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BUSINESS FINANCIAL BEHAVIOUR

in the

COMMONWEALTH CARIBBEAN : A PRELIMINARY REPORT

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A INTRODUCTION

Monetary policy, as a subset of financial policy, though actually conducted through financial institutions, notably commercial banks, is essentially directed at businesses and households, the primary units of economic behaviour. To fully understand the operation of monetary policy, it is necessary not only to understand the vehicles for its transmission but also the response of the final actors to the policy-induced changes in the portfolios of financial institutions. For it is now part of our received knowledge that the response of primary units to changes in monetary policy instruments is distributed over a wide range of assets and spending decisions as opposed to the narrow class of financial instruments - Government securities, bank deposits, - generally identified in the pre-Gurley and Shaw era.

However, when we focus our attention on this area of interest, we find that, in contrast to the general field of commercial banking and central banking policy, little is actually known about the financial behaviour of businesses. Our analyses, if they may be called that, are more often than not, based on nothing more than a simple transplantation of the ideas stemming from the famous Oxford Studies on business behaviour. As is readily accepted, hypotheses developed in societies with mature and well-developed financial systems, are rarely ever applicable even with substantial modifications, to the Caribbean economy. Needed are hypotheses, behavioural postulates, developed within the context of Caribbean institutions and intended to explain the pattern of Caribbean financial behaviour.

But even when one recognises the need for theory, there still remains the problem of where and at what level of abstraction or aggregation to start. It is my feeling that the best point to start, the only logically sound point, is at the data gathering stage. Generalizations are only valid when they are derived from a set <sup>of</sup> facts and then reexamined for consistency and universality against a broader set of factual data. As far as financial behaviour in the Caribbean is concerned, we do not have at hand even the simple rudiments of factual data with which to begin to test established notions or construct new, and hopefully, more meaningful ones. To dramatize the state of our ignorance, it can be stated that we know virtually nothing even about the size (measured by assets) of firms. Our knowledge of this matter can be summed up somewhat exaggeratedly as "we know that there are a few big firms, and many small ones." But how big? How small? What is the middle like? And how does size affect financial behaviour? These we must in all honesty claim ignorance of.

## B NATURE OF DATA

The study of Business Financial Behaviour on which we are now submitting a very preliminary report is intended to reduce our ignorance. It is intended to provide descriptive material on several aspects of business financial behaviour. Among these are the following:

- i) The size distribution and the industrial distribution of firms.
- ii) Business savings. In this broad category information will be provided on profits, retentions, dividends, and taxation. A major purpose is to establish their economic (as distinct from accounting) relationships.
- iii) Investment behaviour and patterns of financing.
- iv) The balance between external and internal (to the firm) financing.
- v) The use of commercial banking facilities, terms of borrowing, and credit-criteria.
- vi) The volume, spread, terms, and determinants of trade credit.
- vii) Hire purchase financing in relation to business investment.

C LINES OF ANALYSIS

The data yielded by the survey will be utilized to test some hypotheses about various facets of financial behaviour contained in the economic literature. These can be mentioned briefly under five headings

a) FINANCIAL DETERMINANTS OF INVESTMENT BEHAVIOUR

The writings of Duesenberry,<sup>1</sup> Meyer and Kuh,<sup>2</sup> Kuh,<sup>3</sup> Anderson<sup>4</sup> and Drymes and Kurz,<sup>5</sup> among others, have attached much importance to the role of financial constraints in business fixed capital formation. Hypotheses within this field include the residual funds or profits hypothesis, the liquidity hypothesis i.e. that the firm's level of investment is partly constrained by the value of its accumulated holdings of cash and other short-term financial assets, as well as its existing debt-assets ratio, and a variant of the availability of credit hypothesis which relates investment expenditures to the level of external finance available.

b) BORROWING AND LIQUIDITY

Some effort will be made to establish the determinants of the business sector's borrowings from the banking system, and its holdings of government securities and cash. Among possible explanatory variables are the level of retained profits, previous levels of cash and other financial assets, the

<sup>1</sup> J.S. Duesenberry - Business Cycles and Economic Growth

<sup>2</sup> J.R. Meyer and Edwin Kuh - The Investment Decision

<sup>3</sup> Edwin Kuh - Capital Stock Growth: A Micro-econometric treatment

<sup>4</sup> W.L. Anderson - Corporate Finance and Fixed Investment also "Business Fixed Investment" in Determinants of Investment Behaviour (ed. R. Ferber)

<sup>5</sup> Phoebus Drymes and Mordecai Kurz "Investment, Dividends and External Finance Behaviour of Firms" in Determinants of Investment Behaviour (ed. R. Ferber)

size of the firm, the nature of its business activity, the level of sales, investment expenditures, taxes, interest rates, and existing debt asset ratios. Because this study is based on a limited number of cross-sections, it is not possible to examine explicitly the role of interest rates.

c) BUSINESS SAVINGS AND PROFITS

Hypothesis which make the level of the rate of profits a function of the size of the firm, and/or the degree of concentration, will be examined. The direction of the relationship between size (measured by assets, or turnover) is not <sup>a</sup>priori unambiguous. Bigness tends to be associated with some marketing and technical opportunities which make for higher profits. As William Baumol<sup>6</sup> put it; Large firms have all the options of small firms, and can also invest in lines requiring large capital. Moreover, industries, within a country framework, consisting of large firms also tend, to exhibit a high degree of product market imperfection which again tends theoretically to raise the profit rate. On the other hand, higher capital - intensity tends to lower the profit rate. Insofar as capital-intensity is a structural consequence of bigness, the profit-size relationship may well be inverse. The study will also investigate the extent to which the rate of or the level of profits, fiscal factors, and dividend policy determine the level of undistributed profits.

d) TERMS OF COMMERCIAL BANK LENDING AND BORROWER CHARACTERISTICS

It has been suggested that the terms of commercial bank loans is simultaneously determined by the characteristics of the lending institution, e.g. deposit experience, loan experience, and by the characteristics of the borrower e.g. profit or loss experience, net worth, liquidity structure and liabilities structure.<sup>7</sup> The latter are indicators of the credit-worthiness of potential borrowers. The size and maturities of loans are a priori expected to

<sup>6</sup>

W.J. Baumol : Business Behaviour, Value and Growth

<sup>7</sup>

See for instance, Donald Hester; "An Empirical Examination of a Commercial Bank Loan Offer Function" in Studies of Portfolio Behaviour (edited D. Hester and James Tobin )

vary directly with applicants average profits (inversely with losses), directly with the firm's liquidity, the value of its assets, the ratio of its assets (current or total) to its liabilities (current or total). No investigation of the interest terms of loans will be attempted because of the oligopolistic price-fixing arrangements in the banking industry.

e) TRADE CREDIT

Trade credit given and taken will be related to certain industry characteristics, such as the degree of competition (or number of firms). Trade credit will also be related to financial variables such as the level of turnover, firm liquidity, net worth, profitability, and access to external finance. It has been suggest for instance <sup>8</sup> (i) that the ratio of trade credit given to trade credit received varies inversely with the share of bank credit in total financing. (ii) that the financial structure of a firm, especially its ability to bear risk of losses and illiquidity, is a critical factor in the value of trade credit extended.

The above listing does not exhaust the possibilities of the data we are in the process of collecting, but it does sketch the main areas of interest.

It is hoped that out of the production and analysis of this data, and the preliminary testing of contemporary hypotheses, sufficient stimulus to and scope for the development and elaboration of behavioural hypotheses more relevant to the Caribbean will emerge.

D METHODOLOGY

a) CROSS-SECTION COUNTRY STUDIES

As should be apparent by now, and as is certainly evident from the questionnaire, the study is a cross-section one. Micro-studies of this nature have several advantages. First, insofar as aggregate economic analysis proceeds on the basis of micro- postulates, it is useful to establish as a first step more securely the micro-foundations upon which we will make our economy-wide macro-economic deductions. Secondly, it avoids certain statistical problems, largely

<sup>8</sup> Meir Tamari "The Nature of Trade Credit" Oxford Economic Papers, Nov. 1970

of a temporal nature, which plague macro-studies. Foremost among these is the problem of autocorrelation. This is not to say that cross-section methods raise no difficulties of their own. However, the latter are generally more tractable. Finally, a series of cross-sections permit an invaluable way of checking for the temporal stability of economic relationships.

b) SAMPLE SELECTION AND QUESTIONNAIRE COMPLETION

It was initially intended that three countries viz. Guyana, Jamaica, and Trinidad and Tobago, would be surveyed. Guyana was chosen as the starting point largely because I have been based there over the past year, and also because I am more familiar with business institutions and personnel there. But whereas Guyana has only a very small manufacturing sector and is primary agricultural, Jamaica and Trinidad and Tobago possess on the surface rapidly growing, much more widely spread, and firmly established manufacturing sectors. There is as a result considerable leeway for establishing from these three (or even two - Guyana and Trinidad and Tobago or Jamaica) uniformities or diversity in Caribbean financial behaviour.

For Guyana, a basic sample frame of some 240 non-financial firms was compiled. This was done on a non-random basis. Rather than go through the official register of companies, we selected those firms that are members of either the Guyana Manufacturers Association or the Georgetown Chamber of Commerce. In our opinion these cover the bulk of the established business sector, and excludes absolutely only the 'corner-shop' grocery (and then not all of them) and the fly-by-night concern. We decided further, for reasons of economy to exclude firms not based in Georgetown.

We are in the process of sending questionnaires and interviewing those firms. Miss Jasmin Singh has had primary responsibility for this aspect of the project. So far we have dispatched about 140 questionnaires. Twenty-seven have been completed fully and returned. Five additional questionnaires do not contain all the information we requested. Two of the twenty-seven present data for groups of companies numbering about 16 firms altogether. At the time of reporting the number of firms to which returns pertain therefore totals forty-six, approximately 33% of the major business units in Guyana. Some public limited

liability companies have refused to complete our questionnaires; but we regard this as only a partial failure since we can and intend to obtain much of the data from their published balance sheets and profits and loss accounts deposited with the Deeds Registry. A major obstacle in our path has been the growing uncasiness of the business community about government's policy. Many have expressed fears that information provided by them might find its way, deliberately or not, into the hands of governments which might then use it as the basis of a policy of government nationalization, or state competition. Some fears about possible leaks to competitors were also expressed. We attempt to meet these problems by i) pointing that firms are not asked to identify themselves on the questionnaire ii) by explaining that the statistical and reporting procedures we are adopting will rule out publication of individual company and sometimes industry data. For the benefit of some larger firms, an explanatory note was prepared. It is too early to judge the success of this latter step.

We are not too worried about the number of positive responses, not only because we anticipate a reasonable sampling percentage, but also because other aspects of our coverage are satisfactory. Our list of respondents at present covers many firms in the manufacturing and distribution sectors. Within manufacturing a broad range of commodity-groups is catered for. For most industries we have got, or have received assurances of, returns from the largest and oldest companies as well as from new and thriving ones.

We are reasonably satisfied about the accuracy of the data provided. Explanatory notes which accompanied each questionnaire defined the terms we used and as far as possible we used conventional accounting terminology. In this task, we received invaluable assistance from the Research Staff of the Bank of Guyana and from persons holding senior executive positions in leading business firms in Guyana. The translation into economic terms germane to the study we regard as an office task for the researcher. Moreover, with one exception, the data was taken directly from copies of balance sheets prepared to satisfy official (tax and other) requirements.

c) STATISTICAL PROCEDURES

Some mention was made above of our statistical procedures. These consist essentially of

- i) constructing a basic data sheet, aggregated over industries and all firms, which would contain the values of various financial variables.
- ii) Where appropriate, selected cross-sections will be pulled out of the Basic Data Sheet to construct frequency distributions, correlation coefficients, or for regression analysis.

E WORK SCHEDULE

We envisage that the data collection phase of our Guyana operations will be completed by the end of July, 1971.

Over the coming twelve months, the processing and analysis of the Guyana material will proceed simultaneously with data collection in Jamaica where I expect to be based until August, 1972. Depending on financial and physical resources, data collection in Trinidad can be fitted into the next year's (1970/72) programme.

Needless to say, we shall be modifying our techniques for the latter two countries on the basis of our Guyana experience.