INTER-AMERICAN DEVELOPMENT BANK

**Enhanced Access to Credit for Productivity Project**

**(BA-L1034)**

Analysis of the Market Demand for a Government-Backed Loan Guarantee

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Analysis of the Market Demand for a Government-backed Loan Guarantee Scheme

# Introduction

This document attempts to determine the demand for a government-backed guarantee product within the Barbadian firms and financial intermediaries. A strong effort was undertaken during a six-month period (from January to June 2014) to obtain the most current official information with the government agencies and ministries regarding documentary evidence about the financing conditions for firms and businesses in Barbados, and from the on-shore financial intermediaries. However, the information that was readily available from official sources was in most cases outdated and lacking the degree of detail needed to undertake a thorough demand and supply analysis. The historical data about the access to finance at the firm level was scarce and information on the supply side with the financial intermediaries is kept very confidential and with minimum access for external sources.

Given these data limitations and information constraints, four different approaches were undertaken to be able to produce reliable (as it could be generated) and up-to-date information to assess the current financing needs and conditions for the Barbadian firms in the market to understand the absorption capacity for a government-backed loan guarantee scheme. Although the approaches are not mutually exclusive; the analyses are not intended to combine all the results into one, but only to present the outcomes of these approaches from separate perspectives in support for the program operation. The approaches taken for this demand study are the following:

1. Quantitative approach with a data-based assessment of the absorption capacity of the firm-financial system-central bank system of a government back loan guarantee scheme covering 80% of the total additional loans based on published reports;
2. Qualitative survey sampling of firms to better understand the financing needs of the intended guarantee users.
3. Qualitative survey sampling of financial intermediaries to assess the financing conditions offered to business, risk appetite and interest in having additional coverage for their operations with a guarantee.
4. Guarantee workshop with business associations, financial intermediaries to ascertain their financing and market perceptions.

A particular emphasis was given to the SME in the analysis for the market demand. Given the lack of an explicit national definition for firm sizes in Barbados, the only definition related to a firm size is found on the Small Business Development Act[[1]](#footnote-1) that defines small firms[[2]](#footnote-2) as an enterprise with no more than B$2,000,000 in annual sales and no more than 25 employees. Moreover, when discussing this topic with financial intermediaries to understand their firm size classification criteria or to find out if they were following a standardized industry benchmark, each of them came up with different approaches to classify the firm size depending on their portfolio business strategies or by the size of the loan approved for the firms, and not necessarily by the characteristics of the firms themselves. Having this complexity in the definitions for firm size, it was decided that for simplicity, to use the IDB/IIC standard definitions to classify the firms in C and D countries according to the number of employees and annual sales based on the IIC recent parameters[[3]](#footnote-3).

# Quantitative approach with data-based analysis

As an outline of targets and quantum, preliminary indications are that the backing for the loan guarantee will be US$35 million, with consideration given to US$30 million and US$25 million. For the purpose of this analysis the program is considering individual loan levels based on the typical loan the Central bank has guaranteed so far of approximately US$50,000, with an upper limit of US$1 million. The guarantee mechanism will focus in promoting access to medium and long term credit for investment projects by SMEs that can enhance their business models, productivity and competitiveness. While there will be no specific sectoral eligibility, the market analysis has been focussing on sectors that are particularly important to GDP or have high potential of productivity gains such as professional services (20.2% of GPD) or tourism (11.8% of GDP) as supposed to mining and quarrying (0.4% of GPD) or agriculture (4% of GDP) . As the scheme is seeking to enhance productivity, there will be an explicit targeting of investment opportunities and hence loans will be for fixed assets, and some consideration should be given for investments in working capital loans associated to fix assets as these can have an effect on productivity.

This approach will focus on identifying the absorption capacity of the private sector in Barbados assuming the circumstances described above and in particular that the scheme will enhance access to credit by reducing the perceived risk to financial institutions and resultant reductions in collateral requirements.

In considering the quanta of loans under consideration, the following three scenarios arise and are relevant to assessing the absorption capacity of the economy (the underlying assumption in the following scenarios is that banks finance 80% of the investment project):

* **Scenario 1:** Guarantee of US$35M = BD$70M => 80% of new loans covered therefore need to see additional BD$87.5M in credit; i.e. absorption capacity of additional US$43.75M.

At an average of BD$400,000 per loan[[4]](#footnote-4), equates to an additional 202 loans.

* **Scenario 2:** Guarantee of US$30M = BD$60M => 80% of new loans covered therefore need to see additional BD$75M in credit; i.e. absorption capacity of additional US$37.5M.

At an average of BD$400,000 per loan, equates to an additional 173 loans.

* **Scenario 3:** Guarantee of US$25M = BD$50M => 80% of new loans covered therefore need to see additional BD$62.5M in credit; i.e. absorption capacity of additional US$31.25M.

At an average of BD$400,000 per loan, equates to an additional 145 loans.

In seeking to identify “additionality”[[5]](#footnote-5), this is conceptualised as coming from two sources. These two sources relate to meeting existing demand for low collateral credit from existing businesses and start-ups, and from new demand which is catalysed by the existence of the credit guarantee scheme (CGS), specifically new projects by existing enterprises and in new emerging sectors. These four specific areas from which additionality will emerge (existing businesses excluded from the credit market, start-ups, new projects, and new emerging sectors) and data sources of information for estimation, where available, are outlined below.

*Existing Demand*

1. **Existing businesses that demand credit but currently self-excluding** from the credit market due to perceptions of interest rates and acceptability of their loan proposals, as well as lacking collateral. The estimates in this regard are drawn from two sources: i) data from the World Bank’s Enterprises Survey for Barbados for 2010 and include those businesses that indicate they required credit but did not apply and; ii) data information from a government-backed project[[6]](#footnote-6) related to data on small business in the country as it represents a more thorough database in terms of being audited, revised and crossed-checked with existing government agencies databases.
2. **Start-ups** are considered an integral source of additionality as they are usually the most constrained in accessing credit. Some estimates are provided, based on information from the Barbados Statistical Service (BSS) in relation to results of the Continuous Household Labour Force Survey in relation to changes in self-employment, as well as recently published statistics from the Census of Population and Housing (2010).

*New Demand*

1. **Existing businesses that have credit and *may* demand further credit (new projects)** but currently have no further collateral available. As this source is not estimated here due to lack of data on potential demand for credit that may be catalysed by the existence of easily accessible credit, some qualitative information is provided in other sections of the document as result of firms being surveyed with this purpose.
2. **Emerging Sectors/Subsectors** are another important source of additionality given the inherent risk in financing untried/untested areas with some but limited information on which to assess risk. In the case of Barbados this would relate to new ventures in renewable energy and tourism sector diversification such as sports, heritage, health and education. Basic information in this area is provided from financing from the Enterprise Growth Fund Ltd. (EGFL) which oversees a number of Government capitalised funds. In addition, a review of trends in commercial bank financing are also reviewed utilising data from the Central Bank of Barbados in relation to the sectoral distribution of credit at the sector level and at the subsector level for manufacturing.

Identifying the additionality from these sources will enable a direct indication as to the absorption capacity for new loans in the Barbadian economy.

While these four sources will provide additionality, it is also important to note that there will be a degree of switching of loans by commercial banks from a traditional collateralised methodology to one that utilises the credit guarantee scheme. This would be the case where commercial banks, in the absence of the scheme, provide credit but consider the applications marginal for approval but approve them anyway; under the scheme, it would be expected that commercial banks switch to using the scheme for loan applications considered at the margin of approval. This source is estimated from Craigwell and Kaidou-Jeffery (2010) who provide estimates of the increase in credit for Barbados, at an aggregate and sectoral level, under credit-rationing and no credit-rationing conditions. These estimates are considered relevant here as the scheme can be considered as removing credit rationing for those at the margin. Despite that this is not a source of additionality, it is still important to consider given that without taking this type of switching into consideration in the calculation of the quantum for the backing for the scheme, that applications outside of this margin may be crowded-out in favour of applications that are inside of the margin.

## Private Sector Credit in Barbados: History and Trends

In absolute terms, credit to selected sectors[[7]](#footnote-7) in Barbados has increased from nearly BS$200 million for the first quarter of 1975 to BD$1.8 billion at the end of 2013, as shown in Figure 1. In terms of the sectoral distribution over time, credit to the primary sectors of agriculture, fisheries and mining and quarrying have significantly decreased over time while credit to manufacturing has declined from highs in the 1980s where it rivalled tourism and distribution in terms of the share of credit to now only comprising 7% of sectoral credit from commercial banks. While distribution, tourism and construction have maintained a high proportion of credit, the most significant change can be seen in professional and other services which have increased from being marginal in 1975 to commanding nearly 31% of commercial bank credit for these sectors (see Table 1).

Figure : Growth in Credit 1975 to 2013 (Selected Sectors) (BD$’000)

*Source: Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014)*

Figure : Sectoral Distribution of Credit 1975 to 2013 (Selected Sectors) (%)

*Source: Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014)*

In relation to the importance of these sectors in the general economy, Table 1 shows that the share of credit is approximate to the share of GDP, with the main exception of Distribution which is the largest sector in terms of GDP but only the third highest in relation to shares of commercial bank credit. During 2014 period, credit growth for the top 5 sectors has been negative, averaging -1.0% for professional services, -3.3% for tourism, -5.0% for distribution, -1.1% for construction and -0.2% for manufacturing[[8]](#footnote-8). This emphasizes the sluggish access to credit for the firms participating in these relevant sectors in the economy during the past years.

Table : Sectoral Distribution of Credit in Barbados, December 2013 (Selected Sectors)

|  |  |  |  |
| --- | --- | --- | --- |
| **Sector** | **Credit (BD$‘000)** | **Share (%)** | **Sector Share of GDP (%) (2012)** |
| Professional and Other Services | 549,321 | 30.84 | 20.2 |
| Tourism | 485,526 | 27.26 | 11.8 |
| Distribution | 334,843 | 18.80 | 22.2 |
| Construction | 208,292 | 11.69 | 6.7 |
| Manufacturing | 117,273 | 6.58 | 4.3 |
| Entertainment & Catering | 40,321 | 2.26 | na |
| Transport | 27,653 | 1.55 | 9.8 |
| Agriculture | 17,215 | 0.97 | 4.0 |
| Mining & Quarrying | 530 | 0.03 | 0.4 |
| Fisheries | 438 | 0.02 | \* |
| **Total** | **1,781,412** | **100** | **79.4** |
| *Source: Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014)*  *\*See note 5 below.*  *Notes on Sector Share of GDP for 2012:*   1. *Base data obtained from Barbados Economic and Social Report 2012 Appendix 1 (Estimates of Real Gross Domestic Product (1974 prices) for calculation of shares of total: Report available from* [*http://www.economicaffairs.gov.bb/archive-detail.php?id=324*](http://www.economicaffairs.gov.bb/archive-detail.php?id=324) *[Accessed 31st May 2014]* 2. *Professional and Other Services utilizes Business and Other Services from report* 3. *Distribution utilizes Wholesale and Retail Trade from report* 4. *Entertaining and Catering not included in report* 5. *Agriculture includes Fisheries*   *NOTE THAT VALUE ADDED DATA AT THIS LEVEL OF DISAGGREGATION WAS NOT AVAILABLE* | | | |

As a point of comparison, the three scenarios would represent an additional 7.0% (BD$125M), 4.9% (BD$87.5M), and 3.5% (BD$62.5M) of current credit levels. In reviewing the change in credit between 1995 and 2013, the figure below demonstrates that *net new credit* exceeded BD$125 million only twice, BD$87.5 million four times, and BD$62.5 million six times. For all of these periods where net credit increased by these levels, the country was either in a period of growth (1997 to 1998; 2008), or entering a period of growth (2002 to 2006). According to IMF Staff Estimates[[9]](#footnote-9) GDP growth is expected to be negative again in 2014 at -1.21%, with increases seen in 2015 of 0.89, over 1.5% for 2016 and 2017, and over 2.3% for 2018 and 2019. While these estimated GDP growth figures are significantly below the nearly 6% seen in 2006, it would be expected that the return to an expansion of the economy after a six year period of no-significant growth, and indeed contraction, that the highly liquid commercial banking sector will expand lending to pre-2009 levels.

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*Source: Author’s Calculations for Change in Credit from Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014); GDP Growth (constant prices) data from IMF WEO data* [*http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx*](http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx) *[Accessed 19th May, 2014]*

As the line of credit for the CGS is not expected to be utilised in a single year, it is useful to examine net new credit over a period of time. Table 2 outlines net new credit over 5 year periods for the years 1995 to 2009 and for the period 2010 to 2013. As Table 2 demonstrates, net new credit exceeded the maximum scenario of BD$125 million for all 5 year periods between 1995 and 2009, with net new credit declining by approximately BD$227 million over the period 2010 to 2013 when average GDP growth was marginal. Overall, the average net new credit was BD$112 million, while average GDP growth was 1.3%.

Table : Net New Commercial Bank Credit and Average GDP Growth for Selected Periods (1995-2013)

|  |  |  |
| --- | --- | --- |
| **Period** | **Net New Credit (BD$000)** | **Average GDP Growth (%)** |
| 1995-1999 | 142,945 | 2.96 |
| 2000-2004 | 297,930 | 0.76 |
| 2005-2009 | 234,772 | 1.52 |
| 2010-2013 | - 227,242 | 0.08 |
| Average | 112,101 | 1.33 |

## Analysis of Enterprise-Level Information for Barbados

The following section profiles self-employment at a general level followed by a review of the World Bank’s Enterprise Survey for Barbados conducted in 2010. The Enterprise Survey for Barbados is utilized as it is the only extensive multi-sector survey for the country that covers data of relevance. The surveys are administered to a representative sample of firms in the non-agricultural[[10]](#footnote-10) formal private economy (150 firms surveyed for Barbados). The sample includes the entire manufacturing sector, the services sector, and the transportation and construction sectors. Public utilities, government services, health care, and financial services sectors are not included in the sample.

### Overview of firms in Barbados

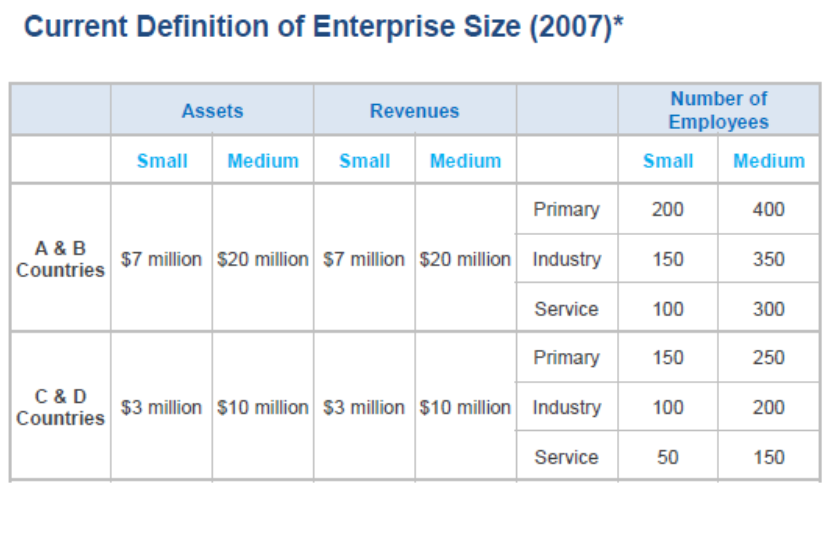
In 2010, from the 2010 Census, Barbados had an estimated 15,167 self-employed persons, 11,440 of which did not have any employees (Barbados Statistical Service, 2010) and could therefore be considered microenterprises. For the current exercise, this cohort of the self-employed would not be considered relevant due to their small size. Therefore, there are approximately 3,727 enterprises of interest, those enterprises that provide employment to at least one person. In seeking to discern the representativeness of the Enterprise Survey for Barbados to the general population of firms, a deeper understanding of the size distribution of enterprises is needed given that the Enterprise Survey only represents establishments with 5 or more employees.

When seeking to provide more detailed information on size distribution of enterprises, data from the Barbados Statistical Service (BSS), from a register of businesses with 25 or less employees from 2008, indicates 11,374 establishments, 3,551 with no employees, 5,668 with 1 to 4 employees and 2,155 with 5 or more employees. An important caveat here is that the 2010 Census data and BSS register data are not directly comparable as: the Census data would include informal enterprises, which would affect the estimation of number of formal enterprises upwards; the BSS data only applies to enterprises with 25 or less employees; and for the Census data there are corporate entities for which no direct owner could be identified, hence affecting the estimation downwards. However, the BSS register data does give an indication of size distribution for enterprises with 25 or less employees, a cohort that would be expected to represent the majority of enterprises in the country; from the BSS register, formal enterprises with no employees represent 31.2% of all enterprises in the register while those with 5 or more employees represent 18.95%.

Given this estimation, it can be suggested that the Enterprise Survey for Barbados represents approximately one-fifth of businesses in the country. The BSS register data and the Census data suggest a range of between 11,000 and 15,000 enterprises in the country. Working with an estimated 13,000 enterprises in Barbados, one-fifth would represent 2,600 enterprises with 5 or more employees. Therefore, the Enterprise Survey sample represents approximately 6% of this cohort; this would give an estimated confidence interval of +/-7.8 at the 95% confidence level.

Looking into the results of the Enterprise Survey for Barbados, the small firms (defined by 5 to 19 employees) accounted for a 33% of the surveyed firms, the medium firms (defined by 20 to 99 employees) accounted for 41% of the surveyed firms and the reminder 26% was accounted for the large firms (defined by 100+ employees). As mentioned at the beginning of this report, the lack of a standard definition for a firm size across the government agencies, industry and sectors generates a dilemma as to which of this particular definition better suits this report. The analysis follows an in-house standard definition approved by the IDB/IIC board and being widely used for the IDB programs[[11]](#footnote-11) and shown in the Table below:

Table : Definition of firm size



Considering Barbados as a country in the C&D classification, the limits to classify a small firm is with B$6 million or US$3 million in annual sales and up to 100 employees according to the firm industry. For medium size firms, the classification goes to B$20 million or US$10 million in annual sales and up to 200 employees according to the industry where the firm operates. Applying the definitions mentioned above for small and medium for industry and services utilising revenues (sales) and number of employees, the table below outlines the distribution of firms by sector from the country’s Enterprise Survey. Data from the Enterprise Survey for Barbados (World Bank, 2010) includes information on a range of indicators for 149 companies with five or more employees from a range of manufacturing and service sectors, the non-agriculture economy. It should however be noted that given the nature of the classification, the utilisation of both revenue and employees to categorise enterprises, there are 35 enterprises (24% of the sample) which are undefined.

Table : Size Distribution of Enterprises by Sector (Source: Enterprise Survey 2010)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Size Category | Frequency | Sales (BD$ million) | | | Employees | | |
|  |  | Mean | Minimum | Maximum | Mean | Minimum | Maximum |
| Small Manufacturing | 48 | 2.2 | 0.075 | 6.0 | 25 | 5 | 100 |
| Medium Manufacturing | 6 | 12.7 | 6.2 | 20.0 | 148 | 108 | 200 |
| Small Services | 40 | 2.0 | 0.01 | 6.0 | 18 | 5 | 50 |
| Medium Services | 18 | 11.5 | 7.0 | 17.0 | 117 | 69 | 150 |
| Large Services | 2 | 52.0 | 36.0 | 68.0 | 388 | 350 | 425 |
| Total | 114 | 5.0 | 0.075 | 68.0 | 50 | 5 | 425 |

As demonstrated in the table above, 89% of manufacturing enterprises were categorised as small, with no large manufacturers in the sample. For services, 67% are small, 30% are medium, and 3% are large. Overall, 77% of the enterprises are small, 21% are medium and 2% are large. Given the limited number of large enterprises in the sample, these were removed from the database. The following subsection analyses the information for the remaining enterprises by size category.

### Firm Characteristics

The legal status of the firms in the Enterprise Survey for Barbados was dominated by private limited liability companies (34.8%), sole proprietorships (26.8%) and partnerships (23.2%). Limited partnerships accounted for 15.2%. The main information by legal status is shown in Table 4.

For the companies that supplied sales information, the results indicate a mean of BD$4.2 million. However, the data is highly skewed as demonstrated by the median of BD$2.5 million. In utilizing the median as the most reliable measure of central tendency here, there is a wide variation in relation to legal status ranging from BD$1.2 million for sole proprietorships to BD$9.8 million for partnerships. When normalized for number of employees, the median ranges from BD$84,000 for privately held limited liability companies to BD$100,725 for partnerships. In terms of employees, there is also a level of skewness with enterprises having a mean of 44 employees and a median of 25. By legal status the median varies from 12 for sole proprietorships to 100 for partnerships.

Table : Legal Status by Sales and Employees (End of FY 2009)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Legal Status** |  | **Total Annual Sales (BD$)** | **Permanent, Full-Time Employees** | **Sales per Employee (BD$)** |
| Privately held, limited liability | Mean | 3,359,006 | 40 | 91,869 |
|  | N | 39 | 39 | 39 |
|  | **Median** | **2,100,000** | **22** | **84,000** |
| Sole proprietorship | Mean | 1,910,667 | 17 | 127,140 |
|  | N | 30 | 30 | 30 |
|  | **Median** | **1,175,000** | **12** | **100,000** |
| Partnership | Mean | 7,694,231 | 75 | 109,755 |
|  | N | 26 | 26 | 26 |
|  | **Median** | **9,800,000** | **100** | **100,725** |
| Limited partnership | Mean | 4,765,380 | 52 | 90,643 |
|  | N | 17 | 17 | 17 |
|  | **Median** | **3,000,000** | **35** | **96,429** |
| **Total** | Mean | 4,190,917 | 44 | 105,283 |
|  | N | 112 | 112 | 112 |
|  | **Median** | **2,490,768** | **25** | **100,000** |

*Source: World Bank Enterprise Survey for Barbados (2010)*

The sector distribution of the sample included a large proportion of manufacturing establishments (47%), while the largest individual sector was Hotels and Restaurants (23%). This is therefore suitable for the current exercise which has a particular focus on manufacturing and tourism, although other sectors are still considered important. Of note here is that the 56 manufacturing establishments is approximately 14% of the sector, given an estimate of 400 manufacturing establishments in the country (SALISES, 2009).

Table : Sectoral Distribution of Enterprise Survey Respondents.

|  |  |  |
| --- | --- | --- |
| **Sector** | **Frequency** | **Percent** |
| Hotels and restaurants | 26 | 23.2 |
| Manufacture of food products and beverages | 13 | 11.6 |
| Manufacture of furniture; manufacturing n.e.c. | 8 | 7.1 |
| Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods | 7 | 6.3 |
| Supporting and auxiliary transport activities, activities of travel agencies | 7 | 6.3 |
| Publishing, printing and reproduction of recorded media | 6 | 5.4 |
| Wholesale trade and commission trade, except of motor vehicles and motorcycles | 6 | 5.4 |
| Manufacture of chemicals and chemical products | 5 | 4.5 |
| Manufacture of wearing apparrel dressing and dying of fur | 4 | 3.6 |
| Manufacture of fabricated metal products, except machinery and equipment | 4 | 3.6 |
| Computer and related activities | 4 | 3.6 |
| Manufacture of textiles | 3 | 2.7 |
| Construction | 3 | 2.7 |
| Manufacture of rubber and plastics products | 2 | 1.8 |
| Manufacture of other non-metallic mineral products | 2 | 1.8 |
| Manufacture of radio, television and communication equipment and apparatus | 2 | 1.8 |
| Manufacture of medical, precision and optical instruments, watches and clocks | 2 | 1.8 |
| Water transport | 2 | 1.8 |
| Manufacture of wood and of products of wood and cork, except furniture, manufacture of articles of straw etc | 1 | 0.9 |
| Manufacture of paper and paper products | 1 | 0.9 |
| Manufacture of electrical machinery and apparatus n.e.c. | 1 | 0.9 |
| Recycling | 1 | 0.9 |
| Sale, maintenance and repair of motor vehicles and motorcycles, retail sale of automotive fuel | 1 | 0.9 |
| Post and telecommunications | 1 | 0.9 |
| **Total** | **112** | **100** |

*Source: World Bank Enterprise Survey for Barbados (2010)*

Reviewing the sales and employment profile of respondent enterprises by sector, median sales were BD$2.5 million, ranging from BD$1.5 million in Wholesale and Retail to US$3.5 million in Hotels and Restaurants. Employment ranged from a median of 20 in Wholesale and Retail to 27 in Hotels and Restaurants, while sales per employee ranged from BD$84,308 in Manufacturing to approximately BD$113,000 in Other Services.

Table : Sector by Sales and Employees (End of FY 2009)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sector** |  | **Total Annual Sales (BD$)** | **Permanent, Full-Time Employees** | **Sales per Employee (BD$)** |
| Manufacturing | Mean | 3,401,851 | 39 | 104,735 |
|  | N | 54 | 54 | 54 |
|  | **Median** | **2,150,000** | **25** | **84,308** |
| Hotels and Restaurants | Mean | 5,893,969 | 61 | 106,526 |
|  | N | 26 | 26 | 26 |
|  | **Median** | **3,500,000** | **27** | **100,000** |
| Wholesale and Retail Trade | Mean | 2,307,692 | 26 | 85,924 |
|  | N | 13 | 13 | 13 |
|  | **Median** | **1,500,000** | **20** | **95,455** |
| Other Services | Mean | 5,391,554 | 48 | 118,383 |
|  | N | 19 | 19 | 19 |
|  | **Median** | **3,000,000** | **22** | **112,797** |
| **Total** | Mean | 4,190,917 | 44 | 105,283 |
|  | N | 112 | 112 | 112 |
|  | **Median** | **2,490,768** | **25** | **100,000** |

*Source: World Bank Enterprise Survey for Barbados (2010)*

A number of financial issues were also included in the Enterprise Surveys. As highlighted in Table 7, in relation to working capital, the majority of working capital is financed from internal funds/retained earnings (mean of 70% and median of 80%). The only other significant source, as measured by the median, is credit from suppliers/advances from customers; this is most prevalent in Manufacturing at 11%. While Other Services also utilise credit and advances, with a median of 5%, working capital sourced from banks accounts for 25% of working capital, unlike the other sectors where bank credit is not prevalent when assessed by the median values.

Table : Sector by Working Capital Sources (%)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sector** |  | **Working Capital Source (%)** | | | | |
| **Internal Funds/Retained Earnings** | **Banks** | **Non-Bank Institutions** | **Credit/Advances From Suppliers /Customers** | **Other (Money Lenders, Friends, Relatives, Etc)** |
| Manufacturing | Mean | 66.66 | 13.4 | 0 | 17.02 | 2.92 |
|  | N | 53 | 53 | 53 | 53 | 53 |
|  | **Median** | **70** | **0** | **0** | **11** | **0** |
| Hotels and Restaurants | Mean | 76.92 | 14.46 | 0 | 5.08 | 3.54 |
|  | N | 24 | 24 | 24 | 24 | 24 |
|  | **Median** | **90** | **0** | **0** | **0** | **0** |
| Wholesale and Retail Trade | Mean | 66.64 | 20 | 4.55 | 8.18 | 0.64 |
|  | N | 11 | 11 | 11 | 11 | 11 |
|  | **Median** | **96** | **0** | **0** | **4** | **0** |
| Other Services | Mean | 73.82 | 19.12 | 0 | 7.06 | 0 |
|  | N | 17 | 17 | 17 | 17 | 17 |
|  | **Median** | **75** | **25** | **0** | **5** | **0** |
| **Total** | Mean | 70.16 | 15.26 | 0.48 | 11.75 | 2.35 |
|  | N | 105 | 105 | 105 | 105 | 105 |
|  | **Median** | **80** | **0** | **0** | **7** | **0** |

*Source: World Bank Enterprise Survey for Barbados (2010)*

Of particular interest to the current analysis is the source of funding for fixed assets. As shown in Table 8, funding for fixed assets is almost completely from internal funds/retained earnings, where the exception is in Hotels and Restaurants where the median is 78% as compared to nearly 100% for Manufacturing and Wholesale and Retail Trade and 88% in Other Services. It should however be noted that only 40% of the sample indicated that they had purchased fixed assets in the last financial year.

Table : Sector by Source of Funding for Fixed Assets Purchased in Last FY (%)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sector** |  | **Fixed Capital Funding Source (%)** | | | | | |
| **Internal Funds/Retained Earnings** | **Owners’ Contributions Or Issued New Equity** | **Bank Borrowing** | **Non-Bank Financial Institutions** | **Credit/Advances** | **Other** |
| Manufacturing | Mean | 78.61 | 0.28 | 17.5 | 0 | 3.61 | 0 |
|  | N | 18 | 18 | 18 | 18 | 18 | 18 |
|  | **Median** | **100** | **0** | **0** | **0** | **0** | **0** |
| Hotels and Restaurants | Mean | 71 | 0 | 10 | 0 | 3.38 | 15.63 |
|  | N | 8 | 8 | 8 | 8 | 8 | 8 |
|  | **Median** | **78.5** | **0** | **2.5** | **0** | **2.5** | **0** |
| Wholesale and Retail Trade | Mean | 95.8 | 0 | 3 | 0 | 1.2 | 0 |
|  | N | 5 | 5 | 5 | 5 | 5 | 5 |
|  | **Median** | **99** | **0** | **0** | **0** | **0** | **0** |
| Other Services | Mean | 78.38 | 1.25 | 15 | 0 | 5.38 | 0 |
|  | N | 8 | 8 | 8 | 8 | 8 | 8 |
|  | **Median** | **87.5** | **0** | **7.5** | **0** | **2.5** | **0** |
| **Total** | Mean | 79.21 | 0.38 | 13.59 | 0 | 3.62 | 3.21 |
|  | N | 39 | 39 | 39 | 39 | 39 | 39 |
|  | **Median** | **95** | **0** | **0** | **0** | **0** | **0** |

*Source: World Bank Enterprise Survey for Barbados (2010)*

The relative low utilisation of bank credit appears to be somewhat of a supply-side issue with 28.7% of enterprises noting access to finance as their most significant obstacle to business. Other important obstacles were electricity (20.4%) and an inadequately trained workforce (14.8%). At the sector level, access to finance is the biggest obstacle for 29% in manufacturing, 19% in hotels and restaurants, 54% in wholesale and retail, and 24% in other services.

Information was also supplied by respondents in relation to their most recent loan. As shown in Table 9, 43.8% of the sample indicated that they had in the past had a loan, with the average value of the most recent loan being approximately BD$187,000 or US$93,500 with required collateral of more the twice the value of the loan at 195%. The average and median loan values however vary widely by sector. Despite this variation in loan size, the value of collateral in relation to the value of the loan shows less variation with a range in the median from 133% to 167% with an overall mean of 133%.

Table : Sector by Value of Most Recent Loan and Collateral

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sector** |  | **Value of most Recent Loan (at time of approval) (BD$)** | **Value Of Collateral Required For Most Recent Credit/Loan (BD$)** | **Collateral/Loan (%)** |
| Manufacturing | Mean | 238500 | 740375 | 144.4321 |
|  | N | 18 | 8 | 8 |
|  | **Median** | **110000** | **275000** | **139.4231** |
| Hotels and Restaurants | Mean | 113357.14 | 1017143 | 308.1185 |
|  | N | 14 | 7 | 7 |
|  | **Median** | **67500** | **200000** | **166.6667** |
| Wholesale and Retail Trade | Mean | 264285.71 | 766666.7 | 148.1481 |
|  | N | 7 | 3 | 3 |
|  | **Median** | **100000** | **200000** | **166.6667** |
| Other Services | Mean | 141200 | 346000 | 144.0132 |
|  | N | 10 | 5 | 5 |
|  | **Median** | **92500** | **160000** | **133.3333** |
| **Total** | **Mean** | 186571.43 | 742304.4 | 194.6433 |
|  | N | 49 | 23 | 23 |
|  | **Median** | **90000** | **200000** | **153.8462** |

*Source: World Bank Enterprise Survey for Barbados (2010)*

In relation to the type of collateral required, 78.1% indicated land and buildings, 36.4% indicated equipment, 15.2% indicated accounts, and 40.2% indicated personal assets; these figures indicate that multiple forms of collateral were required for the last loan approved. In relation to sectoral distribution of collateral requirements, Table 10 shows that land and buildings were also important sources of collateral for each sector, followed by equipment for manufacturing and other services, and personal assets for hotels and restaurants and wholesale and retail.

Table : Sector by Type of Collateral Required (% using collateral type)/Access to Finance as Obstacle

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sector** | **Land/Building** | **Equipment** | **Accounts** | **Personal Assets** | **Other** | **Access to Finance Major/Very Severe Obstacle (%)** |
| Manufacturing | 72.7 | 54.5 | 36.4 | 9.1 | 0.0 | 40.7 |
| Hotels and Restaurants | 90.0 | 30.0 | 0.0 | 40.0 | 10.0 | 38.4 |
| Wholesale and Retail Trade | 75.0 | 20.0 | 0.0 | 60.0 | 20.0 | 46.2 |
| Other Services | 71.4 | 28.6 | 14.3 | 28.6 | 28.6 | 36.9 |
| **Total** | 78.1 | 36.4 | 15.2 | 30.3 | 12.1 | 40.2 |

*Source: World Bank Enterprise Survey for Barbados (2010)*

With land and buildings as an important source of collateral, understanding the availability of these for use of collateral is important. However, there is limited information on the actual available collateral for these enterprises. Instead, in reviewing the general situation in the country, the Barbados Investment Development Corporation provides industrial space on 12 industrial estates with units rented to 221 tenants[[12]](#footnote-12). SALISES (2009), for the approximately 400 manufacturing enterprises, cite that 64.2% rented or leased their current premises. This renting/leasing of space may enable enterprises to establish themselves without having to purchase property, however, it negates the ability of these companies to utilise property as collateral. As the CGS will negate the need for such large levels of collateral, this can be particularly beneficial for the manufacturing sector.

### Firms in the Manufacturing, Hotels and Restaurants, and Other Services Sectors

The issue of size is important as it is one of the reasons for a greater concentration on providing support to SMEs due to their *relative* disadvantage caused by their size. The following results use the IDB/IIC firm size definition used for the program and distinguished between the small and medium enterprises in the sample, noting that small enterprises comprise approximately 79% of the sample once the IIC definitions are utilized.

**Manufacturing**

Table 11 illustrates the main information for manufacturing establishments from the 2010 Enterprise Survey separated by size category. The data indicates that having a female in ownership is not as prevalent in small manufacturing enterprises as in medium enterprises where two-thirds of enterprises have some female involvement in ownership. In relation to subsector, while food and beverage dominates in medium enterprises (50%), there is wider spread for small enterprises with food and beverage only accounting for 21% of enterprises, furniture 17% and publishing and printing accounting for 12%.

In relation to finance, access is not as prominent for medium enterprises with only 17% indicating this as a major or very severe obstacle; this is as opposed to 44% for small manufacturers. For funding sources, this is mostly internal with both small and medium manufacturers indicating this as the main source for both working capital and fixed assets, followed by credit and advances for working capital. The next most prominent sources for fixed assets were banks for small enterprises (21%) and credit and advances for medium enterprises (7%). These results demonstrate there are some salient differences in financing between small and medium manufacturers, and this is revealed in the biggest obstacles the businesses consider they face. Small manufacturers cite finance as their biggest obstacle (32%), followed by electricity costs (19%) and an inadequately educated workforce; this is as opposed to medium manufacturers who do not cite finance, but cite a range of obstacles including electricity, an inadequately educated workforce, customs, taxes and the practices of the informal sector.

Table : Barbadian SME Firm Characteristics by Size and Sector (Source: Enterprise Survey 2010)- Manufacturing

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Size** | **Firms with females in ownership (%)** | **Top Subsector(s) (% share)** | **Finance as Major/Very Severe Obstacle (%)** | **Biggest Obstacles (% share)** | **Working Capital Sources (%)** | **Fixed Assets Funding Sources (%)** |
| Small | 47.9 | Food and Beverage (20.8)  Furniture (16.7)  Publishing/Printing (12.5) | 43.8 | Finance (31.9)  Electricity (19.1)  Workforce (12.8) | Internal (66.4)  Credit/Advances (16.2)  Banks (14.2) | Internal (75.7)  Banks (21.0) |
| Medium | 66.7 | Food and Beverage (50.0) | 16.7 | Customs (20.0)  Electricity (20.0)  Workforce (20.0)  Informal Sector (20.0)  Taxes (20.0) | Internal (69.0)  Credit/Advances (23.5)  Banks (7.5) | Internal (93.3)  Credit/Advances (6.7) |

**Services**

Table 12 shows the related information for enterprises in the service sector, particularly Hotels and Restaurants and Other Services. The information by service subsector is analysed in the subsections that follow.

Table : Barbadian SME Firm Characteristics by Size and Sector (Source: Enterprise Survey 2010)- Services

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sector** | **Size** | **Firms with females in ownership (%)** | **Finance as Major/Very Severe Obstacle (%)** | **Biggest Obstacles (% share)** | **Working Capital Sources (%)** | **Fixed Assets Funding Sources (%)** |
| Hotels and Restaurants | Small | 42.9 | 50.0 | Finance (21.4)  Electricity (21.4)  Workforce (21.4) | Internal (61.8)  Banks (22.2) | Internal (67.6)  Banks (10.7)  Other (17.9) |
|  | Medium | 25.0 | 25.0 | Electricity (25.0)  Transport (25.0)  Finance (16.7)  Workforce (16.7) | Internal (92.1)  Banks (6.8) | Internal (95.0)  Bank (5.0) |
| Other Services | Small | 28.6 | 35.7 | Finance (25.0)  Workforce (16.7)  Informal Sector (16.7) | Internal (77.9)  Banks (12.9) | Internal (75.3)  Banks (17.1) |
|  | Medium | 20.0 | 40.0 | Electricity (40.0)  Finance (20.0)  Workforce (20.0)  Tax (20.0) | Internal (64.0)  Banks (34.0) | Internal (100.0) |

**Hotels and Restaurants**

Unlike manufacturing, there is a low prevalence of females in ownership, with only 43% of small establishments and 25% of medium establishments demonstrating this. However, as with manufacturing, finance is much more of an obstacle to business development for small businesses as compared to medium businesses with 50% of small citing this as a major or very severe obstacle as compared to 25% for medium businesses. In addition, while finance is the biggest obstacle for over one-fifth of small enterprises (21%), along with electricity and an inadequately educated workforce, the main obstacles for medium enterprises were electricity and transport; finance as the biggest obstacle was only seen among 17% of medium businesses. In looking at other issues related to finance, the main source of working capital and fixed assets were internal funds and banks, however, this varied significantly by size. For small enterprises, only 62% of working capital was sourced internally, as opposed to 92% for medium enterprises, with small enterprises also having a greater reliance on banks (22%) than medium enterprises (6.8%). A similar situation is seen with fixed assets where small enterprises only rely on internal funds for 68% of fixed asset funds, as opposed to 95% for medium enterprises. While only 5% of fixed assets are funded by banks for medium enterprises, small hotels and restaurants utilise banks (11%) and other non-formal sources (18%).

**Other Services**

In relation to gender and ownership, Other Services had the lowest representation of females in ownership with small enterprises having only 29% of firms with females in ownership and medium firms less at 20%. For access to finance, this is a major or severe obstacle for 36% of small enterprises and 40% of medium enterprises. In relation to the biggest obstacle to business development, finance was the dominant response from small enterprises at 25% followed by an inadequately educated workforce (17%) and the practices of the informal sector (17%). For medium enterprises the biggest obstacle was electricity (40%), followed by finance, an inadequately educated workforce and taxes, all at 20%.

In relation to financing practices, there was not as significant a difference between small and medium service enterprises as seen with manufacturing and hotels and restaurants. For other services, internal funding for working capital comprised 78% for small enterprises and 64% for medium enterprises, with banks being the next largest source at 13% and 34% respectively. For fixed asset funding, this was 100% internally funded for medium enterprises as opposed to 75% for small enterprises. The other main fixed asset funding source for small enterprises was bank finance at 17%.

## Additionality Under Credit Guarantee Scheme

The additionality of the Credit Guarantee Scheme will emerge from several areas where the enhanced access to credit catalyses additional lending, over and above that occurring under normal economic conditions and under prevailing lending procedures. It is envisaged that this additional lending will emerge from the following:

1. **Existing businesses that demand credit but currently self-excluding** from the credit market due to perceptions of interest rates and acceptability of their loan proposals as well as lacking collateral.
2. **Start-ups** are considered an integral source of additionality as they are usually the most constrained in accessing credit.
3. **Existing businesses that have credit and *may* demand further credit (new projects)** but currently have no further collateral available.
4. **Emerging Sectors/Subsectors** are another important source of additionality given the inherent risk in financing untried/untested areas with limited information on which to assess risk.

An investigation of these sources of additionality is explored below under the prevailing assumption that information on the scheme is disseminated to such a degree and to a sufficient extent that enterprises actively seek loans under the scheme.

While these four sources will provide additionality, it is also important to note that there will be a degree of switching of loans by commercial banks from a traditional collateralised methodology to one that utilises the credit guarantee scheme. This would be the case where commercial banks, in the absence of the scheme, provide credit but consider the applications marginal for approval but approve them anyway; under the scheme, it would be expected that commercial banks switch to using the scheme for loan applications considered at the margin of approval. This source is estimated from Craigwell and Kaidou-Jeffery (2010) who provide estimates of the increase in credit for Barbados, at an aggregate and sectoral level, under credit-rationing and no credit-rationing conditions. These estimates are considered relevant here as the scheme can be considered as removing credit rationing for those at the margin. Despite that this is not a source of additionality, it is still important to consider given that without taking this type of switching into consideration in the calculation of the quantum for the backing for the scheme, that applications outside of this margin may be crowded-out in favour of applications that are inside of the margin. The estimation of switching is also explored below.

### Existing Demand: Those that needed credit but did not apply

The first area of additionality relates to those established enterprises that require credit but are self-excluding themselves from the credit market due to negative perceptions of the operation of the market and their ability to access it. In order to assess the additionality from this group, information was utilised from the Enterprise Survey for Barbados from 2010, as outlined in Table 36. An important caveat here is that these estimates only relate to enterprises with five or more employees, estimated at approximately 2,600 enterprises in the country, and does not include the approximate 5,700 enterprises with between one and five employees.

The Enterprise Survey data indicates that although 65 respondents had a loan in the past (44.2% of the sample), only 26 (17.9%) had applied for a loan in the last financial year (2009). The applicants included 13.2% of manufacturers, 20% of hotels and restaurants, 22.2% of wholesale and retail and 24% of services. In relation to the 119 respondents (82.1% of sample) that did not apply for a loan, 83 did not require a loan at the time, while the main reasons for the other 36 respondents for not applying for a loan were unfavourable interest rates, high collateral requirements, and not thinking approval would be granted, among other non-specified reasons. While unspecified reasons dominate and account for 50% of responses overall, in terms of the sector distribution of these concerns, high interest rates and collateral requirements were an obstacle for 43% in manufacturing, 54.6% in hotels and restaurants, and 80% in wholesale and retail; this only accounts for 16.7% for other services. These results should however be treated with caution in that they only represent 25% of the entire sample.

Under the assumption that the credit guarantee will reduce collateral requirements and/or the interest payable on a loan (or indeed the perceived cost of the loan), these Enterprise Survey respondents indicated that they needed credit but did not apply for one. The estimates of additionality for those that needed credit but did not apply for various reasons are shown in Table 36.

**Table 14: Estimates of Additionality by Sector**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Enterprise Survey Results** | | | **Estimation of Total Additionality** | | | |
| **Sector** | **Number Requiring Credit but not applying (1)** | **Number in Sector (2)** | **(1)/(2) (%)** | **Estimated Number of Enterprises in Economy** | **Estimated Number requiring Credit** | **Median Sector Loan (BD$)** | **Estimated Credit Demanded (BD$)** |
| **Manufacturing** | 14 | 69 | 20.3% | 400[[13]](#footnote-13) | 81 | 130,000 | **10,530,000** |
| **Hotels and Restaurants** | 11 | 35 | 31.4% | 381[[14]](#footnote-14) | 119 | 80,000 | **9,520,000** |
| **Subtotal** |  |  |  |  |  |  | **20,050,000** |
| **Other Services** | 6 | 24 | 25.0% | 1250[[15]](#footnote-15) | 312 | 107,500 | **33,540,000** |
| **Subtotal** |  |  |  |  |  |  | **53,590,000** |
| **Wholesale and Retail** | 5 | 18 | 27.8% | 1500[[16]](#footnote-16) | 417 | 110,000 | **45,870,000** |
| **TOTAL** |  |  |  |  |  |  | **99,460,000** |

From the estimates, the total estimated additionality is BD$99.46 million, or approximately US$50 million. For those that did not apply for credit specifically because of lack of collateral, Table 37 outlines the estimated level of additionality. As shown Table 37, the estimated demand is BD$30.4 million, or US$15.2 million specifically for those enterprises indicating that the reason for not applying for a loan was because of high collateral requirement. It should however be noted that there may be a trade-off for the other specific reason for not applying for a loan, high interest rates. In these cases, the reduction in collateral requirements may offset the perceived high interest rates and these enterprises may seek loans despite the interest rate.

Table : Estimates of Additionality by Sector: Enterprises not applying for loans due to collateral requirements

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Enterprise Survey Results** | | | **Estimation of Total Additionality** | | | |
| **Sector** | **Number Requiring Credit but not applying (1)** | **Number in Sector (2)** | **(1)/(2) (%)** | **Estimated Number of Enterprises in Economy** | **Estimated Number requiring Credit** | **Median Sector Loan (BD$)** | **Estimated Credit Demanded (BD$)** |
| **Manufacturing** | 3 | 69 | 4.3% | 400[[17]](#footnote-17) | 17 | 130,000 | **2,210,000** |
| **Hotels and Restaurants** | 5 | 35 | 14.3% | 381[[18]](#footnote-18) | 54 | 80,000 | **4,320,000** |
| **Subtotal** |  |  |  |  |  |  |  |
| **Other Services** | 1 | 24 | 4.2% | 1250[[19]](#footnote-19) | 52 | 107,500 | **5,590,000** |
| **Subtotal** |  |  |  |  |  |  |  |
| **Wholesale and Retail** | 2 | 18 | 11.1% | 1500[[20]](#footnote-20) | 166 | 110,000 | **18,260,000** |
| **TOTAL** |  |  |  |  |  |  | **30,380,000** |

**Periodicity**

These estimates are considered a one-off additionality from the data available. While there may be additional enterprises seeking loans on a year-to-year basis, those estimates would be covered in the other estimates related to additionality, as outlined in the following sections.

### Existing Demand: Credit for New Enterprises

There are no official figures for the latest number of new ventures in Barbados segmented by sector or initial size. However, drawing on several sources[[21]](#footnote-21), some information can be obtained on the number of new enterprises in general.

Drawing on the Barbados Statistical Service’s Continuous Household Labour Force Survey[[22]](#footnote-22), data indicates an average of 88 net new employers over the period 1995 to 2008. Employers are used here as this group would employ at least one person and be more relevant to the current exercise. In looking at actual changes over this period, the figure below charts net new employers overlaid with GDP growth figures for each period and the previous period (t-1). In looking at general trends, net new employees appears to be directly correlated with GDP growth at t-1, apart from 1999-2000 and 2005 to 2007. Of particular interest here is that 1998 was a watershed year for the development of business support services in the country with the establishment of Government-backed schemes such as the Agency for Micro Enterprise Development (FundAccess) and the Enterprise Growth Fund Ltd. (EGFL), while in the period 2005 to 2007, the country was in preparation for the Cricket World Cup 2007.

This tentative relationship suggests that as growth returns to the economy, as expected from 2015 onwards, that some increase in the number of new enterprises may be seen.

Figure : Net New Employers and GDP Growth in Barbados 1995 to 2008

Other information can be gleaned from agencies dealing with small business development, microbusinesses and start-ups. The Small Business Development Unit of the Government of Barbados, in 2010, 117 businesses were approved for BD$348,680 (mean of BD$2,980). These 117 businesses provided employment to 180 persons full-time, approximately 1.5 full-time employees per business[[23]](#footnote-23). The Rural Development Commission (RDC), also an agency of Government, also provided loans in 2012. The RDC provided loans to 63 businesses at an average of BD$8,15424. The Barbados Agency for Micro Enterprise Development, also known as FundAccess, since its inception in 1998 has provided BD$43,687,012 to 1,190 clients up to March 31st 2014. Fund Access loans range from BD$700 to BD$100,000. Over the period 1998 to 2014, loans averaged BD$36,712, at an average of 70 loans per year.

The Barbados Investment Development Corporation (BIDC), during 2012, assisted 11 new businesses in being established in manufacturing and related services, while in 2011 it assisted 15. Between 2006 and 2012, BIDC assisted on average 19 companies in manufacturing and related services in becoming formally established24. The BIDC can be an important source of dissemination of information on the Credit Guarantee Scheme given their remit and their association with establishments that would suit the rationale for the establishment of the scheme. In looking at the median loan size for manufacturing establishments from the Enterprise Survey for 2010, which was BD$72,500 for small manufacturing companies, and calculating an estimate of 10 companies from BIDC obtaining start-up credit through the Scheme, this would approximate to BD$725,000. At the minimum loan level from the Enterprise Survey of BD$25,000 for small manufacturers, this would be BD$250,000.

From the limited data on new ventures, an estimate of 80 per annum may be somewhat representative. For manufacturing establishments, an average of approximately 20 per annum is suggested based on BIDC data. In terms of loan size for these new ventures, this ranged from approximately BD$3,000 from the Small Business Development Unit, to BD$8,000 from the Rural Development Commission, to BD$37,000 from FundAccess. If an average start-up loan of BD$15,000 is utilised, and 50% (40 enterprises) of new enterprises obtained loans through the scheme, this would suggest a demand of BD$600,000. In reviewing the estimates for BIDC manufacturing enterprises, and the other levels and ranges suggested, an estimate of credit to new start-ups would not be expected to exceed BD$1 million or US$500,000 per year.

**Periodicity**

The data presented is in relation to net new firms per annum. Therefore, in addressing any cost-benefit, it should be considered that this group will provide additional demand on an annual basis. From the BIDC annual averages, this would suggest that there will be additional demand from new manufacturing establishments of between BD$250,000 or US$125,000, and BD$725,000 or US$362,500 per annum, with total expected credit to start-ups of approximately BD$1 million or US$500,000 per annum.

### New Demand: Enterprises with credit but lack further collateral (New Projects)

In addition to those without loans that may be encouraged into the credit market due to lower collateral requirements and/or interest rates, those currently utilising credit may also have demand for further credit for new projects but cannot access the market due to collateral already tied to a previous loan. However, there is currently no data available to allow estimations to be made for demand in this area.

Although this source of additionality is not currently estimated, during the monitoring and impact evaluation phases it will be important to collect data from beneficiaries as to the rationale for the loan and whether in the absence of the CGS whether they had collateral tied to previous loans. This will enable future estimations of additionality to more accurately provide information in this area.

### New Demand: New Credit for Emerging Sectors

As with demand for credit for new projects, it is equally difficult to predict demand from new and emerging sectors due to a lack of information in this area[[24]](#footnote-24). However, two sources provide background information on the credit provided for more innovative projects which could not access commercial bank credit, the Enterprise Growth Fund Limited, and trends in funding at the sector level and for the sub-sector level in manufacturing, from the Central Bank of Barbados. Information emerging from these sources is presented below.

Estimating credit to new and emerging sectors is difficult. However, some information on ‘innovation’ credit can be gleaned from the Enterprise Growth Fund Ltd. (EGFL)[[25]](#footnote-25). EGFL provides loan and equity financing for SMEs through its own Enterprise Growth Fund and manages several funds for the Government of Barbados, the most relevant of which are:

1. **The Agricultural Development Fund**: Funds for enhancing competitiveness. Collateralised loans from BD$50,000 or US$25,000 to BD$1 million or US$500,000.
2. **The Innovation Fund**: Seed capital financing from BD$25,000 or US$12,500 to BD$250,000 or US$125,000 for innovative businesses in: Information Technology, Environment, Culture; Non-traditional Agriculture; and Tourism.
3. **The Industrial, Investment and Employment Fund**: Provides collateralised loans between BD$50,000 or US$25,000 and BD$2 million or US$1 million to enhance growth.
4. **The Tourism Loan Fund**: Collateralised loans for hotels with less than 75 rooms or tourist attractions of between BD$50,000 or US$25,000 and BD$4.5 million or US$ 2.25 million (or 15% of total capitalisation of the fund, whichever is higher). Funds are for refurbishing and upgrading of hotels or attraction or construction of facilities for those in historical cultural or natural heritage attractions.
5. **The Energy Smart Fund**: Provides collateralised loans for energy efficiency and renewable energy up to BD$1.5 million or US$750,000 with a repayment period up to 10 years.
6. **Small Hotels Fund**: Collateralised loans for members of the Small Hotels of Barbados Inc. of between BD$50,000 or US$25,000 and BD$5.25 million or US$2.625 million. Funds are to assist with marketing, management, procurement of joint services and refurbishment.

EGFL funds capitalised by Government in 2012 were approximately BD$15 million or US$7.5 million, while total funds dispersed were BD$18 million or US$9 million in 2012 as opposed to BD$7.5 million or US$3.75 million in 2011. Amount available for lending at end of December 2012 was BD$41.3 million or US$20.65 million. Basic Financials for the relevant funds for 2012 are shown in Table 38.

Table : Selected Financials for EGFL Funds (2012)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Fund** | **Disbursed (2012)** | **Disbursed (2011)** | **Loans (2012)** | **Average Loan Approved (2012)** | **Funds Available (end 2012)** | **Accumulated Loan Value (1998-2012)** |
| Enterprise Growth Fund | BD$1.8 million | BD$2.8 million | 2 | BD$126,500 | BD$7.1 million | - |
| Innovation Fund | BD$386,998 | BD$264,094 | 1 | - | BD$640,391 | BD$3.7 million |
| Industrial, Investment and Employment Fund | BD$30,312 | BD$495,501 |  |  | BD$2.9 million | BD$19.1 million |
| Tourism Loan Fund | BD$ 2.5 million | - | 1 | BD$3.1 million | BD$2.1 million | BD$62.4 million |
| Energy Smart Fund | BD$0 |  |  |  | BD$4.1 million |  |
| Small Hotels Fund | BD$970,964 | BD$71,681 |  |  | BD$9.2 million | BD$39.1 million |
| TOTAL | BD$5.69 million | BD$3.63 | 4 | - | BD$26.04 million | BD$124.3 million |

Other information available indicates that the Innovation Fund had supported 20 projects between December 2003 and 2012, at an average of BD$183,500 or US$ 91,750 (total of BD$3.67 million or US$1.835 million).

For the relevant funds listed in Table 38, there was approximately BD$26 million or US$ 13 million available through EGFL to support the productive sectors. There appears limited disbursement seen in 2012 of BD$5.7 million or US$2.85 million, with a further BD$41.3 million or US$20.65 million available for lending. With the exception of the Innovation Fund, the loan funds are all collateralised, as with commercial bank credit, and this may be a reason for a lack of uptake of these funds. Given this context, the most relevant fund here is the Innovation Fund where seed funds are provided for new emerging sectors, however, the uptake here has also been low with an average of 2 projects funded per year at an average of BD$183,500 or US$91,750. If this is a continuing trend, and assuming a five-year horizon for the disbursement of the CGS, 10 loans over a period of 5 years at an average of BD$183,500 or US$91,750 per year would give an estimated BDS$1.8 million or US$ 900,000 demand per year for the low collateral loans from the scheme.

In relation to general trends, data in section 2 demonstrated that since 2000, the main trends have been a significant decline in the share of credit to agriculture with a significant increase in the share of professional and other services, which as of 2013 accounted for 31% of commercial bank credit to the private sector.

Figure : Sectoral Distribution of Credit 2000 to 2013 (Selected Sectors) (%)

*Source: Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014)*

Table 39 outlines the actual change in credit level during this period and indicates that not only is Professional and Other Services the largest receiver of credit at over BD$0.5 billion, it has also see significant growth relative to the other sectors with total credit increasing by over 200% over the period; the next highest growth was seen in Tourism at 48% followed by Manufacturing at 33%. It should however be noted that this increase in Professional and Other Services is from a significantly smaller base than Tourism where total credit to the sector was 53% of Tourism in 2000.

Table : Commercial Bank Credit to Selected Sectors 2000-2013

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | Total Credit in 2000 (BD$’000) | Total Credit in 2013 (BD$’000) | Change (%) |
| Professional and Other Services | 174,000 | 549,321 | 215.7 |
| Tourism | 328,603 | 485,526 | 47.8 |
| Manufacturing | 87,968 | 117,273 | 33.3 |
| Distribution | 275,662 | 334,843 | 21.5 |
| Entertainment and Catering | 35,776 | 40,321 | 12.7 |
| Construction | 233,536 | 208,292 | -10.8 |
| Transport | 43,427 | 27,653 | -36.3 |
| Agriculture | 66,700 | 17,215 | -74.2 |
| Fisheries | 2,622 | 438 | -83.3 |
| Mining and Quarrying | 5,595 | 530 | -90.5 |
| Total | 1,253,889 | 1,781,412 | 42.1 |

*Source: Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014)*

Given the significant growth in Professional and Other Services, it would be useful to disaggregate this information at the subsector level, however this data is currently not available. The only disaggregation at the sector level that is available is for the Manufacturing sector. This information is shown below.

As demonstrated in the figure below, there have been variations in the shares of the various sectors during the period 2000 to 2013 while the absolute change in credit was highest in Alcoholic Beverages and Tobacco of over 300% and Sugar and Molasses of over 100%, as shown in Table 40. Other notable increases in credit over the period 2000 to 2013 were in Electrical Products and Petrochemicals.

Figure : Sectoral Distribution of Credit to Manufacturing 2000 to 2013 (Selected Sectors) (%)

*Source: Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014)*

Table : Commercial Bank Credit to Manufacturing 2000-2013

|  |  |  |  |
| --- | --- | --- | --- |
| Sector | Total Credit in 2000 (BD$’000) | Total Credit in 2013 (BD$’000) | Change (%) |
| Alcoholic Beverages & Tobacco | 7,224 | 31,713 | 339.0 |
| Sugar & Molasses | 253 | 514 | 103.2 |
| Electrical Products | 675 | 1,261 | 86.8 |
| Petrochemicals | 7,855 | 14,671 | 86.8 |
| Building Material & Metal Products | 19,609 | 23,914 | 22.0 |
| Textiles | 3,412 | 3,917 | 14.8 |
| Food & Non-Alcoholic Beverages | 20,816 | 19,283 | -7.4 |
| Furniture & Wood Products | 3,602 | 3,291 | -8.6 |
| Other | 24,522 | 18,709 | -23.7 |
| Total | 87,968 | 117,273 | 33.3 |

*Source: Central Bank of Barbados Online Statistics* [*http://data.centralbank.org.bb/default.aspx#*](http://data.centralbank.org.bb/default.aspx) *[Accessed 15th May, 2014)*

While the data on commercial bank credit does not indicate potential additionality for emerging sectors, it does indicate the source of increased demand for credit which would be expected to emerge from Professional and Other Services, Tourism and Manufacturing, that represents 20.2% 11.8% and 4.3% of the GDP and 7.2%, 10.5% and 7.1% respectively of the employed force[[26]](#footnote-26) in the country. These are all sectors where credit has increased significantly over the period 2000 to 2013. Specifically for manufacturing, credit growth has increased mainly in Alcoholic Beverages and Tobacco, Sugar and Molasses, Electrical Products and Petrochemicals.

Although the credit data does not provide specific data on additionality from emerging sectors, data from the EGFL on the Innovation Fund gives an estimated additionality of BD$1.8 million over a five year period.

**Periodicity**

The additionality data from the Enterprise Growth Fund (EGFL) is an estimate based on 10 years of disbursements totalling BD$3.6 million. Over an estimated five year period for disbursements from the scheme, this would be BD$1.8 million or US$900,000.

### Credit Switching

Under a credit guarantee scheme, commercial banks are likely to utilise the facility to provide loans to enterprises that they would have funded without the scheme but considered the loan marginal. This is the case where in the absence of the scheme a commercial bank would consider some loans marginal, some of which they will fund and in other not fund. This proposed switching is the case where those marginal loans that were funded in the past utilising traditional collateral-based lending, are now funded through the scheme. Therefore, banks will provide credit to these enterprises through the fund and therefore *not provide any additionality*. However, this will still need to be accommodated by the scheme as if it is not, those in greater need would be crowded out.

Such a situation can be considered as reducing credit rationing for the funds used to guarantee the loan. Craigwell and Kaidou-Jeffery (2010) provide some information on lending behaviour of commercial banks in relation to credit rationing in Barbados. For total loans, Craigwell and Kaidou-Jeffery (2010) indicate that in a period of credit rationing, total loans will decline by 0.062%, while in a period with no rationing, total loans would increase by 0.22%. At the end of 2013, commercial bank credit to the private sector was BS$1781.412 million. Removing credit restrictions in relation to the introduction of the scheme would suggest a net increase in total loans by BD$3.92 million. Craigwell and Kaidou-Jeffery (2010) also provide sectoral indicators for agriculture, manufacturing and tourism, as shown in Table 41.

Table : Estimated Additional Loans (Calculations based on Craigwell and Kaidou-Jeffery (2010))

|  |  |  |  |
| --- | --- | --- | --- |
| **Sector** | **Change in sectoral loans with no credit rationing (%)** | **Current Loans (end Q4 2013) (Million BD$)** | **Additional Loans (Million BD$)** |
| **Agriculture** | +0.34 | 17.215 | 0.058 |
| **Manufacturing** | +1.23 | 117.273 | 1.442 |
| **Tourism** | +0.75 | 485.526 | 3.641 |
| **Construction** | +0.95 | 208.292 | 1.979 |
| **Total** | **-** | **-** | **7.120** |

The rationale for the difference in the total increase in loans of BD$3.92 million for all sectors and the BD$7.12 million or US$ 3.56 million per year for the four specific sectors is that the total loans estimate is a net figure for all sectors where some sectors may experience declines in loans while other sectors see increases, this is as commercial banks switch to more profitable projects.

It is important to note that another source of switching could be internal to the enterprise where with the availability of more accessible credit, enterprises switch from utilising retained earnings or other internal funds to finance fixed asset acquisition to funds guaranteed under the CGS. However, this is not estimated here.

**Periodicity**

The estimate of total additional loans is based on the current loan levels at the end of 2013. Over time, this would vary as commercial banks participate in switching to the CGS, however it is indeterminate as to whether the initial increase will be sustained over time or be a one-time occurrence.

## Data-based approach findings

This section seeks to identifying the absorption capacity of the private sector in Barbados given that the scheme will enhance access to credit by reducing the perceived risk to financial institutions and resultant reductions in collateral requirements. The scenarios under consideration were:

* **Scenario 1:** Guarantee of US$35M = BD$70M => 80% of new loans covered therefore need to see additional BD$87.5M in credit; i.e. absorption capacity of additional US$43.75M.

At an average of BD$400,000 per loan, equates to an additional 202 loans.

* **Scenario 2:** Guarantee of US$30M = BD$60M => 80% of new loans covered therefore need to see additional BD$75M in credit; i.e. absorption capacity of additional US$37.5M.

At an average of BD$400,000 per loan, equates to an additional 173 loans.

* **Scenario 3:** Guarantee of US$25M = BD$50M => 80% of new loans covered therefore need to see additional BD$62.5M in credit; i.e. absorption capacity of additional US$31.25M.

At an average of BD$400,000 per loan, equates to an additional 145 loans.

To assess the potential additionality of the scheme, this was considered to come from 5 sources, as shown in Table 42. The results of the investigation and resultant estimates are also shown in the table.

Table : Estimated Additionality and Commercial Bank Switching (BD$)

|  |  |  |  |
| --- | --- | --- | --- |
| **Additionality Source** | **Estimated Number of Loans** | **Estimated Median Loan Size (BD$)** | **Total Estimated Additionality (BD$)** |
| Existing Business Excluded from Credit: |  |  |  |
| Manufacturing | 81 | 130,000 | 10,530,000 |
| Hotels and Restaurants | 119 | 80,000 | 9,520,000 |
| Other Services | 312 | 107,500 | 33,540,000 |
| Wholesale and Retail | 417 | 110,000 | 45,870,000 |
| Existing Businesses Demanding further Credit | nad | nad | nad |
| New Ventures | 40 | 15,000 | 600,000 |
| Emerging Sectors | 10 | 183,500 | 1,835,000 |
| *Commercial Bank Switching:* |  |  |  |
| *Manufacturing* | *-* | *-* | *1,442,000* |
| *Tourism* | *-* | *-* | *3,641,000* |
| **Total** | **552** | **-** | **106,978,000** |
| *nad: No data available for estimation* | | | |

It should however be noted that these estimates relate to changes in a single period while over a longer timeline, especially as it relates to new business formation and enhanced demand as general economic growth returns. In considering annual additions, as well as the areas not estimated due to a lack of data, **the estimated total of nearly BD$107 million or US$52.5 million would be considered as at the very lowest end of the additionality scale, for which not only the US$35 million from our Scenario 1 is sufficient but it could be highlighted that in a case of higher guarantee funding the local market demand will be able to absorb these additional flows.**

Given these estimates, and in relation to the two areas that could not be estimated (existing businesses demanding further credit and emerging sectors), it appears that the most feasible scenario for consideration would be Scenario 1. Scenario 1 relates to a guarantee of US$35 million or BD$70 million. If the CGS is to cover 80% of loan, this would represent a total additional BD$87.5 million in credit, or 202 new loans with an average loan amount of BD$400,000. While the calculations above match more closely with Scenario 1, there are important sources of additionality which are not estimated and therefore Scenario 1 would be considered the most feasible, especially as economic growth is expected to return to the Barbadian economy in 2015.

It is important to note that these provisional estimates are based on the dissemination of information to enterprises demanding credit of this type as well as commercial banks undertaking to utilise the facility.

# Barbadian Firms Survey

A survey on financing conditions for small and medium-sized enterprises in Barbados was conducted between February and May 2014 to understand the financing conditions that would help determine the type of facility that the IDB could establish in Barbados to support small and medium sized enterprises. It was considered that an on-site firm survey will bring additional value to the market analysis efforts, given the constraints to get official data or updated firm reports in Barbados. As expected with the results of the survey when comparing the findings with other reports[[27]](#footnote-27), access to finance is particularly the most burdensome obstacle for small and medium enterprises Barbados with the lack of collateral being the major impediment to get a loan. Almost half of the surveyed firms do not get any financing from banks at all and more than 50% of the firms would have done between 1 or 3 projects provided that there was financing available, supporting the previous analysis for absorption capacity for funds for guaranteed loans.

## Target Industries, Firm and Financial Intermediary Selection

A 10-question survey on financing conditions was used, having 94 responses from small and medium-sized firms according to the IDB/IIC firm size classification. The survey was aimed but not limited to foreign-exchange earning industries as well as firms that support these industries (such as professional services and providers). A number of organisations were contacted to enlist their support to survey their members:

* Barbados Small Business Association
* Barbados Coalition of Services Industries
* Barbados Manufacturers’ Association
* Barbados Hotel and Tourism Association
* Barbados Chamber of Commerce and Industry
* Barbados Youth Business Trust
* Barbados Renewable Energy Association

In addition to firms that are members of associations listed above, there were small and medium-sized enterprises that fit the above criteria and were not members of any specific Association. This is particularly important for ensuring that small and medium professional services providers such as website developers, advertising agencies, cleaning agencies, etc. are also represented.

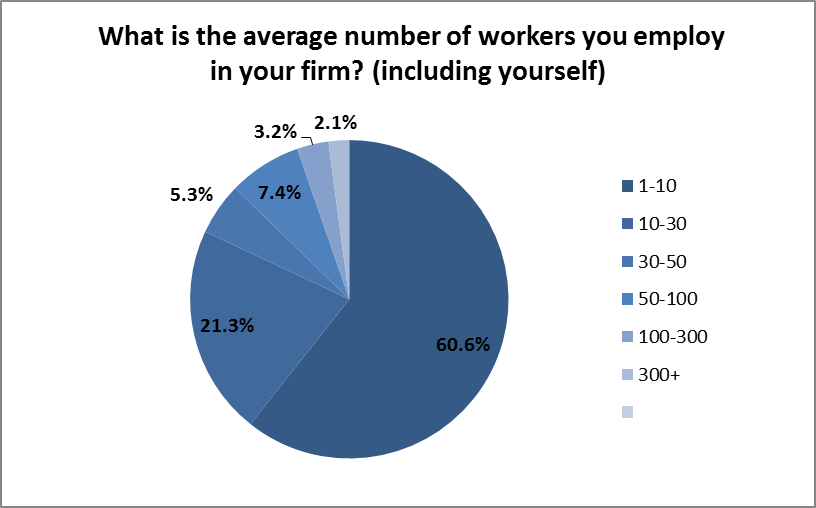
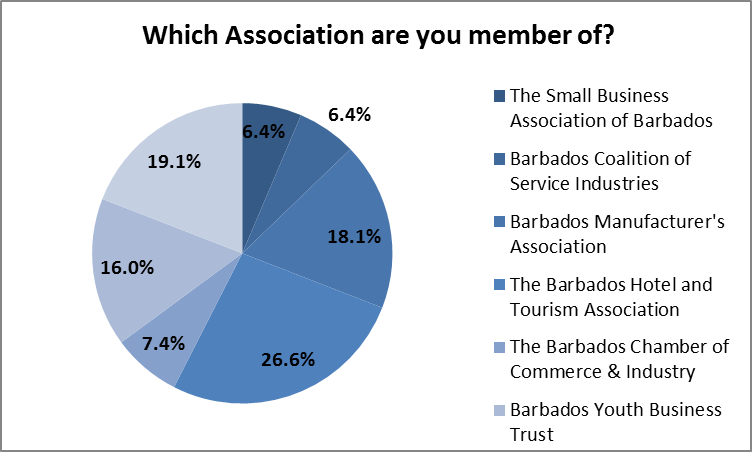
## Survey Distribution

A 10-question survey for firms was distributed by the Associations to collect responses. The surveys were answered in some cases using an online[[28]](#footnote-28) survey provider and in some other cases done one-on-one with the firms Barbados. The questions are all multiple choice and the survey was anonymous when done online. In all of the cases and to facilitate the participation of the firms, the respondents were given three options to complete the survey: online; over the phone; and in person.

## Analysis for Firms

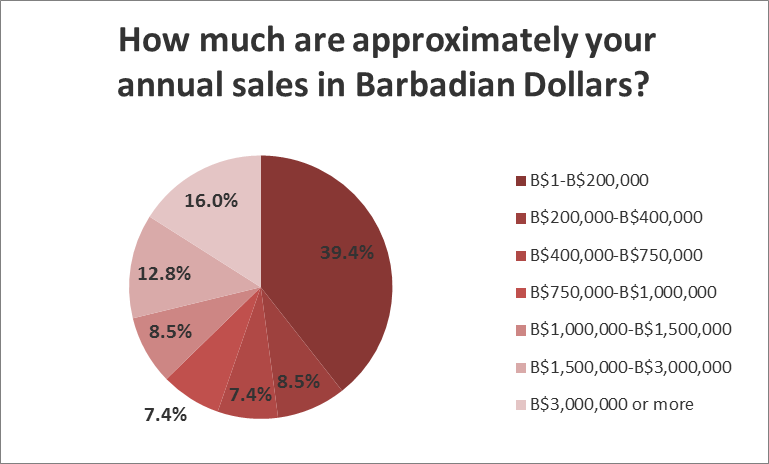
There was a higher participation of members of the Barbados Hotel and Tourism Association for the surveys with 26.6% of the respondents. This is not surprising being one of the main sectors in the economy. The other associations are also represented in the survey responses with the participation showed below. However, the surveys find a big participation of small firms, with 94.6% of the respondents as shown in the following figure:

Figure Firm Survey: Associations and number of employees per firm



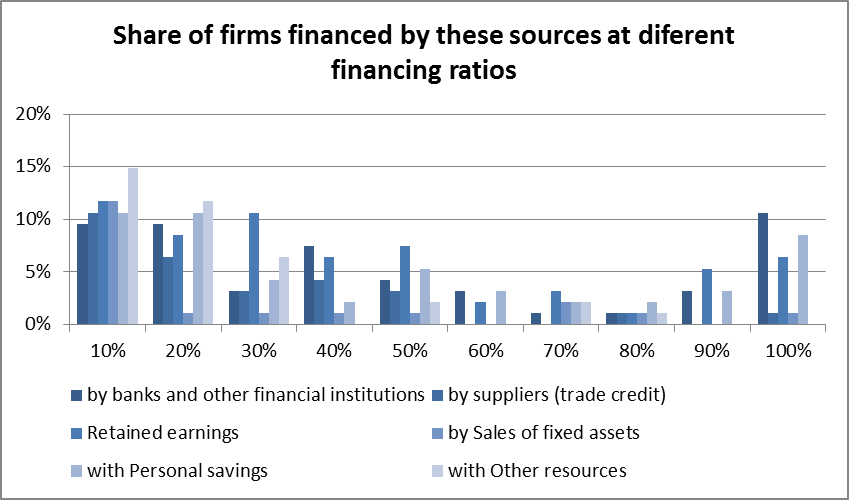
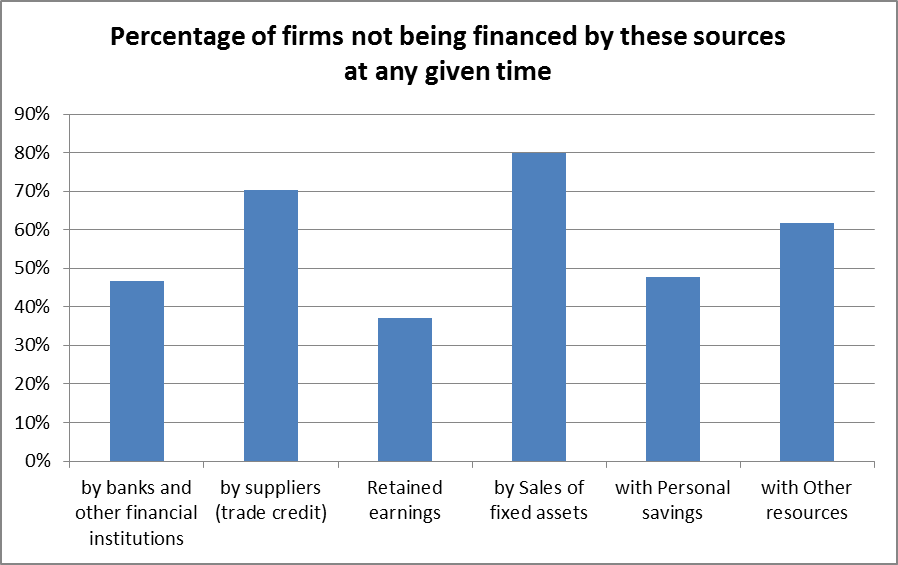
As far as annual sales, the survey shows a high participation of 39.4% for the firms with annual sales up to B$200,000. The firms with annual sales in the range of B$750,000 – B$1,000,000 and B$400,000 – B$750,000 show a similar participation from the firms of 7.4%.

Figure Firm Survey: Annual Sales



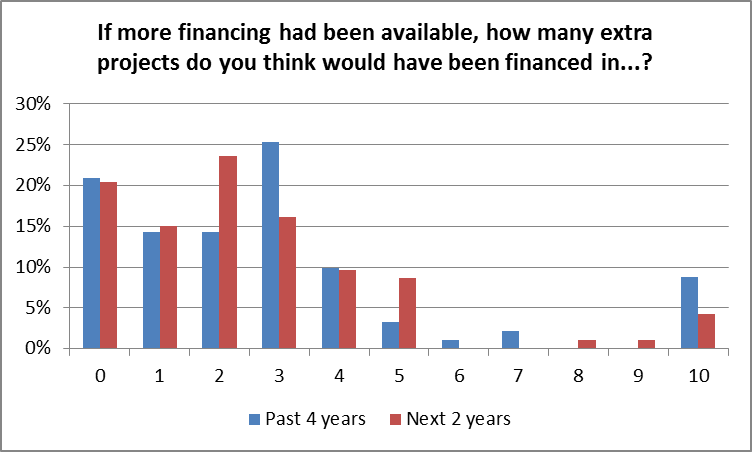
When the firms were asked about what percentage of the total investment amount in new projects (machines, technology, working capital, etc.) is on average financed by banks, suppliers, earnings, sales, savings or other resources, we found that for banks only finance 23% of firms with 50% or more of their financing needs, 30% of the firms with 10% to %50 percent of their financing needs and 47% of the firms do not get any financing from banks at all. When supporting 50% or more of the financing needs, the firms use retained earnings (26%) or personal savings (24%).

Figure Firm Survey: Access to finance



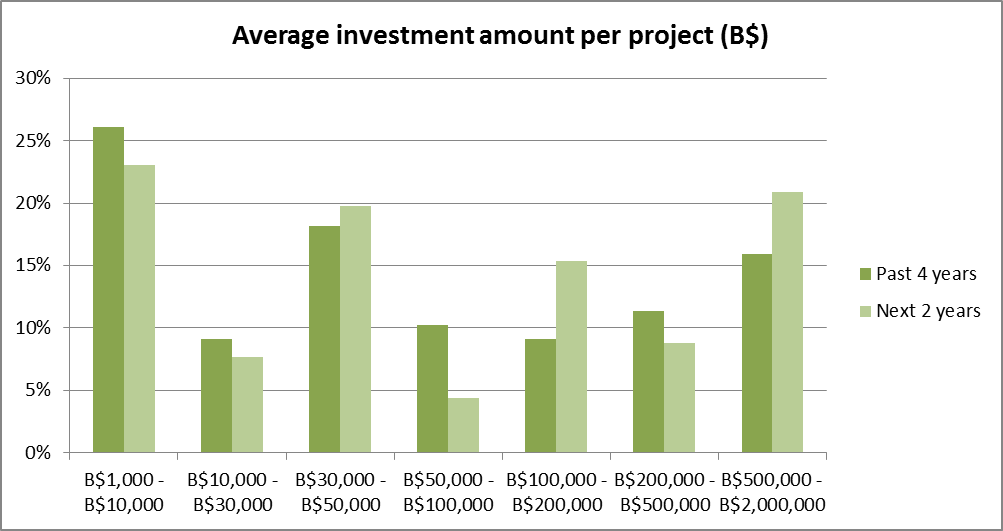
In terms the numbers of projects that firms would have undertaken in the past and will undertake in the future had they have access to finance, we find that only 21% of the firms wouldn’t have pursued new projects in the past and 20% will not have new investments in the future, provided that there was financing available. More than 50% of the firms say that they will have done between 1 or 3 projects either in the past or the near future.

Figure Firm Survey: Additional projects if financing available



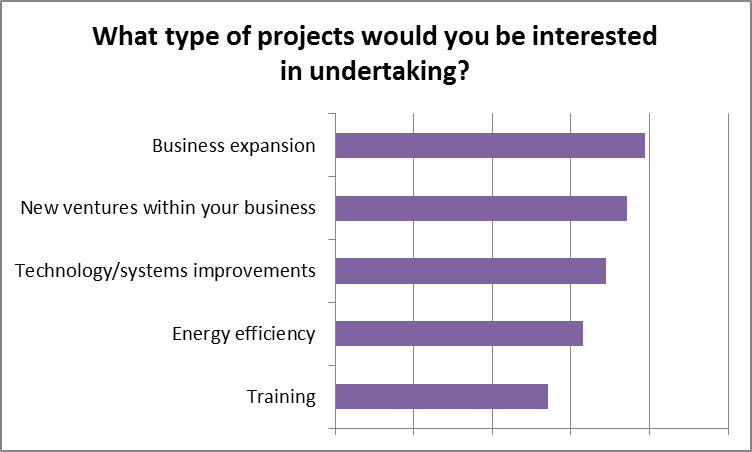
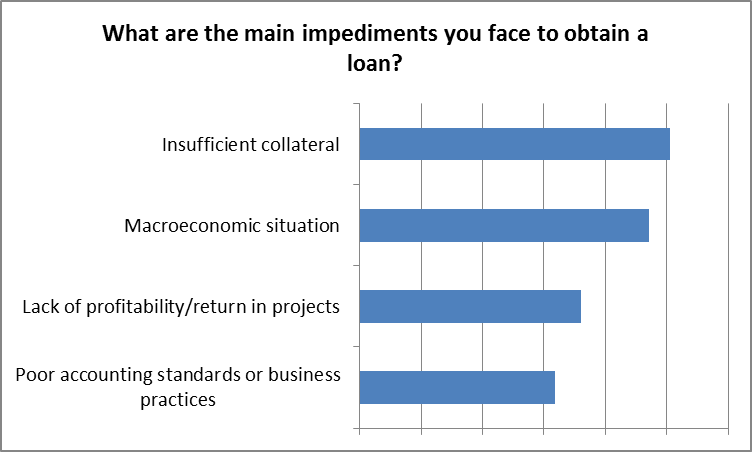
The highest needs in regards to the size of the loans required for the businesses surveyed, for the next years fall in the ranges of B$1,000 - B$5,000 (US$500 – US$2,500) and B$500,000 – B$2,000,000 (US$250,000 – US$1 million).

Figure Firm Survey: Investment amount per project



The main impediment to get a loan is the lack of collateral, although the macroeconomic expectation also plays an important role for the firms when seeking funding. Unviable projects and poor business practices came as other important reasons for not getting loans. However, in the event of having access to finance, most of the firms will opt to expand their business first or try new ventures with the firm second. Technology improvements and energy efficiency projects came in third and fourth place.

Figure Firm Survey: Financing constraints and type of projects to undertake



Lack of collateral continues to be the major impediment to get a loan for the surveyed firms, with 47% of the surveyed firms not getting any financing from banks at all. In addition, the survey found that more than 50% of the firms would have done between 1 or 3 projects provided that there was financing available and it was noticed by the surveys that only 60% of the firms loan applications get approved and 90% of these loans required to present at least 100% of collateral to receive the loan. According to the firms, there is steadily increasing demand for investment financing that is yet not answered by the financial sector due to insufficient collateral for the projects. The survey results show that the absorption capacity for funds for guaranteed loans is present in the market.

# Barbadian Financial Intermediaries Interviews

While considering a supply side analysis to meet the demand side, a series of interviews and a financial intermediary survey were conducted to better understand the market perceptions from the financing parties. As consistent with the firm surveys, one of the most important barrier identified for low access to finance are commercial banks’ high risk perceptions of firms lacking the necessary guarantees and collateral to gain access to finance, coupled with a difficult macroeconomic context in Barbados. The multiple interactions with the financial intermediaries supported the analysis to qualitatively characterize the business environment and financial conditions for the Barbadian firms.

The financial intermediary’s interviews and surveys were done during a 4-month period, from February to June 2014 and served to complement the demand analysis results about the firms demand for a guarantee product. There were bilateral meetings in multiple occasions during February, April and June, as well as follow-up communications over the phone and electronically during this time with the following commercial banks and non-bank financial institutions[[29]](#footnote-29): Signia Financial Group, Republic Bank Barbados Limited, Globe Finance Inc., First Citizens Bank, First Caribbean International Bank, Citi Bank, ScotiaBank Barbados and RBC Caribbean Bank. The main perceptions about the financing conditions from the lenders drawn by these interactions are:

* The requirements for credit lending such as capital or collateral are the biggest constraints to borrowers, and the main risk mitigating factor for the banks.
* In some cases, management skills (accounting, marketing and strategic planning) are also perceived as a risk factor for business lending, since it can compromise the execution of the loans. Local business associations are currently working with their members to strengthen these areas to improve the credit conditions for the borrowers.
* Bank products that serve the local market are limited in their scope since most products are standardized across the regional bank branches and come from off-shore parent companies, not embedding some local characteristics or local business practices into the products.
* Since the banks are relatively small in size, and the credit committees sit at the corporate offices abroad, the loan approval process is in some cases lengthy and without a flexible system to adjust products on a case by case basis and in a timely manner.
* There is interest to keep financing investment projects across the economy, however the manufacturing, wholesale, retail and services sectors are the ones where the financial intermediaries see with more economic potential for better development in a small economy, as well as there is interest from the banks to allocate resources to green projects (energy efficiency).

In addition to the meetings and discussions with the financial institutions, there was a survey conducted to commercial banks and financial intermediaries to have a deeper understanding of the supply side of the market that operates directly in financing the small and medium-sized firms, with the following results[[30]](#footnote-30):

* The proportion of the SME loans requested is on average 35% of the total loan portfolio for the financial intermediaries, and only 60% of those loans are approved.
* On average, 90% of these loans are at least required to present 100% of collateral.
* The average size of a loan that a SME is seeking is B$400,000 or US$200,000.
* Although there is a small ratio of SME loans ending in default on average (3%), these loans on average present an outstanding loan of the 60% of the original loan amount

The banks’ perceptions about the current guarantee schemes are that the operational process tends to be cumbersome and rules are not completely clear in most of the cases. As the guarantor also goes through a credit analysis for each eligible loan, the length of the process goes beyond the usual business time frame for the lenders approval. Since the current guarantee scheme is revocable, there is the risk of giving a loan and not be fully confident of getting repayment by the guarantee scheme should any external events trigger the mechanism. Although there have been guarantee issuances in the past years, there are limited in amount and in number[[31]](#footnote-31). Given the tight fiscal situation for the government, the financial intermediaries’ perception regarding new guarantee claims for the existing guarantees is that there might not be enough resources to honour the claims; hence they are hesitant to issue new loans under these old schemes. The banks and financial institutions will support a new guarantee scheme that relaxes the credit requirements to business (collateral) and that is clear, fast and efficient in its operation, as well as if its capital is segregated from the Central Bank’s balance sheet, it will highly boost confidence that the resources will be solely used for that scheme in particular and won’t be mixed or used with other schemes or purposes.

# Guarantee Workshop

On June 17th, there were consultative meetings with representatives of the following local financial institutions: Signia Financial Group, Fund Access, First Citizens Bank, EGFL, Citi Bank, Scotiabank and RBC Caribbean Bank; and with the following private sector associations: Barbados Renewable Energy Association, Small Business Association of Barbados, Barbados Coalition of Service Industries and Barbados Youth Business Trust to discuss the results of previous meetings and surveys. The following conditions were presented at the workshop:

* The guarantee fund will be set aside in a special purpose vehicle or equivalent instrument according to Barbados laws and won’t be linked to the guarantor balance sheet.
* The IDB program will propose more flexibility in the operational terms for the guarantee scheme as to make the fund easier to perform and fulfil its purpose more efficiently.
* The IDB program will offer clarity within the issuance, claim and recovery processes, as to with its main statues such as the financial intermediary, firm and loan eligibility criteria.
* Participating financial intermediaries will be commercial banks or entities certified by CBB Banking Supervision.
* The is an option to suspend a participant IFI when it exceeds 15% in NPLs for its portfolio, has 10 or more guarantee claims, and/or does not fulfil the monitoring and reporting requirements
* Participating firms will be firms that are majority Barbadian-owned, incorporated in Barbados, with sub-loans of up to B$ 2 million, maintain operating licenses and permits
* The amount of the guaranteed loan could be up to B$2 million or US$1 million
* The guarantee could cover a loan denominated in Barbadian or US dollars,
* A term up to 10 years for the loan and,
* Coverage for up to 80% of the loan amount.

The banks and financial institutions, along with the private sector associations concurred with these terms and showed support for a new guarantee scheme that will operate separated from the Central Bank’s accounts and with the above-mentioned conditions.

# Document Findings

This document attempted to determine the demand for a government-backed guarantee product within the Barbadian firms and financial intermediaries. As the analysis showed the presence of data limitations and outdated information, additional efforts such as having meetings, surveys and discussions with government officials, financial institutions and private sector participants were undertaken to support the analysis to understand the absorption capacity for a government-backed loan guarantee scheme. Some of the main findings are the following:

The sectors where the main firms are concentrated and some estimates can be derived as to the additionality they can provide are: manufacturing (400 firms), Hotels and Restaurants (381 firms), services (1,250 firms) and wholesale and retail (1,500 firms). These sectors comprise for about 58.5% of the GPD activity and 41% of the employed labour force. There is a estimated total of nearly BD$107 million or US$52.5 million of additional demand for credit considered as at the very lowest end of the additionality scale, for which not only the US$35 million from our Scenario 1 is sufficient but in a case of higher guarantee funding, the local market demand will be able to absorb these additional flows. Having a guarantee of US$35 million or BD$70 million and if the CGS is to cover 80% of loan, this would represent a total additionality BD$87.5 million or US$43.75 million in credit, or 202 new loans with an average loan of BD$400,000 or US$200,000.

Lack of collateral continues to be the major impediment to get a loan for firms in Barbados. It was found that more than half of the firms would have done at least one and up to three new investment projects provided that there was financing available. Lack of collateral appears to be one of the main reasons loan applications do not get approved since the majority of these loans required to present at least 100% of collateral to receive the loan. Regardless of the presence of these constraints in the market, the absorption capacity for funds for guaranteed loans is real in the market.

The banks’ adverse perceptions about the current guarantee schemes are mostly related to the source of the guarantee funding, complex operation and unclear rules of the schemes, for which the banks fear that the current guarantees are not fully shielding the risks that the financial intermediaries are seeking to cover. The banks, financial institutions and private sector entities will support a guarantee scheme that provides certainty of repayment by isolating its own funding from other operations, adequately relaxes the collateral credit requirements to businesses, that has a clear set of statues and rules, and offers flexibility and efficiency in its operational rules.

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DOCUMENT END

1. Chapter 318C, September 2009 [↑](#footnote-ref-1)
2. There are other definitions into consideration to characterize the small business, referred to capital ownership, amount of capital seeded and investment origin. For simplicity for this study we based the definition only by the amount of sales and number of employees. For further reference see the Barbados Small Business Act. [↑](#footnote-ref-2)
3. Harmonized definition of SME in the Latin America and the Caribbean Region, Presentation to the Board of Executive Directors, IIC, June 17th, 2014. [↑](#footnote-ref-3)
4. For simplicity in the calculations, the average size loan increases in line with the nominal GDP growth. [↑](#footnote-ref-4)
5. The positive effects on the added credit and/or loans generated given the use government-backed guarantee product within the Barbadian firms and financial intermediaries. [↑](#footnote-ref-5)
6. Small Business Data Collection and Collation Project, Sir Arthur Lewis Institutie of Social and Economic Studies, University of the West Indies, Cave Hill Campus, Barbados. March 2009, that was prepared for the Ministry of Economic Affairs, Economic Empowerment, Innovation, Trade, Industry and Commerce. [↑](#footnote-ref-6)
7. The analysis of sectoral credit is based on information for: agriculture, fisheries, mining and quarrying, manufacturing, distribution, tourism, entertainment and catering, transport, construction and professional and other services. Excluded sectors are: public utilities, government, statutory bodies, financial institutions, personal and miscellaneous. [↑](#footnote-ref-7)
8. Results show computed monthly data from January to May 2014. Central Bank of Barbados. [http://data.centralbank.org](http://data.centralbank.org.bb/CommercialBanks.aspx) [↑](#footnote-ref-8)
9. [http://www.imf.org](http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/weorept.aspx?sy=2013&ey=2019&scsm=1&ssd=1&sort=country&ds=.&br=1&pr1.x=75&pr1.y=9&c=316&s=NGDP_RPCH&grp=0&a) [↑](#footnote-ref-9)
10. The sample for each country is stratified by industry, firm size, and geographic region. The level of detail of the stratification by industry depends on the size of the economy. Stratification by size follows the three levels presented in the text: small, medium, and large. Source: www.enterprisesurveys.org. The agriculture sector in Barbados is relatively small compare to other sectors in the economy, just participating with 4% of GDP. [↑](#footnote-ref-10)
11. Based on the Inter-American Investment Corporation document Harmonized definition of SME in the Latin America and the Caribbean Region, Presentation to the Board of Executive Directors, IIC, June 17th, 2014 [↑](#footnote-ref-11)
12. <http://www.bidc.org/index.php?option=com_content&view=article&id=87&Itemid=131> [↑](#footnote-ref-12)
13. Estimate from Barbados National Productivity Report: *Repositioning the Manufacturing Sector in Barbados* (SALISES, 2009) [↑](#footnote-ref-13)
14. Estimate from Barbados Hotel and Tourism Association Report: [http://www.bhta.org](http://www.bhta.org/images/Download/PCS_BHTA_Tourism_Study_2009.pdf). [↑](#footnote-ref-14)
15. VAT data for October 2006 indicated 1590 registered wholesale/retail establishments. However, this data is nearly 8 years old. Given the recent economic decline, the estimate of 1250 is considered viable. [↑](#footnote-ref-15)
16. VAT data for October 2006 indicated 1744 registered wholesale/retail establishments. However, this data is nearly 8 years old. Given the recent economic decline, the estimate of 1500 is considered viable. [↑](#footnote-ref-16)
17. Estimate from Barbados National Productivity Report: *Repositioning the Manufacturing Sector in Barbados* (SALISES, 2009) [↑](#footnote-ref-17)
18. Estimate from Barbados Hotel and Tourism Association Report: [http://www.bhta.org](http://www.bhta.org/images/Download/PCS_BHTA_Tourism_Study_2009.pdf) [↑](#footnote-ref-18)
19. VAT data for October 2006 indicated 1590 registered wholesale/retail establishments. However, this data is nearly 8 years old. Given the recent economic decline, the estimate of 1250 is considered viable. [↑](#footnote-ref-19)
20. VAT data for October 2006 indicated 1744 registered wholesale/retail establishments. However, this data is nearly 8 years old. Given the recent economic decline, the estimate of 1500 is considered viable. [↑](#footnote-ref-20)
21. Such as the Barbados Statistical Service, the Small Business Development Unit of the Government in Barbados and the Barbados Investment Development Corporation. [↑](#footnote-ref-21)
22. See <http://www.barstats.gov.bb/publications/> [↑](#footnote-ref-22)
23. See Barbados Economic and Social Report (2010:83) available from <http://www.economicaffairs.gov.bb/archive-detail.php?id=324> [Accessed 23rd May 2014] [↑](#footnote-ref-23)
24. Some qualitative indications of type of demand are provided in Section 3 of this document. [↑](#footnote-ref-24)
25. See <http://egfl.bb/index.php> for details [↑](#footnote-ref-25)
26. For the year 2013. https://labour.gov.bb/pdf/Key\_Trends/Emp\_Ind\_2010-2013.pdf [↑](#footnote-ref-26)
27. [Global Competitiveness Report on Barbados](https://mymail.iadb.org/owa/redir.aspx?C=PdgdWzKE7kKYHuq4cVDwZRXSgTeIGNBIm5AudLTuavCAczu4i6oGxNE7XMZ1yqMghfRwdV3GfXU.&URL=http%3a%2f%2fwww3.weforum.org%2fdocs%2fCSI%2f2012-13%2fBarbados.pdf) (2012-13), World Economic Forum [↑](#footnote-ref-27)
28. <https://www.surveymonkey.com/s/2K6N62J> [↑](#footnote-ref-28)
29. These institutions are licensed under the Financial Institutions Act, regulated by the Central Bank of Barbados and also the Securities Act, 2001 which is regulated by the Financial Services Commission, and offer a more limited range of financial products. [↑](#footnote-ref-29)
30. Not all the responses can be shared due to confidentiality of the answers and the operational business models for the sector. [↑](#footnote-ref-30)
31. The current number of guarantees outstanding with the Enhancement of Credit Guarantee Scheme until March 2014 is 28, with a maximum liability of B$1.7 million and a total value of guarantees at B$2.2 million. Since 2009, there have been only 2 claims received for the Credit Guarantee Scheme, one in 2010 and one in 2014. Central Bank of Barbados. [↑](#footnote-ref-31)