

Constraints Affecting Guyana's Private Sector: Survey Results

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Abstract

Guyana has experienced significant economic growth and several waves of reforms over the past two decades. Nevertheless, several constraints continue to affect Guyana's private sector. This policy brief utilizes firm-level data from the Compete Caribbean PROTEqIN database to examine these constraints with the aim of distilling essential policy responses.

JEL Codes: D22, D24, D29

Key Words: private sector, doing business, constraints

Background

Guyana has experimented with two diametrically opposed development paradigms following independence in 1966 (Pasha, Khemraj, and Singh, 2013). During the period 1970 to 1985, the government pursued 'cooperative socialism,' where the state assumed control over the productive resources of the country. Following the failure of this development paradigm, the government adopted the Economic Recovery Program in 1989 with the aim of making the private sector the engine of economic growth. Since then the government has pursued a wave of reforms to support the private sector. However, many businesses are affected by several constraints. Indeed, available data confirms that several of these factors constrain businesses in Guyana. For instance, the Global Competitiveness Report 2015-2016 identified inefficient government bureaucracy, corruption, access to finance, crime and theft, taxes, and inadequate supply of infrastructure as the most problematic factors for doing business in Guyana.

This study utilizes firm-level data from the 2014 PROTEqIN survey to answer the following questions:

- i) How do firms in Guyana perform relative to their counterparts in the Caribbean?
- ii) What are the key constraints to firm performance in Guyana?
- iii) What strategies can relax the constraints?

Performance of Firms in Guyana Relative to their Counterparts in the Caribbean

The performance of firms in Guyana as measured by sales growth is the highest in the Caribbean.¹ Figure 2.1a shows that Guyana reported sales growth of 7 percent, significantly above the average of 2.8 percent. This may be attributed to the relatively stronger economic performance of Guyana vis-à-vis the rest of the Caribbean since the recent global financial and economic crises (see Grenade and Pasha, 2012). The only other countries with above-average performance are: Grenada (5.7 percent), Antigua and Barbuda (5 percent), and The Bahamas (3.5 percent).

Most firms surveyed are expanding as defined by changes in sales growth. Based on Figure 2.1b, approximately 43.4 percent of the firms report sales growth above 5 percent (expanding firms). Only 23.9 percent of the firms may be described as stagnant since they report sales growth ranging from 0 to 5 percent. The remaining firms may be classified as declining since they register a reduction in sales.

Consistent with the literature, most new firms (less than 10 years old) as well as small and medium-scale firms are expanding based on sales growth. Figure 2.1d shows that 61.3 percent of new firms are expanding. Approximately 3.2 percent and 35.5 percent of these firms are stagnant and declining, respectively. On the other hand, the mature firms (firms older than 10 years) have 38.0 percent expanding, 32.9 stagnant, and 29.1 percent declining (see Figure 2.1d). This is not unusual since firm performance deteriorates with age (Dunne and Hughes, 1994; Evans, 1987). Meanwhile, 51.7 percent of medium-scale companies show signs of expansion, with 43.1 percent of small firms and 37.5 percent of large firms displaying similar patterns. Again, the literature suggests that smaller firms, as well as younger firms, have greater latitude for growth when compared with their larger counterparts (Dunne and Hughes, 1994; Evans, 1987).

¹ The estimate for sales growth is consistent with the definition in Ruprah and Sierra (2017).

Figure 2.1a: Sales Growth by Country

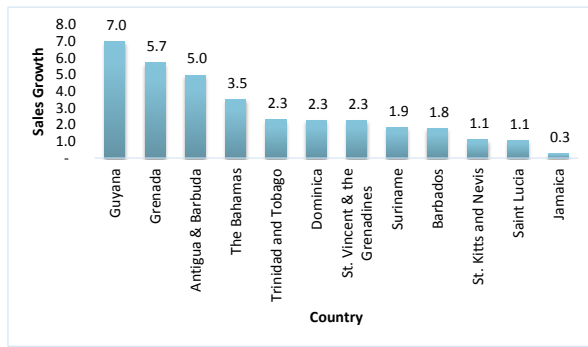


Figure 2.1b: Expanding, Stagnant, and Declining Firms¹⁾

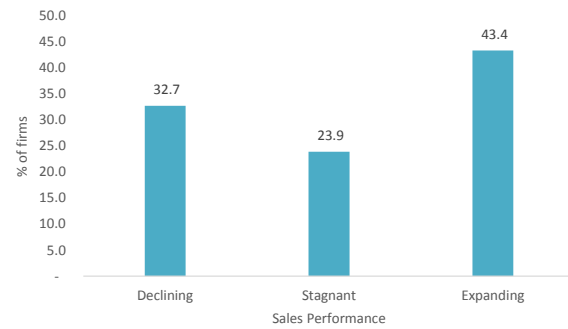


Figure 2.1c: Expanding, Stagnant, and Declining Firms by Size^{1),3)}

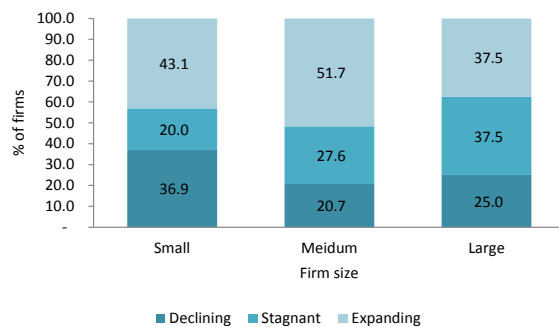
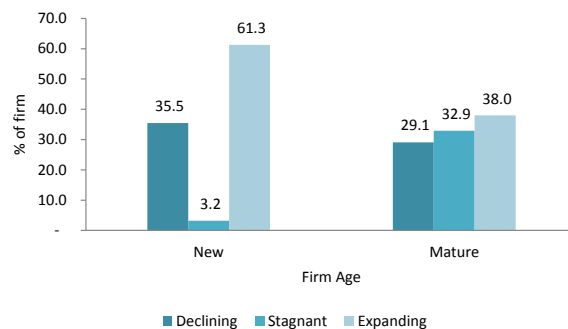


Figure 2.1d: Expanding, Stagnant, and Declining Firms by Age^{1), 2)}



Source: 2014 PROTEqIN survey.

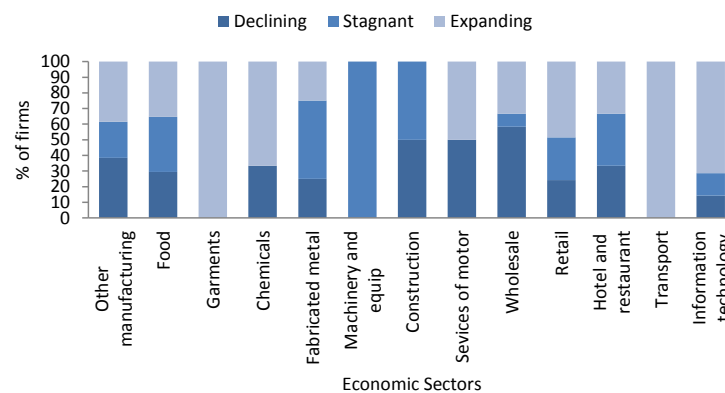
Note: ¹⁾ Expanding firm (sales growth exceeding 5 percent), Stagnant firm (sales growth is between 0 and 5 percent), Contracting firms (sales growth is below 0).

²⁾ New firms (less than 10 years old), Mature firms (more than 10 years old).

³⁾ Small firm (< 20 employees), Medium firm (20 - 100 employees) and Large firm (>100 employees).

Most expanding firms are from the transport (100 percent), garments (100 percent), chemicals (66.7 percent), services of motor vehicles (50 percent), retail (48.5 percent), and information technology (71.4 percent) sectors. The stagnant firms are mostly from the fabricated metal (50 percent), machinery and equipment (100 percent), and construction (50 percent) sectors (Figure 2.2).

Figure 2.2. Expanding, Stagnant, and Declining Firms by Economic Sector¹⁾



Source: 2014 PROTEqIN survey.

Note: ¹⁾ Expanding firm (sales growth exceeding 5 percent), stagnant firm (sales growth is between 0 and 5 percent), Contracting firms (sales growth is below 0).

Despite the strong sales performance of local firms, it is noteworthy that the total factor productivity (TFP) of these firms is the third lowest of 12 countries in the Caribbean.² Based on Figure 2.3a, TFP is 2.6, only better than Trinidad and Tobago (2.5) and St. Vincent and the Grenadines (2.3).

Figure 2.3a. Total Factor Productivity by Country

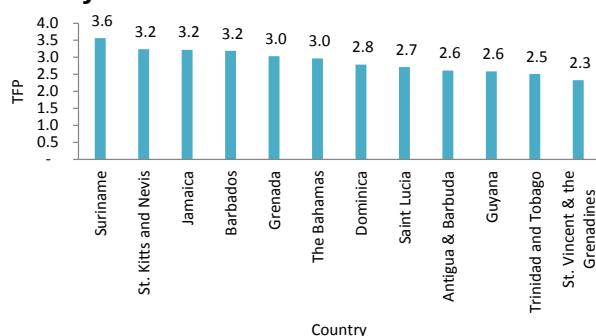


Figure 2.3b. Total Factor Productivity of Firms Based on Sales Growth (expanding, stagnant, declining)¹

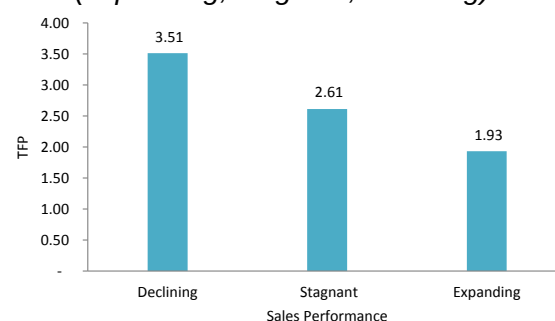


Figure 2.3c. Total Factor Productivity by Size^{1),3)}

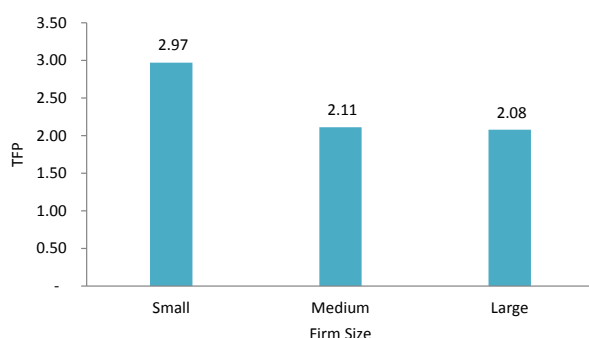
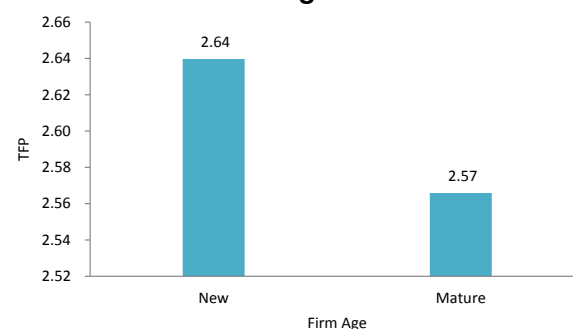


Figure 2.3d. Total Factor Productivity by Firm Age^{1), 2)}



Source: 2014 PROTEqIN survey.

Note: ¹⁾ Expanding firm (sales growth exceeding 5 percent), stagnant firm (sales growth is between 0 and 5 percent), contracting firms (sales growth is below 0).

²⁾ New firms (less than 10 years old), mature firms (more than 10 years old).

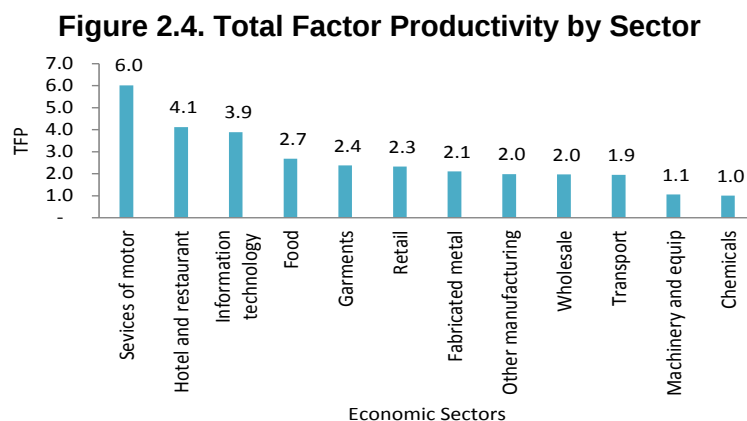
³⁾ Small firm (< 20 employees), Medium firm (20 - 100 employees) and large firm (>100 employees).

Figure 2.3b shows that sales growth is negatively correlated with productivity improvement. The firms with declining sales register the highest TFP (3.51) followed by stagnant firms (2.61) and expanding firms (1.93). The economic performance of Guyana may explain the inverse relationship between sales performance and total factor productivity. Since 2006, the Guyanese economy experienced robust growth relative to its counterparts in the Caribbean (Grenade and Pasha, 2012), which may have contributed to the expansion of the sales revenue of firms without necessarily providing sufficient incentives for the improvements in their productivity. Thus, the sales revenue for firms would have improved because of the strong economic performance, but their productivity remained low.

The small firms have higher TFP than medium and large-scale companies (see Figure 2.3c). The TFP of the small firms is 2.97 compared with 2.11 for medium-scale companies and 2.08 for large-scale companies. The new companies also have higher TFP compared to their older counterparts. These results are consistent with the literature, which suggests that mature firms tend to be less efficient because of organizational rigidities and rent-seeking behavior (see, for example, Loderer and Waelchli, 2010).

² The estimate for TFP growth is consistent with the definition in Ruprah and Sierra (2017).

The firms with the highest TFP are from the services of motors sector (6.0), followed by the hotel and restaurant (4.1), information technology (3.9), food (2.7), garments (2.4), rental (2.3), fabricated metal (2.1), other manufacturing (2.0), wholesale (2.0), transport (1.9), machinery and equipment (1.1), and chemical (1.0) sectors (see Figure 2.4).



Source: 2014 PROTEqIN survey.

Constraints

The extant literature suggests that the growth of businesses is affected by several factors. These include: telecommunications, electricity, transportation, access to land, tax rates, tax administration, customs and trade regulations, labor regulations, labor workforce, business regulations, access to finance, cost of finance, political environment, and the informal sector (see Fiestas and Sinha, 2011).

Available data confirm that several of these factors constrain businesses in Guyana. The Global Competitiveness Report 2015-2016, for instance, identified inefficient government bureaucracy, corruption, access to finance, crime and theft, taxes, and inadequate supply of infrastructure as the most problematic factors for doing business in Guyana.

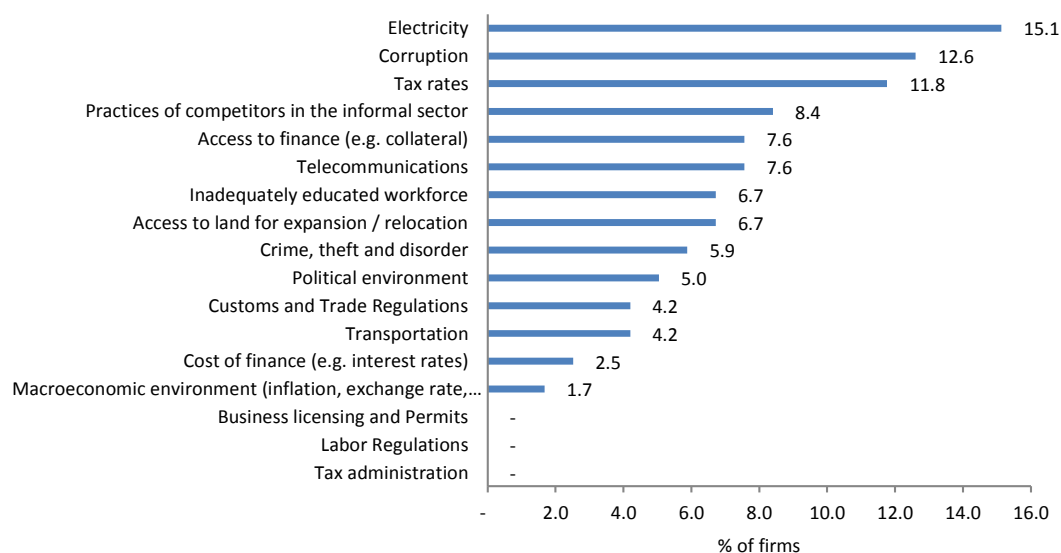
The 2014 PROTEqIN survey also revealed that more than 40 percent of the firms surveyed in Guyana consider telecommunications, electricity, tax rates, cost of finance, political environment, macroeconomic environment, corruption as major and severe obstacles (see Table 3.1).

Table 3.1. Factors Constraining Businesses

	No obstacle	Minor Obstacle	Moderate Obstacle	Major Obstacle	Severe Obstacle	No Response
Constraints						
Telecommunications	21.8	20.2	14.3	26.9	16.8	0.8
Electricity	18.5	10.1	13.4	26.1	31.9	0.8
Transportation	33.6	21.8	21.8	10.1	12.6	0.8
Access to land for expansion / relocation	37.0	14.3	19.3	18.5	10.9	0.8
Tax rates	16.8	10.1	23.5	26.9	22.7	0.8
Tax administration	23.5	19.3	25.2	25.2	6.7	0.8
Customs and Trade Regulations	31.9	13.4	15.1	23.5	16.0	0.8
Labor Regulations	40.3	21.8	27.7	8.4	1.7	0.8
Inadequately educated workforce	17.6	24.4	20.2	28.6	9.2	0.8
Business licensing and Permits	38.7	22.7	16.8	14.3	7.6	0.8
Access to finance (e.g. collateral)	33.6	12.6	18.5	21.0	14.3	0.8
Cost of finance (e.g. interest rates)	22.7	10.1	21.0	26.9	19.3	0.8
Political environment	20.2	9.2	26.9	25.2	18.5	0.8
Macroeconomic environment (inflation, exchange rate, interest rate)	15.1	12.6	31.1	21.8	19.3	0.8
Corruption	14.3	10.1	26.1	19.3	30.3	0.8
Crime, theft and disorder	10.9	13.4	29.4	24.4	21.8	0.8
Practices of competitors in the informal sector	21.0	20.2	26.1	17.6	12.6	3.4

Source: 2014 PROTEqIN survey.

For the 2014 PROTEqIN survey, the local firms were asked to rank the various obstacles as most serious, second most serious, and third most serious constraints. The survey shows that the firms rank the following as the most serious obstacles to their operations: electricity (15.1 percent), corruption (12.6 percent), tax rates (11.8 percent), practices of competitors in the informal sector (8.4 percent), telecommunications (7.6 percent), access to finance (7.6 percent), access to land for expansion/relocation (6.7 percent), inadequately educated workforce (6.7 percent), crime, theft, and disorder (5.9 percent), political environment (5 percent), transportation (4.2 percent), customs and trade regulations (4.2 percent), cost of finance (2.5 percent), and macroeconomic environment (1.7 percent) (see Figure 3.1).

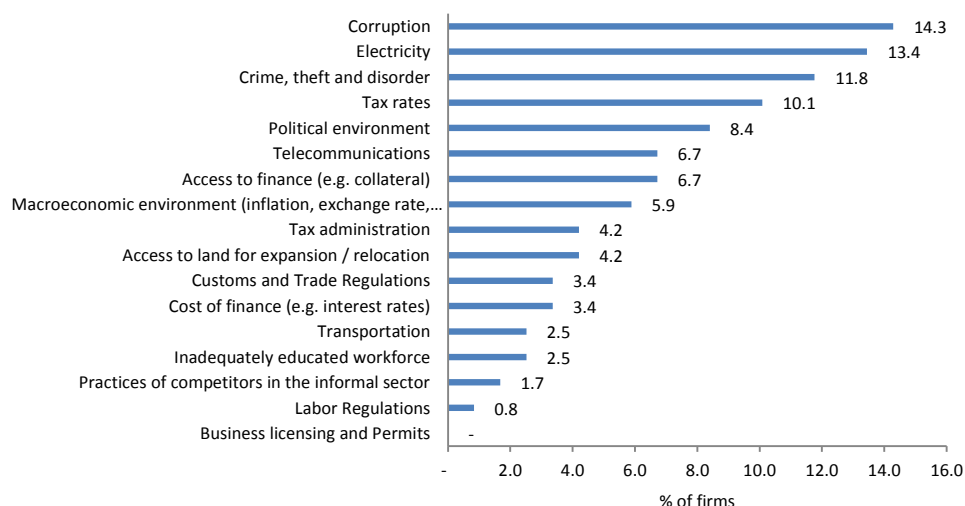
Figure 3.1. Most Serious Obstacles Affecting Businesses
(percent)

Source: 2014 PROTEqIN survey.

For the second iteration of ranking the obstacles, the firms identified the following obstacles as the second most serious: corruption (14.3 percent), electricity (13.4 percent), crime, theft, and disorder (11.8 percent), tax rates (10.1 percent), political environment (8.4 percent), telecommunications (6.7 percent), access to finance (6.7 percent), macroeconomic environment (5.9 percent), tax

administration (4.2 percent), access to land for expansion/relocation (4.2 percent), customs and trade regulations (3.4 percent), cost of finance (3.4 percent), transportation (2.5 percent), inadequately educated workforce (2.5 percent), practices of competitors in the informal sector (1.7 percent), and labor regulations (0.8 percent) (see Figure 3.2).

Figure 3.2. Second Most Serious Obstacles Affecting Businesses
(percent)



Source: 2014 PROTEqIN survey.

Electricity

Electricity was ranked the most serious obstacle to businesses in Guyana. This is not surprising since it takes approximately 104 days to obtain an electrical connection, which is significantly above the average of 62 days for obtaining a connection in the Caribbean (see Figure 3.3a). The firms surveyed indicated that they also experience an average of eight power outages per month with an average duration of three hours, the highest in the Caribbean (3.3b and 3.3c). The estimated loss from power outages for firms in Guyana exceeds the levels incurred by their counterparts in the Caribbean. Based on Figure 3.3d, the estimated loss approximates 1.6 percent of annual sales, compared with a regional average of 0.7 percent of annual sales.

Figure 3.3a. Days Taken to Obtain an Electrical Connection

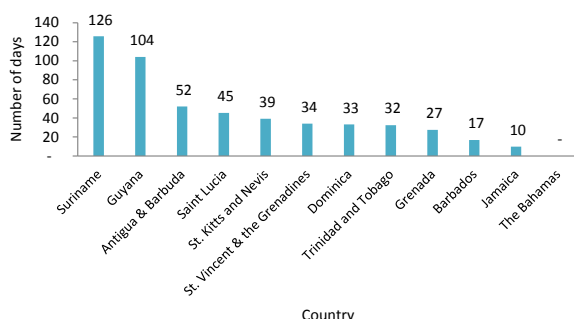


Figure 3.3b. Power Outages per Month
(number)

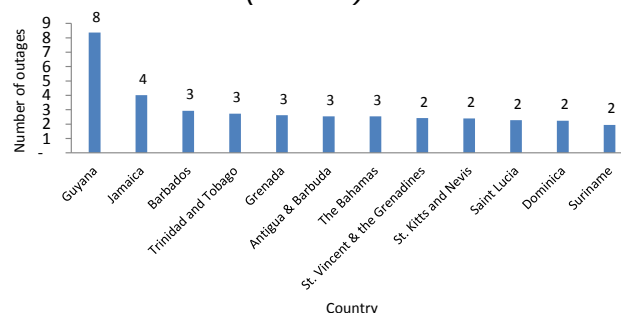


Figure 3.3c. Duration of Outages (hrs.)

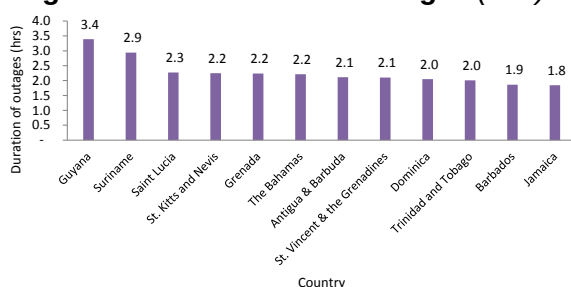
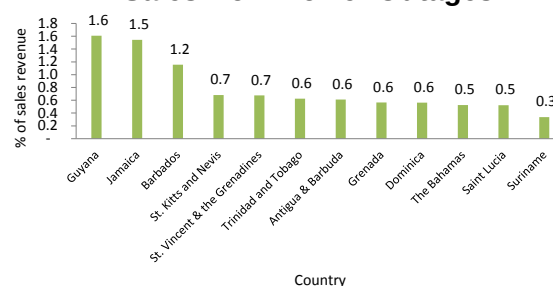


Figure 3.3d. Estimated Losses as Percent of Sales from Power Outages



Source: 2014 PROTEqIN survey.

Corruption

Corruption was the second highest-ranked constraint identified by businesses as the most serious obstacle. Figure 3.4a illustrates that 34.45 percent of firms view corruption as a major obstacle while 43.7 percent consider it a very severe obstacle. Notwithstanding the claim that corruption is a major or severe obstacle, a relatively small percentage of firms surveyed indicated they were expected to pay a bribe to obtain an operating license (1.9 percent), electrical connection (1.7), telephone connection (1.7 percent), import license (1.7 percent), water connection (0.8 percent), and construction permit (0.8 percent). Based on the survey, approximately 6.7 percent of the firms indicated they were expected to pay a bribe to obtain the contract, while 3.3 percent of the firms claimed they were expected to pay a bribe to tax officers.

The cost incurred by businesses in Guyana related to making informal payments (or bribes) to 'get things done' is higher than the amount paid by their counterparts in the Caribbean. Figure 3.4c shows that the bribe paid for various government services is approximately 4 percent, significantly higher than the regional average of 1.8 percent and the highest in the Caribbean. The cost of the bribe is relatively higher for businesses in the following sectors: machinery and equipment (25 percent of annual sales), fabricated metal products (11.7 percent of annual sales), and wholesale (10 percent of annual sales) (see Figure 3.4d).

Figure 3.4a. Perception of Corruption as an Obstacle to Operating a Business in Guyana

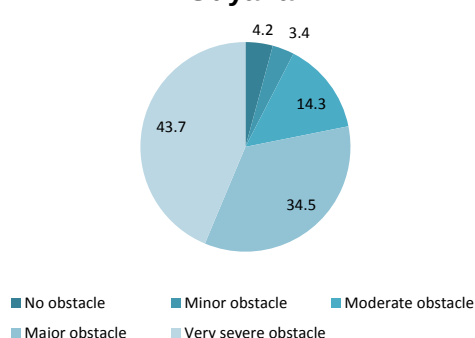


Figure 3.4b. Government Services Firms Expected to Pay a Bribe

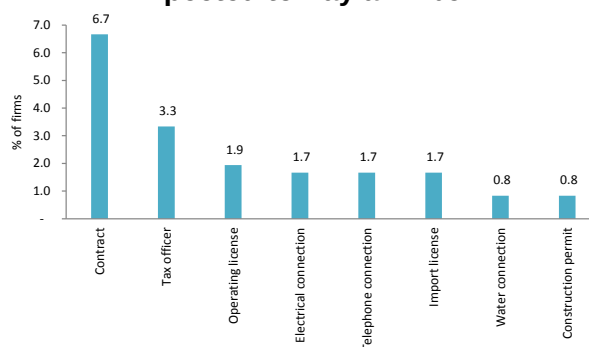


Figure 3.4c. Informal Payment as Percent of Annual Sales by Country

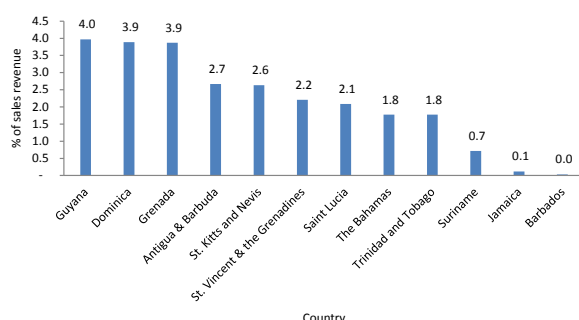
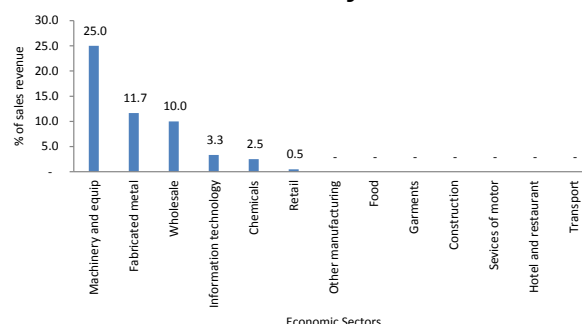


Figure 3.4d. Informal Payment as Percent of Annual Sales by Sector



Source: 2014 PROTEqIN survey.

Tax Rates

The local firms ranked tax rates as a significant obstacle to their operations. Indeed, tax rates were ranked third as the most serious obstacle. In the second and third iterations of ranking of obstacles, it was ranked fourth and second, respectively (see Figure 3.5a). This may be attributed to the fact that Guyana has one of the highest corporate tax rates in Latin America and the Caribbean (Bristol, 2011). Some studies have found that the high tax rates motivate businesses to operate in the informal sector (Thomas, Jourdian, and Pasha, 2011).

Notwithstanding the relationship between high tax rates and the size of the informal economy, most of the firms surveyed paid their required taxes. Figure 3.5b shows that approximately 13.3 percent of the firms paid less tax than required by law, while the remaining 86.7 percent of firms paid their fair share of taxes.

Figure 3.5a. Ranking of Tax Rates as an Obstacle to Doing Business

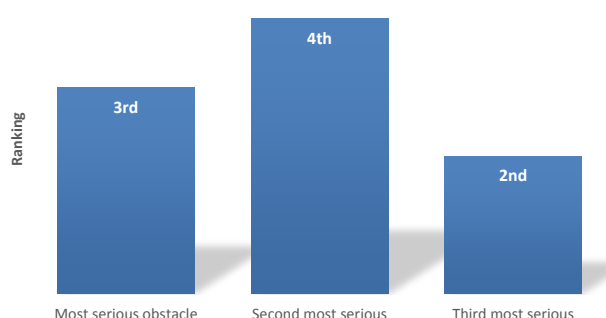
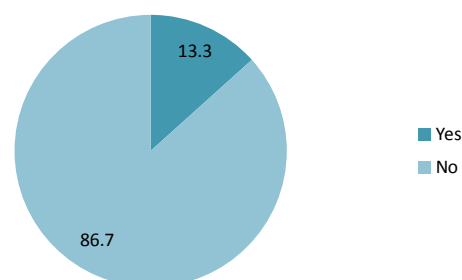


Figure 3.5b. Firms that Paid Less Tax than Required by Law



Source: 2014 PROTEqIN survey.

Competition from Firms in the Informal Sector

The practices of competitors in the informal sector were ranked as the fourth most serious obstacle for businesses operating locally. The survey revealed that approximately 94.4 percent and 88.9 percent of the firms consider this factor as a serious constraint because their counterparts in the informal sector can circumvent rules and regulations and are not subject to rules of entry, respectively (see Figure 3.6b).

Figure 3.6a. Ranking the Practices of Competitors in the Informal Sector

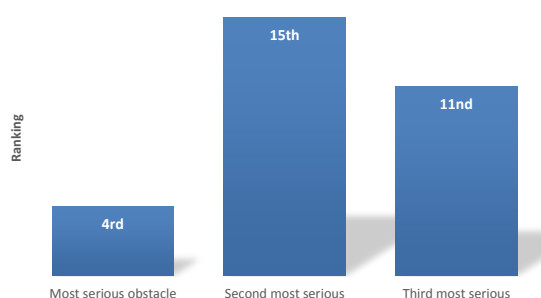
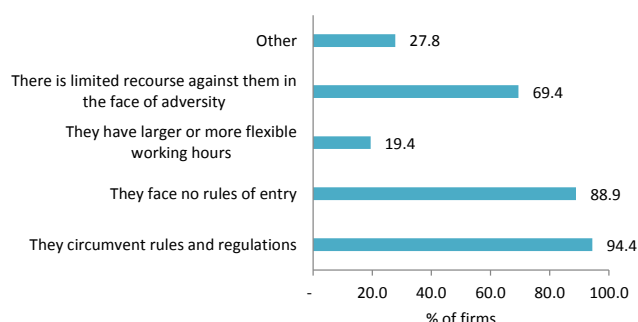


Figure 3.6b. Reasons why the practices of competitors in the informal sector are viewed as major or severe constraint



Source: 2014 PROTEqIN survey.

Access to Finance

The fifth most serious obstacle constraining local businesses was access to finance. The survey revealed that 6.7 percent of the firms regard this factor as the most serious obstacle for doing business. Most firms that view access to finance as a major or very severe obstacle are small and medium-scale enterprises. Figure 3.7a shows that 27.8 percent and 19.4 percent of small firms view access to finance as a major and a very severe obstacle, respectively. The figure also shows that 13.3 percent and 10.0 percent of medium-scale firms view access to finance as a major obstacle and a very severe obstacle, respectively.

Most firms that consider access to finance as a major or severe obstacle are privately owned. These include: sole proprietorship (24.4 percent major obstacle, 28.9 percent very severe obstacle), partnership including limited liability partnerships (18.8 percent major obstacle, 12.5 percent very severe), limited partnership (9.1 percent major obstacle; 18.2 percent very severe obstacle), and shareholding company with no traded shares (22.5 percent major obstacle) (see Figure 3.7b).

Locally owned firms are most affected by access to finance. Figure 3.7c shows that 21.9 percent and 16.2 percent of locally owned firms consider access to finance as a major obstacle and a very severe obstacle, respectively. Approximately 20.0 percent of the firms jointly owned regard access to finance as a major obstacle. Only 11.1 percent of the foreign-owned firms are constrained by access to finance.

Most new firms suggested that access to finance is an obstacle. The data reveal that 22.9 percent and 20 percent of new firms view access to finance as a major obstacle and a very severe obstacle, respectively. With respect to the mature firms, 25.7 percent view access to finance as a major obstacle, and 9.4 percent view it as a very severe obstacle (see Figure 3.7d).

Figure 3.7a. Access to Finance as Constraint based on Firm Size (percent)

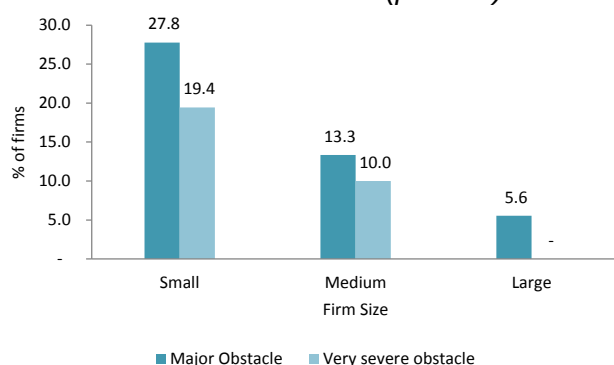


Figure 3.7b. Access to Finance as Constraint based on Legal Form (percent)

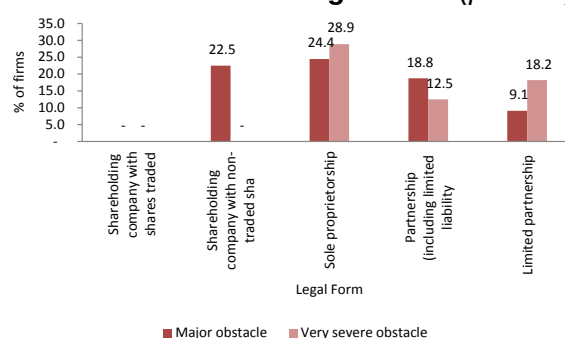


Figure 3.7c. Access to Finance as Constraint based on Ownership Type (percent)

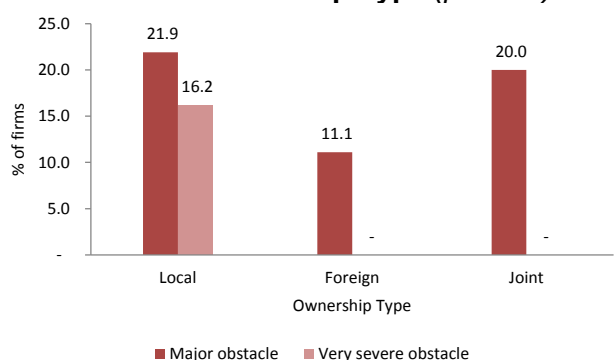
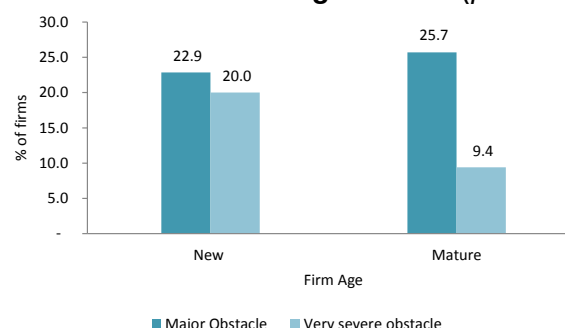


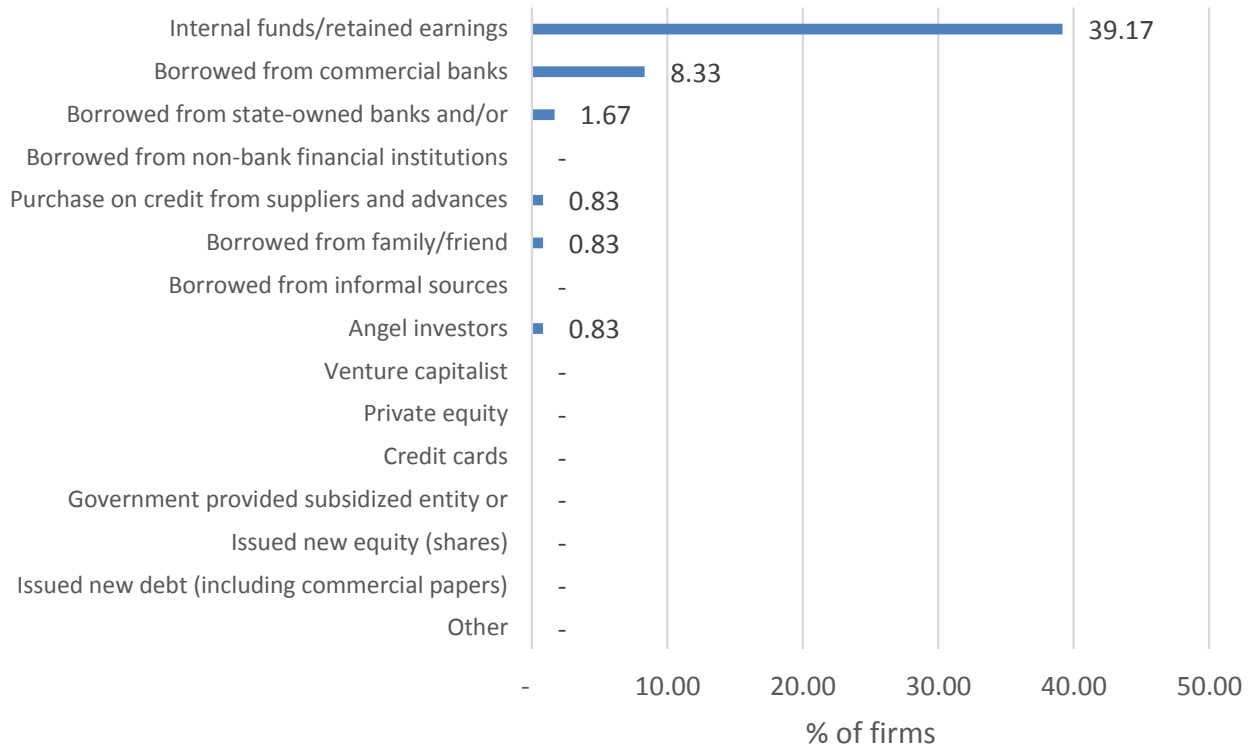
Figure 3.7d. Access to Finance as Constraint based on Age of Firm (percent)



Source: 2014 PROTEqIN survey.

Internal funds and retained earnings are the primary sources of both long-term and working capital of firms in Guyana. Figure 3.8 shows that approximately 39.17 percent of the firms utilized internal funds and retained earnings to acquire fixed assets. Only 8.33 percent of the firms borrowed from the bank to purchase fixed assets, and 1.67 percent obtained funds from state-owned banks to finance the acquisition of assets. None of the firms utilized informal sources, non-bank financial institutions, venture capitalist, private equity, credit cards, or government subsidized programs or issued new debt and equity. These findings confirm our earlier observations that the capital markets were not utilized to raise finance.

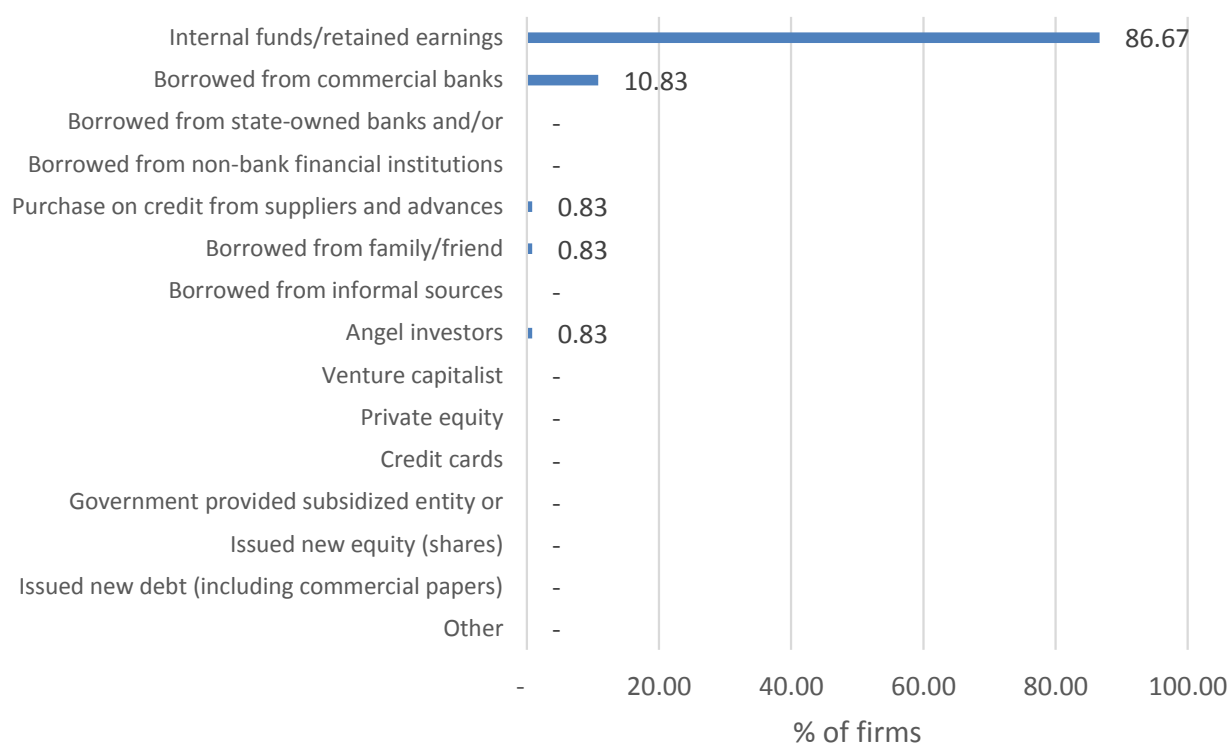
Figure 3.8. Financing Structure of Long-term Capital
(percent)



Source: 2014 PROTEqIN survey.

More than 80 percent of the firms surveyed used internal funds and retained earnings to finance working capital. Commercial banks represent the second most important source of working capital. Figure 3.9 shows that 10.83 percent of the firms surveyed reported that they sourced funds from commercial banks to satisfy their working capital needs. Again, these findings corroborate our earlier observations that commercial banks provide more short-term loans compared to longer-term funding. None of the firms sourced working capital from informal sources, non-bank financial institutions, venture capitalists, private equity, credit cards, or government subsidized programs or issued new debt and equity (see Figure 3.9).

Figure 3.9. Financing Structure of Working Capital
(percent)



Source: 2014 PROTEqIN survey.

The demand for credit varied based on firm characteristics. Figure 3.10a shows that 55.6 percent of large firms applied for loans compared with 25 percent of small firms and 40 percent of medium-scale firms. Regarding age, the appetite for credit by mature firms is greater than their younger counterparts. Approximately 38.8 percent of the mature firms demand credit, while only 20 percent of the younger firms applied for credit (Figure 3.10b). Meanwhile, approximately 40.7 percent of the stagnant firms demand credit, compared with 23.5 percent of the declining firms and 32.7 percent of the expanding firms (Figure 3.10c). Surprisingly, a relatively greater percentage of foreign-owned firms (44.4 percent) applied for credit (Figure 3.10d). Regarding ownership type, the greatest demand for credit is from partnerships (56.3 percent) followed by sole proprietorship (33.3 percent), then the shareholding company with non-traded shares (Figure 3.10e). The businesses with the lowest demand for credit are limited partnerships (18.2 percent) and shareholding companies with shares traded on the stock market (16.7 percent) (Figure 3.10e).

Less than 5 percent of the firms indicated that their loan applications were denied. The data suggest that only three out of 120 firms were denied loans, of which 33.3 percent were small, and 66.66 percent were medium-scale companies. All the firms were mature and were from the chemical (33.33 percent), wholesale (33.33 percent), and transport (33.33 percent) sectors. Surprisingly, all the companies were expanding and locally owned. The principal reasons given for the rejection were: unacceptable collateral or co-signers (33.3 percent), insufficient profitability (33.3 percent) and concerns about the level of debt already incurred (33.3 percent). These results should be accepted with a caveat since only 2.5 percent of the sample reported that they were rejected.

Figure 3.10a. Demand for Credit based on Firm Size (percent)

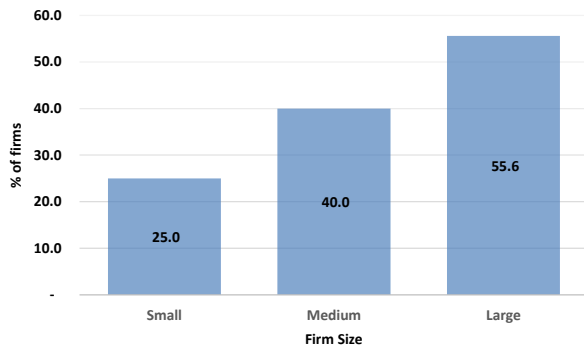


Figure 3.10b. Demand for Credit based on Age of Firm (percent)

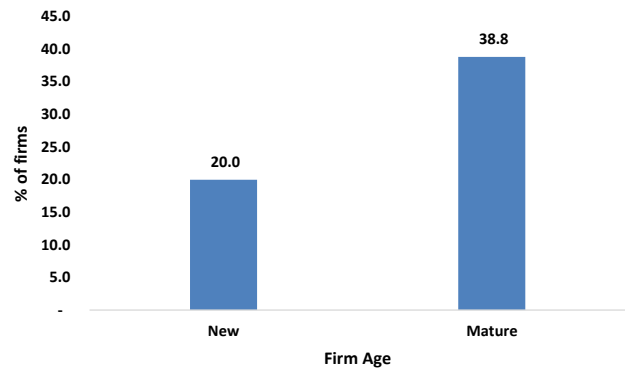


Figure 3.10c. Demand for Credit based on Sales Performance (percent)

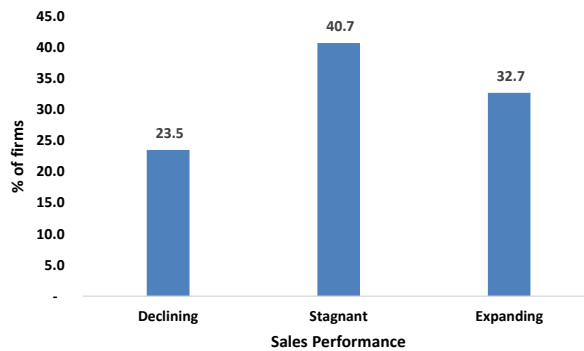


Figure 3.10d. Demand for Credit based on Firm Type (percent)

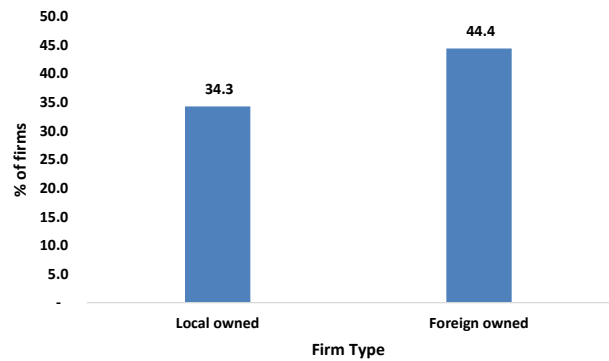
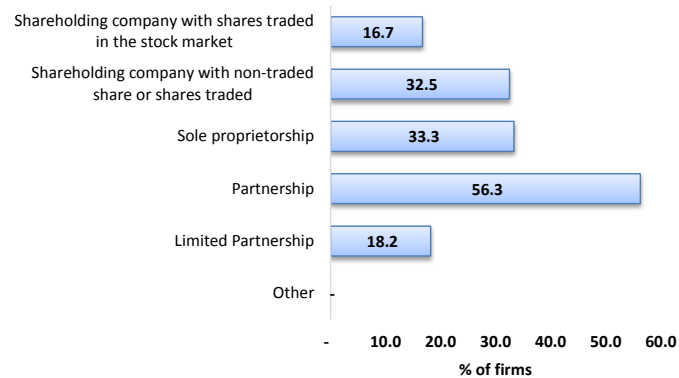


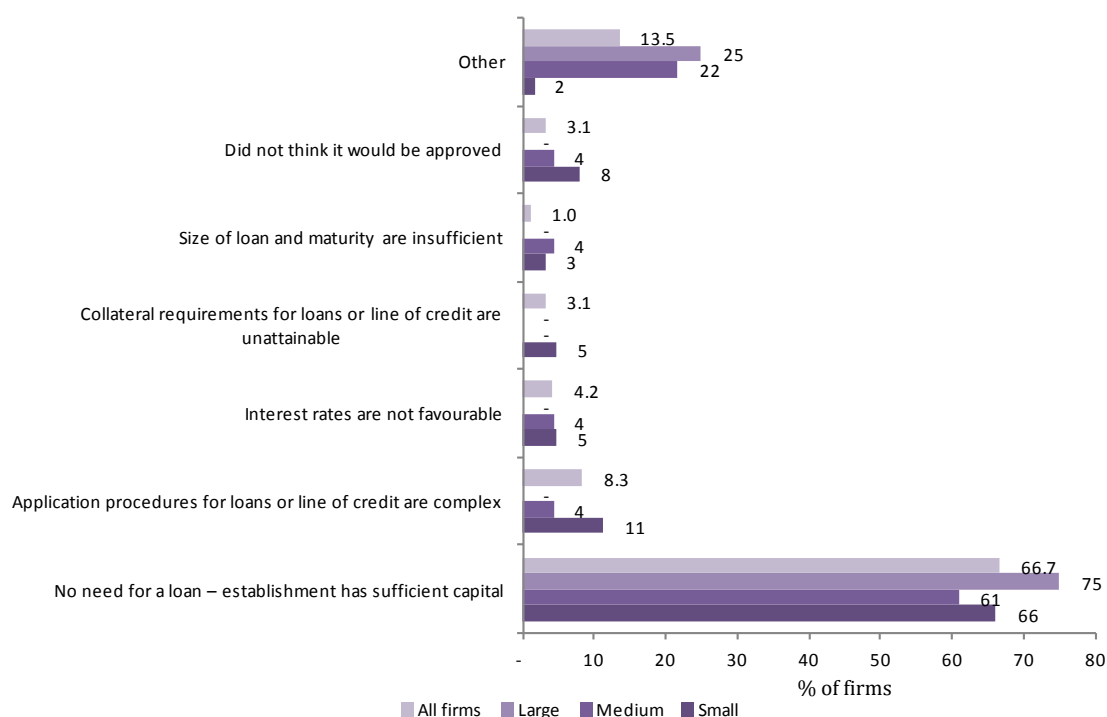
Figure 3.10e. Demand for Credit based on Legal Form (percent)



Source: 2014 PROTEqIN survey.

The data reveal that 80 percent of the firms did not apply for any credit. Figure 3.11 shows that most discouraged firms suggested they had sufficient capital (66.7 percent). To a lesser extent, the firms surveyed were not discouraged by the application procedure (8.3 percent), unfavorable interest rates (4.2 percent), collateral requirements (3.1 percent), insufficiency of the loan (1 percent), or fear that the loans would not be approved (3.1 percent) (Figure 3.11).

Figure 3.11. Reasons for Not Applying for Credit based on Firm Size



Source: 2014 PROTEqIN survey.

Most of the firms that did not apply for loans (discouraged firms) were small enterprises. It is interesting to note that approximately 66 percent of the small firms did not apply for credit because they had sufficient capital (Figure 3.11). Only 11 percent of these firms indicated that they did not apply because of the complex application process, while a smaller percentage of the small firms reported that they were discouraged because of the unfavorable interest rates (approximately 5 percent), collateral requirements (approximately 5 percent), insufficiency of the loans (3.2 percent), or a general belief that the loan would not be approved (approximately 8 percent) (Figure 3.11). These findings conflict with the perception that small firms are inadequately financed because of their inability to raise sufficient collateral, high-interest rates, or rejection rate. However, the findings support our earlier observation that most firms utilize internal funds to acquire fixed assets and finance day-to-day operations (working capital). This calls into question the perception that access to finance is a major obstacle to businesses, as suggested by the World Competitiveness Report, which ranked access to finance as the third most problematic factor for doing business in Guyana.

Figure 3.12a. Discouraged Firms based on Size (percent)

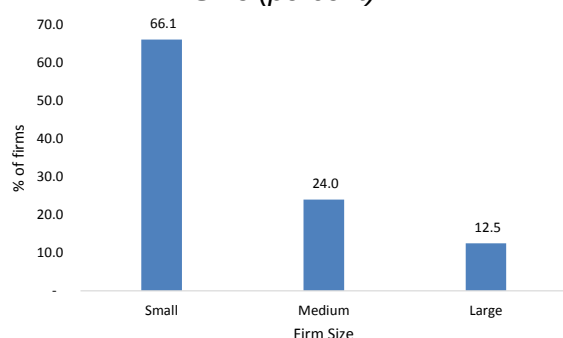
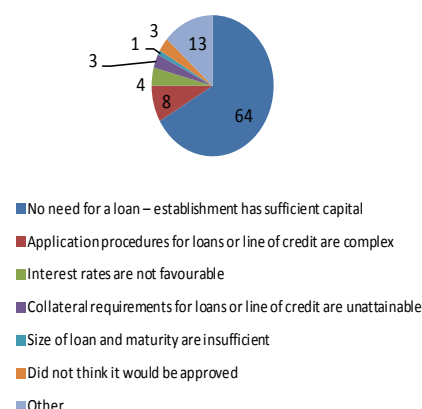


Figure 3.12b. Reasons why Small Firms did not Apply for Line of Credit or Loan (percent)



Only 24 percent of the medium-scale firms and 12.5 percent of the large firms did not apply for credit (see Figure 3.12a). However, like their smaller counterparts, most medium and large-scale firms suggested that they had sufficient capital and therefore had no need to apply for credit (see Figure 3.11).

The survey shows that only 33.3 percent of the firms had a line of credit or loan facility from a financial institution; of these, 65 percent indicated they had loans and the remaining 35 percent benefitted from a line of credit (Figure 3.13a). Approximately 85 percent of these facilities were approved between 2009 and 2013 (Figure 3.13b).

The average amount for the line of credit at the time of approval was \$191,637.3 and ranged between \$4,868.69 and \$980,308.06. These facilities attracted interest rates averaging 13.0 percent and had an average duration of 44.3 months (or approximately 3.7 years). Meanwhile, the value of loans borrowed ranged between \$1,752.73 and \$3,999,920, averaging \$565,419.5. The interest on the loan facilities averaged 12.9 percent and had an average duration of 73.2 months (or approximately 6.1 years).

Commercial banks were the primary sources of funds. Based on the survey of the firms which benefitted from external funding, commercial banks provided 92.9 percent of the lines of credit and 88.5 percent of the loans (Figure 3.13c).

Most of the firms that applied for credit were small. Small enterprises accounted for 42.9 percent of the lines of credit and 46.2 percent of the loans approved by the various institutions (Figure 3.13d). Medium-scale enterprises were the second-largest beneficiaries, accounting for 28.6 percent of the lines of credit and 30.8 percent of the loans approved (Figure 3.13d). The large-scale firms, on the other hand, accounted for 28.6 percent of the lines of credit and 23.1 percent of loans (Figure 3.13d). These findings call into question whether small firms are indeed starved of finance by local banking institutions.

It can be gleaned from the survey that financial institutions have a penchant for granting loans to older firms as well as those with either constant or expanding sales. The data show that older firms accounted for 92.9 percent of the lines of credit and 76.9 percent of the loans approved (3.13e). The expanding firms accounted for 35.7 percent of the lines of credit and 42.3 percent of the loans (3.13f).

Figure 3.13a. Firms with Loans and Credit Line Facilities (percent)

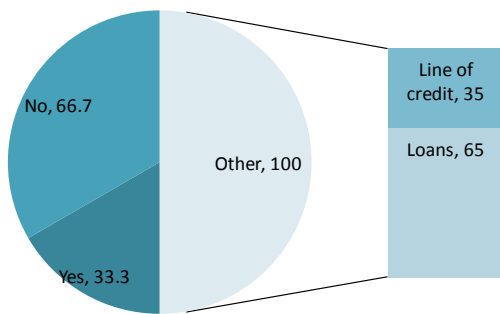


Figure 3.13b. The Year Facilities were Approved (percent): 1992-2013

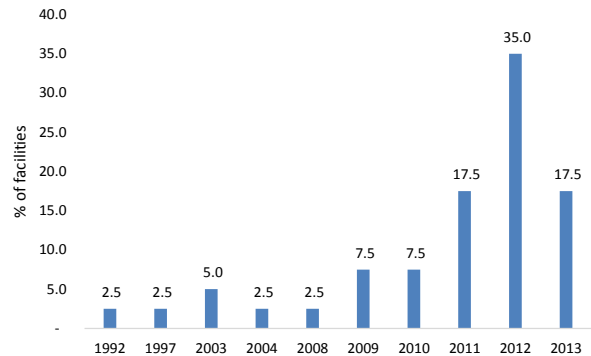


Figure 3.13c. Institutions Providing Lines of Credit and Loans (percent)

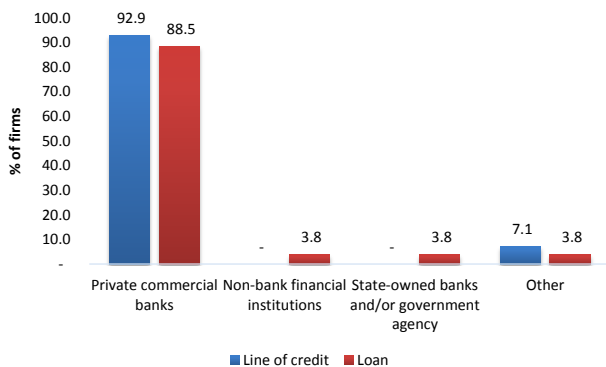


Figure 3.13d. Beneficiaries of Loan/Line of Credit based on Firm Size (percent)

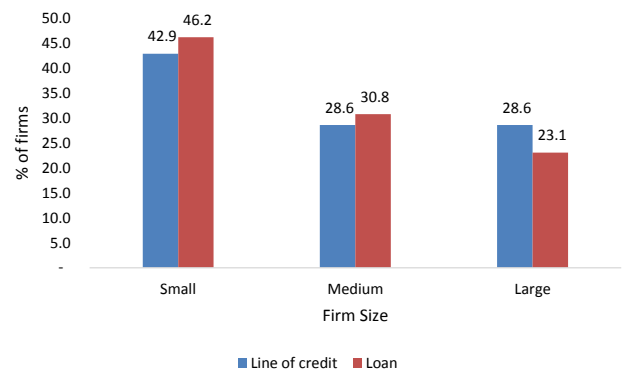


Figure 3.13e. Beneficiaries of Loan/Line of Credit based on Firm Age (percent)

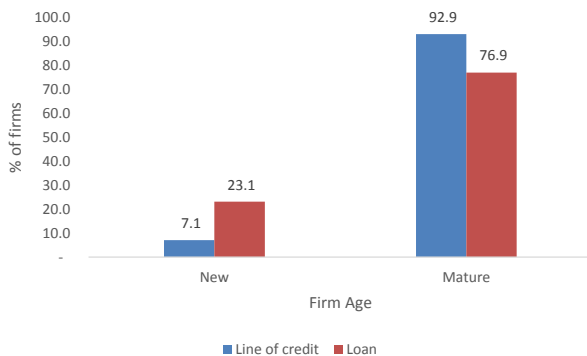
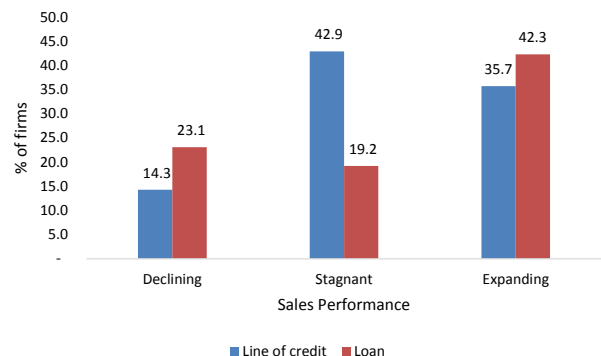


Figure 3.13f. Beneficiaries of Loan/Line of Credit based on Sales Performance (percent)



Source: 2014 PROTEqIN survey.

The firms indicated that financial institutions required collateral. Land and buildings were the most common collateral required for loans while personal assets of the business owners (house, etc.) were demanded as collateral to support lines of credit. On average, the collateral required approximated 73.6 percent of the value of the line of credit and 64.5 percent of the loan value.

The collateral requirements of small firms were relatively higher than medium- and large-scale enterprises. The average collateral requirements of small firms approximated 73.8 percent of the value of the credit facility. However, the collateral requirement of medium- and large-scale enterprises approximated 58.9 percent and 62.9 percent of the credit line/loan value, respectively.

Figure 3.14a. Types of Collateral Required for Line of Credit and Loans

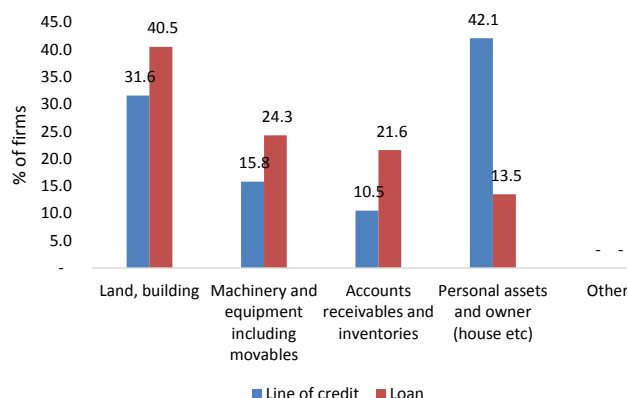


Figure 3.14b. Collateral as a Percent of Value of Line of Credit and Loan

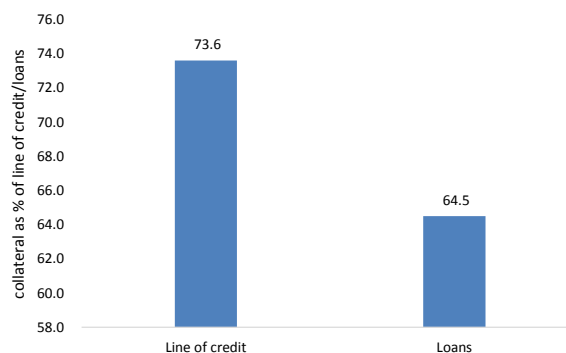


Figure 3.14c. Collateral Requirements based on Firm Size

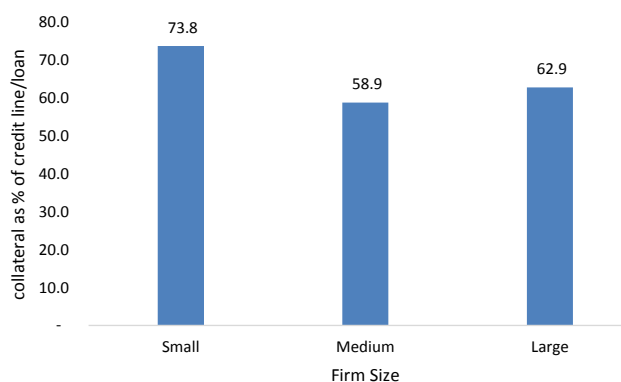


Figure 3.14d. Collateral Requirements based on Sales Performance

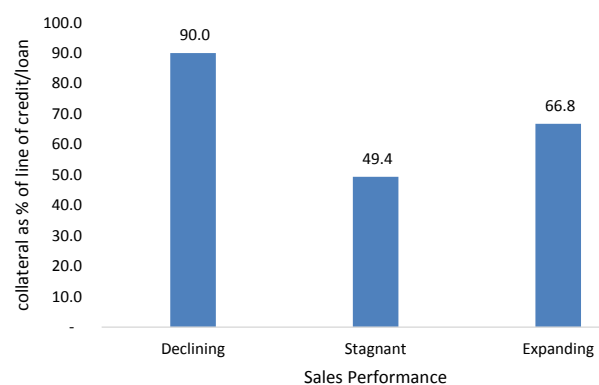


Figure 3.14e. Collateral Requirements based on Ownership Type (percent)

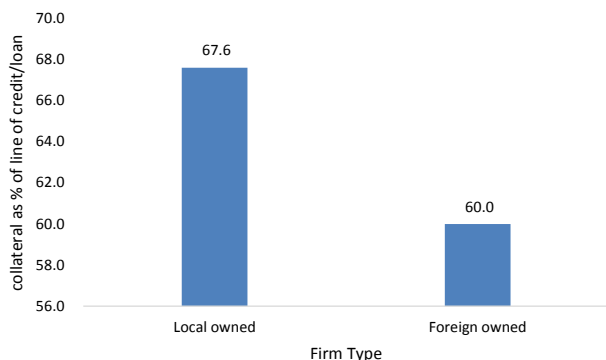
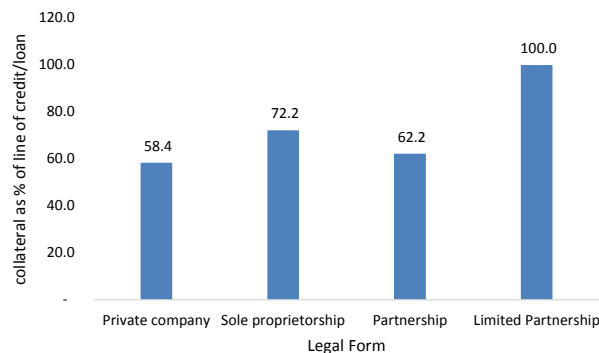


Figure 3.14f. Collateral Requirements based on Legal Form



Source: 2014 PROTEqIN survey.

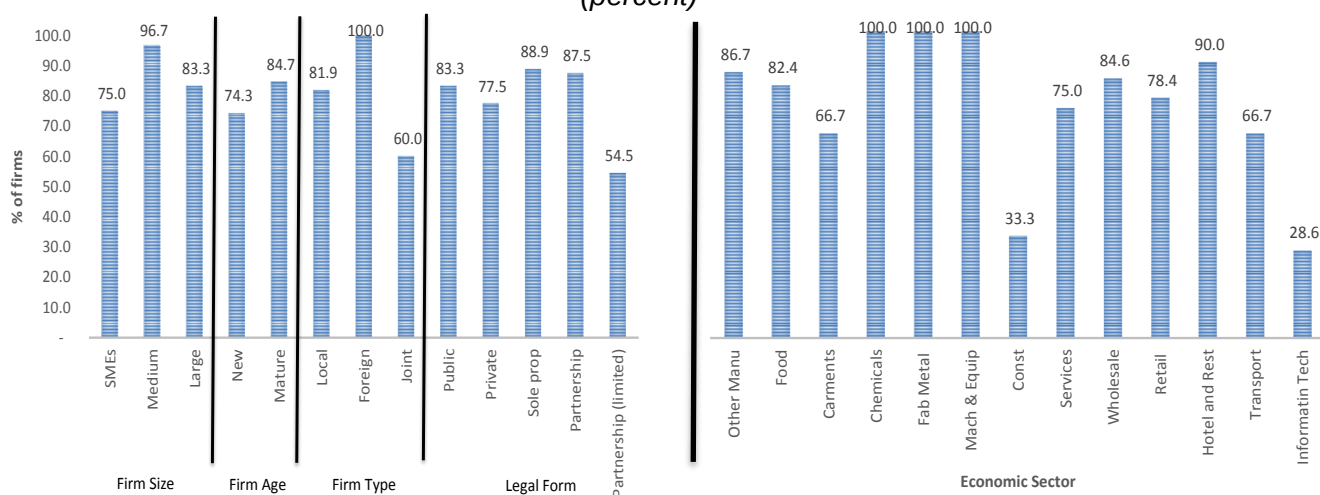
Collateral requirements varied based on sales performance. The declining firms were required to provide collateral equivalent to 90 percent of the value of the credit facility on average. The collateral requirements of stagnant and expanding firms were approximately 49.4 percent and 66.8 percent of the value of the credit facility, respectively.

Locally owned firms were required to provide marginally greater collateral. Regarding legal form, limited partnership firms were required to provide more collateral, followed by sole proprietorships, then unlimited partnerships and private companies.

Human Capital

The survey revealed that the inadequately educated workforce was the seventh most significant obstacle for doing business in Guyana. The figures below show the percentage of firms that indicated that the inadequately educated workforce in Guyana is an obstacle. Regarding size, medium-scale firms are the most affected (96.7 percent), followed by large firms (83.3 percent) and small and medium-sized enterprises (SMEs) (75 percent) (Figure 3.15). This constraint affected mature firms (84.7 percent) more than new firms (74.3 percent) (Figure 3.15). All the foreign firms (100 percent) suggested that the quality of the workforce affects them, whilst 81.9 percent of the local firms and 60 percent of joint firms considered the inadequately educated workforce as an obstacle (Figure 3.15). Regarding legal form, the most affected was the sole proprietorship (88.9 percent) followed by partnership (87.5 percent), private companies (77.5 percent) and limited partnerships (54.5 percent) (Figure 3.15). More than half of the businesses in the following sectors viewed the inadequately educated workforce as an obstacle: other manufacturing (86.7 percent), food (82.4 percent), garments (66.7 percent), chemical (100 percent), fabricated metal (100 percent), machine equipment (100 percent), services (75 percent), wholesale (84.6 percent), retail (78.4 percent), hotel and restaurant (90 percent), and transportation (66.7 percent) (Figure 3.15). Based on these results, it appears that the quality of education of the workforce affects firms regardless of their characteristics. This situation may be explained by the high rate of migration of educated Guyanese as well as possible deficiencies in the education system, which produces graduates who are not properly equipped.

Figure 3.15. Firms Affected by an Inadequately Educated Workforce (percent)



Source: 2014 PROTEqIN survey.

The survey sought to determine the minimum required qualifications for nine different job types and the average level of education for persons who occupied these positions. Surprisingly, for management positions, only 36.7 percent of the firms require university graduates whilst 30.8 percent and 20.8 percent require secondary education and college/vocational training, respectively (Table 3.2). Only 4.2 percent of the firms demanded post-graduate (master's and Ph.D.) degrees for management positions (Table 3.2). Most declined to indicate the minimum qualification required for professionals, technicians, and associate professionals, skilled agricultural, forestry, and

fishery workers, craft and related trade areas, plant and machine operators, and assemblers, and elementary occupations (Table 3.2). The firms that answered the questions related to qualifications required for various categories of workers displayed some preference for persons with college, vocational training, secondary, and primary education for these jobs (Table 3.2). Based on the survey results, the minimum required qualification for each job type was almost sufficiently obtained by the firms (Table 3.2).

Table 3.2. Required Minimum Education and Average Education

	Managers	Professionals	Technicians and associate professionals	Clerical support workers	Service and sales workers	Skilled agricultural, forestry and	Craft and related trades	Plant & machine operators, &	Elementary occupations
Average level of education									
Refuse to answer	2%	79%	65%	47%	43%	92%	94%	66%	70%
Did not complete primary	1%	0%	0%	2%	1%	1%	1%	3%	6%
Completed primary	2%	0%	0%	42%	3%	3%	3%	8%	16%
Started but did not complete secondary	1%	0%	2%	7%	8%	1%	2%	2%	3%
Completed secondary	32%	3%	8%	0%	40%	3%	1%	10%	5%
Started but did not complete college/voc	7%	1%	2%	0%	3%	0%	0%	8%	1%
Completed college/vocational training	23%	8%	19%	2%	2%	0%	0%	5%	0%
University graduate	29%	8%	4%	2%	1%	0%	0%	0%	0%
Post-graduate (Masters, Ph.D)	5%	0%	0%	0%	0%	0%	0%	0%	0%
Minimum level education (required)									
Refuse to answer	2%	79%	65%	47%	43%	92%	94%	66%	70%
Did not complete primary	1%	0%	0%	0%	1%	1%	1%	2%	2%
Completed primary	1%	0%	1%	0%	3%	3%	2%	4%	18%
Started but did not complete secondary	0%	0%	1%	1%	7%	1%	3%	3%	3%
Completed secondary	31%	3%	6%	45%	43%	4%	0%	15%	7%
Started but did not complete college/voc	4%	6%	3%	1%	5%	0%	0%	3%	2%
Completed college/vocational training	21%	13%	22%	5%	0%	0%	0%	8%	0%
University graduate	37%	0%	3%	2%	0%	0%	0%	0%	0%
Post-graduate (Masters, Ph.D)	4%	0%	0%	0%	0%	0%	0%	0%	0%

Source: 2014 PROTEqIN survey.

The survey sought to determine the minimum required qualifications for nine different job types and the average level of education for persons who occupied these positions. The firms that participated in the survey were asked to identify the personal traits and soft skills required for three job categories, namely, director, manager, or professional and skilled (production, administrative, sales, technicians, and craftsmen). More than 80 percent of the respondents considered previous industry experience and overall work experience as important for the first category (Figure 3.16a). A significant number of firms suggested that references (64.2 percent) and job-related training outside school (63.3 percent) were important personal traits for directors, managers, or professionals (Figure 3.16a). For skilled personnel (production, administrative, sales, technicians, and craftsmen), most firms placed importance on education (83.3 percent), previous industry experience (75.8 percent), overall work experience (76.7 percent), job-related training outside school (58.3 percent), and references (57.5 percent) (Figure 3.16a).

More than 80 percent of the employers placed a high value on reliability and punctuality, commitment to hard work, desire to learn and adapt, honesty, personal appearance, ability to work independently, and other physical attributes across both job categories (Figure 3.16b).

Similarly, more than 80 percent of the respondents considered skills such as communication, team working, problem-solving, literacy, numeracy, use of information technology, planning and organizing, customer care, responsibility, reliability, trustworthiness, motivation and commitment, self-management and entrepreneurship, general vocational job-specific are important core skills for both job types. The skill regarded as least important for both job types was foreign language (Figure 3.16c).

The job-related skills ranked highly by most employers were the minimum required level of education, domestic post-secondary education, theoretical knowledge of the job, practical knowledge of the job, previous work experience in the same field, and general experience in a workplace. Meanwhile, the qualification accorded the lowest importance was foreign post-secondary education (Figure 3.16d).

Figure 3.16a. Important Characteristics for Firms

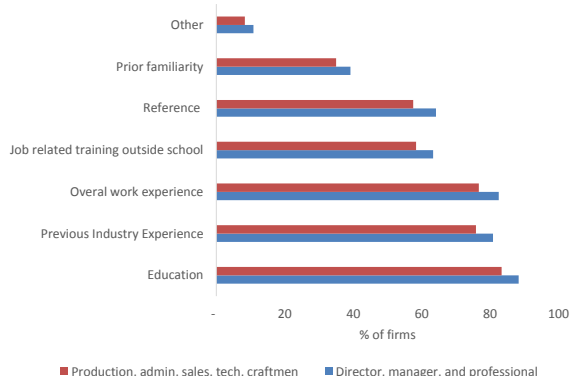


Figure 3.16b. Important Personal Characteristics for Firms

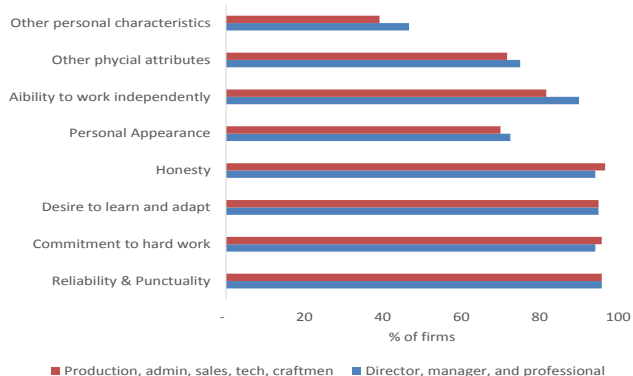
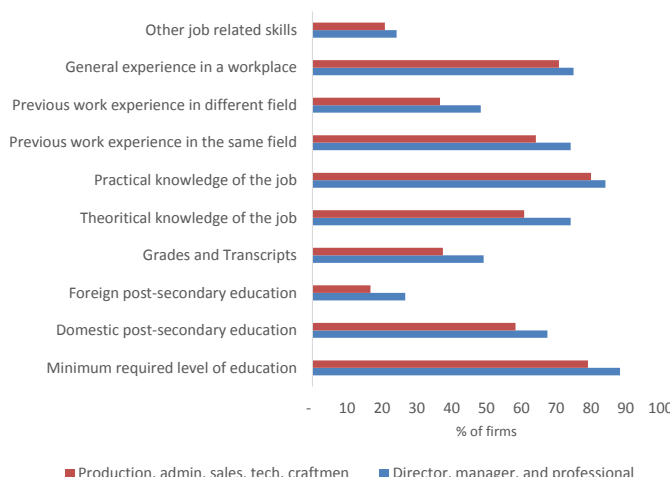


Figure 3.16c. Important Core Skills for Firms



Figure 3.16d. Important Job-related Skills for Firms



Source: 2014 PROTEqIN survey.

The firms were asked about the difficulty of recruiting managers, professionals, technicians and associate professionals, skilled agricultural, forestry, and fishery workers, craft and related trade workers, plant and machine operators, and elementary workers with the required personal characteristics, core skills, and job-related skills. The most challenging category of personnel to recruit with the requisite personal characteristics, core skills, and job-related skills are managers. However, less than 50 percent of the firms suggested that it is not difficult to obtain the other category of employees with the required skills and personal traits (Figure 3.17a).

Most firms attributed the scarcity of skills to factors such as the shortage of local professionals trained by local institutions (80 percent), quality of the education and training offered by local educational institutions (84.2 percent), worker emigration (73.3 percent), and lack of preferred personal characteristics and soft skills (77.5 percent). Factors that figured less prominently were the migration of professionals moving to other sectors of the economy or other enterprises (63.3 percent), high

expectations for new employees (68.3 percent), and labor protection laws and regulations (60.8 percent) (3.17b).

Figure 3.17a. Difficulty of Finding Candidates with Appropriate Skills and Personal Traits

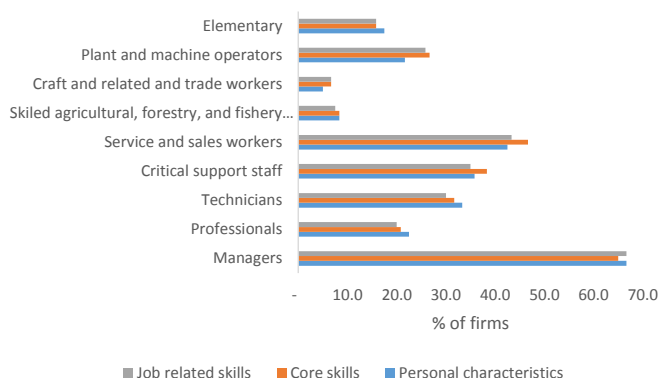


Figure 3.17b. Potential Reasons for the Shortage of Skills



Source: 2014 PROTEqIN survey.

The respondents indicated that they find most of their recent employees through family and friends (44.2 percent), public placement offices (8.3 percent), private placement offices (8.3 percent), public announcements/advertising (23.3 percent), and school-related networks (2.5 percent) (Figure 3.18a).

Figure 3.18a. How Firms Find Most of their Recently Hired Employees

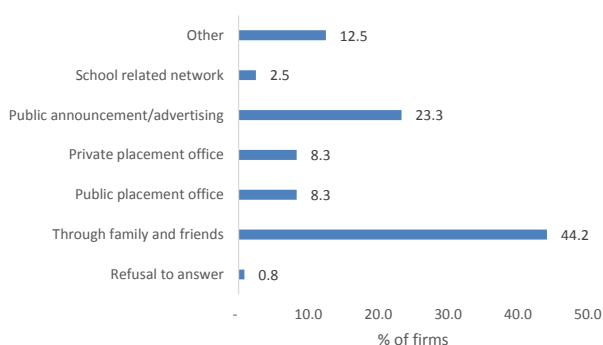
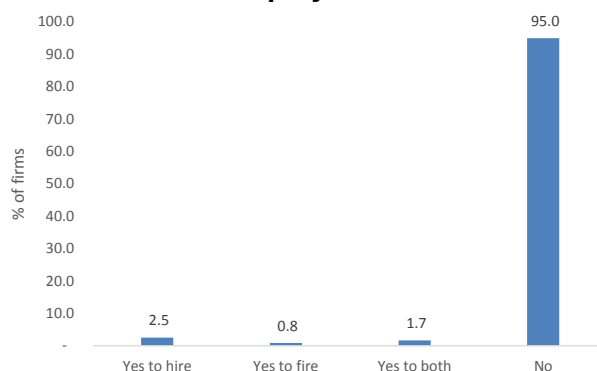


Figure 3.18b. How Labor Regulations Affect Firms' Decision to Hire and/or Fire Employees



Source: 2014 PROTEqIN survey.

Approximately 95 percent of the respondents indicated that labor regulations did not affect their decision to hire and fire employees (Figure 3.18b). Only 2.5 percent of the respondents suggested that their decision to hire was influenced by labor regulations, while 0.8 percent indicated their decision to fire employees was motivated by labor regulations (Figure 3.18b).

The survey revealed that 56.7 percent of the respondents provided a formal training program. Approximately 71.7 percent of production workers and 68.3 percent of non-production workers benefitted from training provided by firms (Figure 3.19a).

When the firms were asked why they did not run training programs, they offered the following reasons: the benefits of training do not justify the cost (35.9 percent), they cannot afford the optimal level of training (12.5 percent), fear that workers will leave the firm after they are trained (14.1 percent), and

they did not have enough information about training programs (17.2 percent) (Figure 3.19c). Approximately 77.5 percent of the firms indicated that they did not experience any difficulties finding skilled employees. The remaining firms suggested they had challenges (Figure 3.19d).

Figure 3.19a. Firms that Offered Formal Training Program (percent)

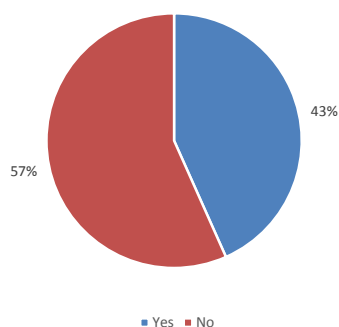


Figure 3.19b. Categories of Employees who Benefitted from Training

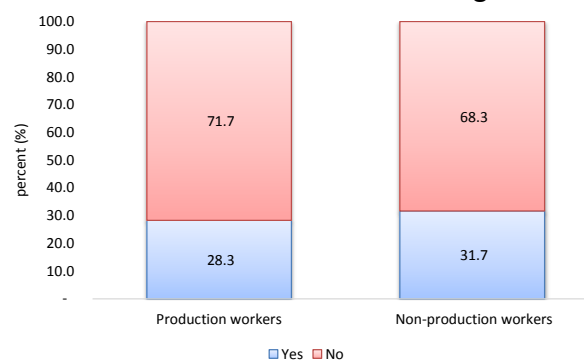


Figure 3.19c. Reasons Why Firms did not Run Training Programs

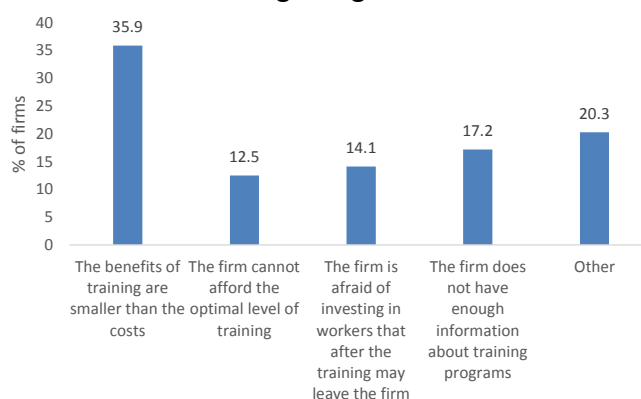
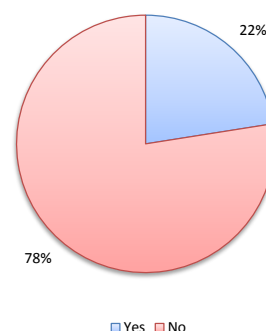


Figure 3.19d. Difficulty Finding Skilled Employees



Source: 2014 PROTEqIN survey.

Crime, Theft, and Disorder

Crime, theft, and disorder were ranked as the ninth most serious obstacle confronting businesses in Guyana. The evidence suggests that 88.3 percent of the firms surveyed regard crime as an obstacle. This problem affects firms regardless of their characteristics. The most prevalent crimes committed were theft (20.8 percent), followed by burglary (9.2 percent), attempted burglary (6.7 percent), robbery (6.7 percent), attempted robbery (5.0 percent), deliberate damage/vandalism (4.2 percent), and assaults and threats (3.3 percent) (Table 3.3).

Table 3.3. Incidence of Crime

Category of incidence	Category of incidence	How many times	When did it occur?	
			During working hours	Outside working hours
	% of firms	Avg. # of events	% of firms	% of firms
Burglary	9.2	2.7	27.3	72.7
Attempted burglary	6.7	2.0	50.0	50.0
Robbery	6.7	4.1	62.5	37.5
Attempted robbery	5.0	1.3	83.3	16.7
Deliberate damage/vandalism	4.2	3.0	40.0	60.0
Theft	20.8	5.3	64.0	36.0
Assaults and threats	3.3	1.9	75.0	25.0

Source: 2014 PROTEqIN survey.

Firms reported that theft occurred roughly five times per year, while burglary, attempted robbery, robbery, attempted robbery, deliberate damage/vandalism, and assaults and threats occurred approximately three times, twice, four times, once, three times, and twice per year, respectively (Table 3.3). The crimes that occurred with higher frequency during working hours were attempted robbery, theft, assault, and threats. Burglary and deliberate damage/vandalism occurred with a higher frequency outside working hours (see Table 3.3). The perpetrators of the crimes varied based on the type of incident. As shown in Table 2.4, burglary, robbery, and attempted robbery were committed largely by a group of criminals. The main perpetrators of theft and vandalism were employees (Table 3.4).

Table 3.4. Perpetrators Based on Type of Crime

	Group of criminals	Gang related	Someone working alone	A fellow employee	A customer	A supplier	A former employee	Other
Burglary	40.0%	0.0%	20.0%	10.0%	10.0%	0.0%	0.0%	20.0%
Attempted burglary	25.0%	12.5%	25.0%	0.0%	12.5%	0.0%	0.0%	25.0%
Robbery	57.1%	14.3%	0.0%	14.3%	0.0%	0.0%	14.3%	0.0%
Attempted robbery	33.3%	0.0%	16.7%	0.0%	16.7%	0.0%	0.0%	33.3%
Deliberate damage/vandalism	0.0%	25.0%	0.0%	50.0%	0.0%	0.0%	25.0%	0.0%
Theft	8.3%	0.0%	8.3%	58.3%	8.3%	0.0%	4.2%	12.5%
Assaults and threats	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	25.0%	25.0%

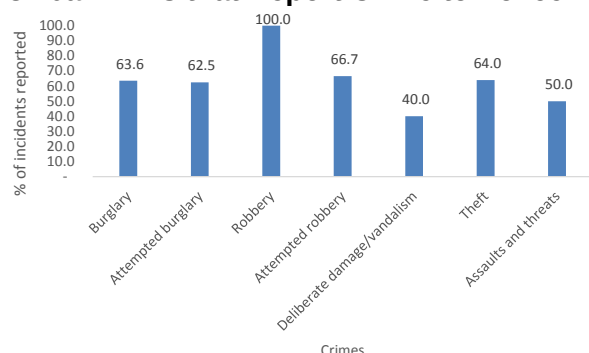
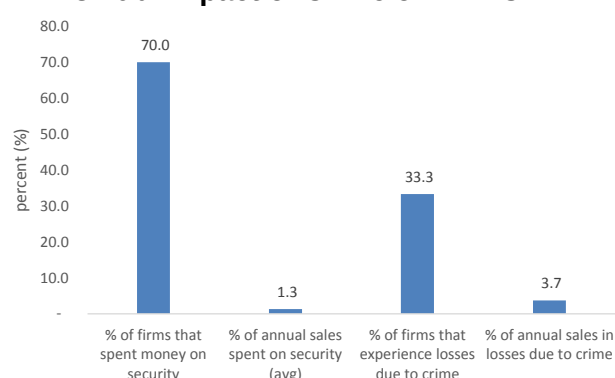
Source: 2014 PROTEqIN survey.

The item targeted varied based on the type of crime. Goods (or stock) were the primary target for attempted burglary and theft, while money was the main target for robbery and attempted robbery (Table 3.5). Meanwhile, 'other company property' was the primary target for burglary, attempted robbery, and deliberate damage/vandalism (Table 3.5).

Table 3.5. Items Targeted Based on Type of Crime

	Money	Goods or stock	Other company property	Personal possessions of employees or customers	Other
Burglary	36%	18%	45%	0%	0%
Attempted burglary	0%	63%	13%	0%	25%
Robbery	75%	25%	0%	0%	0%
Attempted robbery	60%	0%	40%	0%	0%
Deliberate damage/vandalism	20%	20%	40%	20%	0%
Theft	28%	40%	20%	12%	0%
Assaults and threats	25%	0%	25%	0%	50%

Businesses report being the victims of more than half of all crime. The crimes reported included burglary (63.6 percent), attempted burglary (62.5 percent), robbery (100 percent), attempted robbery (66.7 percent), and theft (64 percent). However, only 40 percent and 50 percent of deliberate damage/vandalism and assault and threats, respectively, are reported to police (Figure 3.20a).

3.20a. Firms that Report Crime to Police**3.20b. Impact of Crime on Firms**

Source: 2014 PROTEqIN survey.

Regarding the impact of crime on businesses, the survey revealed that 70 percent of firms spend on security. The average cost for coping with security approximates 1.3 percent of annual sales, with losses due to crime averaging 3.7 percent of annual sales (Figure 3.20b). Further, approximately 33.3 percent of the firms surveyed have experienced losses due to crime (Figure 3.20b).

Conclusion and Recommendations

Among the salient points that emerged from the survey are:

Sales and Productivity

- (i) Local firms recorded faster sales growth compared to their counterparts in the Caribbean. This may be due to Guyana's stronger economic growth performance and the relatively larger basket of commodity exports.
- (ii) Consistent with the literature, most of the firms with strong sales growth are new (less than 10 years old) as well as small (fewer than 20 employees) and medium-scale enterprises (between 20 and 100 employees).
- (iii) Notwithstanding the relatively higher sales growth reported by local firms, their TFP was lower than firms in the Caribbean.
- (iv) The local firms with the lowest productivity levels are old (or mature), large enterprises, and medium scale firms. These results are consistent with the literature, which suggest that mature firms tend to be less efficient because of organizational rigidities and rent-seeking behavior.

Constraints

- (i) Firms ranked electricity as the most serious obstacle, followed by corruption, tax rates, practices of competitors in the informal sector, access to finance, telecommunication, inadequately educated workforce, access to land for expansion/relocation, crime, theft, and disorder, political environment, customs and trade regulations, transportation, cost of finance, and the macroeconomic environment.
- (ii) Not surprisingly, it takes longer for firms to access an electrical connection compared to their counterparts in the region. Local firms also are subjected to more power outages with longer duration. The power outages experienced by local firms cost them more than their counterparts in the region.

- (iii) While corruption is perceived as the second most important obstacle, only a few firms indicated that they were expected to pay a bribe for an operating license, electrical connection, telephone connection, import license, water connection, and construction permit.
- (iv) The average bribe paid for government services, however, is higher than the regional average.
- (v) Taxes were ranked as the third most important obstacle for doing business locally and may be attributed to the relatively higher corporate tax rates imposed on local companies compared to their counterparts in the Caribbean.
- (vi) Notwithstanding the high corporate tax rates and difficulties encountered by local firms concerning taxation, more than 80 percent of the firms surveyed indicated that they paid the required taxes.
- (vii) The competition faced by firms in the informal sector was ranked the fourth most important obstacle. The firms surveyed viewed competition from the informal sector as significant as well as unfair because their counterparts in the informal sector can circumvent rules and regulations and are not subjected to the same entry rules. Because of limited recourse for dealing with competitors from the informal sector, most firms surveyed ranked this problem as major or severe.
- (viii) Access to finance is ranked as the fifth most important constraint.
- (ix) Most firms utilized internal funds to satisfy their working capital and finance their capital spending.
- (x) Contrary to expectation, most firms did not apply for credit because they had sufficient capital.
- (xi) Most of the firms that applied for credit were small enterprises.
- (xii) All financial institutions required collateral. The collateral required ranged from an average of 64.5 percent of the value of the loan to 73.6 percent of the value of the line of credit.
- (xiii) Small enterprises were required to provide more collateral compared to larger enterprises.
- (xiv) The inadequately educated workforce was cited ranked the seventh most important obstacle. However, the firms surveyed were almost always able to hire employees with the minimum required qualifications for various job categories.
- (xv) Most firms attributed the scarcity of skills to factors such as the shortage of local professionals trained by local institutions, quality of the education and training offered by local educational institutions, and worker emigration.

Recommendations

Based on the findings, the following recommendations should be considered:

- (i) The productivity of firms which are relatively lower than their counterparts. A possible solution is the promotion of industrial clusters with an export focus. The extant literature suggests that clusters enable firms to benefit from greater productivity by promoting complementarities and competition among members as well as providing greater access to factor inputs such as employees, suppliers, specialized information, institutions and public goods (Bernhardt and Pollak, 2015; Da-Silva-Glasgow et al., 2016; Madsen, Smith and Dilling-Hansen, 2004; and Porter, 1998). Creating clusters with an export focus may also help firms to scale up their operations while simultaneously benefitting from external markets rather than being limited to the small local market.
- (ii) There is a need for tax reform, which would help the productive sector and encourage businesses in the informal sector to formalize their operations.
- (iii) Incentives should also be given to encourage businesses to formalize their operations. For example, the incentive regime under the Micro and Small Enterprise Development (MSED)

project may be broadened to encourage businesses to formalize their operation.³ Under this project, businesses can access collateral guarantees, interest subsidies, training, and grants. These incentives may be supplemented by offering SMEs access to government procurement as guaranteed under the Small Business Act.

- (iv) The government should promote initiatives geared toward helping businesses access reliable electricity. In this regard, any initiative which accelerates the provision of cheaper and more reliable electricity should be given priority through incentives for energy efficiency conversion projects, either tying it in with renewable energy sources to the national grid or developing affordable, renewable energy solutions.
- (v) The training provided by local institutions should be more aligned with the needs of industry and their curriculum reviewed and improved to ensure the graduates are properly trained. Additionally, the government should provide incentives for professionals, which are in short supply, to remain in Guyana and those who reside in the diaspora to return.
- (vi) The current MSED project and future like-minded projects should be refined to allow micro-small, and medium-sized enterprises to present collateral guarantees to fulfill the requirements of lending institutions.
- (vii) Guyana is about to become an oil producer in 2020. The number of direct jobs to be created is expected to be low because extraction will occur offshore, and the construction of an onshore refinery has not solidified. The authorities should use this analysis of the 2014 PROTEqIN survey to purposefully address business climate weaknesses and help the private sector prepare to exploit the demand for ancillary services that will be generated from the emerging oil and gas sector.

³ The MSED project is an initiative under the Low-Carbon Development Strategy (LCDS) funded by the Guyana REDD+ Investment Fund (GRIF) to promote businesses involved into nontraditional economic activities considered environmentally friendly. The Inter-American Development Bank is responsible for supervising the implementation of the project.

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