instruments. Similarly, all the *micro-businesses* surveyed earned less than 10 per cent of their revenue from foreign investments and 95% of *small and medium-sized enterprises* generate this amount of revenue from foreign investments ---the remaining 5% of them earn between 10% and 49% of their revenue from foreign investments. Most (92%) *large businesses* surveyed

The sale of goods in foreign markets represents less than 10 per cent of total revenue for 88% [250] of the businesses surveyed, and between 10% and 19% for an additional 5% [14] of the businesses. This indicates a low degree of exposure to declining consumer demand in numerous markets overseas. The lack of significant variation across sectors or size of business again indicates that there were no particular types of business that were more or less vulnerable to exposure from this avenue.[90]

The provision of services in foreign markets represents less than 10 per cent of total revenue for 91.2% [259] of the businesses surveyed -- suggesting a low degree of exposure. There was no indication of unique vulnerability of businesses of any size or sector, with the expected exception of the tourism sector, which has 41% of the respondents generating up to 90% of their revenues from services in overseas markets, and the remaining 59% earning less than 10 per cent of revenues from this source. Businesses in the *transportation, storage & communication* sector were also exposed in this regard, as 43% of the respondents from this sector generate up to 90% of revenue from services overseas. The remaining 57% of respondents from this sector earn less than 10% of revenue from services in foreign markets.[91]

Earnings from investment in local financial instruments represent less than 10 per cent of the total revenue for 95.1% [270] of the businesses surveyed, and between 10% and 19% for an additional 2.8% [8] of the businesses. This includes respondents from all sectors and sizes, with very little variation.

Sale of goods in local markets generates more than 90 per cent of revenue for 47.2% [134] of businesses surveyed; and, on the other extreme, less than 10 per cent of revenue for 27.1% [77] of businesses. The classification of these responses by sector yields very few unexpected results, with both of the respondents from the mining sector[100%], 92% of the respondents from *financial services* and 70% of the respondents from *tourism* generating less than 10 per cent of their revenue from selling goods in Jamaica, and 60% -70% of the respondents from *agriculture, trade & distribution, manufacturing* and *gas, electricity & water sectors* earning over 90 per cent of revenue from sale of goods in local markets.

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generate less than 10% of their earnings from foreign investments while these investments represent 10%-19% of revenue for the remaining 8%.

[90] Over 80% of the respondents from *trade/distribution, social & personal services, financial services, transportation, storage & communication, tourism and real estate or & business services earned less than 10% of their revenues from this source.* A smaller percentage of the respondents from *agriculture (71%), mining (50% [1]) and manufacturing (73%))* also earn less than 10% of revenue from export of goods. The respondents from *construction & installation and* gas, *electricity & water* do not generate any revenue from sale of goods in foreign markets. *Similarly,* over 80% of the *micro, small and large businesses* generate less than 10 per cent of their revenue from exports of goods, a smaller amount (68%) of *medium-sized businesses* generate less than 10 per cent of their earnings from export of goods.

[91] Apart from the two sectors mentioned as exceptions, over 90% of the respondents from all the other sectors earn less than 10 per cent of their revenue from services provided overseas. Roughly 90% of businesses from all categories of sizes generate less than 10 per cent of their revenue from services provided overseas.

Classification by size also reveals the expected trend of smaller businesses placing greater reliance on sale of goods in the local market. Such sales generate more than 90 per cent of revenue for 50.6% [43] of micro businesses, 47% [46] of small businesses, 43% [27] of medium-sized businesses, and 25% [3] of large firms. Less than 10% is generated from this source for 41.7% [5] of large businesses, 22.2% [14] of medium-sized businesses, 35.7% [35] of small businesses, and 21.2% [18] of micro businesses.

The provision of services in local markets generates more than 90 per cent of revenue for 55% [156] of businesses surveyed; and less than 10 per cent of revenue for 19% [54] of businesses. As above, classifications by sector yield the expected results, with this source representing less than 10 per cent of total earnings for over 80% of respondents *from t*rade & distribution and manufacturing, 67% of the respondents from gas, electricity & water, 57% of respondents from agriculture, and 50% [1] from mining. Sectors which are heavily dependent on revenue earned from services provided in local markets include finance and construction & installation, with 77% and 61% of the respondents from these sectors generating more than 90% of revenues from this source. Over 30% of the respondents in transportation, storage & communication, tourism, real, estate & business services, and gas, electricity & water are similarly dependent on this source of revenue.

Large businesses generate more revenue from providing services in Jamaica than do other businesses, with a third [4] of the large businesses surveyed indicating that 90 per cent of their revenue is generated from this source, as compared with 17.6% [15] of micro businesses, 26.5% [26] of small businesses, and 11.1% [7] of medium-sized businesses. At the other end of the spectrum, more than half the respondents from (53%) micro, (52%) small and (64%) medium-sized businesses generate less than 10 per cent of revenue from providing services in Jamaica, while only a third of large businesses generate this amount from the same source.

FIGURE 11A:

Sources Providing Less than 10% of Total Revenue

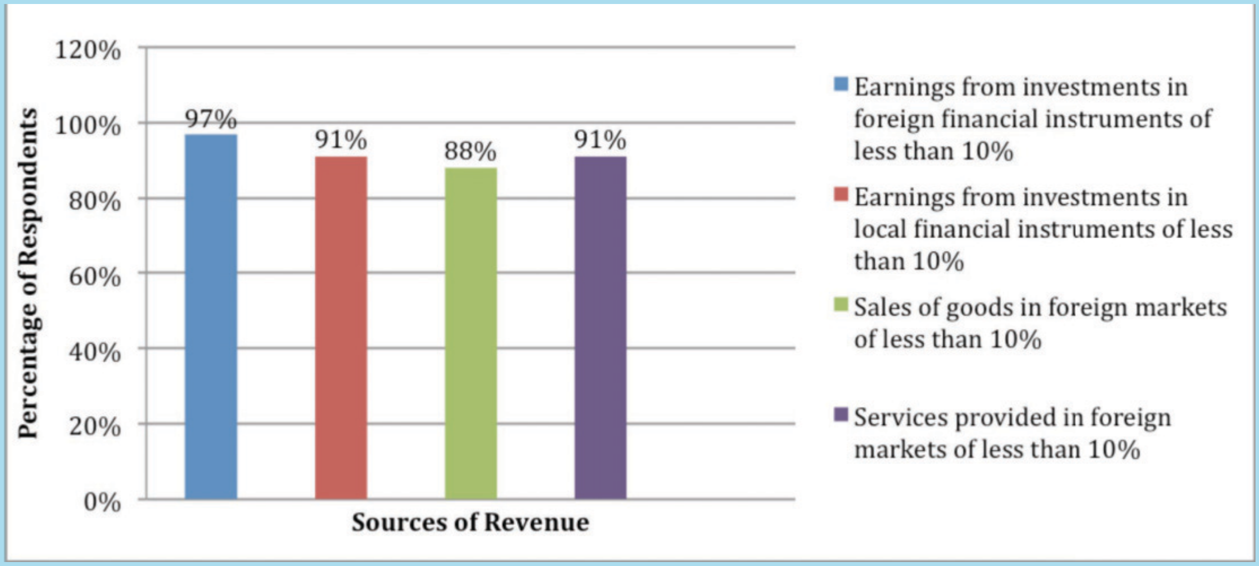
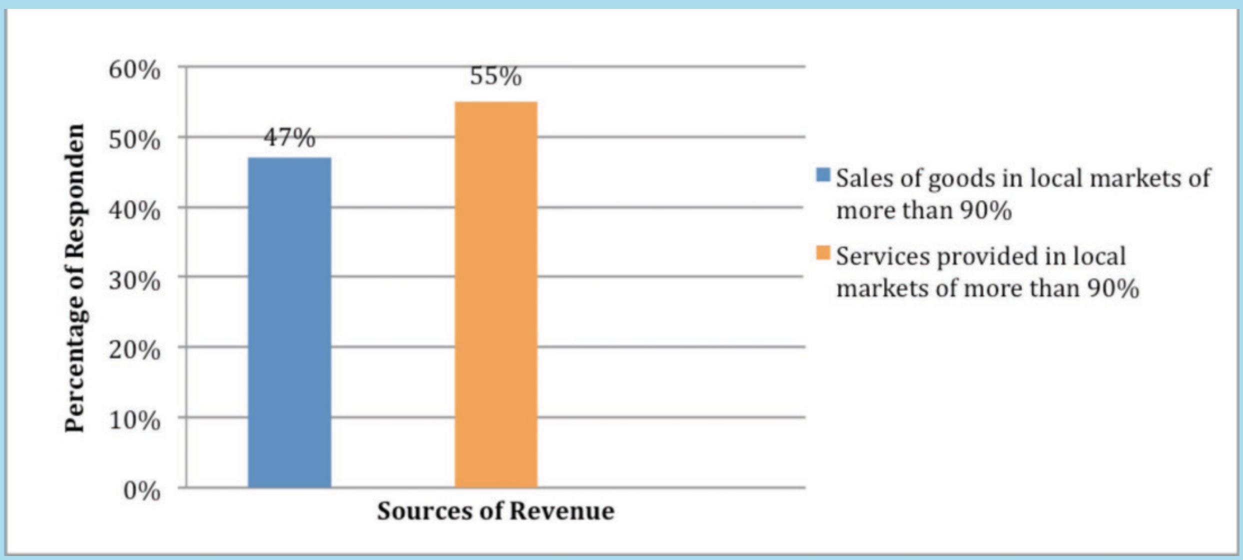


FIGURE 11B:

Sources Providing More than 90% of Total Revenue



Types of Products/Services Offered and Customer/Client Base

The above analysis showed that the businesses surveyed earned most of their revenue from either the sale of goods or provision of services in the local market. Whereas this suggests less exposure than if reliance was being placed on foreign sources of revenue or on earnings from financial instruments, further investigation is needed to ascertain the categories of products/services which represent Jamaican businesses' primary product/service line. This is important, because whether a firm produces basic necessities or luxury goods, for example, is a good indication of how stable its market will be in periods of economic crisis.

The results suggest a fairly low degree of exposure of Jamaican businesses to the higher-than-average volatility typically associated with luxury goods and services, medium cost non-essential goods and services, and consumer durables in times of crisis, as only 7% [20], 8.8% [25] and 9.1% [26] of businesses, respectively, identified these as their primary product or service offering. By contrast, a third [94] of the firms indicated that basic necessities constituted their primary offering (see figure 12).

Interestingly, 41% [117] of the respondents noted that their primary focus was on provision of intermediate goods (i.e. inputs to the production processes of other businesses). This suggests a high degree of interconnectedness within the economy, and implies that there is considerable potential for contagion if certain businesses are adversely impacted by the crisis. This is evidenced by the fact that although the primary client/customer base of Jamaican businesses is spread across a wide array of mainly local clients, over a third [35%, representing 99 firms] of the respondents noted that their primary clients were local large and medium-sized businesses, with the next most frequently identified category of primary clientele being local entrepreneurs and self-employed workers [14.8%, representing 42 respondents].[92] (See figure 13).

When the data was analyzed to highlight vulnerabilities of particular types of firms, it was found that 39.1% [9] of businesses in the tourism sector indicated that their primary offering was a luxury service.[93] The provision of intermediate goods was highlighted by both of the mining companies surveyed [100%], 88.9% [16] of the construction & installation businesses, 66.7% [2] of the respondents from the gas, electricity & water sector and 61.5% [8] of the financial institutions. In terms of size, 52.4% [33] of medium-sized companies primarily provide intermediate goods, and 25% [3] of the large companies surveyed specialize in the provision of medium-cost non-essential goods and services.

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92 A few respondents also identified local blue collar workers [11.7%, 33 respondents] and local professionals [9.2%, 26 respondents] as their primary clients.

93 Although most businesses in tourism had the provision of luxury services as their primary offering, no vacation is a necessity, and so we are not in a position to note whether this makes them relatively more or less vulnerable.

FIGURE 12:

Types of Products/Services Primarily Offered

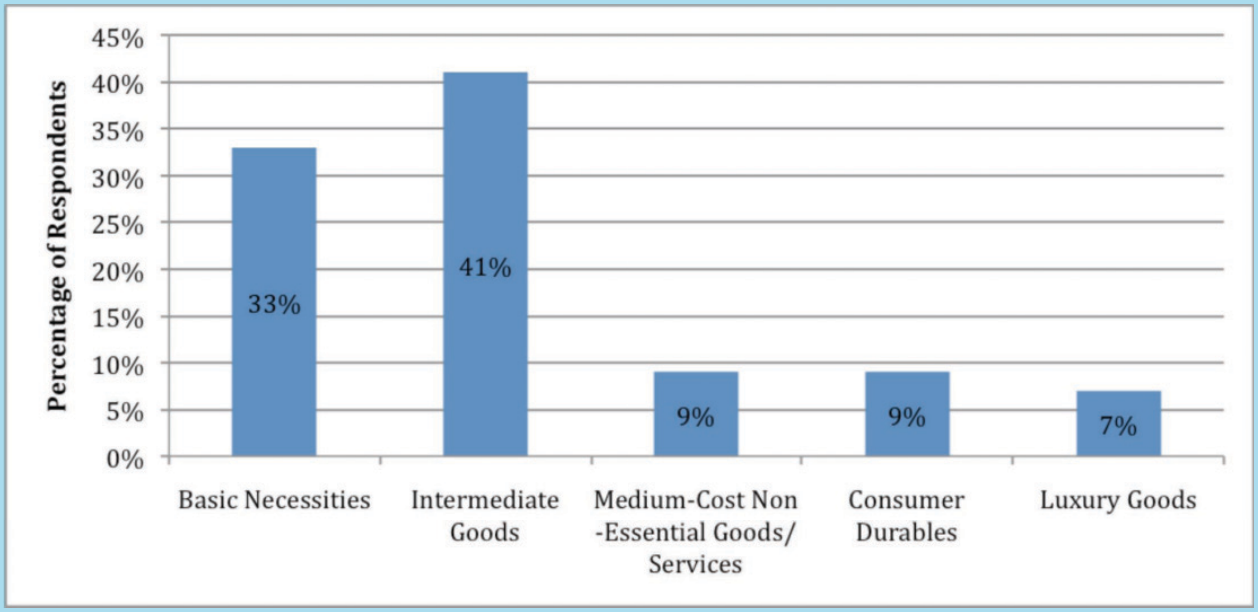
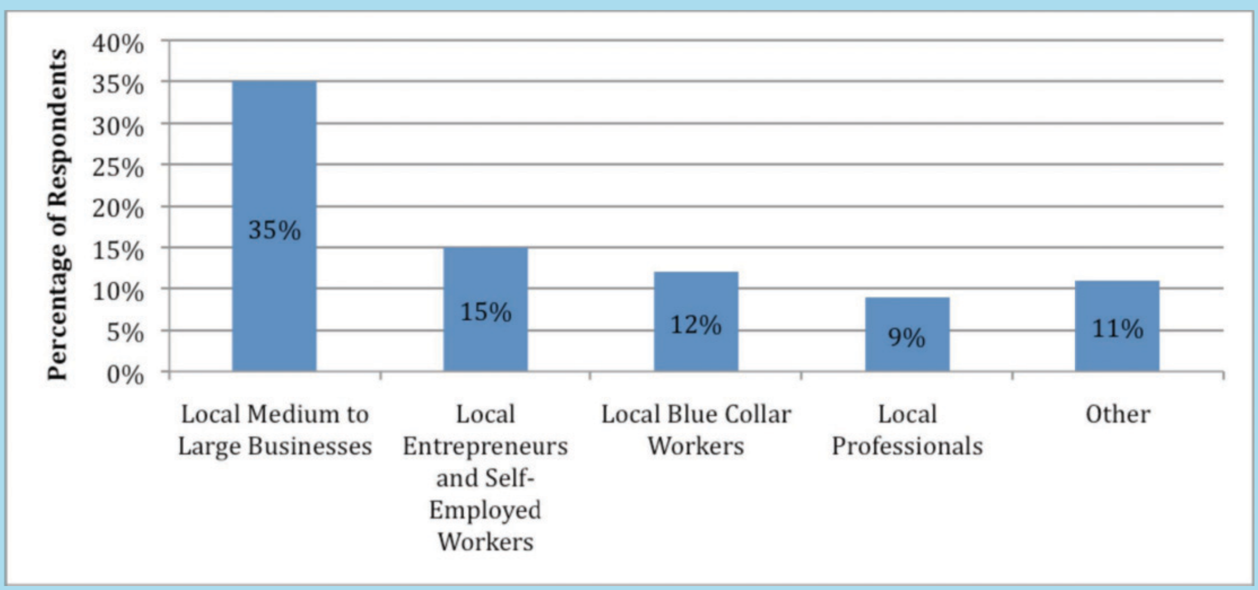


FIGURE 13:

Businesses' Primary Client/Customer Base



Expectations and Experiences with Regards to Output Markets

The heavy reliance by Jamaican businesses on goods sold and services provided in the local market, primarily in the form of basic necessities and intermediate goods, suggests a low degree of immediate exposure to the global recession. It, however, also highlights the threat of rapid contagion that exists if the local economy is plunged into a prolonged recession in which unemployment rises, key medium-sized and large businesses close, and entrepreneurs and self-employed workers lose their livelihoods.

Unique vulnerabilities also exist in certain sectors such as tourism and mining, which are heavily reliant on foreign markets, particularly in the US and UK, both of which are experiencing periods of recession.

To deepen our analysis of indirect exposure through real sector channels, this section examines whether or not Jamaican businesses have already experienced or expect changes in the prices and quantity of goods and services sold in local and foreign markets.

Experiences

Nearly half (48% [137]) of the businesses surveyed experienced no change in the quantity of goods and services exported, and only 13% [37] of the respondents indicated a reduction (see figure 14).[94] Similarly, over half of the businesses (52% [149]) reported *no changes* in the prices for their exports, with 11% [31] actually indicating increased prices.[95] These results did not exhibit much variability by size and sector, with the only exception being the mining sector, in which one of the respondents [representing 50% of the sample surveyed] indicated a decrease in the quantity of exports and an increase in price. The lack of emphasis placed on the foreign market is, however, highlighted by the large proportion of respondents not responding or indicating uncertainty about conditions overseas [representing a combined 32% for quantity and 30.9% for price].

The relative stability experienced in the market for Jamaican exports contrasts very sharply with the results derived for experiences in the local market.[96] Nearly two-

[94] 23.9% [68] of the businesses surveyed did not respond to this question

[95] 23.5% of the businesses surveyed did not respond to this question

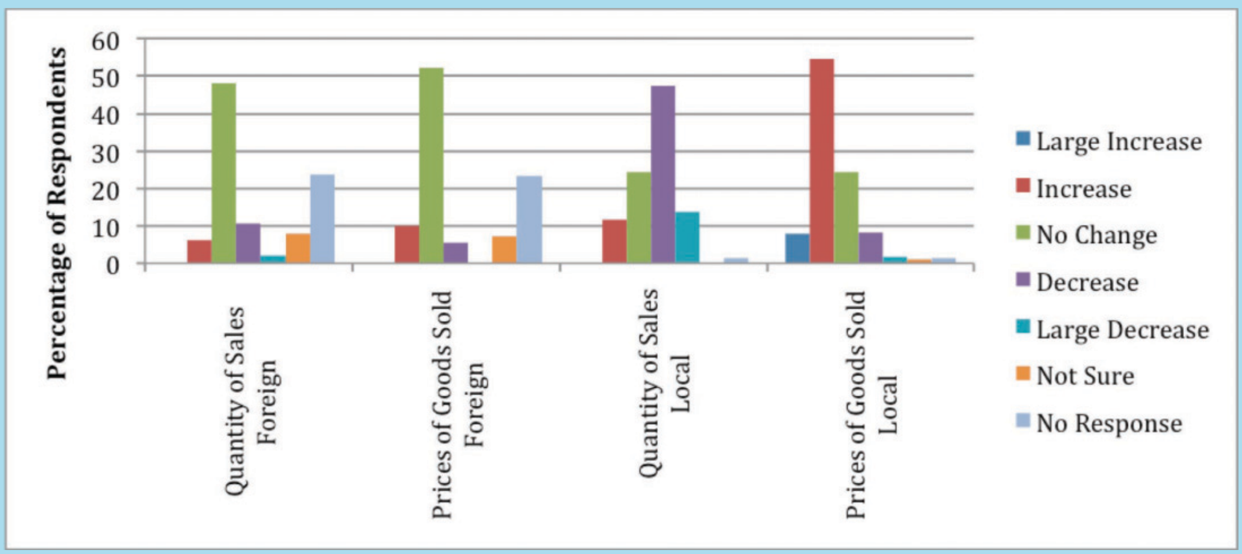
[96] Although this outcome cannot be easily explained, it may be that some exogenous effect, like the depreciation of the currency, gave Jamaican exporters a fillip that helped them to counteract the negative effects of the domestic downturn. Thus, it at least raises the intriguing possibility that, in contrast to the expectation that the US downturn will limit our options, exporting our way back to growth is an imperative to economic recovery.

thirds [61.1%, representing 174 respondents] of the businesses surveyed reported declines in local sales between July and December 2008, with 47.4% [135] experiencing a decrease, and 13.7% [39] experiencing a large decrease. Only 24.6% [70] of the respondents indicate no change in the quantity of goods sold locally. The decrease in quantity sold was not counteracted by increases in local prices, as 54.7% [156] of businesses surveyed reported no change in the prices of their goods/services, and 33% [94] reported decreases or large decreases in prices.

The sectoral and size breakdown of the results indicate widespread vulnerability to the adverse conditions in the local market, with declining sales being reported by over half the respondents from *construction & installation, trade & distribution, financial services and transportation, storage & communication,* as well as *small and medium-sized enterprises*. Most of the respondents from *agriculture, trade & distribution, manufacturing, construction, social & personal services and financial services*, as well as from *micro and large businesses* also experienced decreased prices for their outputs.

FIGURE 14:

Businesses' Experiences in the Output Market

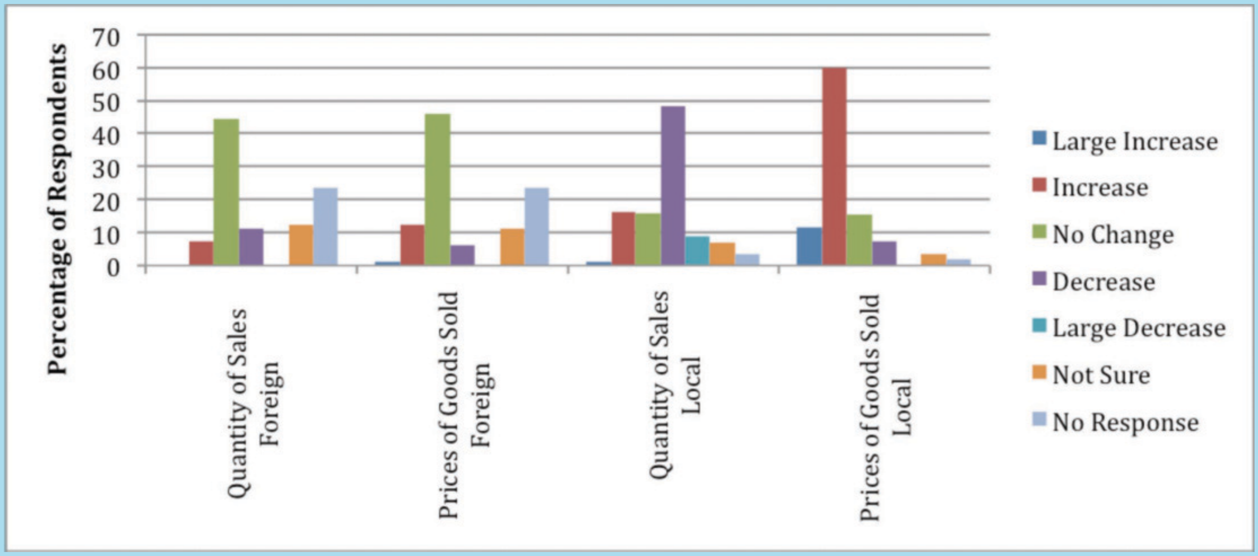


Expectations

The businesses surveyed generally expect the trends currently being experienced in the foreign and local output markets to continue in the medium to long run (see figure 15). For the quantity and price of goods/services sold in the foreign market the most frequently identified expectation was for conditions to remain unchanged [noted by 44.6% or 127 respondents for quantity and 46% or 131 respondents for price]. The continued lack of emphasis placed on the foreign market is again highlighted by the large proportion of respondents not responding or indicating uncertainty about conditions overseas [representing a combined 35.8% for quantity and 34.7% for price].

FIGURE 15:

Businesses' Expectations in the Output Market



The unique vulnerability of the mining sector is again noteworthy, as one of the two respondents from this sector expected a decrease in foreign sales (on which the sector is heavily dependent), and the other indicated unsurity about future conditions.

The dominant expectations for the local market are for sales to continue to decline [identified by 57.2% or 163 of the respondents], and for prices to begin to increase [identified by 71.6% or 204 of the businesses surveyed]. The expected declining sales is ominous, as expectations are often self-fulfilling prophecies, and, as previoulsy noted, many busineses are heavily reliant on sales in the local market. The expected price increases, can be viewed as a double-edged sword, as although it may imply improved revenues, because of the previously identified interconnectedness of Jamaican businesses, the increased price of outputs of some firms may end up increasing input costs of others.

There was not much variability across sector and size with respect to the expectations for the local market.[97]

The experience and expectations of Jamaican businesses with respect to the quantities and prices of their goods and services are surprising. The intuition that the adverse effects of the global economic crisis would be transmitted to the real sectors of the Jamaican economy first through worsened conditions in export markets was not evidenced. Export markets were perceived as relatively stable, while local markets were perceived as exhibiting deteriorating conditions.

This has serious implications for the vulnerability of Jamaican businesses, as most are heavily reliant on the local market and have very little diversification with respect to their output markets. Further, as noted before, the fact that many businesses supply intermediate goods, suggests that contagion in the local economy will be transmitted very quickly, as the failure of a few firms will impact many others.

The reasons for the local market exhibiting more quickly deteriorating conditions than the export markets requires further explanation. Is the Jamaican economy being adversely affected by events other than the global crisis? Is this a manifestation of the lingering effects of the failure of numerous informal investment schemes? Are macroeconomic variables misaligned? Or is the Jamaican economy experiencing a paradox of thrift? These are questions which should be the subject of further research.

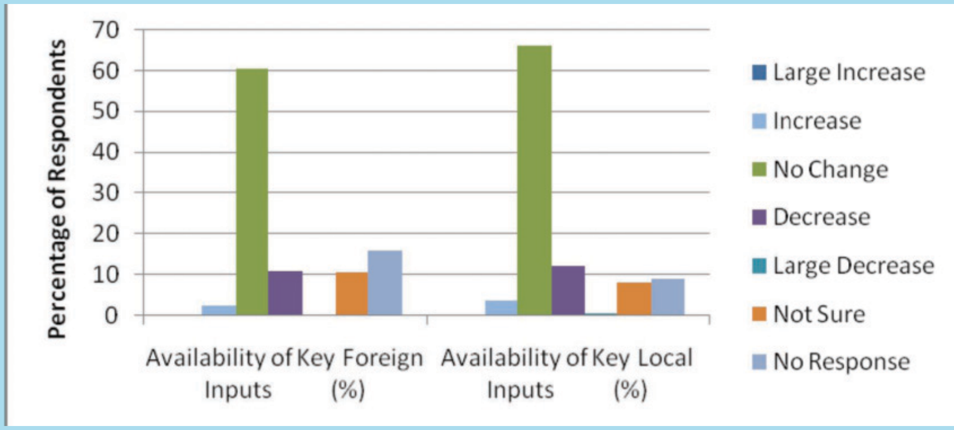
Expectations and Experiences with Regards to Input Markets

Our analysis of the exposure to the global crisis has thus far focused on exposure through financial channels and output markets. The instability associated with periods of crisis can, however, also impact the production processes of firms by affecting the availability of key inputs. This section examines experiences and expectations of Jamaican businesses in this regard.

[97] A reduction in local sales is identified by 29% to 40% of the respondents from *agriculture, social & personal services, financial services, tourism and gas, electricity & water,* and up to 61% of the respondents from the other sectors.

FIGURE 16:

Businesses' Experiences in the Input Market



Experiences

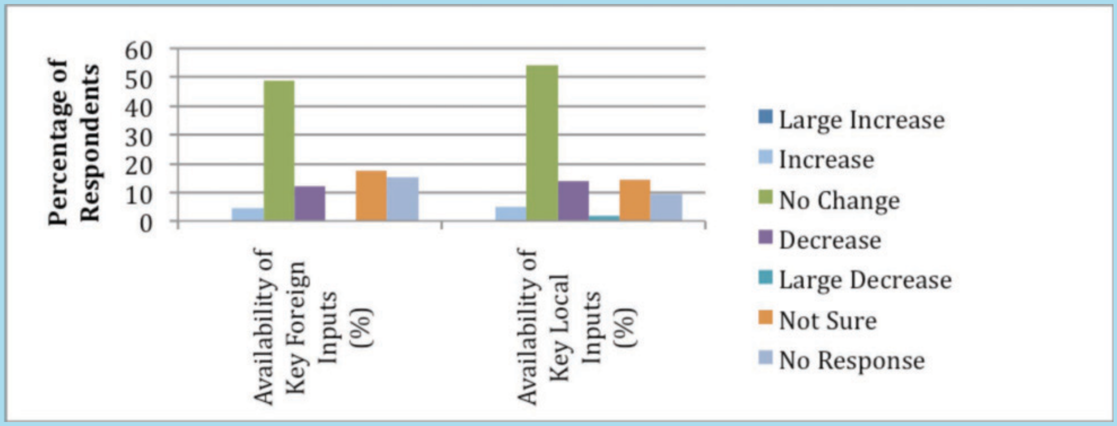
Most respondents [60.4%, representing 172 businesses] indicated that there was no change in the availability of key foreign inputs and only 10.9% [31] (including one of the respondents from mining) indicated a decrease. The availability of local inputs also remained stable, with two thirds of the respondents [188] indicating that there was no change and there were only slight variations across sectors and sizes. On the other hand, only 12.3% [35] observed a decline in availability of these inputs.

Expectations

The businesses' expectations for foreign inputs mirrored their experiences. The dominant response for availability of such inputs was no change, identified by 48.8% [139] respondents, followed at a distance by 17.9% [51] of respondents who acknowledged uncertainty about future conditions. Similarly, most respondents [54%, 154 businesses] expected the availability of local inputs to remain the same, while 14.7% [42] were unsure and 14% [40] expected a decrease in availability. The results also show no noteworthy distinctions amongst the different sectors or sizes of business.

Exposure to the global economic crisis through the input market is thus assessed as being limited, as the availability of key foreign and local inputs is largely expected to remain stable.

FIGURE 17:
Businesses' Expectations for the Input Market



BUSINESSES' RESPONSE TO THE CRISIS: SOME LIKELY ADJUSTMENTS

Exposure to the current global crisis is likely to precipitate adjustment by business owners and managers, with the type of adjustment being dependent on the extent and nature of exposure. An analysis of such adjustments is important, as the ways in which businesses react to the crisis determine the ultimate impact on social and economic development in a country.

In the Jamaican context, such an analysis is clearly justified, as 81% [230] of all businesses surveyed noted that they planned to make adjustments to their business operations in response to the global economic crisis. Interestingly though, as reflected in Figure 18, only 8.3% [19] of these businesses see the need to shut down operations. These 19 businesses were spread across all sectors, with the exception of the *transportation, storage & communication* and *electricity, gas & water* sectors, and all sizes, except for large companies. This confirms the relative stability of larger companies, as they are able to absorb greater shocks for longer periods. More broadly this result also suggests that most Jamaican firms expect to weather the storm.

Even if businesses do not close, other adjustments to the crisis can have major social and economic implications. Large-scale redundancy is one such example, which has precipitated government intervention in many countries. In Jamaica, 67.4% [155] of the businesses surveyed noted that they were unlikely to undertake layoffs. 12.6% [29] of the respondents were, however very likely and 19.6% [45] were likely to lay-off workers.

Large businesses were most likely to undertake layoffs, with 63.7% [7] of these businesses indicating such a proclivity. The sectors most likely to undertake layoffs include mining, transportation, storage & communication and agriculture, with over half of their respective respondents indicating that layoffs were likely. Least likely to take this course of action are the electricity, gas & water sector (with no respondents indicating a proclivity towards layoffs), and, surprisingly, tourism with only 18.7% [3] businesses from this sector indicating a likelihood of layoffs.

The reduction of wages is typically used as an alternative to laying-off workers. This, however, was not the case in most of the businesses surveyed, as 77% [177] of the respondents noted that they were unlikely to cut wages. Only large businesses [36.4%, 4 firms], mining companies [50%, 1 firm] and construction & installation businesses [46.7%, 7 firms] had a significant proportion of their respondents considering this possibility.

Respondents indicated that reduction of other benefits to staff was an adjustment alternative that they were much more likely to consider, with over half [51.7%, 119 firms] of the businesses surveyed noting that they were likely or very likely to pursue this option. This view was prevalent within the *real estate & business services, financial services, manufacturing, trade & distribution* and *agriculture* sectors, and *with medium-sized enterprises,* as over half of the respective respondents indicated that this was a distinct possibility.

The above results suggest that business owners and managers were attempting to shield their workers from the adverse effects of the crisis, by minimizing adjustments that would directly affect staff. Instead, there was a much greater willingness by the respondents to consider the reduction of non-staff related expenses as a means of adjusting to the crisis. A large majority [85.2%, 196 firms] of the businesses surveyed were likely or very likely to undertake such measures, with very little variation across size and sector.

A significantly smaller proportion of respondents viewed the reduced use of local and foreign inputs and services as a likely adjustment to the crisis, with about two-thirds of the businesses surveyed indicating that they were unlikely to consider such measures.[98] There was little variation in the unpopularity of these measures across

[98] 62.6% [144] and 61.7% [142] of respondents were unlikely to reduce use of local and foreign inputs, respectively.

sectors and sizes, with the exception that half [6] of the companies in the transportation, storage & communication sector were likely to reduce foreign inputs, and 63.6% [7] of large companies and both mining companies [100%] were likely to reduce local inputs. The latter two results are important, as local suppliers to large companies and to the mining industry can expect to be adversely affected. The large number of Jamaican firms producing intermediate goods was previously highlighted and is now confirmed as a possible source of vulnerability, as it is very likely that many of these firms supply to large companies.

The previous result highlights the importance of businesses having a diversified market for their output. It is therefore not surprising that two-thirds of the businesses surveyed [152] indicated that they were likely or very likely to seek alternative markets as a means of adjusting to the crisis. A number of respondents noted that this will involve:

- targeting new local clients/customers (such as retailers and wholesalers, large, medium and small food establishments, and government tenders);
- branching out into other areas in their respective sectors (such as exploring other agro-processing or construction related activities);
- exploring new export markets;
- carrying out e-commerce activities (such as streaming on the internet, starting websites, facilitating internet sales); and
- offering special promotional packages.

There was very little variation across sectors with respect to the likelihood of seeking alternative markets, but across sizes, large companies exhibited the greatest dynamism, with 90.9% [10] of respondents indicating a proclivity to go in this direction, as compared with 71.7% [48], 54.6% [42] and 74.1% [43] of micro, small and medium-sized businesses, respectively.

There was more ambivalence with respect to seeking alternative means of financing as an adjustment strategy, with about half of the respondents being likely or very likely to pursue this option [52.2%, 120 firms], and the other half being unlikely. Reluctance to pursue this strategy was clearly related to the size of the entity, with a larger proportion of micro [50.7%, 34 firms] and small [49.4%, 38 firms] businesses being unlikely to pursue this option, than medium-sized [39.7%, 22 firms] and large [36.4%, 4 firms] companies. This again confirms the difficulties faced by micro and small businesses in accessing finance.

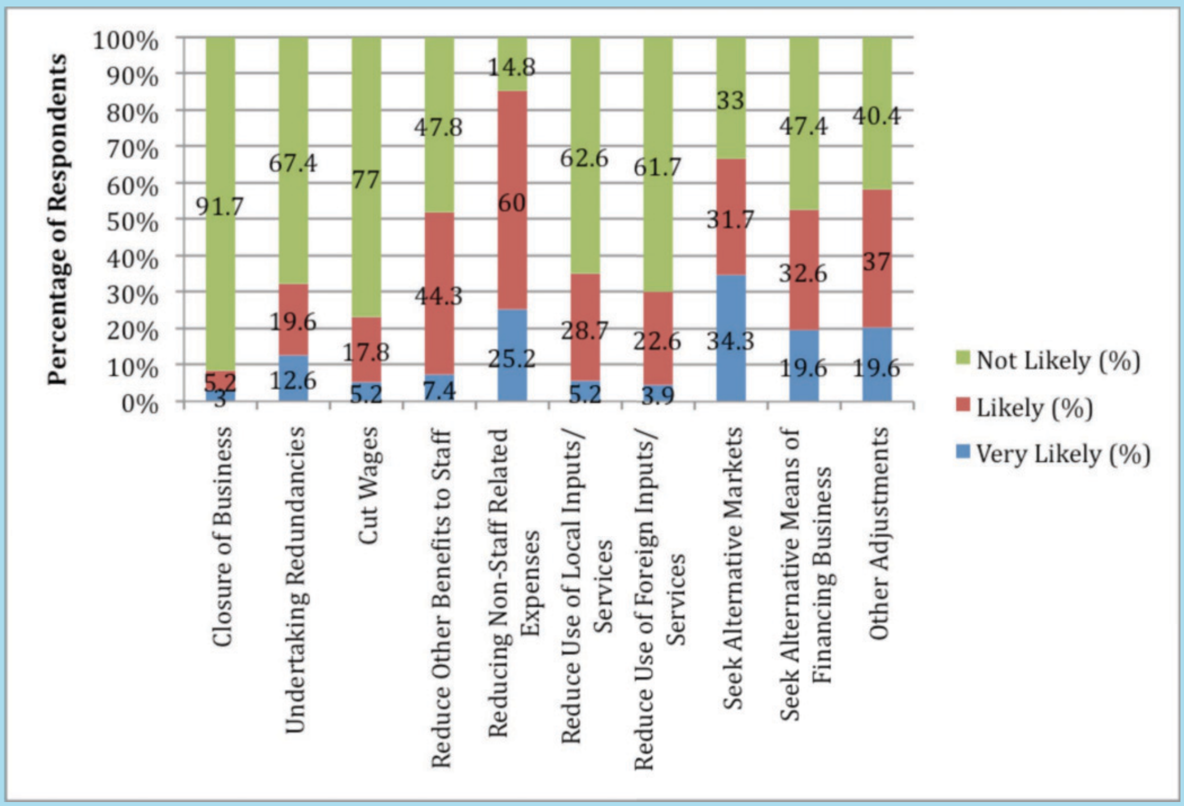
Businesses in the trade & distribution, finance, and transportation, storage & communication sectors were also more reluctant to seek alternative means of financing, with close to or over 60% of the respondents unlikely to take this course of action.

For those businesses likely to utilize this adjustment mechanism, options included:

- equity financing (by attracting investors);
- starting partnerships;
- borrowing from non-banking financial institutions, family members, friends, associates, government financing institutions (e.g. EX-IM Bank), multilateral agencies (e.g. the European Union) and local financial institutions; and
- seeking more credit from suppliers.

FIGURE 18:

Probable Adjustments by Jamaican Businesses to the Global Crisis



The Jamaican Government's Response To The Crisis

Since the latter part of 2008, the Government of Jamaica has implemented monetary and fiscal policy initiatives in an attempt to alleviate the potential adverse effects of the global economic crisis. This section describes these policy measures, highlights the main concerns or criticisms raised about them, and evaluates the effectiveness of the Jamaican government's experiment with a stimulus package in late 2008.

The Bank of Jamaica's Monetary Policy

As the global credit crunch worsened, local securities dealers began experiencing difficulties sourcing the foreign currency needed to protect the value of the Jamaican bonds that they held. The Bank of Jamaica responded by injecting US$168 million from the Net International Reserves, in a well-received effort to maintain liquidity in the financial system.

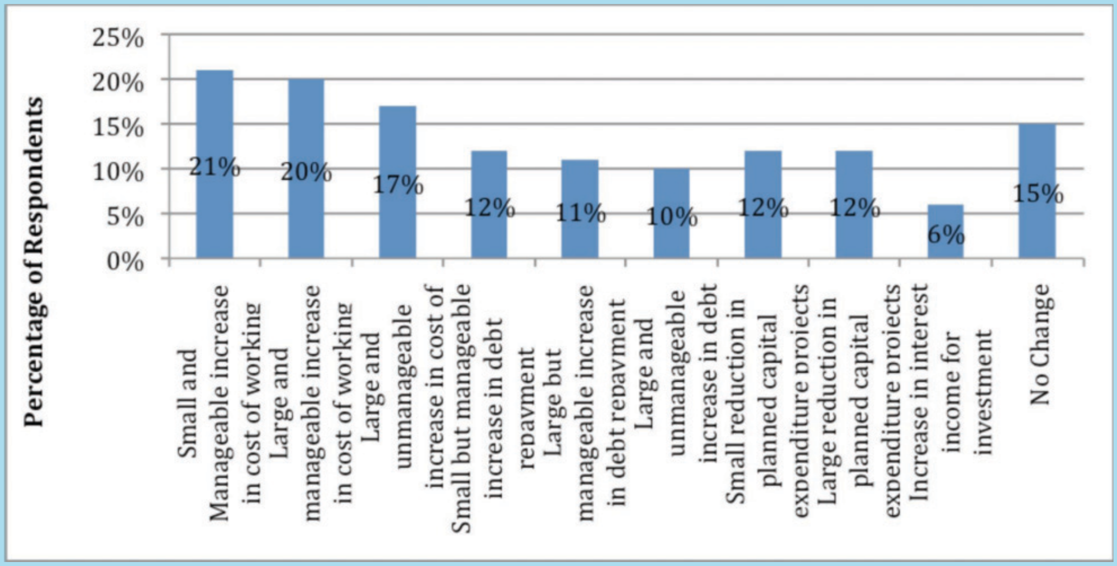
Interest rates were also increased so as to protect the depreciating Jamaican dollar (which had devalued by 10 per cent against the US dollar since the beginning of September 2008). This policy response was heavily criticized by the business community, as more than half the businesses surveyed (58%, [162]) argued that interest rates should not have been increased in the current economic context, and a further 13.7% [39] noted that while increased interest rates were necessary, the rate of increase was too large.[99] Most businesses irrespective of size and sector held these views, except for respondents from the financial and gas, electricity & water sectors, which had less than half their respondents taking this position.

The businesses surveyed had a negative view of the interest rate increases as they were concerned about the implications for the cost of borrowing. It is interesting to note though, that whether or not the respondents viewed the increases as large or small, 63.2% [165] noted that they were manageable with respect to the effect on the cost of working capital and debt repayment. Only about a quarter [26.8%, 70 firms] viewed the interest rate increases as having an unmanageable impact in these areas. Additionally, only 11.5% [30] of the respondents noted that the increased interest

[99] 15.1% [43] of the respondents noted that the increase in interest rates was necessary, but acknowledged that they were unsure about the appropriateness of the rate of increase.

FIGURE 19:

Effects of BoJs Increase in Interest Rates



rates would precipitate a large reduction in planned capital expenditure projects, with 12.3% [32] noting that the reduction in such projects would be small.[100]

These responses were largely invariant across sector and size of the firms, with one notable exception. The construction and installation industry is uniquely adversely impacted by the increased interest rates, as 35.3% [6] and 41.2% [7] of the respondents from this sector noted that they would be affected by large and unmanageable increases in the cost of working capital and debt repayment, respectively.[101]

THE GOVERNMENT OF JAMAICA'S ECONOMIC STIMULUS POLICY INITIATIVES

In December 2008, the GoJ announced15 policy initiatives intended to stimulate and provide relief to Jamaican workers and businesses. These initiatives can be broadly classified as providing: tax relief on income and expenditure to individuals and local

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[100] See Tennant (2006) for a detailed discussion of the debate as to the causes and effects of the high cost of borrowing in Jamaica, and Tennant and Folawewo (2009) for a cross-country study of the determinants of commercial bank interest rate spreads in low and middle income countries.

[101] It should be noted that 35.3% [6] of respondents from this sector also noted that the increased cost of working capital is small and manageable.

businesses; relief from other statutory fees; direct government spending to targeted areas; and special provisions and arrangements.

Twelve of the initiatives were specifically designed to stimulate business performance in five main sectors of the economy, while the other three are sector-neutral. These are summarized as follows:

Tourism

- From January 1 – June 30, GCT will be reduced from 8.5% to 4.125%.
- The Development Bank of Jamaica (DBJ) is to provide a special loan facility of $500m at 10 per cent for two years.
- Increased advertising & marketing for the sector

Bauxite

- Unspecified concessions to the industry were announced.

Small Businesses

- The DBJ is to allocate $350m through the Jamaica National Small Business Loans Limited to provide additional funds for lending to small businesses and micro-enterprises.
- 15 per cent of procurement total for government agencies is to be reserved for small businesses and micro-enterprise suppliers with asset bases less than $30m.
- As of January 1, only businesses with annual sales of more than $3m will be subject to GCT requirements.
- Loan facilities of $300m for micro and small businesses specifically engaged in production of goods or provision of services is to be provided through the Jamaica Business Development Centre and designated credit unions for on-lending at 10%.

Manufacturing

- Effective January 1, custom's user fees on capital goods and raw materials were removed.
- Effective January 1, the time for depreciating the cost of capital equipment was reduced from two years to one.
- US$300m (J$23.865b) is to be provided by the IDB in loans to the productive sector through commercial banks and the Ex-Im Bank.

Real Estate and Construction

- Effective January 1, the transfer tax was reduced to five per cent, down from 6.5 per cent.

Non-sector specific Initiatives

- The income tax threshold was increased to J$220,272, providing relief especially to low income workers.
- The government's procurement policy was adjusted to provide a 10 per cent margin of preference to Jamaican-owned companies.
- The tax on dividends paid by all locally owned companies will be abolished.

Estimated Cost of the GOJ's Stimulus Package

In this section we attempt to estimate the cost of each of the initiatives in the GOJ (Government of Jamaica)'s stimulus package, in terms of the revenue forgone (the opportunity cost) and the direct cost (the accounting cost). This is done so as to provide a reasonably accurate estimate of the reduction in government revenue to be expected (see methodological note in Appendix 4). Although we wanted to provide the costs for all 15 initiatives, we were only able to calculate estimates for 6, due primarily to the unavailability of the requisite information (see Table 1).[102]

Our estimates reveal that the GoJ will be spending and/or forgoing at least **J$4.6 billion**[103] over a one year period (see costing details in Appendix 4). The Ministry of Finance and the Public Service (MoFPS) on the other hand, estimated that six of these initiatives will cost approximately **J$863,000,000**, over the remainder of the 2008/09 fiscal year (primarily between January and March 2009, see details in column 1). If we assume that these estimates will increase by the same amount for each quarter (multiply by 4), then those initiatives for which the MoFPS provided estimates, would amount to **J$2,252,000,000.** This shows that not only are our estimates twice the MoFPS' estimated annual amount, but that if we were to use their estimates for those initiatives that we are yet to cost, the stimulus package would cost roughly between **J$4.6 billion - J$5.3 billion.**[104]

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[102] We were told that there is no cost associated with providing the four loan packages while the other five initiatives could not be estimated due to unavailability of data. See detailed notes in appendix 4.
[103] This is not our final estimate. We are therefore encouraging discussion on the methodology used and estimate derived so as to increase the accuracy of the estimate, and enhance transparency in public discourse on the issue.
[104] Note that the cost for the procurement initiatives and concessions are not included in the J$5.3 billion estimate.

TABLE 1: Revenue foregone based on CaPRI's and the Ministry of Finance and Public Services' Estimates

Initiatives	**MoFPS' estimates of revenue forgone in J$ (January to March 2009)**	**Estimates of revenue forgone in J$ (assuming an increase by the same amount over 4 quarters) using MOFPS' estimates**	**CaPRI's estimates of revenue forgone in J$ (Fiscal year 2009/2010)**
Reduction of transfer tax from 6% to 5%	170,000,000	680,000,000	N/A
Reduction in GCT in the Tourism Sector from 8.25% to 4.125%***	432,000,000	864,000,000	303,040,928
Depreciating cost of capital equipment from 2 years to 1 year	13,000,000	52,000,000	N/A
Removal of Customs User Fees from capital goods and raw materials	114,000,000	456,000,000	2,507,034,105.60
Increase GCT threshold from $1m to $3m	40,000,000	160,000,000	772,860,000
Abolish tax on dividends by locally-owned companies	10,000,000	40,000,000	130,000,000
Christmas Duty Relief	84,000,000	0	N/A
Increasing the income tax threshold to $220,272	N/A	N/A	575,000,000
Increased tourism advertising and marketing	N/A	N/A	264,780,000
Special Loan Facility for small and micro-enterprises	N/A	N/A	The cost is expected to be minimal but an estimate is currently unavailable
Procurement arrangements for local businesses	N/A	N/A	N/A
Concessions to the Bauxite Sector	N/A	N/A	N/A
Total	863,000,000	2,252,000,000	4,552,715,034

Analysis of the GOJ's Stimulus Package

In his speech announcing the stimulus package, the Jamaican Prime Minister stated that its objectives were to: mitigate against job losses and closure of businesses; provide assistance to persons made redundant in creating their own jobs; and to aid households affected by the crisis in meeting basic expenditures. With an estimated cost of J$4.6 billion - J$5.3 billion, the potential effectiveness of these initiatives must be carefully assessed.

In this section we conduct this evaluation first at the micro-level by analyzing businesses' responses to carefully designed questions about their perceptions of the stimulus package and its expected impact. We then utilize dynamic simulation techniques to model the impact of the GOJ's initiatives on macroeconomic and socio-economic outcomes, and compare these results with the probable outcomes of alternative courses of action that the GOJ could have taken.

Analysis of the Effectiveness of the GoJ's Stimulus Package – Business Survey

The analysis of the businesses' perceptions of the stimulus package yield interesting results. Respondents from sectors specifically targeted in the package are largely optimistic about reaping benefits from the respective initiatives. It is, however, noteworthy that such benefits are more likely to lead to improved profitability of the businesses, and less likely to foster retention of employees. This must be viewed though, in the context of most businesses previously noting that layoffs are not likely.

Although optimistic about the initiatives, many of the businesses surveyed have raised concerns about: their ability to access the benefits; the narrow concentration of many of the initiatives; the adequacy and effectiveness of the initiatives in addressing fundamental problems affecting the economy; and the weakening of fiscal prudence implied by increased government expenditure. These concerns are, however, not surprising, as many of the stakeholders were not adequately consulted by the government prior to decisions being made on the initiatives to be implemented (see Box 2). The specific views of the business respondents on each of the initiatives are presented below. For the sector-specific initiatives, only the responses from the businesses in the relevant sector will be highlighted.

Sector-specific Initiatives

Concessions to the bauxite industry

As expected, both respondents from the mining sector indicated that the concessions would be 'very beneficial' to their businesses (see Figure 20). Only one of the respondents noted that this initiative is likely to save jobs, but both highlighted increased profitability as a likely result. They further explained that the concessions would enable them to expand the markets for their products, and, to a lesser extent, lead to reduced business related/operating costs. The respondents from this sector were however concerned that the initiatives do not address the fundamental problems being faced.

Increased advertising and marketing for tourism sector

The majority (83%) of the businesses from the tourism sector are expecting to benefit from this initiative, while only 17% [4] are expecting *no impact*. The respondents expect this initiative to yield expanded markets, which will foster improved profitability for 63% of the respondents, retention of more workers for 32%, and prevention of the closure of their operations for 11% of the tourism businesses surveyed. The main concerns raised about this initiative were that many firms will not be able to access the benefit [opined by 60% (6) of the respondents from the tourism sector], and that the initiative does not address the fundamental problems being faced [highlighted by 40 % (4) of the respondents].

Reduction of GCT for the tourism sector to 4.125%

70% of the respondents from the tourism sector are anticipating gains from this initiative. 40% [6] of these respondents noted that it will reduce business related/operating costs, while 27% [4] expected it to reduce tax-related expenses, and 20% [3] indicated that it will assist with expanding their markets. As a result of these outcomes, the majority (56%) of the respondents from this sector believed they will be able to achieve higher levels of profitability. Only 31% of the respondents noted that this initiative is likely to lead to fewer job losses. The dominant concern, raised by a third [4] of the respondents from this sector is that this initiative does not address fundamental problems being faced.

Box 2 :

Assessing the Effectiveness of Consultations behind the Jamaican Stimulus Package

Consultation is widely noted to be an important component of the policy development process. The OECD notes that '*strengthening relations with citizens is a sound investment in better policy-making and a core element of good governance. It allows government to tap new sources of policy-relevant ideas, information and resources when making decisions. Equally important, it contributes to building public trust in government, raising the quality of democracy and strengthening civic capacity.*'[1]

An effective policy consultation process should be guided by the following principles:

- Proactivity - consultation is designed to identify new issues as well as increase knowledge of extant issues;
- Timeliness –will take place in a timeframe where results can be best used to influence outcomes;
- Continuity – consultation on policy will be an ongoing process; and
- Feedback – communication regarding the outcomes of policy activity will be provided to stakeholders who were consulted. [2]

These guidelines do not suggest that the policy process is simple, sequential or formulaic, but rather indicate the importance of timely and relevant public consultation in a process that is often contentious, messy and quixotic.[3]

A review of the Jamaican stimulus package clearly indicates three categories of stakeholders that should have been included in a properly-executed consultative process:

1. Groups/individuals that would benefit from the proposed provisions;
2. Agencies/firms that would be responsible for the execution or delivery of the proposed provisions; and
3. Industry or other experts who by

Correspondingly, 23% [3] of the respondents also opined that too much focus was placed on one sector, and 17% [2] argued that the initiative was not far reaching enough.

Working capital loans to players in the tourism industry (maximum loan amount: J$50m, interest rate: 10% and maturity: 2 years).

65% of the respondents from the tourism sector anticipate benefits to their business operations as a result of this initiative. 42% [5] indicated that it will help them to expand the market for their services, and 33% [4] noted that it provides more/cheaper credit. Consequently, more than half the respondents [55%] explained that they are likely to see an improvement in their profit levels, and 36% indicated the likelihood of fewer job losses. Over a third of the respondents in the tourism sector (36% [4]) were however concerned that many firms will not be able to access the benefit from this initiative. Another 27% [3] argued that it does not address the fundamental problems being faced, 18% [2] opined that too much focus is being placed on one sector, and 18% stated that the cost is not worth the benefit.

Removal of Customs User Fees payable on capital goods and raw materials for manufacturers.

72.5% [37] of the respondents from the manufacturing sector anticipate this initiative to be beneficial or very beneficial, with another 14.3% [8] indicating that it will only be slightly beneficial. The removal of the CUF will reduce business related/operating costs for 32% [15] of the respondents, and will reduce tax-related costs for 34% [16]. 77% of the respondents from the manufacturing sector indicated that this will result in an improvement in their bottom line, while only 11% said there would be fewer job losses. The

virtue of their experience and/or expertise could offer advice on the design of the proposed provisions.

In a well-designed consultative process, it would be expected that in addition to supplying policy-relevant ideas and information, each of these categories of stakeholders would have also provided checks and balances to ensure that what is desired by the prospective beneficiaries was balanced against what could be feasibly delivered. However, an assessment of the process revealed that consultations with these stakeholders were limited, and the stimulus package in many instances did not reflect the views of those conferred with.

This study suggests that the consultative process adhered to in the conceptualization and design of the Government of Jamaica Stimulus Package was far from ideal. This was evidenced by the number of important potential beneficiaries who were not consulted prior to the announcement of the package, even though elements of the package reflected issues on which they had previously advocated. Most of the prospective executors of the initiatives announced exhibited a high degree of ignorance about the details of the initiatives, suggesting that consultation with this group was also very low. This has implications for the feasibility of the initiatives, as it would be these agencies that are best able to assess such feasibility and advise the government. Finally, there were indications that even though 'experts' were consulted by the government; their expert advice was also ignored. (Please see Appendix 5 for further details).

1. http://www.oecd.org/dataoecd/24/34/2384040.pdf.
2. www.volunteeringaustralia.org/files/2GMJ8RPVXW/VolunteeringAustraliaPolicyConsultationFramework_001.pdf
3. John, Peter. 2005. *Analysing Public Policy*. London: Continuum. "Just a casual experience of the messiness of policy-making, the twists and turns of decisions, the reverses, the quixotic failures and the surprises is enough to alert the researcher that, even as an ideal, the sequential model has its problems." p.25

primary concerns were that the initiative does not address fundamental problems being faced [identified by 42% (10) of the respondents], it is not far reaching enough [25% (6)], and it will not be accessible to many firms [17% (4)].

Reduction of time allowed for depreciating the cost of capital equipment (from 2 years to 1 year)

71% of the respondents from the manufacturing sector are optimistic about this initiative, as it will reduce business related expenses for 35% [12] of them and will lead to increased ease of conducting business for 21% [7]. As a result of these outcomes, 79% [27] of those that will benefit anticipate an improvement in their profitability, 6% [2] are likely to have fewer job losses, and 15% [5] are anticipating other types of benefits. Half [12] of those that hope to benefit are however concerned that this initiative does not address fundamental problems affecting them, a quarter [6] believe it is not far reaching enough, and another 25% [6] argue that many firms will not be able to access the benefit from this initiative.

Loan facility of J$350m for micro and small businesses (provided by DBJ through Jamaica National Small Business Loans Ltd.)

More than half of the small and micro business respondents expect to gain from this initiative (see Figure 20). Almost half of these (49% [65]) expect to be able to expand their markets for goods and services and a fifth [26] expect to benefit from increased ease of conducting business. This should contribute to improved profitability for 81% of the micro-business respondents and 77% of respondents from small businesses. Fewer job losses is indicated as a likely outcome by 19% and 12% of respondents from small and micro businesses, respectively. The primary concern raised by both small (64% [33]) and micro (50% [17]) businesses was that many firms will not be able to access the benefits. The secondary concern was that the initiative is not far reaching enough (identified by 21% [11] and 27% [9] of small and micro business respondents, respectively).

Loan facility of J$300m for micro and small businesses specifically engaged in production of goods or provision of services (provided through Jamaica Business Development Centre and designated credit unions for on-lending at 10%)

A little less than half the respondents from micro (46%) and small (48%) businesses expect to benefit from this initiative. Interestingly, there were more respondents (44%)[105] who expect it to lead to an expansion in their markets than those that expect it to provide more/cheaper credit (19% [7] from micro and 22% [10] from small businesses). 74% [26] of micro and 70% [32] of small businesses expect these benefits to lead to higher profit levels, while only 14% [5] and 11% [5] of micro and small

[105] [16] from micro and [20] from small businesses.

businesses, respectively, indicated that it would enable them to ensure fewer job losses. The accessibility of the benefits was again the major concern, identified by 70% [3] and 64% [21] of small and micro respondents, respectively. Concerns that the initiatives are not far reaching enough were shared by 22% [10] of small businesses and 27% [9] of micro businesses.

Government agencies to reserve at least 15% of their total procurement for micro and small businesses (defined as having an asset base of less than J$30m)

Less than half the micro and small businesses surveyed are optimistic about the impact of this initiative. Two of the outcomes expected from this initiative are expanded markets for services provided by the sector (a view held by 60% [18] of the micro businesses and 62% [18] of small businesses), and increased ease of conducting businesses (a view held by 13% [4] of micro business respondents and 21% [6] of small businesses). As such, 84% of the micro businesses and 90% of the small businesses said they are likely to see an improvement in profit levels due to this initiative. Fewer job losses, on the other hand, is expected to be the outcome for only 11% of micro and 3% of small business operators. As with previous initiatives, many micro (42% [13]) and small businesses (30% [12]) are concerned about the accessibility of this initiative, and about whether it is far reaching enough (highlighted by 45% [18] of small businesses and 36% [11] of micro businesses).

Only businesses with annual sales more than J$3m to be subject to GCT requirements

About half [51%] of the micro-businesses surveyed are anticipating benefits from this initiative, while less than a quarter [24%] of small businesses have similar expectations. 80% [64] of those who stand to gain are expecting to see improvements in their levels of profitability, while a smaller proportion (13% [10]) indicated fewer job losses as a likely outcome.[106] The respondents explained that these outcomes would result from a reduction in their tax related costs (identified by about 42% of both micro and small business respondents). Increased ease of conducting business was also highlighted by 22% of micro businesses, while 21.4% of small businesses noted that they would be able to expand the markets for their goods and services. Concerned with the fiscal ramifications, 26% [13] of small businesses noted that this initiative will adversely affect the government's fiscal position, while 22% [7] of micro business respondents shared this view. Other concerns raised were that the initiative is not far-reaching enough (identified by 18% [9] of small businesses and 28% [9] of micro businesses), and that many firms will not be able to access the benefits (24% [12] of small businesses and 22% [7] of micro businesses). 20% [10] of small businesses also argued that this initiative does not address the fundamental problems being faced, a view shared by 13% [4] of micro businesses.

[106] Slightly more respondents from micro (85%) than small (84%) businesses believed this is likely to improve profits, while only 12% of micro businesses and 8% of small businesses are likely to save more jobs as a result of this initiative.

Loan facility of J$300m for productive sector (provided by IDB through commercial banks and EX-IM Bank)

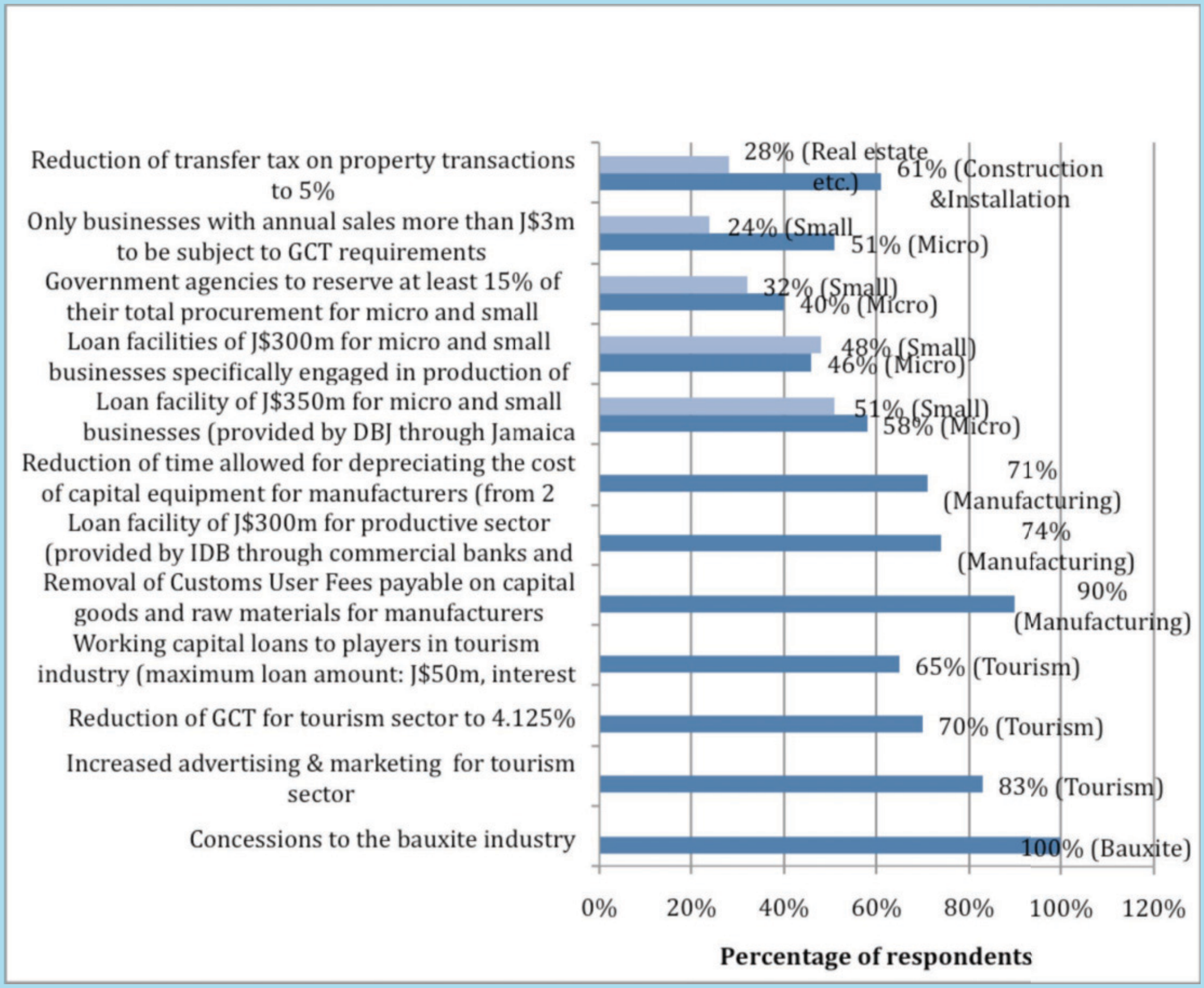
74% of the respondents from the manufacturing sector are anticipating gains from this initiative. 31% [11] of the respondents indicated that they would find it easier to conduct business, and 36% [13] of them said they would be able to expand the market for their products. As a result, 71% of these respondents expected an improvement in profitability, while only 17% are likely to incur fewer job losses. The majority (60% [18]) of the respondents from the manufacturing sector have expressed concern about access to this benefit. About a quarter (23% [7]) of the manufacturing companies surveyed also indicated that this initiative is not far reaching enough, and 13% [4] opined that it does not address the fundamental problems faced.

Reduction of transfer tax on property transactions to 5%

69% [20] and 39% [7] of the respondents from the real estate & business services and construction and installation sectors, respectively, noted that this initiative will have no impact on their operations, and a further 20.7% [6] and 22.2% [4] of the respondents from these sectors noted that it will only be slightly beneficial. 39% [7] of the respondents from the construction and installation sector, however, indicated that it would either be beneficial or very beneficial, as compared to only 6.8% [2] from the real estate and business services sector. 44.4% [8] of the respondents from the construction and installation sector noted that they expect an improvement in profitability as a result of this initiative, while the same proportion did not expect any impact. Only 20.7% [6] of respondents from the real estate and business services sector expected improved profitability, while 72.4% [21] expected not to be impacted, Furthermore, only 11.1% [2] and 6.9% [2] of businesses surveyed in the construction and installation and real estate and business services sectors, respectively, indicated a likelihood of fewer job losses. The majority (90% [9]) of respondents from the construction and installation sector, however, expected reduced tax-related costs, a position shared by 37.5% [3] of businesses surveyed in the real estate and business services sector. The majority of respondents in both the construction and installation (55.6% [10]) and real estate and business services sectors (69% [20]) indicated no concerns with this initiative.

FIGURE 20:

Percentage of Respondents to Benefit from Sector-Specific Initiatives



Non-sector-specific initiatives

Abolishment of tax on dividends paid by all locally owned companies

Just over half of the businesses surveyed (57% [161]) expect no impact from this initiative, while 19% [54] and 13% [38] indicated that it will be beneficial and slightly beneficial, respectively. It is not surprising to note that there is a higher than average proportion of large businesses (33% [4]) which expect to benefit from this initiative. Businesses expect to benefit primarily through improvement in profit levels (a view held by 78% [80] of respondents). A much smaller proportion of companies expect this initiative to result in fewer job losses (a view held by only 13% [13] of the respondents). Most (52% [57]) of the businesses that expect to benefit note that this initiative will allow for a reduction in tax-related expenses, while a smaller amount (22% [24]) felt it would lead to greater ease in conducting business. About a third (34% [39]) of the businesses, however noted that many firms will not be able to access the benefit, and 28% [32] argued that it does not address fundamental problems.

Increase in income tax threshold to J$220,272

Over a third (37% [105]) of respondents expect this initiative to have *no impact* on their operations, and 31% [89] indicated that it will be only slightly beneficial. Only 22% [63] of the respondents believed that it will be beneficial. Of those that expect to benefit, reduced tax-related expenses was identified by 36% [56] of the respondents, and an expanded market for goods and services was highlighted by 25% [39]. Improved profitability is expected to result, as indicated by 66% [95] of respondents. Some respondents also noted that benefits would accrue through the increased motivation of staff and reduced wage increase pressures. The businesses surveyed, however noted that this initiative is not far reaching enough (as indicated by 60% [87] of the respondents), and that it will adversely affect the government's fiscal position (14% [22]).

Adjustment of government procurement policy to provide a 10% margin of preference to Jamaican-owned companies

More than half (53% [150]) of the businesses surveyed said they expect *no impact* from this initiative, while only 19% [53] and 18% [51] expect it to be *beneficial* or even *only slightly beneficial*. This initiative is expected to lead to an expansion of the market for goods and services by 53% [65] of the businesses who would benefit. An additional 23% [28] is expecting to benefit from increased ease of conducting business. Consequently, 83% [107] of the respondents indicated that the initiative would result in increased profitability, while only 13% [17] highlighted fewer job losses as an expected benefit. Almost half (49% [70]) of the respondents however noted that this initiative is not far reaching enough, while others (28% [40]) are worried that many firms will not be able to access the benefit.

Analysis of the Effectiveness of the GoJ's Stimulus Package - Dynamic Modeling

The analysis of the effectiveness of the stimulus package at the macro-level, involved the use of the Planning Institute of Jamaica's dynamic modeling tool called the Threshold 21Jamaica Planning Model.[107] This simulation tool was utilized to model the Jamaican economy during and after the crisis, and to compare the outcomes of the government's stimulus initiatives with a number of alternative policy options (such

[107] The scenario analysis was made possible by a team of researchers from the Planning Institute of Jamaica (PIOJ) who lent their services towards the study using the T21J. This is a dynamic simulation model designed to support, comprehensive, integrated long-term national development planning. As a quantitative planning tool it supports the integration of the economy, environment and society and provides scenarios of future long term outcomes and project consequence of different strategies across a wide range of indicators.

as *no stimulus spending at all*, *job retraining, spending on welfare programmes* and *improving national security*). The outcomes of these policy options in the short (2009), medium (2014) and long (2030) terms were compared by analyzing their impacts on six key socioeconomic indicators: economic growth rates; potential unemployment rates;[108] poverty levels; crime & violence, measured by gang related murder and shooting; access to basic health care; and adult literacy rates.

The details of the assumptions and methodology used in this exercise are presented in Appendix 2. Highlighted below are the results of the simulation exercises and the conclusions derived.

Economic growth

Real GDP is projected to decline by 2.9% in 2009 under all five scenarios (Table 2). This decline is due mainly to the negative impact of the global financial and economic crisis on: 1) FDI; 2) remittances; and 3) the capacity utilization rate. Real GDP is also projected to decline in 2010 for all five scenarios; however, the decline will be marginal (i.e. the decline is projected to be approximately -0.3% in 2010). This result indicates that the different policy scenarios have little or no impact on real GDP performance in the short-run.

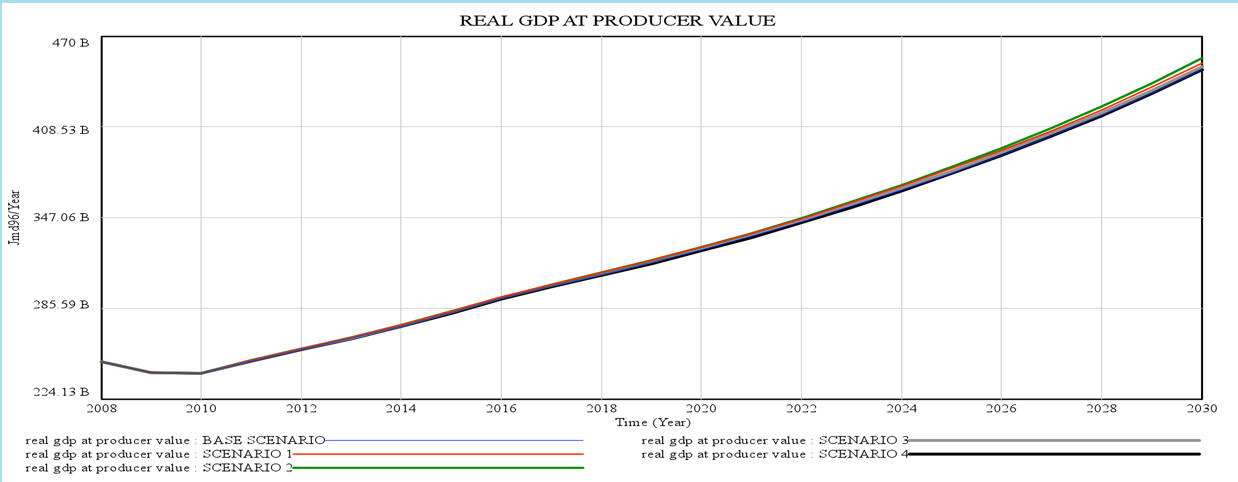
TABLE 2: Real GDP at Producer Value

	2009	**2014**	**2030**
	SHORT-RUN	**MEDIUM-RUN**	**LONG-RUN**
Base Scenario (No Intervention)	-2.9%	3.1%	3.7%
Scenario 1 (Government Policy)	-2.9%	3.1%	3.7%
Scenario 2 (Retraining Policy)	-2.9%	3.1%	3.8%
Scenario 3 (Welfare Policy)	-2.9%	3.1%	3.7%
Scenario 4 (Security Policy)	-3.0%	3.1%	3.7%

[108] This variable represents what the unemployment rate would be if the participation rate within the working group age 15 -19 was 50%, and age 20-24 was 85% and age 25-60 was 100%. After age 60, the rate is assumed to be zero.

FIGURE 21:

Real GDP at Producer Value



Real GDP growth is projected to be approximately 3.1% in the medium run under all scenarios. In the long run, Scenario 2 (Retraining Policy) will be marginally better (Figure 21). These results are expected, because: 1) it is assumed that government will reallocate J$5.0 billion (in nominal terms), which will decline in value over time due to inflation; and 2) the J$5.0 billion was reallocated from other expenditure categories to implement the policy, these expenditure categories (Education, Health Care and Infrastructure) also impact economic growth. Scenario 2 performs the best in the long run because skill development/retraining will improve productivity of persons within the workforce.

Potential unemployment rate

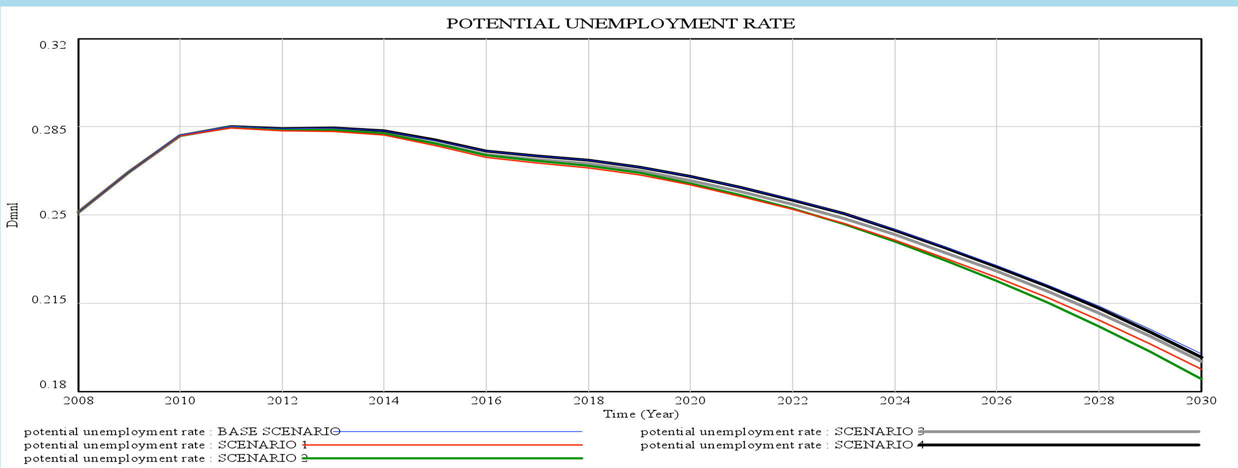
The potential unemployment rate is projected to increase by 1.6 percentage points to 26.7% (Table 3) in 2009 for all policy scenarios. In the medium run, potential unemployment is projected to increase under all scenarios. This is because it is projected that the size of the working age group is growing faster than the size of the employed labour force. Potential unemployment is projected to decline by 2030 under all scenarios (Figure 22). Scenario 3 (Retraining Policy) will result in the lowest potential unemployment rate in the long run (Table 3), which is consistent with the policy scenario recording the highest real GDP (see Figure 21).

TABLE 3: Potential Unemployment Rate

	2009	2014	2030
	SHORT-RUN	**MEDIUM-RUN**	**LONG-RUN**
Base Scenario (No Intervention)	26.7%	28.3%	19.5%
Scenario 1 (Government Policy)	26.7%	28.2%	18.9%
Scenario 2 (Retraining Policy)	26.7%	28.2%	18.5%
Scenario 3 (Welfare Policy)	26.7%	28.2%	19.2%
Scenario 4 (Security Policy)	26.7%	28.3%	19.4%

FIGURE 22:

Potential Unemployment Rate



Poverty

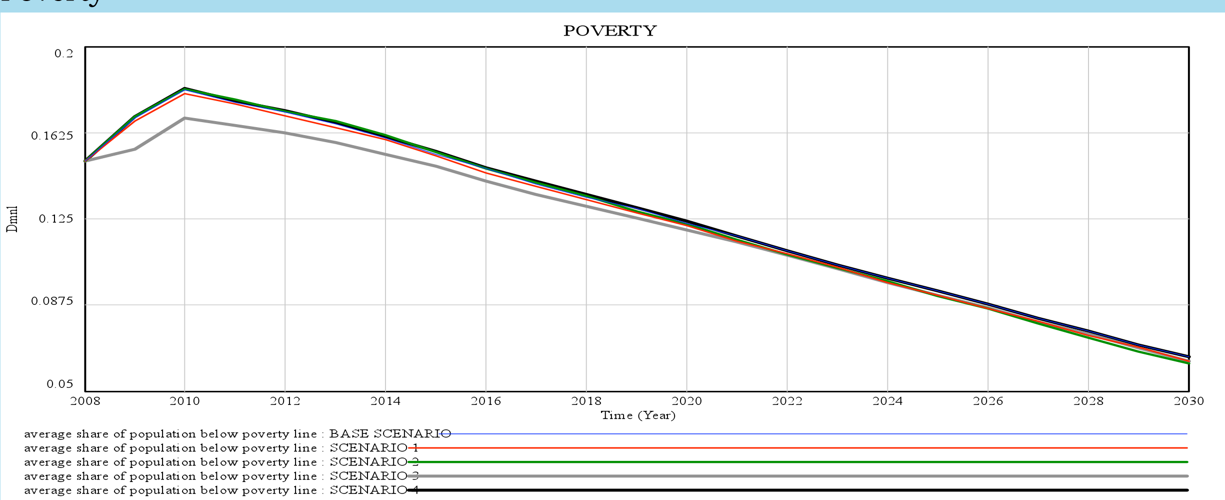
Poverty is projected to increase in 2009 and 2010 under all scenarios (Figure 23), which is consistent with a decline in real GDP. Scenario 3 (Welfare Policy) is projected to produce the lowest poverty rate in the short to medium run (Table 5 and Figure 23). This is because it is assumed that resources will be reallocated to address welfare related issues. However, in the long run, Scenario 2 (Retraining) will yield the lowest poverty rate. Scenario 2 is lower in the long run, because it has the highest real GDP in 2030 (see Figure 21).

TABLE 4: Poverty

	2009	2014	2030
	SHORT-RUN	**MEDIUM-RUN**	**LONG-RUN**
Base Scenario (No Intervention)	16.9%	16.0%	6.5%
Scenario 1 (Government Policy)	16.8%	16.0%	6.3%
Scenario 2 (Retraining Policy)	17.0%	16.1%	6.2%
Scenario 3 (Welfare Policy)	15.5%	15.3%	6.3%
Scenario 4 (Security Policy)	17.0%	16.1%	6.5%

FIGURE 23:

Poverty



Crime & violence – gang related murder and shooting

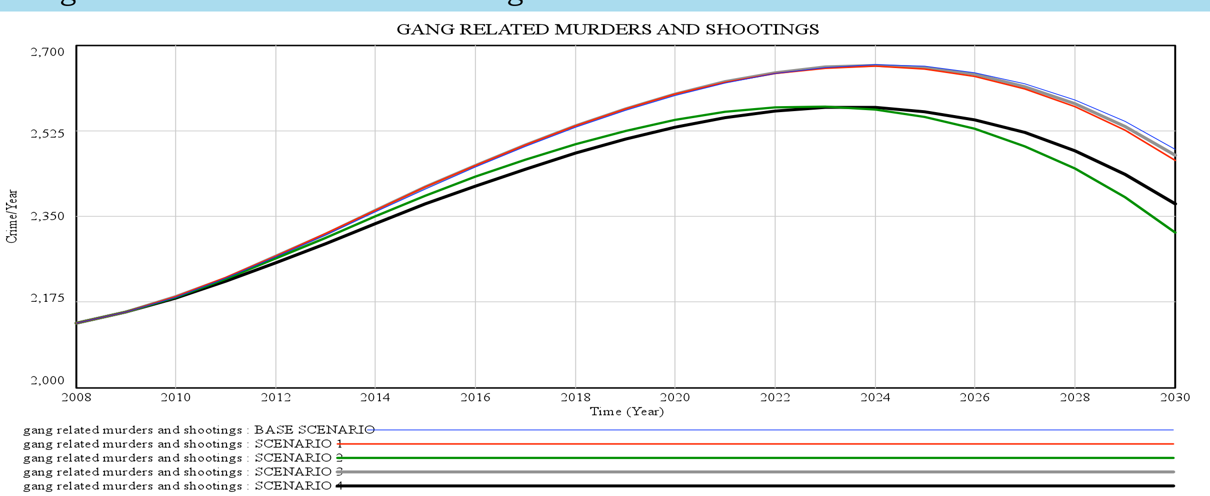
Gang related murder and shooting is projected to increase in 2009 under all scenarios (Figure 24). Gang related murder and shooting is estimated to be the lowest under Scenario 4 (Crime Policy) in the medium run. However, Scenario 2 (Retraining) will outperform Scenario 4 in the long-run (Table 5).

TABLE 5: Gang Related Murders and Shootings

	2009	2014	2030
	SHORT-RUN	MEDIUM-RUN	LONG-RUN
Base Scenario (No Intervention)	2154	2360	2487
Scenario 1 (Government Policy)	2154	2362	2465
Scenario 2 (Retraining Policy)	2154	2350	2317
Scenario 3 (Welfare Policy)	2154	2362	2475
Scenario 4 (Security Policy)	2154	2335	2376

FIGURE 24:

Gang Related Murders and Shootings



Retraining increases the likelihood of persons obtaining a job in the formal economy, thus, reducing the pool of persons seeking a job in the informal economy (joining a gang). Additionally, Scenario 2 will have the highest GDP which means more resources will be available to the security forces in the long- run.

Access to basic health care

Access to basic health care is projected to decline in the short to medium run under all scenarios, as the decline in GDP in 2009 and 2010, and the increase in gang related murder and shootings will lessen the resources available to address basic health care in the short to medium run (Figure 25). However, in the long-run, access to basic health care is projected to improve, as more resources are made available from higher real GDP. In the short to medium run, Scenario 3 (Welfare) will lead to the highest access to basic health care when compared with other scenarios (Table 6).

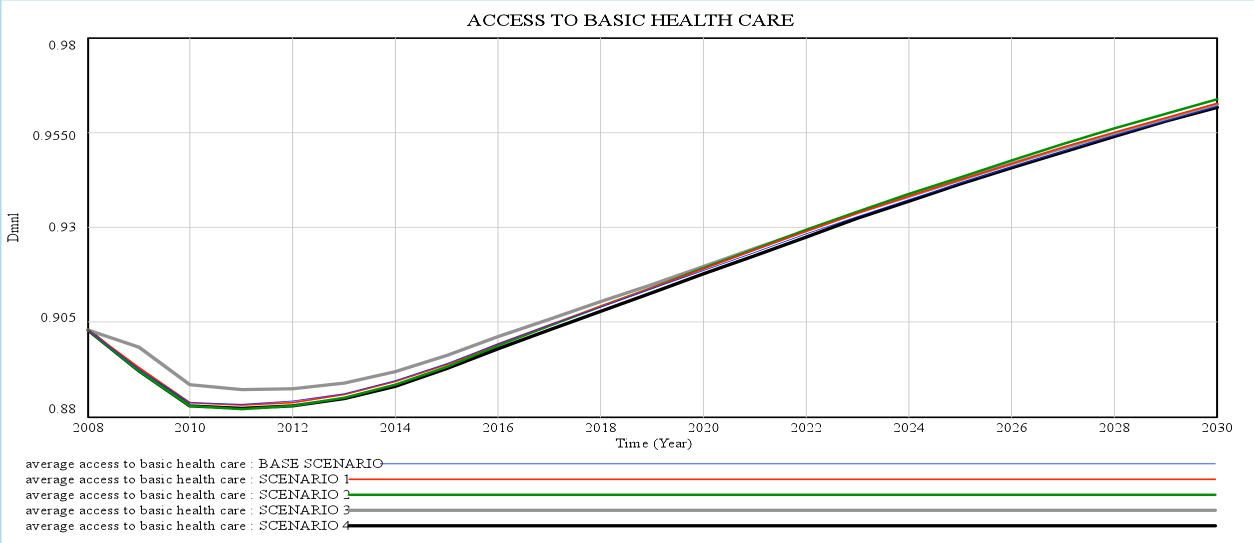
However, in the long run Scenario 2 (Retraining) will lead to the highest access to basic health care when compared with the other scenarios. This is because of a combination of higher real GDP, lower number of gang related murder and shooting and lower poverty rates under Scenario 2 (Retraining).

TABLE 6: Access To Basic Health Care

	2009	**2014**	**2030**
	SHORT-RUN	**MEDIUM-RUN**	**LONG-RUN**
Base Scenario (No Intervention)	89.3%	88.9%	96.2%
Scenario 1 (Government Policy)	89.3%	88.9%	96.3%
Scenario 2 (Retraining Policy)	89.2%	88.9%	96.4%
Scenario 3 (Welfare Policy)	89.8%	89.2%	96.2%
Scenario 4 (Security Policy)	89.2%	88.8%	96.2%

FIGURE 25:

Access to Basic Health Care



Adult literacy rate

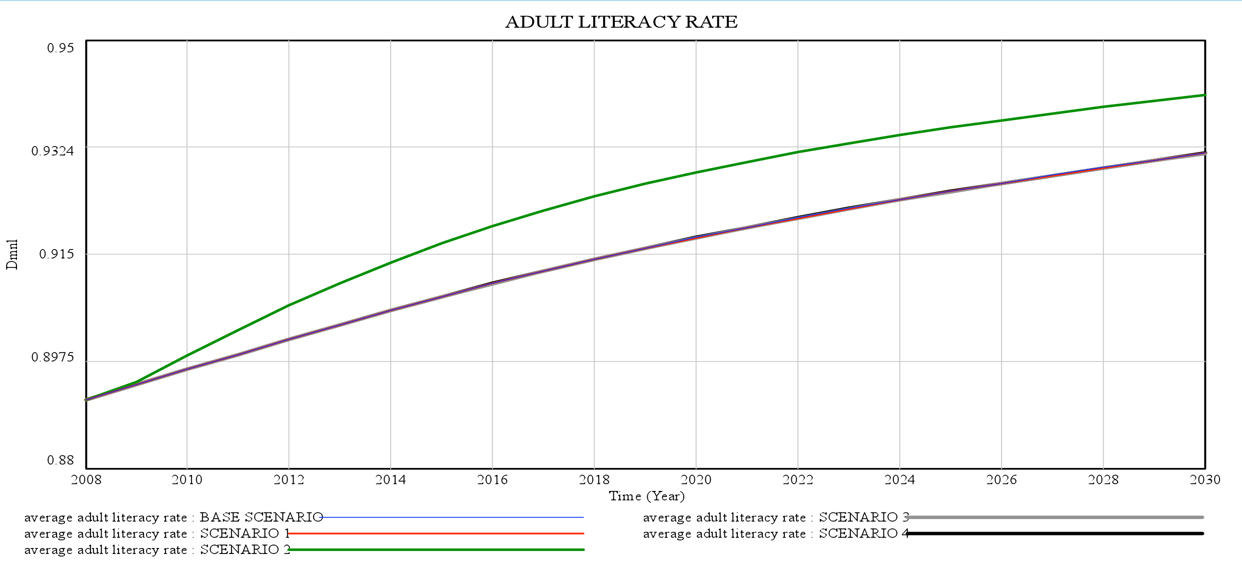
The adult Literacy rate is projected to increase under all scenarios as more educated children join the adult (15 and over) population. Scenario 2 (Retraining) will lead to the highest adult literacy rate as retraining involves addressing literacy deficiencies (Table 7 and Figure 26).

TABLE 7: Adult Literacy Rate

	2009	**2014**	**2030**
	SHORT-RUN	**MEDIUM-RUN**	**LONG-RUN**
Base Scenario (No Intervention)	89.4%	90.6%	93.2%
Scenario 1 (Government Policy)	89.4%	90.6%	93.1%
Scenario 2 (Retraining Policy)	89.4%	91.4%	94.1%
Scenario 3 (Welfare Policy)	89.4%	90.6%	93.1%
Scenario 4 (Security Policy)	89.4%	90.6%	93.2%

FIGURE 26:

Adult Literacy Rate



The analysis above indicates marginal differences in the outcomes of each policy option. If the performance of each policy is assessed based on a simple ranking of best to worst outcomes, and each socioeconomic indicator is assumed to be of equal weight, straightforward conclusions can be made. For the short run, Scenario 1 (Government Policy) is the preferred policy option, followed by Scenario 3 (Welfare Policy). The Base Policy (No intervention) performed the worst of all five policies in the short run. In the Medium run, the best performers were Scenario 1 (Government Policy) and Scenario 2 (Retraining Policy), for which the outcomes were about the same. Finally, in the long run, the best performer in all socioeconomic indicators was Scenario 2 (Retraining Policy) followed by Scenario 1 (Government Policy). Overall, using this simple ranking, Scenario 2 (Retraining Policy) seems to be the best policy option, especially if sustainable medium to long term results are preferred over short-term crisis mitigation.

While straightforward, this simple ranking of the policy options may however be misleading, as in all of the scenarios the results were almost identical, with differences of only fractions of a percent for most of the indicators. This interpretation suggests that the economy will perform just about the same with or without the stimulus package, and also would have performed the same if the money had been used differently. The GOJ's stimulus package is thus assessed as being just as good as any other option, including having no intervention at all. Although this result may seem counterintuitive, it is easily explained by the fact that the stimulus package is too modest a package to have any great effect. Stimulus packages typically involve injections equivalent to fairly large percentages of GDP, but in Jamaica, the high indebtedness of the government precludes injections of a sufficiently high value to create the desired impact.

Conclusion And Recommendations

This report has sought to rigorously assess the degree of exposure of different types of business to the ensuing global economic crisis, evaluate the implications of extant and future adjustments being made by businesses in response to the crisis, and examine the potential efficacy of the government's response to the crisis. This study has been conducted using primary data collected in Jamaica, and, although context-specific, the results contribute to the broader debate on issues such as the resilience of real sector businesses to financial crises, and appropriate private and public sector responses to such crises. Very few, if any countries have been spared the effects of this crisis, and so the lessons learned from across the world should be expeditiously and rigorously derived and shared as the global community responds to a truly global crisis.

Exposure to the Crisis

Direct exposure by virtue of having deposits or investments in financial institutions overseas, and, particularly in distressed foreign institutions was minimal. Indirect exposure through lines of credit from foreign financial institutions and suppliers was also small, as businesses did not rely heavily on credit from foreign financial institutions. Also, even though credit from foreign suppliers was important to medium-sized firms from the manufacturing and trade & distribution sectors, worsening of conditions for such credit lines had not yet been experienced. Expectations, however, were generally negative, with more stringent borrowing conditions expected in the medium to long term, as the global crisis is prolonged.

The greater reliance on local sources of credit does not imply that there is no exposure to the global crisis, as although credit from local financial institutions has been relatively stable, increased interest rates have heightened the cost of credit. There was more ambivalence with regards to extant changes in the terms of credit from local suppliers. Expectations for both local sources of credit in the medium to long term were, nonetheless, also negative, with local financial institutions clearly expected to reduce the availability of credit, local suppliers expected to decrease the length of loans offered, and both expected to increase the cost of credit.

The analysis of the degree of exposure through real sector channels revealed interesting results, as Jamaican businesses were shown to be heavily reliant on goods and services sold in the local market, primarily in the form of basic necessities and intermediate goods. This would suggest a low degree of immediate exposure to the global recession, but, surprisingly, export markets were perceived as relatively stable, while local markets were perceived as exhibiting deteriorating conditions. This has serious implications for the vulnerability of Jamaican businesses, as most have very little diversification with respect to their output markets. The threat of rapid contagion thus exists if the local economy is plunged into a prolonged recession in which key medium-sized and large businesses close, and entrepreneurs and self-employed workers lose their livelihoods.

The reasons for the local market exhibiting more quickly deteriorating conditions than the export markets require further explanation. Comparison across countries would be useful to determine whether this is a uniquely Jamaican phenomenon, related to local events and conditions, or whether other countries have similar experiences. If the latter, then questions as to the prevalence of a paradox of thrift would have to be raised.[109]

Notwithstanding this, unique vulnerabilities exist in certain sectors such as tourism and mining, which are heavily reliant on distressed foreign markets. A number of businesses in the tourism sector could be exposed by virtue of reliance on luxury service provision.

Businesses' Response to the Crisis

Only 19 of 285 Jamaican businesses indicated a need to shut down operations in response to the global economic crisis, suggesting that most Jamaican firms expect to weather the storm. No large companies indicated an intention to close operations, confirming the relative stability of larger companies, as they are able to absorb greater shocks for longer periods.

Staff-related adjustments to the crisis were relatively unpopular amongst businesses surveyed. Approximately two-thirds of the respondents noted that they were unlikely to undertake layoffs. Least likely to undertake layoffs are businesses from the electricity, gas & water and tourism sectors. Most likely are large businesses in the mining, transportation, storage & communication and agriculture sectors. Most businesses (77%) also have no intention of reducing wages, with only large businesses, mining companies and construction & installation businesses having a significant proportion of their respondents considering this possibility. Instead, over half of the businesses surveyed were more likely to reduce other benefits to staff. This view was most prevalent within the real estate & business services, financial services, manufacturing, trade & distribution and agriculture sectors, and with medium-sized enterprises.

[109] The paradox of thrift (or the paradox of saving) results when people begin to save more money in times of recession and thereby consume less. This however leads to a reduction in overall demand for goods and services in the economy which leads to worsening conditions since it will result in even slower economic growth. As economic growth slows, people will generate less income which in turn will lower their total savings.

There was also a much greater willingness by most of the respondents to consider the reduction of non-staff related expenses as a means of adjusting to the crisis, with very little variation across size and sector. This, however, does not involve the reduced use of local and foreign inputs and services by most businesses. Only the transportation, storage & communication sector was likely to reduce foreign inputs, while large companies and the mining sector were likely to reduce local inputs. Local suppliers to large companies and to the mining industry can expect to be adversely affected, thus highlighting the vulnerability of the considerable number of Jamaican firms supplying intermediate goods, particularly to large companies.

This emphasizes the importance of businesses having a diversified market for their output, a lesson which seems not to be lost on Jamaican companies, as two-thirds of the businesses surveyed indicated that they were likely or very likely to seek alternative markets as a means of adjusting to the crisis, with large companies exhibiting the greatest dynamism in this respect. There was more ambivalence with respect to seeking alternative means of financing as an adjustment strategy, with about half of the respondents being likely or very likely to pursue this option, and the other half being unlikely. Reluctance to pursue this strategy was clearly related to the size of the entity, with a larger proportion of micro and small businesses being unlikely to pursue this option. This confirms the difficulties faced by micro and small businesses in accessing finance. Businesses in the trade & distribution, finance, and transportation, storage & communication sectors were also more reluctant to seek alternative means of financing.

The Government's Response to the Crisis

A depreciating currency precipitated a monetary policy response of increased interest rates, which was heavily criticized by the business community, as being too harsh in a period of crisis. Notwithstanding this, about two-thirds of the businesses surveyed noted that this policy response did not result in unmanageable increases in the cost of working capital and debt repayment. The construction and installation industry is, however, uniquely adversely impacted in this respect, as a higher-than-average proportion of respondents from this sector noted that they would be affected by large and unmanageable increases in the cost of working capital and debt repayment.

On the fiscal side, a stimulus package, estimated to cost between J$4.6 billion - J$5.3 billion was announced by the government. The initiatives for the most part involved support to specific sectors of the economy. Businesses from targeted sectors were largely optimistic about reaping benefits from the respective initiatives, but were primarily concerned about their ability to access the benefits, the narrow concentration of many of the initiatives, and the adequacy of the initiatives in addressing fundamental problems affecting the economy.

The results also indicated that the expected benefits from the stimulus package are more likely to lead to improved profitability of the businesses, and less likely to reduce job losses. This result raises questions as to whether the stimulus package is able to achieve the announced objectives, which primarily relate to alleviating the effects of job losses and closure of businesses. This is particularly so in a context within which most businesses have noted that layoffs and closures are not likely.

The results of the simulation exercises similarly indicated that the government's stimulus package will not have a major impact on a range of social and economic issues affecting the country. Very similar outcomes are however derived from the modeling exercises if the same amount of money had been used differently, or even if no money had been spent. This suggests that the stimulus injections were not sufficiently large to create the desired impact. Let us, however note that although only minimal gains can be expected from the stimulus package, if the announcement of such a package causes increased confidence within the business community in a period of heightened pessimism, this could at least partially justify its implementation.

Recommendations

The results on the exposure of different types of business to the global crisis, the channels through which such exposure is transmitted, the responses of the business community to the crisis, and on the efficacy of the government's response to the crisis, yield numerous lessons for decision-makers in businesses and government. These lessons, in many instances, are not unique to Jamaica, and should spur stimulating discussion and debate as the crisis-recovery effort continues around the world.

Recommendations for businesses:

- Be vigilant with where you save and/or invest your money. Be careful not to have a knee-jerk reaction to the global financial crisis and invest all your funds in one 'safe' place. As the current crisis illustrates, even the largest and most 'reputable' institutions can fail. Have a diversified portfolio of savings and investments, and monitor that portfolio rigorously.
- Explore all available options to diversify lines of credit and seek alternative sources of finance. As both foreign and local credit conditions are expected to worsen in the medium to long term, businesses with internal reserves and/or retained earnings are now better positioned.
- Grow your business, as increased size reduces vulnerability, as larger companies can absorb losses for longer periods of time.
- Diversify the location of your output markets, as overreliance on the domestic market makes businesses more vulnerable to prolonged periods of recession and harsh domestic conditions. Overreliance on the USA and the UK similarly increases vulnerability to volatility in those markets.

- Diversify your product line and/or customer base. While the supply of intermediate goods is traditionally viewed as stable, because the demand for such goods are relatively inelastic, in times of crisis when even large businesses are adversely affected, overreliance on such goods can be detrimental, as the closure of a few large firms completely eradicates your market. Reliance on revenues from luxury or medium cost non-essential goods/services is even more risky, and should be hedged against by market diversification and product differentiation.

Recommendations for the Government:

As financial systems evolve, financial regulation must do so as well. Hence the government should ensure that there is improved regulation of the Jamaican financial system on a continuous basis.

In periods of crisis ensure that continued support (within reason) is provided to the financial sector so as to avoid panic and loss of confidence. This is exemplified by the BOJ's provision of liquidity support to the financial system in the current crisis. The experience of similar support provided in the 1990s, however, suggests that such support should not be indefinite and should be complemented by strong incentives against moral hazard.[110]

In periods of crisis ensure that continued support (within reason) is provided to the financial sector so as to avoid panic and loss of confidence. This is exemplified by the BOJ's provision of liquidity support to the financial system in the current crisis.

As a longer-term objective, because Keynesian-type stimulus measures are useful in responding to crises, governments should aim to manage their budgets so as to enable them to have the fiscal space to implement a meaningful response when the need arises.

Because the business community is heavily dependent on the local market, stimulus measures should focus on increasing domestic spending. Direct support to consumers may therefore be more effective than support to targeted business communities, especially if the latter is the result of lobbying efforts and cronyism. As learned from previous crisis response efforts in South East Asia and Jamaica, such support should seek to, inter alia, ensure food security, maintain the purchasing power of vulnerable households, and maintain economic and social services for the poor, including education and healthcare.[111]

Facilitating the increased access of micro and small businesses to financing is critical, as if a prolonged recession leads to further layoffs, self-employment will increase and will need to be a viable alternative for individuals. This must be accompanied by carefully

[110] See Kirkpatrick and Tennant (2002)

[111] A comparison of the governments' responses to financial crises in Jamaica and South East Asia is presented in Kirkpatrick and Tennant (2002).

planned strategies to enhance the productive capacity as well as the export capabilities of these firms.

Appendix 1

Surveying Methodology

This survey was carried out over a period of three months, from January to March 2009 and involved the administration of surveys to 285 randomly selected businesses. The sample was stratified by sectors, counties and size of the entities, as indicated below:

Sector	Counties/Area	Size of Entity
Agriculture (14)	KSA (141)	Micro businesses (85)
Trade/Distribution (100)	Other Surrey (14)	Small businesses (99)
Mining (2)	Cornwall (25)	Medium businesses (63)
Manufacturing (51)	Middlesex (105)	Large businesses (12)
Construction & Installation (18)		
Social or Personal Services (15)		
Financial Sector (13)		
Transportation, Storage & Communication (17)		
Tourism (23)		
Real Estate or Business Services (29)		
Gas, Electricity, Water (3)		

The target population was all businesses across the three strata. The sampling frame used was a database of all companies that are serviced by the Jamaica Public Service Company (JPS). This has the advantage of including registered as well as non-registered businesses.

The company, Market Research Services Limited (MRSL), was contracted to select the sample and administer the surveys. Sample selection across the different strata was generally based on a principle of equal allocation. However, in any stratum where there were too few firms to support equal allocation, a census was conducted. The remainder of the sample was then allocated equally across the rest of the strata. A sample size of 400 businesses was targeted, but a low response rate precipitated a final sample size of 285 firms.

APPENDIX 2:

SCENARIO ANALYSIS USING THE THRESHOLD 21 JAMAICA PLANNING MODEL (T21)

The scenario analysis was made possible by a team of researchers from the Planning Institute of Jamaica (PIOJ) who lent their services towards the study. The Threshold 21 Jamaica planning Model was used to assess the impact of the crisis and the government's response (stimulus package) to the crisis. Different scenarios were analyzed in which it was assumed that the estimated cost of the stimulus package is utilized in supporting: 1) job retraining; 2) welfare programmes; and 3) improved national security.

The features and strengths of the Threshold 21Jamaica Planning Model (T21J) makes it a useful tool in assessing the implications of the crisis on key socioeconomic indicators in the Jamaican economy, and allow comparisons of the outcomes of different policy options.

Major assumptions of the modeling exercise:

It is assumed that the capacity utilization rate will decline in 2009 and 2010, owing to the waning demand for Jamaica's goods and services. This was estimated using CAPRI's survey data;

Remittances are assumed to decline by 10.0% in 2009 and 5.0 % in 2010. This estimate is based on reported data for the first two months of 2009, where average remittance declined by approximately 10.0%;

Foreign Direct Investment (FDI) is expected to decline by 20.0% in 2009[112] and 10.0% in 2010; and

The Budget will be balanced by Fiscal year 2010/11[113] as set out in the Government's Medium Term Framework FY 2007/08 – FY 2010/11.

[112] This data is based on estimates from the IMF – The implication for the global financial crisis for low income countries, March 2009.
[113] It is assume that the balance budget will start in 2010. Balance budget means the government will only borrow to finance amortization.

The annualized value of the stimulus package was an important input variable that was ascertained by combining CAPRI's estimates with those of the Ministry of Finance and Public Services (MoFPS).[114] Based on these estimates, the revenue that would be foregone in 2009 is projected to total $5.3 billion. From 2010 onwards, revenue foregone will be $5.0 billion each year. Additionally, the government has made available a $650.0 million loan facility for micro and small enterprises. It is estimated, based on CAPRI's survey data, that there will be an uptake of $249.5 million.

The T21 model was used to assess the trade-off of pursuing the different policy scenarios (Table A1) in the short run (2009), the medium run (2014) and the long run (2030). The key socioeconomic variables that were analyzed included:

- Economic growth
- Potential Unemployment rate[115]
- Poverty
- Crime & Violence – Gang related murder and shooting
- Access to Basic Health Care
- Adult literacy rate

TABLE A1: Scenarios/Policy Options

BASE SCENARIO	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4
The impact of the global crisis on the Jamaican economy without the assistance of the stimulus package (no intervention).	The impact of the stimulus package on the Jamaican economy.	The impact if the equivalent sum of money from the stimulus package is used to support job retraining.	The impact if the equivalent sum of money from the stimulus package is used for supporting welfare programmes.	The impact of the equivalent sum of money from the stimulus package is used to support improved national security.

[114] Due to data limitations, not all items included in the stimulus package were estimated. The six items that were estimated by CAPRI will be used in the combined estimate along with Reduction of transfer tax from 6% to 5% and Depreciating cost of capital equipment from 2 years to 1 year items which were estimated by the MoFPS.

[115] This variable represent what the unemployment rate would be, if participation rate within the working age group age 15 -19 was 50%, and age 20-24 was 85% and age 25-60 was 100%. After age 60, the rate is assumed to be zero.

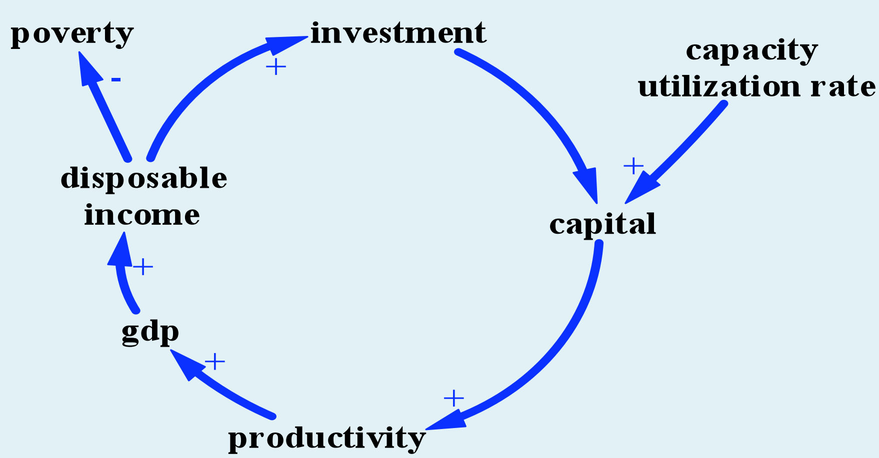
CAUSAL LOOP DIAGRAMS

Base Scenario – Expected Outcome of the crisis with no stimulus:

For the Base Scenario, we are estimating the impact of the global economic crisis on the economy. The global economic crisis has resulted in a downturn in investments, in addition to a reduction in the capacity utilization rate of firms (Figure A1). The lower utilization of capital will result in a reduction in productivity and a further lowering of GDP. A downturn in GDP is expected to result in a decline in disposable income. As a result of lower disposable income, poverty rates will be higher. Lower investments will also emanate from a decline in income which further results in lower capital stock.

FIGURE A1:

Impact of the Global Crisis on the Economy

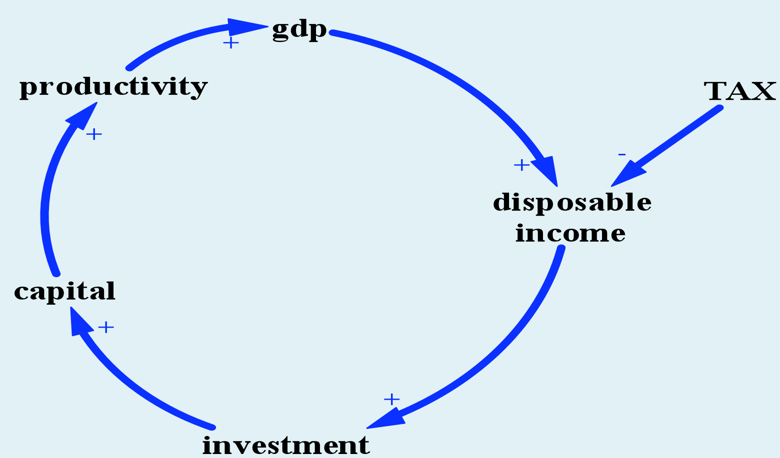


Scenario 1 - Impact of the stimulus package:

In light of the global crisis, the Government of Jamaica (GOJ) has deemed it necessary to cushion the effects of the crisis by implementing a stimulus package valued at $5.3 billion in 2009 and $5.0 billion thereafter.[116] This package includes a lowering of tax rates for the tourist industry stakeholders and Custom User Fees for the manufacturers, among other things. Lower taxes will result in higher disposable income which means that there will be higher savings (Figure A2). Investment in capital will increase resulting from a higher savings. With added investment, capital stock is expected to grow, hence increasing overall productivity. Improvements in productivity will further result in an increase in the production of goods and services in the economy which stimulates even more funds being available for households.

FIGURE A2:

Causal Diagram showing the expected outcome of the Stimulus package on the economy



Scenario 2 -Impact of the equivalent sum of money from stimulus package utilized to support job retraining:

For Scenario 2, the GOJ will be examining the option of using the funds allocated for the stimulus package to support job retraining. The utilization of this fund is expected to result in an increase in the skills of the working population (Figure A3). Increased productivity is expected to emanate from higher human capital.

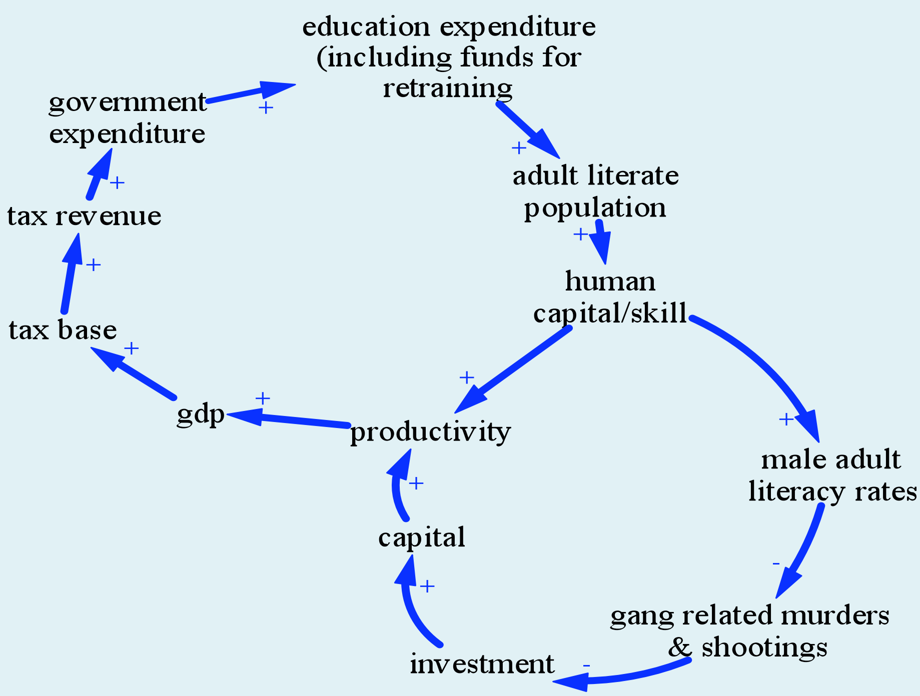
[116]This figure was estimated by the MoFPS and CAPRI for eight items included in the stimulus package.

Improvements in the productivity of the human resource capacity will result in an increase in the rate of growth in GDP. As a consequence, the tax base will be larger which means that there will be more revenue for the government; hence more resources will be available to spend on the government's discretionary expenditure (education, infrastructure, health care, etc.).

Additionally, improvements in the literacy rates will impact on the number of gang related murders and shootings as it is expected that with increased opportunities for the socially vulnerable population[117], these persons will not turn to a life of crime. The lower crime rate will result in an increase in investment and further increases in capital stock within sectors in the economy which as a result, improves productivity and GDP.

FIGURE A3:

Causal Diagram showing the expected outcome of the equivalent sum of money from stimulus package utilized to support job retraining



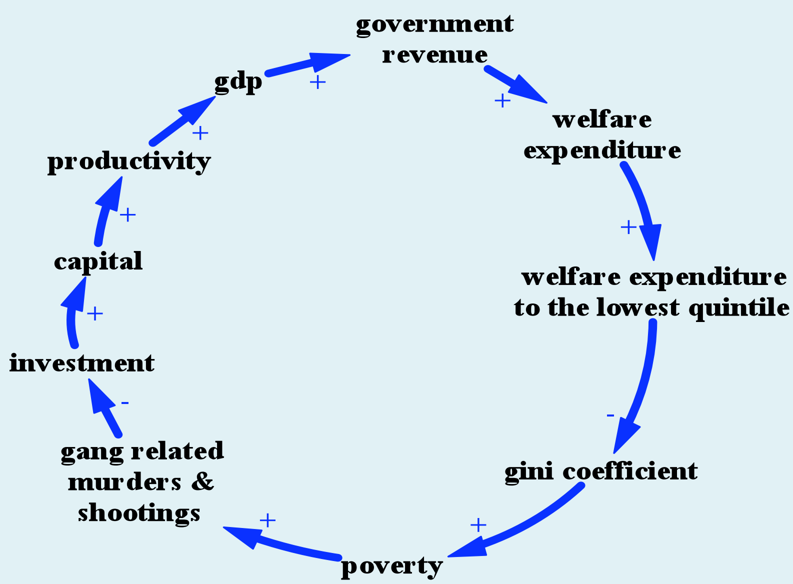
[117] Socially vulnerable populations are young males within the 15 – 24 years who are highly likely to engage in a life of crime.

Scenario 3 – Expected impact if the equivalent sum of money from stimulus package utilized to support welfare programmes:

The World Bank has estimated that due to the global economic and financial crisis, another 53 million persons will be pushed into extreme poverty in 2009. In light of this fact there is a need to cushion the effects that will be felt by the poor. The option of giving support to welfare programme is another option which the GOJ can explore, utilizing the total funds allocated for the stimulus package. Welfare assistance will be provided to the lowest quintile since they are the most vulnerable; as a result of the allocation we can anticipate a lowering of the Gini coefficient and hence, a reduction in poverty (Figure A4). It is assumed in the model that there is a link between poverty and crime and as a consequence of a reduction in poverty, a fall-off in gang related murders and shootings are expected. Reductions in murders and shootings will affect investment flows positively which is reflected in an increase in capital stock and productivity and GDP. Higher GDP will result in a growth in Government revenue which means more will be available to support welfare programmes. Implementing welfare programmes is expected to have a reinforcing effect on the economy.

FIGURE A4:

Casual Diagram showing the expected outcome of the equivalent sum of money from stimulus package utilized to support welfare programmes

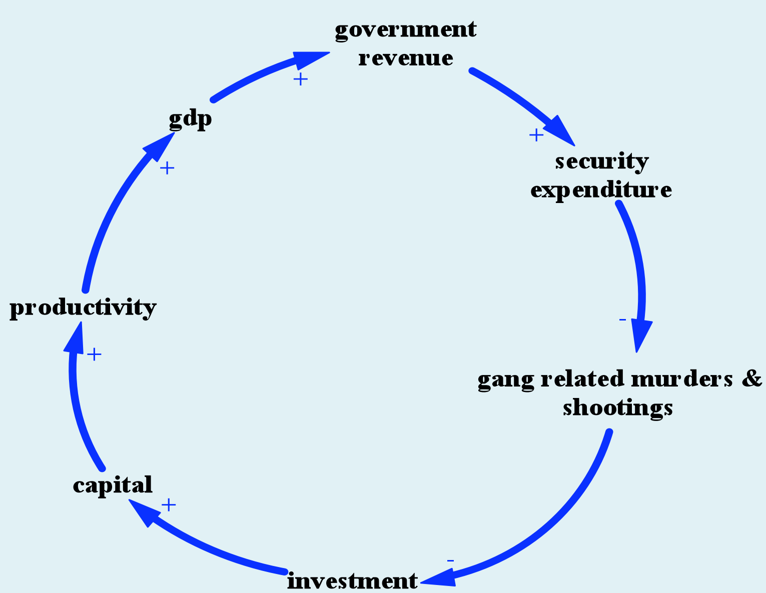


Scenario 4 –Expected outcome if the equivalent sum of money from stimulus package is used to support improved national security

If the equivalent sum of money for the stimulus package is used to support the improvement of the security forces, we can expect a reduction in gang related murders and shootings (Figure A5). With a decline in murders & shootings, we can anticipate an increase in investment which further improves the nation's productive capacity. Improvement in productivity will result in higher GDP, hence a larger tax base for the government and greater tax income. Additional revenue for the government translates into increase funds being available for discretionary items such as security expenditure.

FIGURE A5:

Causal Diagram showing the expected outcome if the equivalent sum of money from stimulus package is used to support improved national security



APPENDIX 3

TABLE 9: Labour Market Indicators

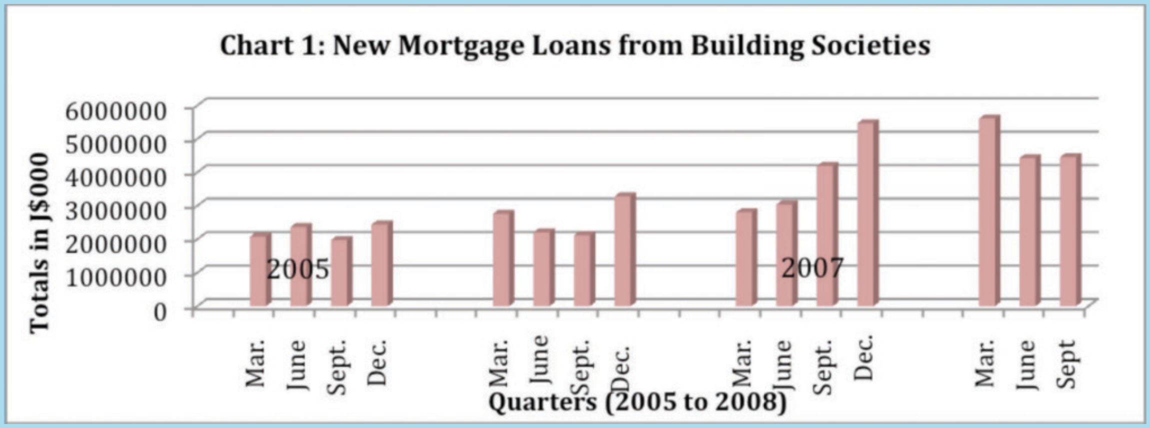
	2006		2007	
	July	**October**	**July**	**October**
Unemployment Rate (%)	8.9	9.6	9.7	9.4
Job Seeking Rate (%)	5.0	5.3	6.2	6.0
Outside the Labour Force	685,900	690,700	691,300	680,800
Unemployed Labour Force	112,000	119,600	121,400	119,800
Labour Force	1,251,400	1,249,100	1,256,000	1,268,800

Source: PIOJ, Review of Economic Performance (October to December 2007)

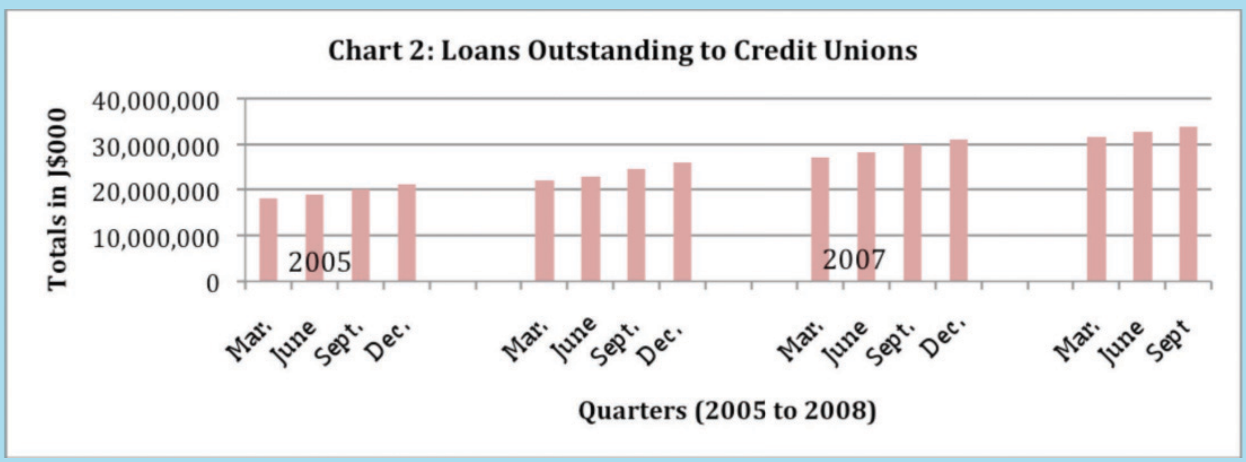
Table 10: Monthly Analysis of Loans and Advances by Sector in J$000

	Commercial Banks			F.I.A[a]		
Sectors	**2006**	**2007**	**2008**	**2006**	**2007**	**2008**
Agriculture	2,298,384	2,178,964	3,635,597	1,037,014	1,031,340	30,190
Mining	643,469	567,498	620,603	19,902	13,899	46,979
Manufacturing	5,865,305	6,400,025	9,920,449	423,542	498,590	345,240
Construction & Land Development	8,045,537	9,329,236	13,028,701	1,663,875	3,006,290	2,653,088
Financial Institution	1,425,759	719,057	1,138,809	10,495	647,778	538,831
Transport, Storage & Communication	3,705,753	7,744,895	11,055,131	609,187	906,539	432,927
Electricity, Gas & Water	190,098	1,694,447	3,169,695	10,154	6,422	197,825
Government Services	27,936,979	30,225,694	31,493,579	359,968	390,929	10,858,151
Distribution	13,569,699	18,341,963	22,680,611	1,874,644	1,984,195	1,201,946
Tourism	24,282,298	28,680,280	37,741,023	995,794	793,199	279,668
Entertainment	291,237	304,207	418,241	106,309	102,852	24,743
Professional & Other Services	9,237,158	11,563,108	15,413,072	1,324,818	1,538,002	1,470,424
Personal (local and overseas)	55,957,491	70,004,315	89,095,296	2,711,035	3,350,796	3,287,145
Total	**153,449,167**	**187,800,520**	**239,410,807**	**11,146,737**	**14,270,831**	**10,858,151**

Source: BOJ, Statistical Digest, October 2008. (Tables 12.0, 12.1, 15.1 and 15.2)
Note:
a : F.I.A institutions include Merchant Banks, Trust Companies and Finance Houses
The figures used for 2006 are for the month of December while those for 2007 and 2008 are for October.



Source: BOJ, Statistical Digest, October 2008 (Table 17.1)



Source: BOJ, Statistical Digest, October 2008

APPENDIX 4

ESTIMATING THE COST OF THE GOJ'S STIMULUS PACKAGE

The cost of each initiative was difficult to quantify due to the unavailability of requisite information. We have had to apply a number of approaches in deriving our estimates. Some estimates were taken directly from source documents, which were prepared by the Ministry of Finance, while other estimates were calculated using available data from the previous fiscal budget as well as other economic data sources provided by the Bank of Jamaica. We take these estimates to represent the maximum possible costs (or revenue forgone) as a result of the specified fiscal initiatives. Where a time period for intervention was not given by the GoJ we calculated the costs for an entire budgetary cycle, this is to be compared to the MoFPS' approach of calculating costs for the first three months in 2009.

COST ESTIMATES

Initiative:	**GCT Relief**
Details:	Raise GCT threshold to $3mn from $1mn for businesses
Duration of Initiative:	Indefinite (using one-year period)
Source:	N/A
Sector:	Small Business
Methodological Note:	Given the following:

a. The estimated number of small businesses that will benefit under this initiative is 2,800.[118]

b. The threshold will increase from $1mil to $3mil; hence the additional opportunity cost to the government is the difference between the previous limit ($1mil) and the new limit ($3mil). In other words, the opportunity cost to the government is the loss in revenue from those businesses which earn between $1,000,001 and $2,999,999 per annum.

c. According to the Global Entrepreneurship Monitor 2005 Jamaica Report,[119] of the total number of small businesses operating in Jamaica in 2005, 2.62% of them earned between J$1,000,001 - $1,499,999 p.a. while 1.92% earned between J$1,500,000 - $2,999,999 per annum. The earnings will be used as a proxy for the sales from the operations of these businesses, since GCT is charged on goods and services.

d. It is assumed that the GCT due from all of these businesses would have been collected in full.

Based on the foregoing:

Since 2,800 businesses are expected to benefit then using the findings of the Global Entrepreneurship Monitor 2005 Jamaica Report, this 2,800 is equivalent to the share of businesses that fall within the

118 Based on speech made by the Prime Minister of Jamaica (Sunday, December 14, 2008).

119 See, Sandra Glasgow, et. al (2005). "Global Entrepreneurship Monitor 2005 Jamaica Report." Note, the average of the percentage values for the different levels of development of small businesses (nascent, new and established given in table 11, pg.11) was used in these calculations.

J$1,000,001 - $2,999,999 annual earnings range i.e. 4.54% (2.62% plus 1.92%). This means, of the 2,800 businesses:

i) **1,616** (i.e. 2.62%/4.54%) earn between J$1,000,001- $1,499,999 p.a. and

ii) **1,184** (i.e. 1.92%/4.54%) earn between J$1,500,000 - $2,999,999 p.a.

Using the average earnings for both groups of businesses, the GCT relief is expected to be disbursed among the businesses as follows:

i. ($1,250,000*1,616)* 16.5% = $333,300,000

ii. ($2,250,000*1,184)* 16.5% = $439,560,000

Estimated (opportunity) cost to the GOJ: $772,860,000[120]

Initiative:	**Tax Relief**
Details:	Abolition of tax on dividends by locally owned-companies
Duration of Initiative:	Indefinite (using one-year period)
Source of estimate:	Ministry Paper No. 23
Sector:	General
Methodological Note:	N/A

Estimated (opportunity) cost to the GOJ: $130,000,000[121]

[120] This amount is taken as a high-end estimate since the GCT paid in the tourism sector is 8.25% and not 16.5%, although less than 10 percent of small businesses operate in the tourism sector. (See, McFarlane, C. (1997). The 1996 Micro and Small Enterprise Survey of Jamaica. Government of Jamaica / Government of Netherlands Micro Enterprise Project (GOJ / GON MEP) and USAID).

[121] According to this Ministry Paper, the GOJ had proposed to remove the withholding tax on dividends payable by local registered companies to their shareholders, effective January 1, 2009; shareholders are expected to account for the tax when they file their annual returns but tax on dividends paid to non-residents will continue to have the tax withheld at the appropriate rates. The methodology used to derive this calculation was not included in the Ministry Paper.

Initiative:	**GCT Relief**
Details:	The GCT paid by hotels will be cut by half to 4.125 per cent.
Duration of Initiative:	January to June 2009
Source:	N/A
Sector:	Tourism
Methodological Note:	Based on preliminary data for 2008,[122] total GCT payable/ creditable by Hotels, Motels and Restaurants among others (these combined are generally used as a proxy for tourism) was **$1,212,163,712.49.**[123] Therefore a 50% reduction in the GCT rate could reasonably result in a 50% reduction in the amount expected to be collected in revenue from this sector. Given that tourism growth indicators for the last quarter of 2008 indicate a slow-down in tourism growth performance (e.g. real GDP growth of the hotel, restaurants fell by 1.3%; total arrivals declined by 2.3%; visitor expenditure decline by 2.2%);[124] we do not anticipate a significant increase in the revenues to be collected from this sector in the FY 2009/2010. Hence, the fall off in revenue which will result of this GCT initiative will be taken as 50% of the estimates amount collected in 2008 which is approximately $606,081,856.25 but since this initiative will only last for six months, we estimate the amount to be forgone is:

Estimated (opportunity) cost to the GOJ: $303,040,928[125]

Initiative:	**Income Tax Relief**
Details:	Increase in income tax threshold to J$220,272
Duration of Initiative:	Indefinite/1 year
Source of estimate:	Ministry Paper No. 23
Sector:	Individuals
Methodological Note:	N/A

Estimated (opportunity) cost to the GOJ: $575,000,000[126]

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122 Please note that some firms might have filed their returns subsequently so not all the returns are captured in this amount.
123 Data compiled by PIOJ using data produced by the Tax Assessment and Audit Department (TAAD).
124 See, Planning Institute of Jamaica's Review of the Economic Performance (October to December 2008).
125 This should probably be taken as a high-end estimate based on the possible continued impact of the crisis on the tourism industry which could lead to a reduction in government revenue for this sector.
126 Based on the details of Ministry Paper No.23 an increase in the income tax threshold was already accounted for in FY 2008/09 and this was expected to take place in two phases: effective July 1, 2008, the threshold was expected to increase to $200,304 and effective January 1, 2009, the threshold was expected to be raised to $220,272. The methodology used to derive this calculation was not included in the Ministry Paper.

Initiative:	**Elimination of Customs User Fees**
Details:	Elimination of CUF on capital goods and raw materials.
Duration of Initiative:	Indefinite (using one-year period)
Source:	N/A
Sector:	Manufacturing
Methodological Note:	Given the following:

a. Total value of imports for Jan.-Mar. 2004 (1st quarter) is $70,740,240,000.[127] In the absence of relevant data from STATIN, we will multiply this by four to get the total value of imports for the year 2004 and this works out to be J$282,960,960,000.

b. The customs user fee is assumed fixed at 2 per cent on all goods. Hence, when the CUF's are applied, the total amount of revenue to the government for that year was roughly J$5,659,219,200.00.

c. The BOJ notes that the value of raw material imported accounted for 53.2% per cent of the total value of imports in that same period and of this amount 32.7% is attributed to 'other materials and goods used in manufacturing.' The value of capital goods imported over that period accounted for 15.5 %[128] and of this amount, 'construction materials'[129] accounted for 4.2% which leaves 11.3% which we will assume is attributed to manufacturing. Hence, on a whole, roughly 44.3% of the total value of imports is attributed to the manufacturing sector. This means that 44.3% of the total amount collected in CUF is attributed to the manufacturing sector.

Estimated (opportunity) cost to the GOJ: $ 2,507,034,105.60

Initiative:	**Tourism Promotional Programme**
Details:	Government has ramped up its tourism advertising and marketing programme
Duration of Initiative:	Indefinite
Source:	Jamaica Tourist Board
Sector:	Tourism
Methodological Note:	N/A
Estimated cost to the GOJ:	**$264,780,000**[130]

[127]This was given as US$884, 253,000 but converted to JMD using US$=J$80.
[128] Note that the only available data on imports were from Jan. – Mar. 2004. See, Bank of Jamaica, Statistical Digest October 2008.
[129] This was the only notable category that we can pull out of the figures given
[130] This amount was given by sources at the Jamaica Tourist Board (JTB). These sources revealed that approximately US$3million (this was converted using an exchange rate of J$88.26: US$1) has been approved towards this initiative: US$2.5 million was earmarked for the JTB Marketing programme and the remaining US$500,000 is expected to be used by Jamaica Vacations Limited.

Initiative:	**Special Loan Facility**
Details:	*Special loan facility totaling J$500m at 10% p.a. from DBJ*[131]
Duration of Initiative:	Two years
Details:	*Special loan facility totalling J$350m at 10% from JN Small Business Loans*
Duration of Initiative:	Indefinite
Details:	*Special loan facility totalling J$300m at 10% from Jamaica Business Development Centre and credit unions.*
Duration of Initiative:	Indefinite
Source:	Representatives at Jamaica Business Development Centre (JBDC) and the Development Bank of Jamaica (DBJ)
Sector:	Small Business/Tourism Sector
Methodological Note:	According to sources at the DBJ and JBDC, some of the resources being allocated to these initiatives are from lines of credit that were already commissioned for the small and medium-sized enterprise sector but were un-utilized within the period that they were slated for. Other resources will come from a re-allocation of un-used lines of credit that were set aside for the energy sector. Hence, the assumption being made is that since these funds were already sourced and were unused when the stimulus package was formulated, its reallocation to the areas under the stimulus package does not represent any additional costs.
Estimated cost to the GOJ:	**The cost is expected to be minimal but an estimate is currently unavailable**

INITIATIVES IN THE STIMULUS PACKAGE FOR WHICH A COST COULD NOT BE ESTIMATED

Initiative:	**Depreciation of capital equipment**
Details:	Reduction of time allowed for depreciating the cost of capital equipment, from 2 years to 1 year
Duration of Initiative:	Indefinite/ 1 year
Source:	N/A
Sector:	Manufacturing
Methodological Note:	
Estimated cost to the GOJ:	

[131] Working capital loans will be offered to players in tourism industry *(maximum loan amount: J$50m, interest rate: 10%, maturity: 2 years)*

Initiative:	Procurement Provisions
Details:	Adjustment of government procurement policy to provide a 10% margin
Duration of Initiative:	Indefinite/ 1 year
Source:	N/A
Sector:	Manufacturing
Methodological Note:	
Estimated cost to the GOJ:	

Initiative:	Procurement Provisions
Details:	Government agencies to reserve at least 15% of their total procurement for micro and small businesses *(defined as having An asset base of less than J$30m)*
Duration of Initiative:	Indefinite/1 year
Source:	N/A
Sector:	Small Business and Micro-enterprises (Manufacturing)
Methodological Note:	
Estimated cost to the GOJ:	

Initiative:	Concessions
Details:	Concessions will be given to the bauxite industry
Duration of Initiative:	Indefinite
Source:	N/A
Sector:	Bauxite
Methodological Note:	
Estimated cost to the GOJ:	

Representatives from the Ministry of Mining and Telecommunications explained that discussions surrounding these concessions are still ongoing so they are unable to provide an estimate.

Initiative:	**Transfer Tax Relief**
Details:	Reduction of transfer tax on property transactions to 5%
Duration of Initiative:	Indefinite/ 1 year
Source:	N/A
Sector:	Real Estate and Construction
Methodological Note:	

Estimated (opportunity) cost to the GOJ:

Appendix 5

Assessing the Effectiveness of Consultations behind the Jamaican Stimulus Package

CaPRI's evaluation of the consultative process which guided the development of the Jamaican stimulus package clearly indicated that there was minimal participation by stakeholders affected by the initiatives announced. Three broad categories of stakeholders are identified, as below:

Groups/individuals that would benefit from the proposed provisions;

Agencies/firms that would be responsible for the execution or delivery of the proposed provisions; and

Industry or other experts who by virtue of their experience and/or expertise could offer advice on the design of the proposed provisions.

- Numerous representatives from each of these stakeholder categories were interviewed to ascertain:
- Whether they were consulted prior to the announcement of the stimulus package;
- Whether the package reflected representations made to the government; and
- Whether they were clear on the details as to how the various initiatives were to be implemented.

From the first category of stakeholders – that is the prospective beneficiaries of the stimulus package – seven umbrella agencies representing the interests of micro, small and medium-sized enterprises, manufacturers, bauxite companies, employers, private sector companies, and businesses involved in commerce were contacted. Three of the seven agencies did not respond to the questions asked. The remaining four all noted that they were not involved in any meetings or consultations with the government prior to the announcement of the stimulus package. Notwithstanding this, two of these agencies noted that the proposed initiatives had included policies which they had previously advocated.

From the second category of stakeholders, that is the agencies that would be responsible for the execution/delivery of the proposed provisions, fourteen governmental agencies and private firms were contacted. The agencies/firms contacted included commercial banks, credit unions, microfinance institutions, development banks, providers of business development services, and a number of government ministries and agencies. Six of the agencies/firms contacted did not respond to the questions asked, and another two advised that they would not be involved in the execution of the stimulus package. Of the remaining six interviewees, only one indicated that it was consulted prior to the announcement of the stimulus package. That agency further noted that its input was reflected in the contents of the package. Three agencies noted that they did not have sufficient information to respond to our queries, and two explicitly noted that they were not consulted prior to the announcement of the package.

For the final category of stakeholders, that is industry and other experts, it must be noted that many people that would be included here, were already contacted as representatives of stakeholders in the two previous categories. As such, only three 'independent' experts were contacted – a politician, a senior civil servant, and a senior academic. Two of the persons contacted did not respond. The third noted that he was included in a group of economists and analysts that were consulted prior to the announcement of the stimulus package. He, however, noted that none of the proposals subsequently announced were mooted at the meeting, but rather that suggestions as to how to address the crisis were solicited. The suggestions given were not reflected in the package that was announced. It was also noted that the Ministry of Finance and Public Service had established a committee months prior to the announcement of the package to make suggestions on a comprehensive package of tax reforms to be implemented with the new budget. That committee was also not consulted.

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