

# **CORPORATE FINANCING REVISITED**

Christopher Martin Clarke  
Dominic Stoddard  
Vernie Shield

*A Paper presented at the XXV Conference of the  
Regional Programme of Monetary Studies Econometric  
Modelling Seminar on the 17-20 November 1993*

Research Department  
Central Bank of Trinidad and Tobago

DRAFT  
NOT FOR QUOTATION

# Corporate Financing Revisited

Christopher Martin Clarke  
Dominic Stoddard  
Vernie Shield

## INTRODUCTION

This paper presents some of the major findings from the National Sample Survey on Corporate Financing (N.S.S.C.F) 1992. This survey is a follow up to a similar survey carried out by the Research Department in 1983. The major areas of improvement relate to the increased coverage of the survey population and the utilization of randomized techniques of sample selection. The paper is divided into five sections. In the next section we undertake a brief review of previous research in the area of corporate financing especially with regard to the Caribbean context. In section III we examine the methodologies utilized for the N.S.S.C.F. 1992 and present some caveats about the data. In Section IV we present some of the major findings from the current survey with regard to our findings on bank customer relationships, sources and uses of corporate finance and business financial structure. Finally, in Section V we present a summary of our findings and some suggestions for future research.

## SECTION II

### Corporate Financing Theory and Caribbean Economics

Traditionally, the literature on corporate financing in the advanced countries has been dominated by the widespread belief that the financial system simply responds to the needs of the productive sector or is "simply the handmaiden of industry" (Mayer, 1987). This notion may be traced back to the seminal work of Modigliani and Miller (1958, 1961) who argued that in a perfect capital market with no transactions cost and no taxation the market valuation of the firm is independent of financing or dividend policy. Moreover, assuming that all players in the stock market had uniform expectations, the firms valuation would be determined by their earning prospects rather than

by their financial structure or choice between external or internal funds for investment.

More recently this orthodoxy has been challenged from a number of perspectives. Indeed, even from within the Modigliani-Miller paradigm there have been attempts to relax some of the more restrictive assumptions particularly with regard to taxes and expectations. For example, many corporate tax systems convey a significant tax advantage on users of debt finance for fixed investment purposes. However, there is an associated cost to firms, in that such financing increases the risk of corporate failure in an economic downturn. As such, proponents of the "trade-off" model argue that firms strive for an optimal debt equity ratio that maximizes its stock market valuation. Other writers have introduced considerations such as asymmetric information, moral hazards, signaling and transaction cost into the analytical framework (see, for example, Myers, 1977; Stiglitz, 1985; and Greenwald, Stiglitz, Weiss, 1984) and have argued that the so-called "pecking order" approach to corporate finance may be more appropriate. These writers have argued that firms always preferred internal sources of funds to finance investment over debt and in the last resort, equity finance. Other writers have taken a more empirical approach and have argued that the competitive failure of the US and the UK firms in many key sectors *vis a vis* their Japanese and German competition, could be attributed to differences in the operation of the financial system. These writers have argued that in the highly competitive, stock-market dominated financial system of the US and the UK the cost of capital and the expected rate of returns are too high to encourage long term investment. By contrast, the Japanese and German financial systems are more bank-dominated with banks with long term relationships with industrial concerns. This situation is more conducive to the long term planning, investment and the development of international competitiveness.

By contrast Caribbean research on corporate financing behaviour is not very extensive. The most notable studies are those of Bourne (1972) and Farrell, Najjar and Marcelle (1986). We shall focus our analysis on the latter paper for obvious reasons. Farrell, Najjar and Marcelle study was based on the empirical sample survey of 69 firms in Trinidad and Tobago in 1982. Farrell, et al assumed that in the

context of a relatively underdeveloped capital market commercial banks would dominate the market for corporate finance; as such the major focus of the analysis was on illuminating the nexus between commercial banks and their corporate customers. Among the major findings of Farrell et al was the fact that while commercial banks played a strategic role in corporate financing, supplier credits and non-bank financial intermediaries were also an important source of external funding. Indeed, external funding accounted for slightly less than 50 per cent of corporate financing requirements. Overdraft credit was the most popular form of borrowing but firms outside the construction sector generally relied on non overdraft credit to finance business expenditure. Farrell et al also revealed that firms were generally highly geared with small firms having high gearing ratios while more established firms tended to be less highly geared than their younger counterparts. Sector analysis also revealed that firms in Construction had the highest debt to equity ratios. Farrell, Najjar and Marcelle attributed the relatively high gearing levels of business enterprises to the easy credit conditions which prevailed in the economy in the boom years. Moreover, their study revealed that local businesses were largely insensitive to the level of interest rates as neither the cost nor the availability of finance were listed as serious constraints to the expansion of business. Instead, the size of the domestic market and the availability of qualified managers were listed as more important constraints to business expansion.

The major criticisms of the Farrell, Najjar and Marcelle study have been the small size of the sample and use of non-random methods of sample selection. However, its finding has achieved wide currency because of the implications for the conduct of monetary policy in the small open economies of the Caribbean. Moreover, this study also pointed to the relative inefficiency of financial intermediation in the Trinidad and Tobago context. Farrell, Najjar and Marcelle found the fact that overdraft credit was utilized to finance investment "disquieting" and had concerns about the high levels of gearing observed in the survey. This proved to be quite relevant after the collapse of oil prices in 1985/86 which led to the spate of business failures which followed.

In this context and in the light of changing financial conditions, it was considered necessary to update and expand the survey. In the

next section we outline the improvements that we have made to the survey methodology. At this point, we pause to remind our readers about some of the intrinsic weaknesses of the approach to data collection that we have chosen. As an alternative, flow of funds accounts could have been utilised to collect information on corporate financing behaviour. While such data tends to be more universal in coverage, it was felt to be too aggregated to allow for inter sectoral comparisons. However, the use of accounting data is not without its limitations. For instance, the data that we were able to collect from respondents was quite sparse while we had little control over accounting the accounting practices utilised to compile the returns.

In this preliminary presentation of our findings, we confine our analysis to the firms that responded to the survey and make no attempt at generalising the results to the wider survey population. Moreover, readers are reminded that response rates to some items on the questionnaire were low, so that they should be cautious about interpreting these results.

### SECTION III

#### Survey methodology

##### *Sample Frame*

The Central Statistical Office's Register of Business Establishments (employing 10 or more persons) was utilized as the basis for constructing a sampling frame for the NSSCF. The department obtained the latest available edition of the register which contained information on individual firms classified by the industrial sector, employment size, geographical location and telephone contact numbers. An examination of the register obtained from the CSO revealed that some of the information contained was dated. Many of the firms listed had gone out of business, in other cases new firms had become active and were not listed. Moreover, for the active firms on the list, information on numbers employed, mailing addresses and contact persons had to be verified. Given the pervasive nature of these problems and in an effort to improve coverage of the population, the Department undertook a supplemental survey designed to identify which firms should have been included on the list, those to be eliminated and to update

information on mailing addresses, telephone numbers, numbers employed, etc. Additionally, the Department utilized the data base it had compiled during the course of its routine surveys of the Balance of Payments and Quarterly Real Gross Domestic Product to supplement these efforts.

#### *Sampling Methodology*

Previous research and experience with similar surveys revealed that the survey population was likely to exhibit a high degree of positive skewness, i.e. a few large and many smaller units. In such circumstances simple random sampling was likely to lead to an overestimate of the sample characteristics. In an attempt to deal with the problems posed by a highly skewed population, it was decided to adopt the "cut-off" sampling technique proposed by Hidioglou (1982) and utilized quite successfully in many official business surveys. In this technique, the population is divided into two major strata: a "take-all" stratum which contains the largest elements of the population and are sampled entirely, and a "take-some" stratum which is sampled randomly.

For the purpose of selecting the sample, numbers employed was utilized as the primary measure of size of establishment. Experience suggests that this variable was likely to be highly correlated with the major variables of interest. We utilized Hidioglou's technique to obtain an exact "cut-off" rule for a sample size of 200 firms (judged to be the maximum manageable size given the Department's resources and time) and a coefficient of variation of 10 per cent. It should be noted that while this method yielded an objective cut-off rule, the validity of the technique does not rest on its rigid application. Indeed, Kish (1965) notes that the entire sorting procedure is an area where personal judgement based on expert knowledge of the list and the subject matter can be fruitfully exercised.

#### *Questionnaire Design and Field Work*

The questionnaire utilised for the NSSCF 1992 was largely based on the one utilized in the 1983 survey. Firms were asked to supply information on the following areas:

- Basic identifiers such as major economic activity, legal status, type of ownership and number of years in operation, as well as information on total employment and total revenue at the end of the last financial year.
- The questionnaire sought to address the relationship between firms and their bankers. Information was requested on the number of business relationships as well as the quality of these relationships. In this regard, the firms were asked to comment on how the availability and cost of finance relative to other factors such as market size, availability of management etc. had affected the scale of their operations.
- The overdraft facility was explored at some length. Information was requested on overdraft limits, overdraft balances on a quarterly basis, interest paid etc. The questionnaire also requested information on the uses to which these funds were being put.
- Firms were requested to give information on the amount of commercial bank credit outstanding as well as the reason for the choice of financial instruments. The questionnaire also requested information on institutional sources of funds (excluding overdrafts) and sought to determine how much funding was obtained from these sources as well as the uses to which these funds were being put.
- Information was requested on the value of investment in fixed assets for 1990, 1991 and 1992 (to date) and whether this investment was financed by internally generated funds, overdraft or other external borrowing.
- In an effort to supplement and validate the responses, information on the sources and uses of funds and other financial statements were requested.

The questionnaire employed for the NSSCF 1992 was largely "experimental" in the sense that it was anticipated that some items would prove difficult for respondents. However, it was important to design an instrument that would allow us to compare results with the 1983 survey. Moreover, since the Department intends to conduct surveys on corporate financing on a more regular basis it was felt that an analysis of response patterns and the problems encountered by par-

ticipants would serve to improve the quality of future business surveys.

The proposed plan of action called for a pilot survey of 30 firms, but these plans had to be severely curtailed as the field staff was forced to devote a large part of its resources to developing an adequate sampling frame. Moreover, since the survey instruments remained largely unchanged from 1983, when it was extensively tested, it was felt that this would not pose a serious problem to respondents. This assumption turned out to be invalid as some of the items created difficulties for some respondents.

The survey was formally launched on July 31, 1992, and was attended by over 175 participants from business organisations, commercial banks and research institutions. Following the launch, questionnaires were mailed out in batches to the firms in the sample, starting on August 15, 1992. Field work consisted of telephone reminders, reminder letters and visits to some firms. It was anticipated that the survey would close-off by October 10, 1992. However, several firms requested extensions as they were engaged in auditing exercises so it was decided to extend the deadline to January 31, 1993. As an interim measure, at the end of December 1992 when the "number" response rate stood at 54.5 per cent, a set of preliminary tabulations were sent out to firms that responded to the survey. At January 31, 1993, the number response rate stood at 77.5 per cent of 155 firms out of 200.

### Respondent Characteristics

Table 1 provides a summary of the characteristics of the firms that responded to the survey. Analysis of the size distribution of respondent firms indicates that the modal firm was medium-size, as 46.5 per cent (72 firms) of the respondents fell into this cohort. Large firms represented about one fifth of the sample while 32 per cent (49 firms) were classified as small. When examined by ownership 122 (79 per cent) of the respondents were locally-owned firms in the private sector, 13 per cent (20 firms) were foreign-owned, while 8 per cent (13 firms) were state controlled.

Most of the respondent firms 35.5 per cent (55 firms) were in operation for between 10 and 25 years. Those that were in operation

TABLE 1: SAMPLE RESPONDENTS BY SIZE, INDUSTRY GROUP, OWNERSHIP  
 YEARS IN OPERATION AND LEGAL STATUS  
 (Size based on number of employees)

Industry group, Ownership, Years in operation, Legal status	Small (less than 50)		Medium (51-250)		Large (More than 250)		Total	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num ber	Per cent
TOTAL, ALL FIRMS	49	31.6	72	46.5	34	21.9	155	100.0
INDUSTRY GROUP								
Petroleum	3	6.1	6	8.3	8	23.5	17	11.0
Manufacturing	15	30.6	34	47.2	11	32.4	60	38.7
Other Goods Producing	0	-	3	4.2	2	5.9	5	3.2
Distributive	17	34.7	22	30.6	6	17.6	45	29.0
Other Services	14	28.6	7	9.7	7	20.6	28	18.1
OWNERSHIP								
Local	40	81.6	63	87.5	19	55.9	122	78.7
Government	1	2.0	2	2.8	10	29.4	13	8.4
Foreign	8	16.3	7	9.7	5	14.7	20	12.9
YEARS IN OPERATION								
Under 10 years	15	30.6	16	22.2	11	32.4	42	27.1
10-25 years	24	49.0	23	31.9	8	23.5	55	35.5
Over 25 years	9	18.4	28	38.9	13	38.2	50	32.3
Not Stated	1	2.0	5	6.9	2	5.9	8	5.2

TABLE 1: (Cont'd) SAMPLE RESPONDENTS BY SIZE, INDUSTRY GROUP, OWNERSHIP  
YEARS IN OPERATION AND LEGAL STATUS  
(Size based on number of employees)

Industry group, Ownership, Years in operation, Legal status	Small (less than 50)		Medium (51-250)		Large (More than 250)		Total	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num ber	Per cent
LEGAL STATUS								
Individual								
Proprietorship	0	—	2	2.8	0	—	2	1.3
Partnership	5	10.2	1	1.4	1	2.9	7	4.5
Private Limited								
Liability	38	77.6	58	80.6	22	64.7	118	76.1
Public Limited								
Liability	2	4.1	6	8.3	8	23.5	16	10.3
Other	2	4.1	3	4.2	2	5.9	7	4.5
Not Stated	2	4.1	2	2.8	1	2.9	5	3.2

for over 25 years accounted for a slightly small proportion of the sample while more recently established firms (under 10 years) accounted for 27 per cent of the respondents.

The private limited liability company was the preferred form of incorporation as 76.1 per cent (118 firms) of the respondents reported that they were privately incorporated. Public limited liability companies account for 10.3 per cent of the respondents, partnerships accounted for 4.5 per cent, while two firms, both in the retail sector, were individual proprietorships.

Firms from the Distribution and Manufacturing sectors together constituted almost 68 per cent of the total respondents to the sample. Eighteen (18 per cent) of the firms were from the Other Services sector while firms from the Petroleum and Other Goods Producing sectors (mainly firms from Agriculture and Construction) represented 11 and 3 per cent respectively of all respondents.

Table 2 shows the distribution of respondent firms by size, industry group, years in operation and total revenue for 1991. As expected, there appeared to be a high correlation between revenue and numbers employed. Firms earning over \$50 million were typically large and/or in operation for more than 25 years. Local private sector firms represented 84.7 per cent of those earning under \$15 million and were relatively small. In fact, they represented 61.7 per cent of all small firms.

## SECTION IV

### Bank Customer Relations

As part of the analysis, the survey attempted to gain insights into firms' perception of their relationship with the banks, the number of relationships they had and the reasons for so doing. In addition, the extent to which firms were affected by the cost and availability of finance, market size and other constraints to business expansion were also investigated.

### Number of Banking Relationships

Information on the number of banking relationships of firms and the way in which this varied by size, sector, years in operation and own-

TABLE 2: TOTAL REVENUE BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Total Revenue and Industry Group	Under \$15 million		\$15-\$50 million		Over \$50 million		Not Stated		Total	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
TOTAL, ALL FIRMS	59	38.1	49	31.6	43	27.7	4	2.6	155	100.0
Small (<50)	40	67.8	7	14.3	0	—	2	50.0	49	31.6
Medium (51-250)	17	28.8	37	75.5	16	37.2	2	50.0	72	46.5
Large (>250)	2	3.4	5	10.2	27	62.8	0	—	34	21.9
INDUSTRY GROUP										
Petroleum	4	6.8	3	6.1	9	20.9	1	25.0	17	11.0
Manufacturing	18	30.5	26	53.1	14	32.6	2	50.0	60	38.7
Other Goods Producing	1	1.7	3	6.1	1	2.3	0	—	5	3.2
Distributive	17	28.8	14	28.6	14	32.6	0	—	45	29.0
Other Services	19	32.2	3	6.1	5	11.6	1	25.0	28	18.1
OWNERSHIP										
Local	50	84.7	42	85.7	27	62.8	3	75.0	122	78.7
Government	1	1.7	1	2.0	10	23.3	1	25.0	13	8.4
Foreign	8	13.6	6	12.2	6	14.0	0	.0	20	12.9
YEARS IN OPERATION										
Under 10 years	18	30.5	8	16.3	15	34.9	1	25.0	42	27.1
10-25 years	29	49.2	16	32.7	7	16.3	3	75.0	55	35.5
Over 25 years	10	16.9	21	42.9	19	44.2	0	—	50	32.3
Not Stated	2	3.4	4	8.2	2	4.7	0	—	8	5.2

ership is summarized in Table 3. As indicated, 82 firms (53 per cent) of the firms surveyed had a relationship with only one bank, 25 per cent (39 firms) dealt with two banks, and 14 firms (9 per cent) dealt with three banks. Firms which had relationships with more than three banks were grouped and totalled 19 or 12.3 per cent of the sample. When classified on the basis of size, roughly 60 per cent of both small and medium size firms had relationships with a single bank. Large firms however tended to have more banking relationships, to the extent that 38 per cent had relations with more than three banks.

When classified by industrial grouping, both the Manufacturing and Petroleum sectors had a significant proportion of firms with more than one relationship. For Manufacturing it was 50 per cent (29 firms), while 64.7 per cent or 11 of 17 firms in the Petroleum sector reported having more than one relationship.

Based on ownership, it was observed that locally-owned firms largely maintained a relationship with one bank. A total of 71 (58 per cent) of the local firms had relations with one bank, while government-controlled firms in proportionate terms had three or more banking relationships. In fact, 9 of the 13 government controlled firms (69.2 per cent) had multiple banking relationships. Finally, firms in operation for under ten years tended to have more banking relationships.

An attempt was made to elicit the reasons for multiple banking relationships among firms. The most popular reason given was that such arrangements increased flexibility and allowed the firm to take advantage of different kinds of financial services offered by banks. A total of 49 firms (35.5 per cent) indicated this as their reason. Other popular reasons given were prudence and the fact that multiple relationships strengthened bargaining position *vis a vis* bankers. These were recorded at 23.2 per cent and 21 per cent respectively. It was further observed that the popularity of these responses did not vary significantly when firms were classified by either size, industry group, ownership or years in operation.

#### Quality of Banking Relationships.

The duration of banking relationships was also investigated, particularly in relation to size and industry group. It was found that 61 per

TABLE 3: NUMBER OF BANKING RELATIONSHIPS BY SIZE, INDUSTRY GROUP,  
OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years in Operation	Number of Banking Relationship										Total all Firms	
	One		Two		Three		More Than Three		Not Stated		Num- ber	Per cent
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num ber	Per cent	Num- ber	Per cent		
TOTAL, ALL FIRMS	82	52.9	39	25.2	14	9.0	19	12.3	1	0.6	155	100.0
SIZE OF FIRM												
Small	31	63.3	11	22.4	6	12.2	0	.0	1	2.0	49	31.6
Medium	42	58.3	19	26.4	5	6.9	6	8.3	0	—	72	46.5
Large	9	26.5	9	26.5	3	8.8	13	38.2	0	—	34	21.9
INDUSTRY GROUP												
Petroleum	6	35.3	3	17.6	2	11.8	6	35.3	0	—	17	11.0
Manufacturing	30	50.0	15	25.0	7	11.7	7	11.7	1	1.7	60	38.7
Other Goods Producing	1	20.0	3	60.0	0	—	1	20.0	0	—	5	3.2
Distributive	29	64.4	10	22.2	3	6.7	3	6.7	0	—	45	29.0
Other Services	16	57.1	8	28.6	2	7.1	2	7.1	0	—	28	18.1
OWNERSHIP												
Local	71	58.2	32	26.2	9	7.4	9	7.4	1	0.8	122	78.7
Government	4	30.8	1	7.7	3	23.1	5	38.5	0	—	13	8.4
Foreign	7	35.0	6	30.0	2	10.0	5	25.0	0	—	20	12.9
YEARS IN OPERATION												
Under 10 years	21	50.0	8	19.0	6	14.3	7	16.7	0	—	42	27.1
10-25 years	33	60.0	14	25.5	4	7.3	3	5.5	1	1.8	55	35.5
Over 25 years	24	48.0	14	28.0	4	8.0	8	16.0	0	—	50	32.3
Not Stated	4	50.0	3	37.5	0	—	1	12.5	0	—	8	5.2

TABLE 4: REASONS FOR MULTIPLE BANKING RELATIONSHIPS BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION  
(Due to multiple responses, the percentages may add to more than 100)

Size, Industry Group, Ownership and Years In Operation	Reasons for Multiple Banking Relationships																Total, all Responses	
	Historical		Prudence		Flexibility		Size of the Business		Strengthens Negotiating Position		Choose All		Choose None		Not Stated		Number	Per cent
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent		
TOTAL, ALL FIRMS	19	13.7	33	23.7	49	35.3	9	6.5	29	20.9	2	1.3	3	1.9	86	55.5	155	100.0
SIZE OF FIRM																		
Small	3	10.3	8	27.6	12	41.4	0	—	6	20.7	0	—	0	—	32	65.3	49	100.0
Medium	7	13.0	10	18.5	21	38.9	2	3.7	14	25.9	2	2.8	2	2.8	44	61.1	72	100.0
Large	9	16.1	15	26.8	16	28.6	7	12.5	9	16.1	0	—	1	2.9	10	29.4	34	100.0
INDUSTRY GROUP																		
Petroleum	4	16.0	4	16.0	8	32.0	2	8.0	7	28.0	0	—	0	—	6	35.3	17	100.0
Manufacturing	6	10.7	13	23.2	22	39.3	5	8.9	10	17.9	2	3.3	0	—	34	56.7	60	100.0
Other Goods																		
Producing	1	16.7	2	33.3	2	33.3	0	—	1	16.7	0	—	1	20.0	1	20.0	5	100.0
Distributive	6	19.4	8	25.8	9	29.0	2	6.5	6	19.4	0	—	1	2.2	29	64.4	45	100.0
Other Services	2	9.5	6	28.6	8	38.1	0	—	5	23.8	0	—	1	3.6	16	57.1	28	100.0
OWNERSHIP																		
Local	13	13.1	25	25.3	33	33.3	7	7.1	21	21.2	2	1.6	3	2.5	74	60.7	122	100.0
Government	3	16.7	4	22.2	5	27.8	1	5.6	5	27.8	0	—	0	—	5	38.5	13	100.0
Foreign	3	13.6	4	18.2	11	50.0	1	4.5	3	13.6	0	—	0	—	7	35.0	20	100.0
YEARS IN OPERATION																		
Under 10 years	5	11.4	9	20.5	16	36.4	5	11.4	9	20.5	1	2.4	0	—	21	50.0	42	100.0
10-25 years	5	13.5	8	21.6	13	35.1	1	2.7	10	27.0	0	—	1	1.8	36	65.5	55	100.0
Over 25 years	8	15.7	15	29.4	17	33.3	3	5.9	8	15.7	1	2.0	2	4.0	25	50.0	50	100.0
Not Stated	1	14.3	1	14.3	3	42.9	0	—	2	28.6	0	—	0	—	4	50.0	8	100.0

TABLE 5: LENGTH OF LONGEST REPORTED BANKING RELATIONSHIP BY SIZE AND INDUSTRY GROUP<sup>a</sup>

Length of Longest Reported Relationship and Industry group	Small (less than 50)		Medium (51-250)		Large (More than 250)		Total, all Firms	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>ALL FIRMS</b>								
Total, all firms	49	31.6	72	46.5	34	21.9	155	100.0
Less than 3 years	2	4.1	5	6.9	1	2.9	8	5.2
3-10 years	12	24.5	18	25.0	3	8.8	33	21.3
11-15 years	8	16.3	4	5.6	4	11.8	16	10.3
More than 15 years	26	53.1	44	61.1	25	73.5	95	61.3
Not Stated	1	2.0	1	1.4	1	2.9	3	1.9
<b>PETROLEUM</b>								
Total, all firms	3	1.9	6	3.9	8	5.2	17	11.0
Less than 3 years	0	—	2	33.3	0	—	2	11.8
3-10 years	1	33.3	1	16.7	1	12.5	3	17.6
11-15 years	1	33.3	0	0	1	12.5	2	11.8
More than 15 years	1	33.3	3	50.0	6	75.0	10	58.8
<b>MANUFACTURING</b>								
Total, all firms	15	9.7	34	21.9	11	7.1	60	38.7
Less than 3 years	1	6.7	2	5.9	0	—	3	5.0
3-10 years	3	20.0	9	26.5	1	9.1	13	21.7
11-15 years	2	13.3	1	2.9	0	—	3	5.0
More than 15 years	9	60.0	21	61.8	9	81.8	39	65.0
Not Stated	0	—	1	2.9	1	9.1	2	3.3
<b>OTHER GOODS PRODUCING</b>								
Total, all firms	0	—	3	1.9	2	1.3	5	3.2
3-10 years	0	—	1	33.3	0	—	1	20.0
More than 15 years	0	—	2	66.7	2	100.0	4	80.0
<b>DISTRIBUTIVE</b>								
Total, all firms	17	11.0	22	14.2	6	3.9	45	29.0
Less than 3 years	0	—	0	—	1	16.7	1	2.2
3-10 years	5	29.4	7	31.8	0	—	12	26.7
11-15 years	3	17.6	2	9.1	2	33.3	7	15.6
More than 15 years	9	52.9	13	59.1	3	50.0	25	55.6
<b>OTHER SERVICES</b>								
Total, all firms	14	9.0	7	4.5	7	4.5	28	18.1
Less than 3 years	1	7.1	1	14.3	0	—	2	7.1
3-10 years	3	21.4	0	—	1	14.3	4	14.3
11-15 years	2	14.3	1	14.3	1	14.3	4	14.3
More than 15 years	7	50.0	5	71.4	5	71.4	17	60.7
Not Stated	1	7.1	0	—	0	—	1	3.6

cent (95 firms) had banking relationships lasting more than 15 years, 10 per cent (16 firms) had relationships lasting between 11 and 15 years, 21 per cent (33 firms), for 3 to 10 years and a mere 5.2 per cent (8 firms) had banking relationships for less than three years. Three firms did not respond to this question.

In the Petroleum sector 10 of the 17 firms (58.8 per cent) had a banking relationship lasting more than 15 years. The corresponding figure for Manufacturing was 39 or 65 per cent of the respective total. Both the Distributive and Other Services sector displayed a similar pattern in that half the firms in these sectors reported having had a relationship for over 15 years. Four of the five (5) firms in the Other Goods Producing sector had a relationship with a bank for more than 15 years.

Firms were asked to rate the quality of their general relationship with banks, the advice given and the quality of business services provided. Table 6 summarizes this information. As indicated, firms perceived their general relationship to be largely very good or excellent. One hundred and twenty six (126) firms or 81 per cent of the respondents perceived their general relationship to be very good or excellent, while only 26 firms (17 per cent) rated their relationship as either good or fair. Notably, only 41 per cent rated the quality of their business advice as excellent, whereas 51 per cent rated it good or fair. Business advice was considered poor by 4.5 per cent of the sample and overall had the lowest rating by firms. In terms of services offered just over half the responding firms found business services satisfactory as 83 firms (54 per cent) gave a rating of very good or excellent. However, forty five (45) per cent of the firms rated business services as good or fair, a single firm perceived business advice as poor and two others did not respond.

When analyzed by size, 31 of the 34 large firms found their general relationship very good/excellent compared with 82 and 73 per cent respectively for medium and small firms. The rating of business advice varied significantly by firm size. While a mere 31 per cent (15 small firms) rated business advice excellent, 65 per cent of the large firms gave this excellent rating. For medium size firms, 38 per cent rated the advice excellent. More than 50 per cent of both medium and small firms rated the banks' advice as good or fair. For business services the pattern was similar, with small firms having the

lowest assessment of the quality of services provided and large firms the highest.

On the basis of industrial grouping, however, the most common response for business advice was good or fair as more than 50 per cent of the firms gave this rating. The proportion of firms rating business advice excellent was roughly 40 per cent on average, with the exception of the Other Goods Producing sector where 4 of the five responding firms gave an excellent rating. The assessment of business services offered by banks to firms in the different sectors was largely similar to that of business advice.

Firms' perception of their general relationship with banks did not vary with ownership. In fact, over 80 per cent of the firms in each ownership category rated their relationship as excellent. For both business advice and business services offered, the distribution of firms was roughly equal between excellent and good, with the exception of foreign firms in which 70 per cent rated business services as very good.

As a corollary to Table 6, firms' perception of several commonly held opinions about banks was analyzed. These may be divided broadly into positive and negative opinions. Regarding positive opinions 92 firms (59 per cent) agreed that banks always or often provide modern services, 12 firms thought this seldom or never true. Less than half of the firms (43 per cent) found that banks were sensitive to their particular needs, whereas 18 firms (12 per cent) indicated that this was very seldom the case. Fifty one (51) per cent of the firms surveyed felt that it was always or often the case that banks were flexible and accommodating, while 38 per cent saw this as sometimes true. Few firms, only 7.1 per cent, found that banks were seldom/never flexible and accommodating while 6 firms did not respond.

In general, large firms tended to have a more favourable opinion of banks based on the high percentages recording always/often true for positive opinions. When firms were classified by industrial grouping, however, there was no discernible pattern; when firms were classified by ownership and years in operation the result was consistent with the overall distribution.

In respect of negative opinions, 50 firms or 32 per cent found that it was always/often the case that banks' decision making process was too slow. In terms of their risk behaviour, 57 per cent of the firms

TABLE 6: RATING OF BANKING RELATIONSHIP BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION  
(Based on "excellent or very good")

Size, Industry Group, Ownership and Years In Operation	Rating of Banking Relationship					
	General Relationship		Business Advice		Business Service	
	Number	Per cent	Number	Per cent	Number	Per cent
TOTAL, ALL FIRMS	126	81	64	41	83	54
SIZE OF FIRM						
Small	36	73	15	31	22	45
Medium	59	82	27	38	38	53
Large	31	91	22	65	23	68
INDUSTRY GROUP						
Petroleum	12	71	7	41	7	41
Manufacturing	53	88	26	43	36	60
Other Goods Producing	5	100	4	80	4	80
Distributive	34	76	17	38	23	51
Other Services	22	79	10	36	13	46
OWNERSHIP						
Local	99	81	48	39	63	52
Government	11	85	6	46	6	46
Foreign	16	80	10	50	14	70
YEARS IN OPERATION						
Under 9 years	33	79	13	31	18	43
10-25 years	44	80	20	36	27	49
Over 25 years	44	88	28	56	34	68
Not Stated	5	63	3	38	4	50

perceived banks as being too cautious. Only 9 firms stated that this was very seldom/never the case. It can be observed from Table 7 that large firms were less numerous in percentage terms, among those indicating always/often true for negative opinions. As an example, 11 firms representing 32 per cent of the large firms found the decision making process often/always over centralised, compared with the

TABLE 7: GENERAL PERCEPTIONS OF COMMERCIAL BANKS BY SIZE,  
INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION  
(Based on always or often true)

Size, Industry Group, Ownership and Years In Operation	Positive Perceptions						Negative Perceptions					
	Provide Modern Services		Sensitive		Flexible and Accommodating		Too Cautious		Decision Making Too Slow		Overcentralized	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
TOTAL, ALL FIRMS	92	59	66	43	79	51	89	57	50	32	74	48
SIZE OF FIRM												
Small	25	51	16	33	21	43	28	57	15	31	27	55
Medium	43	60	32	44	38	53	41	57	28	39	36	50
Large	24	71	18	53	20	59	20	59	7	21	11	32
INDUSTRY GROUP												
Petroleum	9	53	7	41	7	41	13	76	9	53	7	41
Manufacturing	36	60	27	45	29	48	33	55	22	37	31	52
Other Goods Producing	5	100	3	60	4	80	2	40	1	20	3	60
Distributive	26	58	19	42	25	56	25	56	12	27	20	44
Other Services	16	57	10	36	14	50	16	57	6	21	13	46
OWNERSHIP												
Local	73	60	50	41	58	48	75	61	41	34	61	50
Government	8	62	5	38	9	69	8	62	2	15	6	46
Foreign	11	55	11	55	12	60	6	30	7	35	7	35
YEARS IN OPERATION												
Under 10 years	20	48	14	33	18	43	24	57	14	33	19	45
10-25 years	37	67	21	38	22	40	36	65	20	36	31	56
Over 25 years	32	64	27	54	34	68	26	52	14	28	23	46
Not Stated	3	38	4	50	5	63	3	38	2	25	1	13

TABLE 8: CONSTRAINTS TO SCALE OF OPERATIONS BY SIZE,  
INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION  
(Based on "important")

Size, Industry Group, Ownership and Years In Operation	Constraints											
	Market Size		Management		Technical Staff		Availability of Finance		Cost of Finance		Other	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
TOTAL, ALL FIRMS	145	94	129	83	127	82	135	87	135	87	18	12
SIZE OF FIRM												
Small	45	92	38	78	37	76	39	80	38	78	5	10
Medium	71	99	66	92	64	89	66	92	67	93	10	14
Large	29	85	25	74	26	76	30	88	30	88	3	9
INDUSTRY GROUP												
Petroleum	15	88	13	76	14	82	15	88	14	82	3	18
Manufacturing	57	95	52	87	56	93	58	97	55	92	6	10
Other Goods Producing	5	100	3	60	4	80	5	100	5	100	0	—
Distributive	44	98	41	91	34	76	38	84	41	91	5	11
Other Services	24	86	20	71	19	68	19	68	20	71	4	14
OWNERSHIP												
Local	117	96	107	88	103	84	110	90	112	92	16	13
Government	10	77	9	69	10	77	11	85	11	85	0	—
Foreign	18	90	13	65	14	70	14	70	12	60	2	10
YEARS IN OPERATION												
Under 10 years	37	88	33	79	32	76	38	90	36	86	3	7
10-25 years	53	96	48	87	48	87	47	85	50	91	7	13
Over 25 years	49	98	43	86	42	84	44	88	43	86	8	16
Not Stated	6	75	5	63	5	63	6	75	6	75	0	—

TABLE 9: FACTORS LIMITING BUSINESS EXPANSION BY SIZE, INDUSTRY GROUP,  
OWNERSHIP AND YEARS IN OPERATION  
(Due to multiple responses, the percentages may add to more than 100)

Size, Industry Group, Ownership and Years In Operation	Factors													
	Loanable Funds		Banks querying Feasibility of Projects		Lack of Collateral		Chose All		Not Affected		Not Stated		Total Responses	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- per	Per cent
TOTAL, ALL FIRMS	22	38.6	22	38.6	13	22.8	5	3.2	102	65.8	13	8.4	155	100.0
SIZE OF FIRM														
Small	9	39.1	10	43.5	4	17.4	3	6.1	27	55.1	8	16.3	49	100.0
Medium	10	43.5	9	39.1	4	17.4	2	2.8	51	70.8	4	5.6	72	100.0
Large	3	27.3	3	27.3	5	45.5	0	—	24	70.6	1	2.9	34	100.0
INDUSTRY GROUP														
Petroleum	0	—	4	100.0	0	—	0	—	12	70.6	1	5.9	17	100.0
Manufacturing	9	42.9	7	33.3	5	23.8	4	6.7	45	75.0	2	3.3	60	100.0
Other Goods Producing	0	—	2	40.0	3	60.0	0	—	2	40.0	0	—	5	100.0
Distributive	8	50.0	5	31.3	3	18.8	1	2.2	25	55.6	8	17.8	45	100.0
Other Services	5	45.5	4	36.4	2	18.2	0	—	18	64.3	2	7.1	28	100.0
OWNERSHIP														
Local	22	43.1	20	39.2	9	17.6	5	4.1	78	63.9	8	6.6	122	100.0
Government	0	—	2	40.0	3	60.0	0	—	9	69.2	1	7.7	13	100.0
Foreign	0	—	0	—	1	100.0	0	—	15	75.0	4	20.0	20	100.0
YEARS IN OPERATION														
Under 10 years	6	31.6	7	36.8	6	31.6	2	4.8	26	61.9	5	11.9	42	100.0
10-25 years	11	42.3	11	42.3	4	15.4	3	5.5	28	50.9	7	12.7	55	100.0
Over 25 years	5	41.7	4	33.3	3	25.0	0	—	41	82.0	1	2.0	50	100.0
Not Stated	0	—	0	—	0	—	0	—	7	87.5	0	—	8	100.0

medium and small firms, for which 36 (50 per cent) and 27 firms (55 per cent) respectively indicated always or often true.

Both local private and government firms found banks too cautious, as is evident by over 60 per cent of each of these groups stating that banks were always/often too cautious. This compares with the 20 foreign firms where only 6 or 30 per cent claimed to have found banks always or often too cautious.

### Constraints to Business

Most of the factors offered were identified as constraints to firms' scale of operations. The most significant, however, was market size, which was indicated by 94 per cent of reporting firms. This was followed by the availability of finance and the cost of finance both of which recorded 87 per cent (135 responses), and the availability of management which recorded 83 per cent. Firms were also asked if they had difficulty in expanding their business over the five (5) years prior to the survey. Of the total number of firms surveyed, 13 firms did not respond, while 102 (66 per cent) had no difficulty expanding business. Of the three (3) factors identified as limiting expansion, the two most important were the unavailability of loanable funds and banks querying project feasibility. For each of these two factors, 22 firms (38.6 per cent) indicated these factors as constraints. While a total of 13 firms (22.8 per cent) were affected by lack of collateral, only five (5) firms were affected by all three (3) factors.

Among small firms, queries regarding project feasibility was the most common factor as indicated by 10 firms (43.5 per cent) followed by the unavailability of funds. A total of 24 of the 34 large firms found none of these factors limiting expansion. Five (5) firms (45.5 per cent), however, were limited by a lack of collateral.

Of responding firms, whether classified by years in operation, ownership or industry group, the responses were largely similar. Where they differed significantly in percentage terms, however, the number of firms involved was very small. Moreover, firms were mostly unaffected by these factors, and in those instances where they were affected queries regarding project feasibility and the unavailability of loanable funds remained the most common response.

## SOURCES OF FUNDS

The sources of finance available to firms have been traditionally classified as either internal or external. For the purposes of this survey internally generated funds are defined as funds from operating profits before depreciation and other non-cash expenses. The availability of such funds reflects current and past profit levels, as well as depreciation provisions, taxation and the companies' dividend policy. The major external sources of funds have traditionally been: bank borrowing, trade credits, share issues and long term debt issues. Choosing among these instruments depends on the desired capital structure of firms as well as their relative cost and availability. In this section, we begin with an analysis of the internal funds ratio — defined as the ratio between internally generated funds and total sources of funds. We also undertake a more detailed analysis designed to highlight the role of commercial banks in the funding of businesses. Unfortunately, the response rates for items on sources and uses of funds were generally lower than for some of the other items analyzed, and readers are asked to bear this in mind as they examine the data.

### Internal Sources

Table 10 shows the internal funds ratio analyzed by size of firm, industry grouping, ownership and years in operation. For the sample as a whole, the median internal funds ratio was 30.6 per cent. An analysis of the grouped data reveals that 17.4 per cent of the respondents had an internal fund ratio below 10 per cent, 42.6 per cent had a ratio between 10 and 50 per cent while almost 24 per cent generated over half their funds internally. Generally, larger firms displayed greater reliance on internal funds than smaller firms. The median internal funds ratio for large firms was 37.9 per cent, for small firms the ratio was 32.9 per cent while the average for medium-sized firms was 23.9 per cent. The relatively low median for medium sized firms resulted from the fact that seven of the medium sized firms reported negative internal funds ratios.

The internal funds ratio also exhibited some variability when analyzed by industry grouping. Firms in the Other Services sector were most reliant on internal funds as the average for this cohort was 44.6 per cent. Indeed, 7 firms (25 per cent) in this sector reported internal funds ratios over 70 per cent. On the other hand, firms in the

TABLE 10: INTERNAL FUNDS RATIO BY SIZE, INDUSTRY GROUP,  
OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Internal Funds/Total Sources of Funds											Total all Firms			
	Under 10%		10-25%		26-50%		51-70%		Over 70%		Not Stated		Num- per	Per cent	Med- ian
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent			
TOTAL, ALL FIRMS	27	17.4	31	20.0	35	22.6	11	7.1	26	16.8	25	16.1	155	100.0	30.6
SIZE OF FIRM															
Small	7	14.3	8	16.3	11	22.4	2	4.1	9	18.4	12	24.5	49	100.0	32.9
Medium	15	20.8	17	23.6	15	20.8	6	8.3	10	13.9	9	12.5	72	100.0	23.9
Large	5	14.7	6	17.6	9	26.5	3	8.8	7	20.6	4	11.8	34	100.0	37.9
INDUSTRY GROUP															
Petroleum	3	17.6	2	11.8	7	41.2	1	5.9	3	17.6	1	5.9	17	100.0	38.2
Manufacturing	8	13.3	12	20.0	16	26.7	6	10.0	10	16.7	8	13.3	60	100.0	33.0
Other Goods															
Producing	2	40.0	1	20.0	1	20.0	0	—	0	—	1	20.0	5	100.0	9.7
Distributive	11	24.4	12	26.7	5	11.1	3	6.7	6	13.3	8	17.8	45	100.0	20.9
Other Services	3	10.7	4	14.3	6	21.4	1	3.6	7	25.0	7	25.0	28	100.0	44.6
OWNERSHIP															
Local	23	18.9	25	20.5	29	23.8	9	7.4	14	11.5	22	18.0	122	100.0	26.8
Government	3	23.1	1	7.7	3	23.1	1	7.7	3	23.1	2	15.4	13	100.0	41.5
Foreign	1	5.0	5	25.0	3	15.0	1	5.0	9	45.0	1	5.0	20	100.0	51.0
YEARS IN OPERATION															
Under 10 years	7	16.7	10	23.8	10	23.8	3	7.1	5	11.9	7	16.7	42	100.0	27.3
10-25 years	11	20.0	9	16.4	16	29.1	1	1.8	8	14.5	10	18.2	55	100.0	28.0
Over 25 years	8	16.0	9	18.0	9	18.0	7	14.0	10	20.0	7	14.0	50	100.0	39.2
Not Stated	1	12.5	3	37.5	0	—	0	—	3	37.5	1	12.5	8	100.0	20.9

Other Goods Producing sector appeared to be most reliant on external funds, reporting a median internal funds ratio of 9.7 per cent. As expected, firms in the Petroleum sector exhibited relatively high internal funds ratios as their median ratio was 38.2 per cent. An analysis of the grouped data reveals that 5 firms (29.4 per cent) in this sector had internal funds ratios below 25 per cent, while 41.2 per cent of those in the sector relied on internal funds for between 26 and 50 per cent of total sources of funds. In a manner similar to the Other Goods Producing sector, firms in the Distributive sector were generally more reliant on external funds. The average for firms in this sector was 20.9 per cent while 51.1 per cent of the firms in Distribution reported internal funds ratios below 25 per cent.

An analysis of the internal funds ratio by ownership, revealed that local private sector firms relied less on internal funding than firms classified as government controlled or foreign owned. The median internal funds ratio for locally owned firms was 26.8 per cent while for government controlled and foreign firms the ratio was 41.5 and 51 per cent, respectively. It should be noted that the typical government-controlled firm that responded to the survey had been successful over the last three years, which may have accounted for relatively high internal funds ratios for these firms. The extent of the foreign firms' reliance on internal funds can be gauged by the fact that 45 per cent or nine of the foreign firms reported internal funds ratios that exceeded 70 per cent; however, this may reflect the greater profitability of foreign firms as well as past Central Bank restrictions on lending to these firms.<sup>1</sup>

Finally, the more mature firms among the respondents to the survey appeared to be less reliant on external funds than the more recently established firms. The median internal funds ratio for firms established over 25 years was 39.2 per cent, while the internal funds ratios for firms operating for under 10 years and between 10 and 25 years were 27.3 per cent and 28 per cent, respectively. Few of the more mature firms had internal funds ratios that were below 25 per cent (34 per cent), in contrast to 40 per cent of the firms operating for less than 10 years and 36.4 per cent for firms operating between 10 and 25 years which all had internal funds ratios below 25 per cent.

TABLE 11: BANK FUNDS AS A PROPORTION OF TOTAL SOURCES OF FUNDS BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Total Bank Funds/Total Sources of Funds												Total all Firms		
	Under 10%		10-25%		26-50%		51-70%		Over 70%		Not Stated		Number	Percent	Median
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
TOTAL, ALL FIRMS	71	45.8	16	10.3	14	9.0	20	12.9	9	5.8	25	16.1	155	100.0	7.7
SIZE OF FIRM															
Small	19	38.8	5	10.2	5	10.2	4	8.2	4	8.2	12	24.5	49	100.0	9.0
Medium	36	50.0	6	8.3	6	8.3	11	15.3	4	5.6	9	12.5	72	100.0	4.2
Large	16	47.1	5	14.7	3	8.8	5	14.7	1	2.9	4	11.8	34	100.0	6.9
INDUSTRY GROUP															
Petroleum	7	41.2	2	11.8	3	17.6	4	23.5	0	0	1	5.9	17	100.0	14.5
Manufacturing	30	50.0	5	8.3	5	8.3	10	16.7	2	3.3	8	13.3	60	100.0	3.5
Other Goods															
Producing	2	40.0	0	—	0	—	2	40.0	0	—	1	20.0	5	100.0	33.6
Distributive	24	53.3	4	8.9	3	6.7	1	2.2	5	11.1	8	17.8	45	100.0	—
Other Services	8	28.6	5	17.9	3	10.7	3	10.7	2	7.1	7	25.0	28	100.0	13.0
OWNERSHIP															
Local	49	40.2	12	9.8	13	10.7	18	14.8	8	6.6	22	18.0	122	100.0	10.1
Government	7	53.8	2	15.4	1	7.7	1	7.7	0	—	2	15.4	13	100.0	—
Foreign	15	75.0	2	10.0	0	—	1	5.0	1	5.0	1	5.0	20	100.0	—
YEARS IN OPERATION															
Under 10 years	20	47.6	4	9.5	6	14.3	5	11.9	0	—	7	16.7	42	100.0	7.7
10-25 years	22	40.0	3	5.5	4	7.3	11	20.0	5	9.1	10	18.2	55	100.0	10.8
Over 25 years	25	50.0	7	14.0	4	8.0	4	8.0	3	6.0	7	14.0	50	100.0	4.1
Not Stated	4	50.0	2	25.0	0	—	0	—	1	12.5	1	12.5	8	100.0	—

TABLE 12: OVERDRAFT CREDIT AS A PROPORTION OF TOTAL BANK CREDIT BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Overdraft Loan/Total Bank Credit														Total all Firms		
	No Bank Credit		Under 10%		10-25%		26-50%		50-70%		Over 70%		Not Stated		Number	Per cent	Median
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent			
TOTAL, ALL FIRMS	30	19.4	21	13.5	5	3.2	26	16.8	19	12.3	51	32.9	3	1.9	155	100.0	58.0
SIZE OF FIRM																	
Small	17	34.7	6	12.2	1	2.0	4	8.2	2	4.1	18	36.7	1	2.0	49	100.0	100.0
Medium	8	11.1	6	8.3	3	4.2	17	23.6	13	18.1	25	34.7	0	—	72	100.0	57.2
Large	5	14.7	9	26.5	1	2.9	5	14.7	4	11.8	8	23.5	2	5.9	34	100.0	33.2
INDUSTRY GROUP																	
Petroleum	5	29.4	3	17.6	3	17.6	3	17.6	2	11.8	1	5.9	0	—	17	100.0	28.7
Manufacturing	7	11.7	8	13.3	1	1.7	13	21.7	12	20.0	19	31.7	0	—	60	100.0	57.7
Other Goods																	
Producing	0	—	1	20.0	0	—	2	40.0	1	20.0	0	—	1	20.0	5	100.0	37.2
Distributive	10	22.2	3	6.7	0	—	7	15.6	3	6.7	21	46.7	1	2.2	45	100.0	72.5
Other Services	8	28.6	6	21.4	1	3.6	1	3.6	1	3.6	10	35.7	1	3.6	28	100.0	71.2
OWNERSHIP																	
Local	17	13.9	15	12.3	4	3.3	23	18.9	16	13.1	44	36.1	3	2.5	122	100.0	58.3
Government	3	23.1	4	30.8	1	7.7	1	7.7	1	7.7	3	23.1	0	—	13	100.0	26.0
Foreign	10	50.0	2	10.0	0	—	2	10.0	2	10.0	4	20.0	0	—	20	100.0	64.7
YEARS IN OPERATION																	
Under 10 years	13	31.0	9	21.4	2	4.8	5	11.9	3	7.1	10	23.8	0	—	42	100.0	37.6
10-25 years	12	21.8	5	9.1	2	3.6	9	16.4	7	12.7	18	32.7	2	3.6	55	100.0	61.3
Over 25 years	5	10.0	5	10.0	1	2.0	10	20.0	8	16.0	21	42.0	0	—	50	100.0	60.1
Not Stated	0	—	2	25.0	0	—	2	25.0	1	12.5	2	25.0	1	12.5	8	100.0	45.6

Corporate Financing Revisited

TABLE 13: REASONS FOR CHOICE OF MOST UTILIZED LOAN FACILITY BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Reasons for Choice of Most Utilized Loan Facility														Total Responses	
	Cost of Funds		Immediate Access		Flexibility		Too much Collateral		Choose All		None		Not Stated		Number	Percent
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
TOTAL, ALL FIRMS	44	21.4	73	35.4	77	37.4	12	5.8	2	1.6	10	8.2	2	1.6	122	100.0
SIZE OF FIRM																
Small	10	17.9	24	42.9	20	35.7	2	3.6	0	—	1	3.2	1	3.2	31	100.0
Medium	20	18.5	38	35.2	44	40.7	6	5.6	2	3.1	6	9.4	1	1.6	64	100.0
Large	14	33.3	11	26.2	13	31.0	4	9.5	0	—	3	11.1	0	—	27	100.0
INDUSTRY GROUP																
Petroleum	5	25.0	5	25.0	7	35.0	3	15.0	0	.0	1	8.3	0	—	12	100.0
Manufacturing	19	20.2	33	35.1	35	37.2	7	7.4	2	3.8	2	3.8	2	3.8	53	100.0
Other Goods																
Producing	2	28.6	3	42.9	2	28.6	0	—	0	—	0	—	0	—	4	100.0
Distributive	10	18.2	21	38.2	24	43.6	0	—	0	—	4	11.8	0	—	34	100.0
Other Services	8	26.7	11	36.7	9	30.0	2	6.7	0	—	3	15.8	0	—	19	100.0
OWNERSHIP																
Local	34	19.4	65	37.1	67	38.3	9	5.1	2	2.0	8	7.8	1	1.0	102	100.0
Government	4	33.3	3	25.0	3	25.0	2	16.7	0	—	2	20.0	1	10.0	10	100.0
Foreign	6	31.6	5	26.3	7	36.8	1	5.3	0	—	0	.0	0	—	10	100.0
YEARS IN OPERATION																
Under 10 years	9	22.0	12	29.3	16	39.0	4	9.8	1	3.4	4	13.8	2	6.9	29	100.0
10-25 years	14	18.4	28	36.8	27	35.5	7	9.2	1	2.4	1	2.4	0	—	41	100.0
Over 25 years	19	24.1	30	38.0	29	36.7	1	1.3	0	—	3	6.7	0	—	45	100.0
Not Stated	2	20.0	3	30.0	5	50.0	0	—	0	—	2	28.6	0	—	7	100.0

### External Sources

Firms identified bank funds (bank loans and decreases in cash and bank balances) as well as trade credit as their major sources of external funds. The median external funds ratio for the entire sample was 69.4 per cent. However, there was considerable variation in this ratio. Indeed, it was observed that some of the more successful firms seemed to be quite conservative when it came to the direct use of bank funds. Thus, while the mean bank funds ratio was 26.3 per cent, the median was only 7.7 per cent. The ratio of trade credits to total sources of funds was also positively skewed and this median was 7.7 per cent. An analysis of the grouped data revealed that the majority of firms (87 firms or 56.1 per cent) reported that bank resources represented less than 25 per cent of total sources of funds. While 14 firms (9 per cent) reported that the ratio of bank funds to total sources of funds was between 26 and 50 per cent, 20 firms (12.9 per cent) reported that it was between 51 and 70 per cent, while 9 firms (5.8 per cent) indicated that the ratio exceeded 70 per cent. An analysis of ownership pattern showed that 21.4 per cent of the locally-owned firms reported a ratio of bank funds to total sources of funds to be over 50 per cent, while 75 per cent of foreign-owned firms and 53.8 per cent of the government-controlled respondents reported that this ratio was under 10 per cent.

### Bank Financing

In order to obtain a clearer picture of the use of commercial bank credit, the firms were asked to list by type of loan, the total value of commercial bank credit outstanding as at May 31, 1992. Thirty firms (19.4 per cent) indicated that they had no commercial bank credit outstanding. More than half the firms (17) that had no commercial bank outstanding were small firms, a similar number were locally-owned although these firms represented only 13.9 per cent of all locally-owned firms. Foreign owned firms did not seem to utilise the local commercial bank financing facilities as half of the foreign owned firms reported that they had no commercial bank credit outstanding. Thirteen (31 per cent) of the firms that had been in operation for less than 10 years reported that they had no commercial bank credit outstanding as of May 31, 1992. Of firms in operation between 10 and

25 years and over 25 years, 21.8 and 10 per cent respectively, reported no outstanding bank credit for the same period.

Among firms which had bank credit, overdraft credit appeared to be the most popular instrument of bank borrowing. The median ratio for overdraft credit to total bank credit was 58 per cent. When analyzed by size of firm there was a marked preference for this form of financing among small firms, as the median small firm reported that overdraft credit represented 100 per cent of total bank credit. It was further observed that 18 of the small firms (36.7 per cent) responding, reported overdraft credit as representing over 70 per cent of total bank credit. On the other hand, the average for large firms was 23.5 per cent, while 26.5 per cent of these firms reported a ratio of less than 10 per cent. Firms in the Distributive sector seemed to favour this form of credit. The median proportion of overdraft credit to total credit outstanding was 72 per cent and 21 firms (46.7 per cent) reported that overdraft loans accounted for more than 70 per cent of total loans. In contrast, firms in the Petroleum sector reported an average ratio of only 28.7 per cent and 35.2 per cent of the firms in this sector reported a ratio of less than 25 per cent. The preference for overdraft credit was also significant in the Other Services sector where the median ratio was 71.2 per cent, and in the Manufacturing sector where the ratio averaged 57.7 per cent.

Firms were also asked to give the reasons why they opted for the financial instrument they were utilizing the most as at May 31, 1992. The most popular reason given was flexibility indicated by 37.4 per cent, followed by immediate access to funds which accounted for 35.4 per cent of the responses. One interesting finding was that only 21.4 per cent of the respondents indicated that cost factors were important in the choice of the credit instruments, while only 5.8 per cent of the respondents indicated that the cost of using alternative instruments had an important effect on their choice of instrument.

### USES OF FUNDS

The survey also sought to determine how the funds from the various sources were being put to use by firms. A key concern of development economists has been the efficiency of the financial system in channeling financial resources to firms in the real sector. Economists believe that the more efficient the financial system, the higher

TABLE 14: FIXED INVESTMENT RATIO BY SIZE, INDUSTRY GROUP,  
OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Fixed Investment/Total Sources of Funds												Total all Firms		
	Under 10%		10-25%		26-50%		51-70%		Over 70%		Not Stated		Num- per	Per cent	Med- ian
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent			
TOTAL, ALL FIRMS	52	33.5	33	21.3	28	18.1	5	3.2	12	7.7	25	16.1	155	100.0	15.4
SIZE OF FIRM															
Small	21	42.9	5	10.2	7	14.3	1	2.0	3	6.1	12	24.5	49	100.0	6.5
Medium	23	31.9	18	25.0	13	18.1	3	4.2	5	6.9	10	13.9	72	100.0	15.4
Large	8	23.5	10	29.4	8	23.5	1	2.9	4	11.8	3	8.8	34	100.0	19.6
INDUSTRY GROUP															
Petroleum	3	17.6	3	17.6	5	29.4	2	11.8	3	17.6	1	5.9	17	100.0	27.1
Manufacturing	16	26.7	18	30.0	9	15.0	2	3.3	6	10.0	9	15.0	60	100.0	16.8
Other Goods															
Producing	2	40.0	0	.0	2	40.0	0	—	0	—	1	20.0	5	100.0	15.4
Distributive	22	48.9	9	20.0	6	13.3	1	2.2	0	—	7	15.6	45	100.0	6.5
Other Services	9	32.1	3	10.7	6	21.4	0	—	3	10.7	7	25.0	28	100.0	19.4
OWNERSHIP															
Local	43	35.2	22	18.0	22	18.0	4	3.3	9	7.4	22	18.0	122	100.0	12.7
Government	1	7.7	5	38.5	3	23.1	1	7.7	1	7.7	2	15.4	13	100.0	24.4
Foreign	8	40.0	6	30.0	3	15.0	0	—	2	10.0	1	5.0	20	100.0	14.0
YEARS IN OPERATION															
Under 10 years	10	23.8	8	19.0	10	23.8	1	2.4	5	11.9	8	19.0	42	100.0	18.4
10-25 years	23	41.8	9	16.4	8	14.5	2	3.6	4	7.3	9	16.4	55	100.0	10.4
Over 25 years	18	36.0	13	26.0	8	16.0	2	4.0	2	4.0	7	14.0	50	100.0	16.1
Not Stated	1	12.5	3	37.5	2	25.0	0	—	1	12.5	1	12.5	8	100.0	16.3

TABLE 15: INVESTMENT IN PLANT AND MACHINERY AS A PROPORTION OF TOTAL INVESTMENT  
BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Plant and Machinery/Total Investment										Total all Firms		
	Under 30%		30-49%		50-80%		Over 80%		Not Stated		Num- ber	Per cent	Med- ian
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent			
TOTAL, ALL FIRMS	66	42.6	15	9.7	25	16.1	28	18.1	21	13.5	155	100.0	30.9
SIZE OF FIRM													
Small	20	40.8	2	4.1	4	8.2	9	18.4	14	28.6	49	100.0	8.2
Medium	35	48.6	6	8.3	18	25.0	10	13.9	3	4.2	72	100.0	29.4
Large	11	32.4	7	20.6	3	8.8	9	26.5	4	11.8	34	100.0	41.0
INDUSTRY GROUP													
Petroleum	6	35.3	0	—	3	17.6	7	41.2	1	5.9	17	100.0	76.0
Manufacturing	18	30.0	8	13.3	17	28.3	13	21.7	4	6.7	60	100.0	54.3
Other Goods Producing	2	40.0	1	20.0	0	—	1	20.0	1	20.0	5	100.0	30.6
Distributive	24	53.3	3	6.7	5	11.1	5	11.1	8	17.8	45	100.0	9.9
Other Services	16	57.1	3	10.7	0	—	2	7.1	7	25.0	28	100.0	8.2
OWNERSHIP													
Local	57	46.7	11	9.0	16	13.1	21	17.2	17	13.9	122	100.0	28.2
Government	1	7.7	4	30.8	2	15.4	4	30.8	2	15.4	13	100.0	50.6
Foreign	8	40.0	0	—	7	35.0	3	15.0	2	10.0	20	100.0	55.3
YEARS IN OPERATION													
Under 10 years	14	33.3	6	14.3	4	9.5	10	23.8	8	19.0	42	100.0	40.5
10-25 years	22	40.0	3	5.5	12	21.8	9	16.4	9	16.4	55	100.0	38.5
Over 25 years	27	54.0	5	10.0	8	16.0	8	16.0	2	4.0	50	100.0	26.3
Not Stated	3	37.5	1	12.5	1	12.5	1	12.5	2	25.0	8	100.0	36.6

TABLE 16: PROPORTION OF INVESTMENT FINANCED BY INTERNAL FUNDS  
BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Investments/Internal Funds												Total all Firms	
	Nil		1-35%		36-80%		Over 80%		Not Stated		Not Applicable			
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
TOTAL, ALL FIRMS	55	35.5	10	6.5	9	5.8	54	34.8	19	12.3	8	5.2	155	100.0
SIZE OF FIRM														
Small	14	28.6	2	4.1	0	—	19	38.8	9	18.4	5	10.2	49	100.0
Medium	33	45.8	5	6.9	8	11.1	18	25.0	7	9.7	1	1.4	72	100.0
Large	8	23.5	3	8.8	1	2.9	17	50.0	3	8.8	2	5.9	34	100.0
INDUSTRY GROUP														
Petroleum	7	41.2	0	—	1	5.9	7	41.2	2	11.8	0	—	17	100.0
Manufacturing	25	41.7	4	6.7	5	8.3	21	35.0	3	5.0	2	3.3	60	100.0
Other Goods														
Producing	3	60.0	0	—	0	—	0	—	2	40.0	0	—	5	100.0
Distributive	13	28.9	4	8.9	3	6.7	15	33.3	6	13.3	4	8.9	45	100.0
Other Services	7	25.0	2	7.1	0	—	11	39.3	6	21.4	2	7.1	28	100.0
OWNERSHIP														
Local	47	38.5	8	6.6	8	6.6	38	31.1	14	11.5	7	5.7	122	100.0
Government	2	15.4	1	7.7	0	—	7	53.8	—	23.1	0	—	13	100.0
Foreign	6	30.0	1	5.0	1	5.0	—	—	—	—	1	5.0	20	100.0
YEARS IN OPERATION														
Under 10 years	12	28.6	4	9.5	0	—	17	40.5	6	14.3	3	7.1	42	100.0
10-25 years	20	36.4	2	3.6	5	9.1	18	32.7	7	12.7	3	5.5	55	100.0
Over 25 years	21	42.0	4	8.0	3	6.0	17	34.0	3	6.0	2	4.0	50	100.0
Not Stated	2	25.0	0	—	1	12.5	2	25.0	3	37.5	0	—	8	100.0

the levels of investment and as a consequence increased economic growth and development. In this section we focus our attention on the fixed investment ratio and also examine the relationship between the type of capital investment undertaken and how it was financed.

### Investment in Fixed Assets

The survey results indicated that the median respondent invested 15.4 per cent of total funds in fixed assets. Analysis of the grouped data reveals that 33.5 per cent of the respondents had fixed investment ratios below 10 per cent, 39.4 per cent had ratios between 10 and 50 per cent, while for 10.9 it was over 50 per cent.

When analyzed by size, the median small firm invested about 6.5 per cent of total funds in fixed assets, while medium-sized and large firms were investing 15.4 per cent and 19.6 per cent respectively. Further, while 42.9 per cent of the small firms had fixed investment ratios below 10 per cent, only 23.5 per cent of the large firms had fixed investment ratios below this level.

Analyzed by industry grouping, firms in the Petroleum sector were the heaviest investors as expected, while firms in the Distributive sector had the lowest fixed asset ratios. The median firm in the Petroleum sector had a fixed investment ratio of 27.1 per cent while for the Distributive sector this ratio was only 6.5 per cent. It was also observed that while 29.4 per cent of the firms in the Petroleum sector had fixed investment ratios above 50 per cent, 17.6 per cent had fixed investment ratios below 10 per cent.

The survey results also suggest that the proportion of funds invested varied with ownership. The median fixed investment ratio for government-controlled firms was 24.4 per cent while for locally-owned and foreign firms the median averaged 14 per cent.

### Types of Investment

The survey revealed that expenditure on plant and machinery was the most popular type of investment although there were significant variations across size, industry grouping and ownership. The median firm invested about 30 per cent of its budget for fixed assets in plant and machinery. Expenditure on plant and machinery made up less than 30 per cent of investment expenditure for 42.6 per cent (66 firms) of

the 155 captioned firms, while 18.1 per cent reported that over 80 per cent of the investment budget was utilized for plant and machinery.

Some variability was observed in the ratio of investment in plant and machinery to total investment when the data were analyzed by size of firm. Small firms typically spend less on plant and machinery when compared to medium size and large firms. Indeed, the data revealed that the median small firms spent a greater proportion (11.3 per cent) of its investment funds on office equipment than firms in the other size groups. Results indicate that 26.6 per cent of the small firms were spending more than 50 per cent of total investment funds for plant and machinery. In contrast, almost 40 per cent of the medium-sized firms spent over 50 per cent of funds allocated for investment on plant and machinery. Although a relatively smaller proportion of the large firms fell into this cohort (35.3 per cent), about one third of these firms reported that they were investing under 30 per cent of total investment funds in plant and machinery.

An analysis by industry grouping indicated that 58.8 per cent of firms in the Petroleum sector spent over 50 per cent of investment funds on plant and machinery. Further, 41.2 per cent spent over 80 per cent of their investment funds in this manner. Firms in the Manufacturing sector also reported high rates of investment in plant and machinery with 50 per cent reporting investment expenditure in excess of 50 per cent on plant and machinery. By contrast, firms in the Distributive and Other Services sectors typically invested proportionately less on plant and machinery and only 22.2 per cent and 7.1 per cent of these firms respectively were spending more than 50 per cent of investment funds on plant and machinery.

### Financing of Capital Investments

The survey instrument requested information on the various sources of finance used for investment in fixed assets. From the analysis, it was evident that the most popular method of financing investment was by internal funds. The survey revealed that 35.5 per cent of the respondents did not use internally generated funds to finance investments, for 6.5 per cent of the firms used less than 35 per cent of such funds to finance investments and 34.8 per cent financed over 80 per cent of their investment in this manner.

Analysis across size of firms indicated that medium sized firms were most numerous among those not utilizing internal funds for investment expenditure while large firms seemed to prefer this method. In fact, 50 per cent of the large respondents reported that internal funds financed more than 80 per cent of their expenditure.

Foreign firms displayed a marked preference for financing investments from internally generated funds as 45 per cent of these firms reported that internal funds financed over 80 per cent of their investment. Government-controlled firms also seemed to prefer internal funding of investment as 53.8 per cent of these firms reported that this accounted for more than 80 per cent of investment funding. In contrast, locally owned firms utilized external funding and only 31.1 per cent of these firms were represented in the 80 per cent and over cohort.

The firms that responded to the survey did not generally utilize overdraft credit to finance investment. However, in the Distributive and Other Goods producing sectors overdraft credit was an important alternative to internal funding. External funding appeared to be an important means of financing investment among firms in the Other Goods Producing Sector.

### BUSINESS FINANCIAL STRUCTURE

The financial structure of firms was analyzed utilizing some key financial ratios calculated from balance sheet information for 1991. The response rate was generally good as only 5 firms did not supply any information while 10 firms supplied information for 1990 and 140 firms supplied data for the period requested. Nevertheless, it should be noted that the usual caveats with respect to inference apply in this case.

#### Gearing

The relationship between medium and long-term debt to net worth or shareholder's equity (Issued Capital plus Reserves) and total assets normally referred to as the gearing of a firm is conventionally used as a measure of financial soundness. The debt to equity ratio indicates the relative importance of external funds to financing the operations of the firm. Preliminary analysis revealed that the median debt to equity ratio for the respondents to the survey was 127.3 per cent.

However, the level of gearing was significantly higher for small firms when compared to larger firms. The median debt to equity ratio was 143.7 per cent for small firms, 130.9 per cent for medium-sized firms and 88 per cent for large firms. Analysis of the grouped data by size of firm indicated that 55.5 per cent of the medium-sized firms surveyed had ratios over 100 per cent, 55.1 per cent of the small firms and 38.2 per cent of the large firms registered ratios over 100 per cent.

When analyzed by ownership, government controlled firms emerged with the lowest median debt to equity ratios (45.1 per cent) while locally-owned and foreign-owned firms had median debt to equity ratios of 163 per cent and 75 per cent, respectively. In terms of years in operation, firms in operation between 10 and 25 years had the highest median debt to equity ratios averaging 163.6 per cent debt to assets ratio of 63.1 per cent. Firms operating more than 25 years registered higher debt to equity ratios than firms operating less than 10 years.

Of the 155 responding firms, 51.6 per cent (80 firms) had a debt to equity ratio of over 100 per cent, 27.1 per cent registered a ratio between 40 and 100 per cent and 13.5 per cent or 21 firms were under 40 per cent. Of the 80 firms which had a gearing ratio over 100 per cent, 11.6 per cent had ratios of over 500 per cent, the other firms had ratios between 100 and 500 per cent. The non-response rate for this section of the questionnaire was 7.7 per cent (12 firms).

Analysis by industry grouping indicated that firms in the Distributive sector had the highest median debt to equity ratio which stood at 169.7 per cent while the lowest rate recorded was 78.5 per cent from the Petroleum sector. A cross-sectional analysis highlights that of the 80 firms which registered a ratio over 100 per cent, 37.5 per cent were in the Manufacturing sector and 36.3 per cent in the Distributive sector. Taken together, they account for almost 75 per cent of the firms registering a ratio of over 100 per cent. Of the 27.1 per cent which had ratios between 40 per cent and 100 per cent, 21 were in the Manufacturing sector and 7 in the Distributive sector. In the Petroleum sector 64.7 per cent (10 firms) had debt to equity ratios below 100 per cent while 11.8 per cent had ratios which exceeded 500 per cent. Eighty firms (51.6 per cent) had debt to equity ratios of over 100 per cent, and of these, 92.5 per cent (74 firms) were locally-

TABLE 17: COMPARATIVE GEARING RATIOS BY SIZE, INDUSTRY GROUP,  
OWNERSHIP AND YEARS IN OPERATION  
(Per Cent)

Size, Industry group Ownership and Years In Operation	Debt/ Equity Ratio	Equity/ Assets Ratio	Debt/Assets
	Median	Median	Median
TOTAL, ALL FIRMS	127.3	40.4	59.6
SIZE OF FIRM			
Small	143.7	37.7	62.3
Medium	130.9	37.8	62.2
Large	87.9	47.4	52.6
INDUSTRY GROUP			
Petroleum	78.5	46.9	53.1
Manufacturing	118.6	43.7	56.3
Other Goods Producing	136.8	17.9	82.1
Distributive	169.7	28.7	71.3
Other Services	101.8	42.9	57.1
OWNERSHIP			
Local	163.0	36.4	63.6
Government	45.1	61.9	38.1
Foreign	75.0	54.4	45.6
YEARS IN OPERATION			
Under 10 years	86.2	37.1	62.9
10-25 years	163.6	36.9	63.1
Over 25 years	94.4	47.2	52.8

owned while 5 were foreign-owned. The lone government controlled firm which fell in this group registered a ratio over 500 per cent.

The behaviour of the equity to assets and debt to assets ratios displayed a similar pattern to that of the debt equity ratio. The highest gearing ratios were seen in the locally-owned firms within the Manufacturing and Distributive sectors which had been operating for over 10 years. However, foreign-owned companies were not as highly geared. Of the twenty foreign firms surveyed, only 5 registered debt to equity ratios over 100 per cent, 11 firms had ratios between 40 and 100 per cent and 4 firms had ratios of under 40 per cent.

TABLE 18: DEBT/EQUITY RATIO BY SIZE,  
INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Debt/Equity Ratio										Total all Firms	
	Over 500%		101-500%		40-100%		Under 40%		Not Stated			
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
TOTAL, ALL FIRMS	18	11.6	62	40.0	42	27.1	21	13.5	12	7.7	155	100.0
SIZE OF FIRM												
Small	6	12.2	21	42.9	8	16.3	8	16.3	6	12.2	49	100.0
Medium	7	9.7	33	45.8	21	29.2	8	11.1	3	4.2	72	100.0
Large	5	14.7	8	23.5	13	38.2	5	14.7	3	8.8	34	100.0
INDUSTRY GROUP												
Petroleum	2	11.8	5	29.4	5	29.4	5	29.4	0	—	17	100.0
Manufacturing	5	8.3	25	41.7	21	35.0	7	11.7	2	3.3	60	100.0
Other Goods Producing	0	—	3	60.0	0	—	1	20.0	1	20.0	5	100.0
Distributive	10	22.2	19	42.2	7	15.6	6	13.3	3	6.7	45	100.0
Other Services	1	3.6	10	35.7	9	32.1	2	7.1	6	21.4	28	100.0
OWNERSHIP												
Local	15	12.3	59	48.4	25	20.5	14	11.5	9	7.4	122	100.0
Government	1	7.7	0	—	6	46.2	4	30.8	2	15.4	13	100.0
Foreign	2	10.0	3	15.0	11	55.0	3	15.0	1	5.0	20	100.0
YEARS IN OPERATION												
Under 10 years	6	14.3	12	28.6	12	28.6	10	23.8	2	4.8	42	100.0
10-25 years	7	12.7	28	50.9	13	23.6	2	3.6	5	9.1	55	100.0
Over 25 years	4	8.0	19	38.0	16	32.0	7	14.0	4	8.0	50	100.0
Not Stated	1	12.5	3	37.5	1	12.5	2	25.0	1	12.5	8	100.0

TABLE 19 : EQUITY/ASSET RATIO BY SIZE, INDUSTRY GROUP,  
OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Investments/Internal Funds												Total all Firms	
	Over 70%		51-70%		26-50%		10-25%		Under 10%		Not Stated		Number	Per cent
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent		
TOTAL, ALL FIRMS	18	11.6	37	23.9	49	31.6	18	11.6	26	16.8	7	4.5	155	100.0
SIZE OF FIRM														
Small	9	18.4	6	12.2	18	36.7	4	8.2	9	18.4	3	6.1	49	100.0
Medium	5	6.9	19	26.4	24	33.3	12	16.7	10	13.9	2	2.8	72	100.0
Large	4	11.8	12	35.3	7	20.6	2	5.9	7	20.6	2	5.9	34	100.0
INDUSTRY GROUP														
Petroleum	3	17.6	5	29.4	3	17.6	4	23.5	2	11.8	0	—	17	100.0
Manufacturing	10	16.7	17	28.3	24	40.0	2	3.3	5	8.3	2	3.3	60	100.0
Other Goods Producing	0	—	0	—	2	40.0	1	20.0	2	40.0	0	—	5	100.0
Distributive	3	6.7	7	15.6	15	33.3	6	13.3	13	28.9	1	2.2	45	100.0
Other Services	2	7.1	8	28.6	5	17.9	5	17.9	4	14.3	4	14.3	28	100.0
OWNERSHIP														
Local	12	9.8	21	17.2	47	38.5	17	13.9	20	16.4	5	4.1	122	100.0
Government	4	30.8	5	38.5	0	—	0	—	2	15.4	2	15.4	13	100.0
Foreign	2	10.0	11	55.0	2	10.0	1	5.0	4	20.0	0	—	20	100.0
YEARS IN OPERATION														
Under 10 years	7	16.7	11	26.2	8	19.0	5	11.9	10	23.8	1	2.4	42	100.0
10-25 years	4	7.3	9	16.4	23	41.8	7	12.7	9	16.4	3	5.5	55	100.0
Over 25 years	6	12.0	16	32.0	18	36.0	3	6.0	5	10.0	2	4.0	50	100.0
Not Stated	1	12.5	1	12.5	0	—	3	37.5	2	25.0	1	12.5	8	100.0

TABLE 20: DEBT/ASSET RATIO BY SIZE, INDUSTRY GROUP,  
OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Debt/Asset Ratio												Total all Firms	
	Over 70% -		51-70%		26-50%		10-25%		Under 10%		Not Stated		Number	Per cent
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent		
TOTAL, ALL FIRMS	54	34.8	39	25.2	44	28.4	9	5.8	2	1.3	7	4.5	155	100.0
SIZE OF FIRM														
Small	17	34.7	14	28.6	9	18.4	5	10.2	1	2.0	3	6.1	49	100.0
Medium	25	34.7	21	29.2	21	29.2	3	4.2	0	—	2	2.8	72	100.0
Large	12	35.3	4	11.8	14	41.2	1	2.9	1	2.9	2	5.9	34	100.0
INDUSTRY GROUP														
Petroleum	6	35.3	3	17.6	6	35.3	1	5.9	1	5.9	0	—	17	100.0
Manufacturing	13	21.7	18	30.0	22	36.7	5	8.3	0	—	2	3.3	60	100.0
Other Goods Producing	3	60.0	2	40.0	0	—	0	—	0	—	0	—	5	100.0
Distributive	23	51.1	11	24.4	7	15.6	3	6.7	0	—	1	2.2	45	100.0
Other Services	9	32.1	5	17.9	9	32.1	0	—	1	3.6	4	14.3	28	100.0
OWNERSHIP														
Local	47	38.5	37	30.3	26	21.3	6	4.9	1	.8	5	4.1	122	100.0
Government	2	15.4	0	—	7	53.8	1	7.7	1	7.7	2	15.4	13	100.0
Foreign	5	25.0	2	10.0	11	55.0	2	10.0	0	—	0	—	20	100.0
YEARS IN OPERATION														
Under 10 years	19	45.2	4	9.5	13	31.0	5	11.9	0	—	1	2.4	42	100.0
10-25 years	18	32.7	21	38.2	13	23.6	0	—	0	—	3	5.5	55	100.0
Over 25 years	12	24.0	14	28.0	17	34.0	3	6.0	2	4.0	2	4.0	50	100.0
Not Stated	5	62.5	0	—	1	12.5	1	12.5	0	—	1	12.5	8	100.0

### Importance of Commercial Bank Credit

The relative level of firms' indebtedness to commercial banks was also surveyed. It should be noted that the following analysis probably understates the importances of commercial bank credit in the financial structure of firms as the category "other liabilities" typically includes items such as trade credits which may have been facilitated mainly through commercial bank financing.

Overall, commercial bank liabilities as a proportion of total assets averaged 13.5 per cent while the ratio of commercial bank liabilities to total liabilities averaged 25 per cent (see Table 21). Analysis of the grouped data reveals that 6.4 per cent of firms surveyed recorded a ratio of commercial bank liabilities to total assets of over 50 per cent, 20 per cent (31 firms) a ratio between 26 and 50 per cent and 69.1 per cent were below 25 per cent. In the case of the commercial bank liabilities as a proportion of total liabilities, 7.7 per cent or 12 firms were over 70 per cent, while for 47.1 per cent of the respondents (73 firms), this ratio was under 25 per cent.

The most significant source of variability in these ratios was observed when the data were analyzed by ownership. In the case of the commercial banks liabilities to total assets ratio, the median for locally owned firms stood at 15.6 per cent while, for government firms this ratio averaged 5.48 per cent. The median foreign owned firm had no commercial bank credit outstanding as foreign owned firms were then restricted from accessing domestic credit. Grouped data analysis revealed that the 69.2 per cent of the government-controlled firms and 80 per cent of the foreign-owned firms had bank liabilities to total asset ratios of under 10 per cent. This pattern also applied to the ratio of bank liabilities as a proportion of total liabilities. The median for locally-owned firms was 30.4 per cent with 25.4 per cent of the locally-owned firms reporting that this ratio exceeded 50 per cent. By contrast, for government controlled firms, commercial bank liabilities as a proportion of total liabilities averaged 6.9 per cent, with 46.2 per cent of these firms recording ratios less than 10 per cent. In line with the financial institution hypothesis, the average for foreign firms was zero per cent with 80 per cent of these firms reporting ratios below 10 per cent (see Table 21 and 22). Interestingly, for locally-owned firms the median ratio of long term commercial bank liabilities to total liabilities stood at 15.6 per cent.

TABLE 21: IMPORTANCE OF COMMERCIAL BANK CREDIT  
BY SIZE, INDUSTRY GROUP, OWNERSHIP AND  
YEARS IN OPERATION  
(Per Cent)

Size, Industry group, Ownership and Years In Operation	Commercial Banks Liabilities/Total Assets	Commercial Banks Liabilities/Total Liabilities
	Median	Median
TOTAL, ALL FIRMS	13.49	25.03
SIZE OF FIRM		
Small	7.83	16.81
Medium	16.55	31.47
Large	12.63	18.38
INDUSTRY GROUP		
Petroleum	9.92	26.56
Manufacturing	14.47	31.29
Other Goods Producing	20.34	11.98
Distributive	15.19	20.09
Other Services	3.64	10.76
OWNERSHIP		
Local	15.61	30.39
Government	5.48	6.86
Foreign	—	—
YEARS IN OPERATION		
Under 10 years	14.92	31.59
10-25 years	9.38	15.08
Over 25 years	14.72	29.43

Analyzed by industry grouping, the data revealed significant differences in the relative importance of commercial bank credit. Firms in the Other Services sector recorded the lowest ratios for commercial bank liabilities to total assets (3.6 per cent) as well as commercial bank liabilities to total liabilities (10.7 per cent). By contrast, firms in the Manufacturing and Petroleum sectors reported averages for the ratio of commercial bank liabilities to total liabilities of 31.3 per cent and 26.6 per cent, respectively. Indeed, analysis of the grouped data indicates that for twelve of the 28 firms in the Other Services sector commercial bank liabilities constituted less than 10 per cent of total long term liabilities, while in the Manufacturing and Petroleum sectors this cohort was occupied by 25 per cent and 35.3 per cent respectively of the firms in these sectors.

The survey results also revealed that the importance of commercial bank credit in the financial structure of firms appeared to vary considerably with the age of the firm. The variation was most pronounced for the ratio of commercial bank liabilities to total liabilities where the ratio for the most recently established firms was 31.6 per cent, with 28.6 per cent (12) of these firms reporting ratios above 51 per cent. In the case of firms operating between 10 and 25 years, the median was 15.1 per cent largely on account of the number of firms (38.2 per cent or 21 firms) reporting that commercial bank liabilities represented less than 10 per cent. By contrast, for the longest established firms the ratio of commercial bank liabilities to total liabilities averaged 29.4 per cent as the modal class was between 26 and 50 per cent.

## SECTION V

### Summary and Conclusion

The foregoing represents an attempt to garner current information on the extent to which firms were utilizing commercial bank credit to finance their operations, the preferred choice of financing instrument and the factors that may have influenced this choice. In addition, the survey also probed the quality of bank-firm relationships, constraints to expansion and the use of funds, both internally and externally generated.

The results indicate that multiple banking relationships were not typical as most firms dealt with one or two banks. Firms maintaining multiple banking relationships advanced flexibility and prudence as the two main reasons for so doing. In terms of the quality of bank-firm relationships, small firms tended to have a lower assessment of the quality of their relationship with banks, compared to large firms. In fact, a similar pattern was observed for firms' perception of their general relationship, the business advice given and the business services provided. In proportionate terms, large firms, followed by those of medium size, gave a more positive rating for all three areas of bank relations surveyed. It is important to note, however, that while for the general relationship over 80 per cent of the respondents indicated excellent or very good, for business advice and business services 41 and 54 per cent, respectively, gave this response.

TABLE 22: LIABILITIES OF COMMERCIAL BANKS AS A PROPORTION OF TOTAL ASSETS  
BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years In Operation	Liabilities to Commercial Banks/Total Assets												Total all Firms	
	Over 70%		51-70%		26-50%		10-25%		Under 10%		Not Stated		Number	Per cent
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent		
TOTAL, ALL FIRMS	3	1.9	7	4.5	31	20.0	41	26.5	66	42.6	7	4.5	155	100.0
SIZE OF FIRM														
Small	1	2.0	3	6.1	7	14.3	8	16.3	27	55.1	3	6.1	49	100.0
Medium-	2	2.8	2	2.8	19	26.4	23	31.9	24	33.3	2	2.8	72	100.0
Large	0	—	2	5.9	5	14.7	10	29.4	15	44.1	2	5.9	34	100.0
INDUSTRY GROUP														
Petroleum	0	—	2	11.8	1	5.9	5	29.4	9	52.9	0	—	17	100.0
Manufacturing	1	1.7	1	1.7	12	20.0	19	31.7	25	41.7	2	3.3	60	100.0
Other Goods Producing	0	—	1	20.0	1	20.0	2	40.0	1	20.0	0	—	5	100.0
Distributive	1	2.2	1	2.2	13	28.9	13	28.9	16	35.6	1	2.2	45	100.0
Other Services	1	3.6	2	7.1	4	14.3	2	7.1	15	53.6	4	14.3	28	100.0
OWNERSHIP														
Local	2	1.6	6	4.9	30	24.6	38	31.1	41	33.6	5	4.1	122	100.0
Government	0	—	1	7.7	1	7.7	0	—	9	69.2	2	15.4	13	100.0
Foreign	1	5.0	0	—	0	—	3	15.0	16	80.0	0	—	20	100.0
YEARS IN OPERATION														
Under 10 years	1	2.4	2	4.8	12	28.6	9	21.4	17	40.5	1	2.4	42	100.0
10-25 years	1	1.8	3	5.5	10	18.2	11	20.0	27	49.1	3	5.5	55	100.0
Over 25 years	1	2.0	1	2.0	8	16.0	18	36.0	20	40.0	2	4.0	50	100.0
Not Stated	0	—	1	12.5	1	12.5	3	37.5	2	25.0	1	12.5	8	100.0

TABLE 23: LIABILITIES OF COMMERCIAL BANKS AS A PROPORTION OF TOTAL LIABILITIES  
BY SIZE, INDUSTRY GROUP, OWNERSHIP AND YEARS IN OPERATION

Size, Industry Group, Ownership and Years in Operation	Liabilities to Commercial Banks/Total Liabilities												Total all Firms	
	Over 70%		51-70%		26-50%		10-25%		Under 10%		Not Stated		Number	Per cent
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent		
TOTAL, ALL FIRMS	12	7.7	22	14.2	41	26.5	25	16.1	48	31.0	7	4.5	155	100.0
SIZE OF FIRM														
Small	5	10.2	8	16.3	7	14.3	5	10.2	21	42.9	3	6.1	49	100.0
Medium	6	8.3	9	12.5	25	34.7	15	20.8	15	20.8	2	2.8	72	100.0
Large	1	2.9	5	14.7	9	26.5	5	14.7	12	35.3	2	5.9	34	100.0
INDUSTRY GROUP														
Petroleum	0	—	3	17.6	6	35.3	2	11.8	6	35.3	0	—	17	100.0
Manufacturing	4	6.7	9	15.0	21	35.0	9	15.0	15	25.0	2	3.3	60	100.0
Other Goods Producing	0	—	1	20.0	1	20.0	1	20.0	2	40.0	0	—	5	100.0
Distributive	5	11.1	5	11.1	11	24.4	10	22.2	13	28.9	1	2.2	45	100.0
Other Services	3	10.7	4	14.3	2	7.1	3	10.7	12	42.9	4	14.3	28	100.0
OWNERSHIP														
Local	10	8.2	21	17.2	34	27.9	23	18.9	29	23.8	5	4.1	122	100.0
Government	1	7.7	1	7.7	2	15.4	1	7.7	6	46.2	2	15.4	13	100.0
Foreign	1	5.0	0	—	5	25.0	1	5.0	13	65.0	0	—	20	100.0
YEARS IN OPERATION														
Under 10 years	6	14.3	6	14.3	12	28.6	4	9.5	13	31.0	1	2.4	42	100.0
10-25 years	4	7.3	8	14.5	7	12.7	12	21.8	21	38.2	3	5.5	55	100.0
Over 25 years	2	4.0	6	12.0	20	40.0	7	14.0	13	26.0	2	4.0	50	100.0
Not Stated	0	—	2	25.0	2	25.0	2	25.0	1	12.5	1	12.5	8	100.0

Similar to the findings of Farrell et al (1986), the most binding constraint to firms' scale of operations was market size. In order of importance, this was followed by the cost of finance and the availability of finance. In the previous study, however, the availability of management was the next most important factor to market size as a binding constraint. Of the factors offered as limitations to business expansion, few firms were affected by any, while those affected identified the availability of loanable funds and queries of project feasibility.

The survey disclosed that over the past 10 years since the last survey, the relative importance of internal funds in financing corporate activities has remained virtually unchanged, when measured by the median. The 1982 Corporate Financing Study found that the median firm generated 32 per cent of its funds internally while in 1992 the ratio obtained was 30.6 per cent. Farrell et al ascribed their observed ratio to fairly buoyant conditions, a high liquidity environment and therefore relatively easy access to credit. The stability of the ratio, notwithstanding successive years of negative economic growth and much less liquidity, suggests that there is a preference for external funding which is invariant to prevailing economic conditions.

The observed similarity of the median internal funds ratios with those of the 1986 study extended to the classification by size. Again, the ratio for small and large firms were highest with medium size firms registering the lowest. Although large firms in 1992 displayed the greatest reliance on internal funds, compared with small firms in 1982, the changes involved are quite small, making any conclusions drawn about this shift, tenuous at best. Further, the choice of external financing instrument reflected some conservatism on the part of the more successful firms regarding the use of bank credit. Almost half the firms reported bank funds ratios of under 10 per cent. These firms were predominantly medium sized, manufacturing firms, locally owned and operating in the private sector (see Table 11).

While it was noted that many firms did not have bank credit at the end of their last financial year, bank overdraft accounted for the single largest component for firms with outstanding credit.<sup>2</sup> In fact, one-third of the firms had over 70 per cent in overdraft credit, while for an almost equal amount, overdrafts accounted for between 25 and 70 per cent. Clearly, the results indicate flexibility and the imme-

diacy of access as the overriding reason for such heavy utilization of overdraft credit.

Just about half of the firms surveyed applied 25 per cent or less of their total funds to fixed assets, while the median firm invested approximately 15 per cent. As would be expected, Petroleum firms were the most heavy investors in fixed investments. Categorized by ownership, government controlled firms applied twice as much, in proportionate terms, in fixed assets than was the case for either private or foreign controlled firms.

An examination of firms' financial structure was undertaken to determine the extent of owners/shareholders financial stake in their businesses. The results were similar to the Farrell et al study, and it was found that firms were relatively highly geared, with small firms registering higher ratios than medium size or large firms. Whereas the 1981/1982 study found that newly established firms registered higher gearing ratios than their more mature counterparts, our survey found the opposite. This may be attributed to the declining economic conditions and extreme caution on the part of banks in extending credit to new businesses.

Another point of divergence between the current survey and the Farrell et al report relates to the ownership structure of firms. In this survey the median government controlled firm was observed to be less geared when compared to the foreign owned firms, however the results of the 1982 study found the reverse to be true. Nevertheless, firms continue to have a high ratio of debt to shareholders' equity as demonstrated in the 1982 survey.

As already noted, declining economic conditions had little impact on firms' financing strategy. The shortage of bank funds (characterized by very high interest rates) has not been an important enough deterrent for firms to seek alternative financing. Admittedly, Trinidad and Tobago does not have a developed capital market and firms have limited scope for raising additional capital to finance their operations hence their heavy reliance on debt.

In general, the results of both surveys were quite similar, though it is recognised that these may not be strictly comparable on account of the different sampling technique employed. Although there were few anomalies in the data, these were indicative of the need to further refine the survey instrument. The experience suggests that it may also be useful to institutionalize surveys of this type so as to monitor

changes in corporate financing structure and to facilitate an assessment of the impact of monetary policy on this structure.

### NOTES

- 1 Largely, foreign owned firms operating locally were subsidiaries or affiliated companies, thereby enabling them to access resources from foreign based parent companies. In addition, the high turnover-low operating cost nature of their activities enhanced their capacity to generate funds internally. It is also possible that local banks may have been unable to meet the highly specialized and sophisticated needs of some foreign owned firms, especially firms in the petrochemicals industry. More importantly, however, Central Bank restrictions, then in force, inhibited access to the domestic financial market by foreign owned firms.
- 2 This may not be representative of their true state of affairs as it is the practice of many firms to "tidy up" their accounts at the financial year's end to meet disclosure requirements.

### REFERENCES

- Bourne, C. "Business Financial Behaviour and the Credit System in Guyana". Paper presented at the Regional Monetary Studies Conference, Nassau, 1972.
- Farrell, T., Najar, A., and Marcelle, H. (1986). "Corporate Financing and Use of Bank Credit in Trinidad and Tobago", *Social and Economic Studies*, Vol. 35, No. 4.
- Greenwald, B., Stiglitz, J.E., and Weiss, A. (1984). "Information imperfections in the capital market and macroeconomic fluctuations", *American Economic Review*, Vol. 74.
- Mains, M. "Recent Corporate Financing Patterns", *Federal Reserve Bulletin*, September 1980.
- Mark, A.A. "Public Companies, Private Companies and Disclosure: How the Non-Disclosure of Financial Information Affects the National Economy", U.W.I., St. Augustine, 1973.
- Mayer, C.P. (1987). "Financial Systems and Corporate Investment", *Oxford Review of Economic Policy*, p. 3.
- Modigliani, F. and Miller, M.H. (1958). "The Cost of Capital, Corporate Finance and the Theory of Investment", *American Economic Review*, 48, pp. 201-297.
- Myers, S. (1977). "Determinants of Corporate Borrowing", *Journal of Financial Economics*, 5, pp. 147-75.
- Palmer, R. "Financing Corporate Investment in Jamaica", *Social and Economic Studies*, September 1967.