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COMMERCIAL BANK FINANCE AND  
SECTOR ACTIVITY IN JAMAICA: 1960-1968

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INTRODUCTION

Many attempts, theoretic and empirical, have been made to demonstrate the importance of financial institutions in general, and of commercial banks in particular, to the structure and growth of contemporary economies. Studies based on developing economies have with few exceptions centred on the credit-mobilizing role of financial institutions. Yet the sectoral composition of loan advances portfolios should command no less attention.

The magnitude of credit is not the only means by which finance affects the economy: distribution effects of sectoral credit flows are also important. The sectoral pattern of credit partly determines the pattern of expenditure which in turn influences the pattern of resource use. Sectors differ in importance and some activities are more directly productive than others. And, perhaps overriding all other considerations, policy-makers regard some sectors as more strategic to the implementation of a national development programme. Worthy of special mention in this context is the concept of innovation finance. This concept refers to the provision of long-term credit or 'risk' capital to innovating sectors. The latter are of paramount importance essentially for two reasons:

- i) They generally have substantially lower incremental capital output ratios (ICOR) and therefore can lower the national average.
- ii) They are frequently relied upon to eliminate strategic bottlenecks.

However, innovating sectors also typically face a stringent insufficiency of capital. Contributing factors include the low volume of internal funds and potentially reinvestible surplus, and the loan preferences of commercial banks (the major institutional lenders) for short-term finance and traditional enterprises. Thus the distribution of credit between the traditional and the innovating sectors (or industries) is of some importance to the question of optimal allocation of resource in the context of economic growth.

Perhaps, enough has been said by now, to constitute a prima facie case for examining the pattern of and changes in commercial bank loan portfolios. The intention is two-fold. First, this study will attempt to explain the evolving pattern of bank credit in terms of the nature and trend of sector activity. An assessment of the role and importance of bank finance as a determinant of sector activity constitutes the second objective.

It is convenient, however, to first clarify a few theoretical concepts and the methodology underlying our later analysis.

A. THEORY AND CONCEPTS

An observed loan magnitude at any point in time is an equilibrium value. It reflects a short-period or long-period balance between the demand for and the supply of loanable funds. This study utilizes data on bank credit outstanding over the years 1960-68. This time series necessarily traces out the pattern of demand and supply responses over the 9 years. An analysis of the credit pattern would consequently be incomplete without some discussion of bank credit supply and demand functions.

CREDIT SUPPLY FUNCTIONS

A bank supply function refers to the terms at which a commercial bank is willing to extend credit to specified borrowers.

Factors entering into the supply function would include:

- i) the risk of voluntary or involuntary default by the borrower i.e. risk of capital loss.
- ii) The size of the loan demanded.
- iii) The composition and maturity structure of the existing loan portfolio.
- iv) The loan repayment period.
- v) The market structure of the financial system.

A full discussion of these factors can be found in a number of banking studies. Here, it suffices to say that the amount offered varies inversely with risk and directly with returns. Further, the sum offered would vary inversely with the loan repayment period. The abundant literature on loan preferences of commercial banks also indicates that banks have a marked preference for short-term and self-liquidating loans. Optimal assets for profit-maximising,

risk-minimising bank are (a) high shiftability, (b) low risk of capital loss and (c) self-liquidating.

In underdeveloped capital markets, such as Jamaica, shiftability is limited. Consequently, the other two qualities rise in importance. We may, therefore expect the pattern of loans in Jamaica to reflect a combination of institutional developments and asset preferences.

The relationship between the size of the loan offered and the composition of existing portfolios is less obvious. A priori, the more diversified is the portfolio, and the shorter is its maturity structure, and insofar as diversification reduces risk, the greater is the new credit offered. The overall earning potential of the existing portfolio is also important. To the extent that diversification and shorter maturity structure implies lower earning potential, new bank credit may again vary directly with portfolio composition.

With respect to the market structure of the banking industry, both theoretical and historical reasons suggest that a greater degree of competitiveness is associated with larger loan offers, and a reduction of competitiveness with either smaller loan offers or with a greater degree of discrimination between borrowers.

So far the discussion has been conducted in terms of micro-supply functions. The transformation into macro-functions poses no great difficulties: the macro-functions are essentially similar to the micro ones. That is, the same variables on an aggregate basis explain the level of credit offered by the commercial banking system in toto. However, some variables, though similar in name,

enter into the aggregate function differently. Credit risk and profitability evidently cannot be assessed by examination of individual units. It is necessary to resort to global indicators. Useful proxy variables for credit risk could be the asset: liabilities (A:L) ratios for the various sectors; time series and other details about corporate bankruptcies in the economy; and indices of the trend of sector activity and predictions for the future. Ceteris paribus, a higher A:L ratio is a greater sign of solvency, than is a lower A:L. A lower level and diminishing rate of bankruptcies is more reassuring about financial viability than is the converse. A healthy upward trend in product demand signifies a lower probability of involuntary default than does a downward trend. Likewise, a bouyant product market is more indicative of profits than is a stagnant or sagging one.

An important difference in the aggregate function arises too with respect to market structure. It is a noticeable feature of the Jamaican banking system that the local banks are branches of foreign banks. Granted the unrestricted freedom to transfer funds overseas, the market was fundamentally international. Therefore, the volume of local loans was partly determined by the strength of international loan demand, and as a result by the international nature of the banking system.

#### CREDIT DEMAND FUNCTIONS

Major elements in a demand function for bank credit would be interest charges and the nature and strength of credit needs. In Jamaica, the rates of interest demanded by large institutional lenders are remarkably uniform. There is, as a result, no scope

for interest-induced switches of loan demands from the banks to other lenders. Changes in interest charges therefore have only incentive or disincentive effects on the size of loan demanded. That is, the choice confronting a borrower is either to borrow from the banks at the rate specified or not to borrow at all, especially since the commercial banks dominate the suppliers' side of the loanable funds market. Whether a loan request is still placed depends of course on the strength and nature of credit needs. As a general rule, the amount requested will vary inversely with the loan rate.

Credit is either desired for short- or long-term purposes. For private individuals the object is the acquisition of non-durable or durable consumer goods. Business units may require either short-term loan finance of stock accumulation and/or sales, or investment finance. Evidently, the nature of a sector's need would correspond with the nature of that sector's activity. Further, it is reasonable to presume that the strength of need would be greater for short-term projects than for long-term ones, since the latter are more postponable.

In addition, the size of the loan demand would vary directly with the intensity of need. The strength would depend greatly on the potential for alternative finance and would in general vary inversely with the volume of finance available from non-bank sources. It follows that the magnitude of the loan requested will vary inversely with the volume of alternative finance. Consequently the latter provides a useful proxy for "credit needs".

METHODOLOGICAL NOTE

It was pointed out earlier, that this study will utilize bank credit outstanding (a stock variable) to explain the pattern and growth of sector activity. Sector activity refers to the economic life of the sector. As such it can be represented (singly or in combination) by several variables: by the value of sector transactions; by the Gross Domestic Product of the sector; and by the value of capital formation in the sector. In a very meaningful sense any of these variables can be interpreted as an index of sector activity. Since data on each are given for end of year by the National Accounts, each of them approximates a stock variable. It is methodologically sound to correlate two stock variables. Thus our attempt to relate bank credit outstanding to sector activity (variously represented) is conceptually adequate.



B. BANK CREDIT AND SECTOR ACTIVITY

In this section, we attempt to do two things: (1) To describe the pattern of bank credit, (2) To assess the importance of bank credit to the activity of selected sectors. The pattern of bank loans is set out in Tables 1 and 2, pps. 9 and 10, and is discussed item for item in connection with the analyses of economic activity for the various sectors. This arrangement is dictated by nothing more than convenience.

Financial variables may impinge upon a sector's activity in several ways. Firstly, financial resources may be required to bridge the gap between expenditures and receipts. For viable enterprises, current receipts generally do not fall short of current expenditures. Yet non-synchronization of receipts and expenditures necessitates short-term adjustment finance. Evidently, the income-lag will vary between sectors and industries, depending upon the nature of the activity and upon the marketing arrangements. Thus some enterprises will require more bridging finance and for longer periods than will others. Secondly, some financing of inventory accumulation may be necessary. Thirdly, there is the necessity of financing fixed investment.

To be sure, a sector's activity may be financed internally or externally. Further, external finance may be secured from a variety of financial institutions of which commercial banks are only one, and/or by resort to share issue. Commercial bank credit influences a sector's activity only when (a) the sector is significantly dependent on external finance, and (b) the banks are the main supplier of credit. Therefore in what follows we shall

TABLE I

BANK CREDIT OUTSTANDING AT 31st DECEMBER £m.

	1961	1962	1963	1964	1965	1966	1967	1968
Credit & Financial Institutions	.9	.9	.9	1.4	1.8	2.5	1.7	3.1
Personal & Professional Distribution	6.0	5.6	5.4	7.1	9.0	12.6	16.3	20.0
Entertainment	.4	.3	.6	.8	.9	1.1	1.2	1.0
Agriculture & Fishing	2.8	3.2	2.1	3.7	4.9	3.7	3.1	4.0
Mining	4.0	4.0	2.0	2.0	2.0	2.0	3.0	3.0
Industry (Manufacturing)	6.5	5.7	6.3	10.6	14.0	15.0	15.7	18.7
i) Sugar, Rum, Molasses	2.2	1.5	1.6	2.7	4.3	5.3	5.0	3.8
ii) Food, Drink, Tobacco	.9	.8	1.4	2.0	1.6	2.1	2.0	3.0
iii) Textile, Leather & Footwear	.9	.8	.7	.7	1.0	.8	.6	.7
iv) Other	2.6	2.6	2.6	5.2	7.1	6.5	8.2	11.2
Building & Construction	1.8	1.7	1.5	2.6	3.7	3.0	3.5	5.3
Hotels	2.0	2.0	2.2	1.7	1.7	1.8	1.7	1.9
Government & Other Public Bodies	1.6	1.1	.7	1.3	1.3	1.5	1.0	1.7
Land Development	1.7	1.4	2.0	3.9	4.5	2.0	4.1	3.9
Public Utilities	(included in other)	.5	1.1	.2	.7	1.5	2.2	2.7
Other	2.6	2.1	2.2	2.9	2.1	3.6	2.5	3.1
Total	42.8	40.7	37.6	51.1	63.2	67.6	72.9	86.9

Source: Bank of Jamaica 1961, Annual Report 1962, Quarterly Bulletins March, 1962.

TABLE 2

BANK CREDIT - % OF TOTAL AS AT 31st DECEMBER

	1961	1962	1963	1964	1965	1966	1967	1968
Credit & Other Financial Institutions	2.2	2.1	2.5	2.8	2.8	3.6	2.3	3.6
Personal and Professional	14.0	13.9	14.3	13.8	14.2	18.7	22.4	23.5
Distribution	29.0	29.7	28.3	25.4	26.3	24.1	23.0	21.2
Entertainment	1.0	0.8	1.7	1.6	1.4	1.7	1.6	1.1
Agriculture & Fishing	6.5	7.8	5.6	7.1	7.6	5.5	4.3	4.6
Mining	9.4	9.9	5.3	4.0	3.2	3.0	4.1	3.5
Manufacturing Industry	15.3	14.0	16.8	20.7	22.2	21.8	21.5	21.5
i) Sugar, Rum, Molasses	5.0	3.7	4.3	5.3	6.9	7.8	6.8	4.4
ii) Food, Drink, Tobacco	2.1	2.0	3.6	4.0	2.6	3.0	2.8	3.5
iii) Textile, Leather, Footwear	2.1	2.0	1.9	1.4	1.6	1.2	.8	0.3
iv) Other	6.0	6.3	6.9	10.1	11.2	9.7	11.2	12.9
Building & Construction	4.2	4.2	4.0	5.0	5.9	4.5	4.8	6.1
Hotels	4.8	4.9	5.8	3.3	2.8	2.7	2.3	2.2
Public Utilities		1.2	2.3	0.5	1.1	2.3	3.0	3.1
Government & Other Public Bodies	3.6	2.8	1.8	2.4	2.1	2.3	1.4	2.0
Land Development	3.9	3.4	5.3	7.6	7.1	3.0	5.7	4.5
Other	6.2	5.3	6.0	5.6	3.3	5.3	3.4	3.5

Source: Bank of Jamaica Annual Reports 1961, .....  
 Monetary Statistics, Jamaica Department of Statistics, 1960.

be attempting not only to relate bank loans to the indices of sector activity, but also to estimate the relative contribution of bank credit to the entire financial resources of the sector.

It is convenient at this stage to draw attention to a problem encountered throughout this section: namely, the problem of reconciling loan categories with the national accounts categories. In some instances there is no counterpart to a bank loan category in the National Accounts tables for GDP and capital formation. In other cases, the categories can be reconciled only imperfectly. For instance, the National Accounts list the category Recreation and Entertainment. Is this correctly identified with Entertainment in the Banking tables? (Tables 1 and 2 pps. 9 and 10). And is loan category Hotels, a strict counterpart to Hotels, Restaurants, and Clubs. Perfect reconciliation, even any kind of reconciliation where it is necessary, requires more detailed information and more time than was available. Nonetheless we proceed on the premise that tentative conclusions drawn from imperfect data, if properly qualified, are better than no conclusions at all.

#### BANK CREDIT AND AGRICULTURE

Tables 1 and 2 show that the commercial banks lent substantial amounts in both absolute and percentage terms to the agricultural sector. We may note however that, though absolute magnitudes were increasing throughout the period, the percentage share of agriculture was diminishing. Expressed as a percentage of sector GDP, bank advances was also significantly large throughout the period, though the same diminishing trend was noticeable particularly in

1966 and 1967. (See Table 3, pp. 13.) Thus the statistics indicate a general importance of bank credit to the activity of the sector. This is consistent with qualitative information on the operations of the agricultural sector.

Lengthy lags of receipts behind expenditures are a marked feature of Jamaican agriculture. This is true of export agriculture in general, and of cane-farming in particular, where the crop is reaped after about six months and, except in the case of peasant crops, does not constitute the final product. Large estates not only have to finance their own crops but also the milling of their own and peasant crops. Though the level of retained profits in export agriculture was fairly sizeable in absolute terms, it was small compared to GDP. (GDP data is given in Table 4, pps. 14, 15 & 16 and Retained Profits in Table 5, pps. 17 & 18.) Thus the volume of surplus funds available for financing production was insufficient. Therefore, though the loan data does not give details for export agriculture, considerable reliance appears to have been placed on bank finance. This aspect of export agriculture operations is no more than a continuation of traditional behaviour. It is generally held that commercial banks provide short and medium term funds to the large estates engaged primarily in the farming of sugar-cane and bananas.<sup>(1)</sup> Arthur Brown

(1) See for instance A.G. Brown: "The Private Sector and Economic Development" Social and Economic Studies, ISER, Jamaica, Vol. 7, No. 3, 1958 pp. 109.  
Dennis McFarlane: "The Future of the Banana Industry in the West Indies" Social and Economic Studies, Vol. 13, No. 1, 1964.  
C.S. Morris: "Small Farming in Jamaica" Social and Economic Studies, Vol. 6, No. 3, 1957.

TABLE 3

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SECTORS	BANK ADVANCES OUTSTANDING		AS A % OF SECTOR GDP 1961 - 1967				
	1961	1962	1963	1964	1965	1966	1967
Agriculture & Fishing	10.07	10.97	6.13	10.67	14.04	9.86	8.18
Mining, Quarrying, Refining	18.17	17.35	8.88	7.76	7.00	6.54	9.38
Manufacturing	20.02	23.83	15.91	25.18	31.33	29.71	31.02
Food, Drink, Tobacco	8.82	7.14	10.29	13.46	10.54	12.01	11.51
Sugar, Rum, Molasses	31.70	46.72	19.54	39.00	66.64	72.77	87.63
Textile, Leather, Footwear	30.78	28.62	18.89	17.62	21.69	17.37	11.27
Other Industry	20.48	26.81	18.20	32.19	38.65	32.00	36.57
Building and Construction	6.88	7.38	5.75	8.85	11.67	8.76	9.55
Distributive Trades	32.46	32.56	27.64	32.43	38.88	38.15	35.08
Hotels	40.14	35.09	43.16	30.94	25.01	22.75	19.72
Entertainment	14.12	11.59	17.33	21.69	21.22	23.99	23.52
Public Utilities	N.A	N.A	33.39	6.81	16.95	50.70	46.16
Government	10.37	10.48	3.59	6.08	5.84	6.12	3.88
Credit & Financial Institutions	9.19	6.57	9.92	13.47	13.53	16.74	10.65

TABLE 4 - 14 -

## GROSS DOMESTIC PRODUCT AT FACTOR COST 1960 - 1967

INDUSTRY BY SUB-SECTORS	1960	1961	1962	1963	1964	1965	1966	1967	EJ'000
							(Prov.)	(Pre/im)	
AGRICULTURE, FORESTRY, AND FISHING	25,974	27,735	28,709	34,216	34,231	34,541	37,560	38,230	
EXPORT AGRICULTURE	11,163	11,971	12,437	17,330	16,293	14,196	15,050	14,999	
Sugar Cane	7,333	7,999	8,392	12,814	11,669	9,670	10,225	10,315	
Other Main Export	3,830	3,972	4,045	4,516	4,624	4,520	4,825	4,680	
DOMESTIC AGRICULTURE	8,146	8,225	8,607	9,171	9,753	11,243	12,659	12,748	
Root Crops	3,087	2,851	3,136	3,048	3,304	4,533	5,378	4,924	
Other Primary Product	5,059	5,374	5,471	6,123	6,449	6,710	7,281	7,824	
Livestock and Hunting	4,226	4,601	4,636	4,983	5,241	5,812	6,249	6,743	
FISHING	1,242	1,675	1,805	1,504	1,685	2,006	2,247	2,317	
FORESTRY AND LOGGING	1,197	1,263	1,224	1,228	1,259	1,290	1,355	1,423	
MINING, QUARRYING, AND EXTRACTING	20,781	22,081	23,102	22,753	26,085	28,868	30,900	32,318	
Bauxite and Alumina	19,657	22,758	21,747	21,246	23,958	26,095	27,512	28,825	
Quarrying and Refining (including Gypsum)	1,124	1,323	1,355	1,507	2,127	2,773	3,388	3,493	
MANUFACTURING	29,367	32,695	32,872	39,369	42,152	44,636	49,501	50,664	
Food (excl. Sugar)	6,648	6,542	6,831	7,848	8,815	9,480	10,550	10,748	
Sugar, Molasses and Rum	5,360	6,802	5,847	8,391	6,926	6,514	7,291	5,649	
Alcoholic Beverages (excl. Rum)	1,548	1,751	1,938	2,186	2,411	2,643	2,874	3,140	
Non-Alcoholic Beverages	731	795	851	943	1,044	1,106	1,224	1,308	
Tobacco and Tobacco Products	1,125	1,303	1,583	2,149	2,801	2,221	2,420	2,554	
Textiles, made-up Textile Goods	1,833	2,119	2,420	2,822	3,242	3,487	3,785	4,041	
Footwear	690	611	644	635	724	701	729	653	
Wood and wood products (exclg. Furniture)	824	884	921	937	1,057	1,128	1,200	1,302	
Furniture and Fixtures (inclg. Upholstering)	1,463	1,578	1,549	1,643	1,730	1,834	1,990	2,267	

TABLE 4 (continued)

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INDUSTRY BY SUB-SECTORS	1960	1961	1962	1963	1964	1965	1966 (Prov.)	1967 (Pre/im)
Printing, Publishing, Advertising and other Paper Products	1,818	1,985	1,988	2,397	2,734	2,964	3,328	3,692
Leather and Leather Products(exclg. footwear)	182	178	164	186	188	225	231	231
Chemicals and Chemical Products	1,370	1,493	1,566	1,750	1,942	2,276	2,511	3,142
Cement and Clay Products	2,067	2,293	2,169	2,456	2,905	3,432	3,796	3,951
Metal Products and Repair	3,049	3,694	3,680	4,144	4,682	5,608	6,443	6,787
Miscellaneous Manufactures and Repairs	650	667	721	882	951	1,017	1,129	1,199
CONSTRUCTION AND INSTALLATION	25,564	25,879	26,009	26,061	29,050	31,820	34,620	36,544
ELECTRICITY, GAS AND WATER	2,259	2,694	2,912	3,166	3,567	4,011	4,501	4,734
Electric Light, Power, and Gas	1,747	2,056	2,202	2,360	2,713	3,006	3,380	3,563
Water and Sanitation Services	512	638	710	806	854	1,005	1,121	1,171
TRANSPORTATION, STORAGE AND COMMUNICAT- ION	16,712	18,517	19,150	18,841	20,243	21,958	24,240	24,981
DISTRIBUTIVE TRADES(Wholesale & Retail)	38,912	38,178	38,458	38,521	40,100	42,870	45,595	47,908
FINANCIAL INSTITUTIONS	8,091	10,034	10,966	9,432	10,433	13,165	14,697	16,138
Banks	2,078	2,605	2,807	2,758	3,118	4,061	4,848	5,712
Insurance(Life and General)	4,413	4,423	4,831	4,926	5,178	6,281	6,408	7,164
Real Estates & other Financial Institutions	1,600	3,006	3,268	1,748	2,137	2,823	3,441	3,262
OWNERSHIP OF DWELLINGS	6,753	7,485	7,972	8,605	9,443	10,227	10,955	11,192
PUBLIC ADMINISTRATION	13,316	15,021	17,199	18,587	20,556	22,311	24,979	26,674



TABLE 4 (continued)

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INDUSTRY BY SUB-SECTORS	1960	1961	1962	1963	1964	1965	1966	1967
MISCELLANEOUS SERVICES	28,147	30,433	33,139	36,232	38,087	42,733	44,908	47,109
Education (Private)	3,014	3,588	3,841	4,524	4,760	5,044	5,232	5,511
Medical and Health	1,536	1,633	1,642	1,883	1,916	1,916	1,917	1,966
Legal Services	1,157	1,222	1,196	1,340	1,340	1,357	1,357	1,436
Other Professional Services	1,782	1,989	2,510	2,736	2,677	2,986	3,042	3,290
Recreation and Entertainment	2,724	2,917	3,651	3,694	3,892	4,020	4,676	4,971
Hotels, Restaurants, Clubs	5,084	5,095	5,019	5,072	5,514	6,960	8,036	8,424
Laundries and other Personal Services	3,829	4,149	4,521	4,719	4,705	5,129	5,222	5,588
Undertakers and Embalmers	214	215	223	230	237	250	253	253
GROSS DOMESTIC PRODUCT	215,876	230,752	240,428	255,783	273,947	297,140	322,456	336,492

TABLE 5

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UNDISTRIBUTED CORPORATE PROFIT BY INDUSTRIAL ORIGIN  
SECTORS AND SUB-SECTORS 1960 - 1966

(Current Values)

£ J'000

Sectors and Sub-Sectors	1960	1961	1962	1963	1964	1965	1966 (Prov)
<u>AGRICULTURE, FORESTRY AND FISHING (1)</u>	575	704	804	980	1,385	1,220	1,579
Export Agriculture	284	336	365	543	641	500	648
Sugar Cane	120	144	143	245	377	254	328
Other Main Exports	164	192	222	298	264	246	320
Domestic Agriculture	89	114	143	181	336	275	355
Root Crops	-	-	-	-	-	-	-
Other Primary Products	89	114	143	181	336	275	355
Livestock and Hunting	202	254	296	256	408	445	576
Fishing	-	-	-	-	-	-	-
Forestry and Logging	-	-	-	-	-	-	-
<u>MINING, QUARRIES AND REFINING (2)</u>	-	-	-	-	-	-	-
Bauxite and Alumina	-	-	-	-	-	-	-
Quarrying (incl. Gypsum)	-	-	-	-	-	-	-
<u>MANUFACTURING (3)</u>	4,659	5,071	4,446	5,595	6,377	7,103	8,000
Food (excl. Sugar)	626	408	487	613	762	907	1,021
Sugar, Molasses & Rum Distilling	727	1,294	832	913	622	744	839
Alcoholic Beverages (incl. Rum Blending)	602	587	533	490	778	889	1,002
Non-Alcoholic Beverages	74	78	73	79	74	72	82
Tobacco and Tobacco Products	211	207	255	232	295	195	220
Textiles & Made-up Textile Goods	233	211	172	160	248	272	306
Footwear	52	40	41	29	35	34	38
Wood and Wood Products	76	79	135	142	142	140	157
Furniture and Fixtures (incl. Upholstering)	97	83	107	119	133	136	153
Printing, Publishing, Advertising and other	-	-	-	-	-	-	-
Paper Products	233	227	179	292	336	351	395
Leather and Leather Products	18	15	8	10	10	11	13
Chemicals and Chemical Products	391	316	295	471	431	460	518
Cement and Clay Products	105	99	89	466	610	698	787
Metal Products and Repairs	1,155	1,374	1,185	1,487	1,787	2,066	2,326
Miscellaneous Manufacture and Repair	59	53	55	92	114	128	143

TABLE 5 (continued)

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UNDISTURBED CORPORATE PROFIT BY INDUSTRIAL ORIGIN  
SECTORS AND SUB-SECTORS 1960 - 1966

(Current Values)	£J'000						
Sectors and Sub-Sectors	1960	1961	1962	1963	1964	1965	1966
<u>CONSTRUCTION AND INSTALLATION (4)</u>	<u>770</u>	<u>868</u>	<u>843</u>	<u>762</u>	<u>1,236</u>	<u>1,277</u>	<u>1,365</u> (Prov)
<u>GAS, ELECTRICITY AND WATER (5)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>TRANSPORTATION, STORAGE AND COMMUNICATION (6)</u>	<u>1,088</u>	<u>918</u>	<u>914</u>	<u>837</u>	<u>1,094</u>	<u>899</u>	<u>933</u>
<u>DISTRIBUTIVE TRADES (7)</u>	<u>3,228</u>	<u>2,831</u>	<u>2,665</u>	<u>4,208</u>	<u>3,936</u>	<u>4,090</u>	<u>3,957</u>
<u>FINANCIAL INSTITUTIONS (8)</u>	<u>581</u>	<u>706</u>	<u>628</u>	<u>442</u>	<u>687</u>	<u>1,218</u>	<u>1,444</u>
<u>OWNERSHIP OF DWELLINGS (9)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>PUBLIC ADMINISTRATION (10)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<u>MISCELLANEOUS SERVICES (11)</u>	<u>712</u>	<u>534</u>	<u>556</u>	<u>581</u>	<u>923</u>	<u>1,090</u>	<u>1,237</u>
Education (Private)	-	-	-	-	-	-	-
Medical and Health	-	-	-	-	-	-	-
Local Services	-	-	-	-	-	-	-
Recreation and Entertainment	201	121	105	190	321	383	434
Hotels, Restaurants and Clubs	511	413	451	391	602	707	803
TOTAL	12,475	12,622	11,623	14,219	16,492	11,787	19,365

Source: Annual Abstract of Statistics, 1968.

expresses an authoritative view when, with reference to sugar, he stated: "the banks lend the short-term money which is necessary to provide for cultivation and harvesting expenses and get back their money when the harvest comes in."<sup>(1)</sup>

The dependence of domestic agriculture on outside finance was even more marked. Retained profits constituted an even more slender proportion of GDP for this sector. Admittedly, the production process is on average shorter for domestic agriculture than for export crops. But the bulk of domestic agriculture's GDP is provided for by non-root crops, and by livestock and hunting which have fairly lengthy production processes. Therefore, there must have still been considerable need for short-term finance. Available evidence suggests that the commercial banks satisfied some of these needs. G. S. McMorris in a study conducted during the 1950s established that bank loans to small farmers were mainly "short-term, i.e. repayable within a year and (normally covering) such operations as land preparation, labour and marketing."<sup>(2)</sup> It is known that domestic agriculture has the heaviest concentration of small farmers. But the inference that bank loans were important to domestic agriculture in general must be qualified. For McMorris' study revealed that even among small farmers bank loans were concentrated on export crops, such as bananas and coffee.

Moreover, greater recourse was made to specialized loan agencies, such as the Agricultural Credit Board and the People's

(1) A. Brown, op. cit.

(2) G. S. McMorris, op. cit.

Cooperative Bank. Some information on loans by the Agricultural Credit set out below.

TABLE 6

A. LOANS BY THE AGRICULTURAL CREDIT BOARD TO DIRECT BORROWERS 1961-1968 £J.

	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
SHORT-TERM	14,990	26,846	12,663	300	NA	NA	11,569	6,431
MEDIUM TERM	61,734	17,105	15,837	695	NA	NA	21,394	30,442
LONG-TERM	61,229	9,700	1,534	-	NA	NA	9,900	37,230
TOTAL	<u>137,953</u>	<u>53,651</u>	<u>30,651</u>	<u>995</u>			<u>42,863</u>	<u>74,103</u>

N.A.: Not Available. Total loans to Direct Borrowers and approved organisations (including PCBs were 1965: £975,044; 250,575; 33,125; 1966 £592,865; 188,175; and 27,228.

B. TO PEOPLE'S COOPERATIVE BANKS AND APPROVED ORGANISATIONS 1961-68 £J.

	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
SHORT-TERM	383,798	329,600	336,658	9,600	NA	NA	532,280	519,087
MEDIUM-TERM	619,969	471,654	224,120	8,330	NA	NA	342,810	436,927
LONG-TERM	152,475	19,850	10,325	1,450	NA	NA	20,579	22,016

Short-term are for up to 2 years. Medium-term from 2 to 7 years.

Long-term for over 7 years.

Source: Monetary Statistics.

The data indicates that a relatively large amount was loaned on a short-term basis either directly by the Agriculture Credit Board or via the People's Coop Banks, since the latter engaged in substantial relending to small scale farmers. These funds were augmented by those contributed by the People's Coop Banks from their own share capital and reserves. Except for two years, 1965 and 1966, and for Farmers' Production Programme and Agriculture and Development Programme loans, we have no breakdown on the

maturity dimensions of loans by these institutions. In total they are evidently large.<sup>(1)</sup> For those two years the breakdown is as follows: 1965: £1,075,551; £251,054; £11,423; 1966: £642,834; £150,990; £4,990 in increasing order of maturity. Altogether then, the evidence indicates that though bank credit was important to the short-term finance of economic activity in the agricultural sector, this was more the case with respect to export agriculture than to domestic-market oriented agriculture.

Let us turn to the question of capital formation. In Table 8 (pp. 24) we present data on fixed capital formation in the economy. In 1964, capital formation in the agricultural sector was at its highest, and in 1963 at its lowest for the period under review. The statistics on retained profits and depreciation allowances show clearly that in no year could have fixed capital formation been financed entirely from internal sources. In 1963, when fixed investment was at its lowest, the two internal sources accounted for 66% at the most.<sup>(2)</sup> (Details are given in Tables 9 and 10, pps. 25 and 26.) The sector therefore must have resorted to external sources.

(1) Total loans outstanding and share capital at 31st December were:

	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Loans	2,010,916	3,029,482	3,274,637	3,452,256
Paid-up Share Capital	365,146	388,565	405,190	419,230
	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
Loans	4,199,228	3,389,112	4,626,231	5,892,351
Paid-up S. Cap.	441,174	468,464	471,294	NA

In 1965 and 1966, share capital loans were £115,950 and £162,451 respectively.

(2) The qualification is necessary since undistributed profits need not have been entirely expended (and our earlier discussion suggests this) on capital projects in any given year.

TABLE 7

- 22 -

## CAPITAL CONSUMPTION ALLOWANCE BY INDUSTRIAL ORIGIN 1960 - 1966

(Current Values)	£J'000						
SECTORS	1960	1961	1962	1963	1964	1965	1966
<u>AGRICULTURE, FORESTRY AND FISHING (1)</u>	<u>1,204</u>	<u>1,277</u>	<u>1,273</u>	<u>1,785</u>	<u>1,578</u>	<u>1,456</u>	<u>1,496</u>
Export Agriculture	709	754	776	1,283	1,055	897	881
Sugar Cane	500	553	583	1,078	825	693	671
Other Main Exports	209	201	193	205	230	204	210
Domestic Agriculture	290	295	266	256	261	284	323
Root Crops	34	31	34	33	37	50	59
Other Primary Products	256	264	232	223	224	234	264
Livestock and Hunting	184	203	206	222	237	248	262
Fishing	8	11	11	10	11	13	15
Forestry and Logging	13	14	14	14	14	14	15
<u>MINING, QUARRYING AND REFINING (2)</u>	<u>3,385</u>	<u>3,488</u>	<u>3,878</u>	<u>4,041</u>	<u>4,685</u>	<u>5,160</u>	<u>5,400</u>
Bauxite and Alumina	3,298	3,376	3,760	3,892	4,351	4,739	4,952
Quarrying (incl. Gypsum) and Petroleum Refining	87	112	118	149	334	421	448
<u>MANUFACTURING (3)</u>	<u>2,683</u>	<u>2,896</u>	<u>2,927</u>	<u>4,063</u>	<u>3,910</u>	<u>4,026</u>	<u>4,634</u>
Food (excl. Sugar)	509	513	519	587	679	718	742
Sugar, Molasses and Rum Distilling	820	880	878	1,767	1,242	1,098	1,436
Beverages (Alcoholic and Non-Alcoholic)	299	338	371	401	447	476	523
Tobacco and Tobacco Products	38	47	38	67	107	109	120
Textile and Made-up Textile Goods	131	150	165	180	215	230	246
Footwear	54	48	50	50	57	55	57
Wood and Wood Products	42	45	46	47	53	55	57
Furniture and Fixtures	48	51	51	54	57	61	66
Printing, Publishing, Advertising and Other Paper Products	107	119	116	152	172	186	206
Leather and Leather Products	15	13	10	11	11	12	13
Chemical and Chemical Products	79	81	83	104	118	138	156
Cement and Clay Products	328	372	351	362	430	507	564
Metal Products and Repairs	179	201	207	236	269	321	376
Miscellaneous Manufacture and Repair	34	38	42	45	53	60	72

TABLE 7 (continued)

- 23 -

## CAPITAL CONSUMPTION ALLOWANCE BY INDUSTRIAL ORIGIN 1960 - 1966

(Current Values)							£J'000
Sectors	1960	1961	1962	1963	1964	1965	1966
CONSTRUCTION AND INSTALLATION (4)	1,179	1,217	1,247	1,229	1,251	1,467	1,762
GAS, ELECTRICITY AND WATER (5)	258	304	326	443	456	701	761
TRANSPORTATION, STORAGE AND COMMUNICATION) (6)	2,214	2,763	2,856	3,053	3,194	3,446	3,828
DISTRIBUTIVE TRADE (Wholesale and Retail) (7)	1,944	1,996	2,008	2,194	1,805	1,916	2,062
FINANCIAL INSTITUTIONS (8)	80	113	130	112	115	137	151
OWNERSHIP OF DWELLINGS (9)	1,913	2,152	2,292	2,474	2,715	2,941	3,150
PUBLIC ADMINISTRATION (10)	-	-	-	-	-	-	-
MISCELLANEOUS SERVICES (11)	1,112	1,278	1,287	1,349	1,417	1,621	1,816
Private Education	47	56	60	71	73	84	71
Medical and Health	75	79	80	91	93	93	93
Legal Services	36	39	38	39	39	39	39
Other Professional Services	31	36	46	51	46	57	60
Recreation and Entertainment	216	249	253	251	258	249	309
Hotels, Restaurants and Clubs	493	475	447	466	517	689	820
Domestic Services	-	-	-	-	-	-	-
Laundries and Other Personal Services	184	313	338	347	353	373	381
Religious, Trade, Welfare and Other Non-Profit Organisations	17	17	17	19	23	36	27
Undertakers and Embalmers	13	14	14	14	15	16	16
TOTAL	15,972	17,484	18,224	20,743	21,126	22,871	25,060

Source: Annual Abstract of Statistics, 1968.



TABLE 8

- 24 -

## FIXED CAPITAL FORMATION BY INDUSTRIAL SECTORS 1960 - 1967

Current Values								£m.
GROUPS	1960	1961	1962	1963	1964	1965	1966	1967(Prov)
Agriculture, Forestry and Fishing	6.1	5.5	5.1	4.2	7.2	5.9	6.5	5.5
Mining, Quarrying and Refining	1.5	1.3	6.8	10.5	3.2	5.7	10.5	24.1
Manufacturing	7.6	9.0	6.9	5.1	8.9	7.7	8.7	10.2
(a) Sugar, Molasses and Rum	1.0	1.4	.9	1.1	1.9	2.0	2.5	2.1
(b) Other Manufacture	6.5	7.5	5.9	4.0	7.0	5.7	6.2	8.1
Construction and Installation	2.2	2.2	2.2	2.1	3.2	4.6	5.1	3.8
Electricity, Gas, and Water	1.7	2.2	1.6	.8	1.0	1.1	1.7	5.2
Transportation, Storage and Communication	6.0	5.9	6.0	5.0	7.1	8.5	8.7	6.5
Wholesale and Retail Distribution	8.5	7.1	5.9	4.1	6.1	5.0	5.3	5.1
Banking and Insurance	.5	.8	.7	.7	1.0	1.0	1.1	1.7
Ownership of Dwellings	8.5	7.4	6.9	6.2	8.7	9.8	10.1	7.6
Public Administration	5.3	5.5	5.0	5.1	7.0	9.6	11.6	13.7
Miscellaneous Services	1.9	1.9	2.0	2.0	2.6	3.3	3.6	2.7
<b>TOTAL</b>	<b>49.6</b>	<b>48.9</b>	<b>49.1</b>	<b>45.8</b>	<b>55.9</b>	<b>62.1</b>	<b>73.0</b>	<b>86.1</b>

Source: Annual Abstract of Statistics 1968

TABLE 9

- 25 -

UNDISTRIBUTED CORPORATE PROFITS AS % OF CAPITAL FORMATION BY INDUSTRIAL  
SECTORS 1960 - 1966

CURRENT VALUES							
GROUPS	1960	1961	1962	1963	1964	1965	1966
<u>Agriculture</u>	9.45	12.69	15.67	23.37	19.20	20.81	24.25
<u>Mining</u>	NA	NA	NA	NA	NA	NA	NA
<u>Manufacturing</u>	61.68	56.60	64.69	110.07	71.78	92.27	91.94
Sugar	70.38	91.13	88.70	84.62	32.98	36.56	33.95
Other	60.29	50.10	60.89	16.43	32.24	112.29	114.94
<u>Construction and Installation</u>	35.53	39.53	38.69	36.10	38.78	27.65	26.64
<u>Gas, Electricity, and Water</u>	NA	NA	NA	NA	NA	NA	NA
<u>Transport, Storage and Communication</u>	18.16	15.55	15.23	16.74	15.4	10.50	10.72
Distributives Trades	38.09	39.60	44.96	102.89	64.36	81.47	75.34
Financial Institutions	116.20	88.25	89.71	63.14	68.70	121.80	131.27

TABLE 10

- 26 -

DEPRECIATION ALLOWANCES AS % OF FIXED CAPITAL FORMATION

CURRENT VALUES							
GROUPS	1960	1961	1962	1963	1964	1965	1966
<u>AGRICULTURE</u>	19.78	23.02	24.81	42.57	21.87	24.87	22.97
<u>MINING</u>	226.88	264.84	56.70	38.31	146.91	90.93	22.44
<u>MANUFACTURING</u>	35.51	32.32	42.59	79.93	44.01	46.27	45.25
Sugar	79.38	61.97	93.60	163.76	65.85	53.96	58.11
Other	28.56	26.74	34.52	57.34	38.13	51.70	39.29
<u>CONSTRUCTION</u>	54.41	55.42	57.23	58.22	39.25	31.77	34.39
<u>ELECTRICITY</u>	15.17	13.81	20.37	55.37	45.60	63.72	44.76
<u>DISTRIBUTIVE TRADE</u>	22.94	27.92	33.87	53.64	29.51	38.17	39.26
<u>TRANSPORT, STORAGE, COMMUNICATION</u>	36.90	46.83	47.60	61.06	44.98	40.54	44.00
<u>FINANCIAL INSTITUTIONS</u>	160.00	14.12	18.57	16.00	11.50	13.70	13.72

However, the extent of the banks' participation must be ascertained. Much loanable funds came from non-bank sources. The Agricultural Development Corporation, the Commonwealth Development Corporation, and Barclays Overseas Development Corporation were major suppliers of long-term funds to the sugar industry. Likewise for the banana industry. Thus Callender writes: "There are no statistics available on the financing of investment, but it is quite probable that the greater portion of the capital for investment in the larger banana and sugar estates came from undistributed profits, issues of debentures, stocks and from private sources ....."<sup>(1)</sup> McFarlane was more precise. He listed for the banana industry the main sources of capital funds:

- 1) British Overseas Development Corporation, and Colonial (now Commonwealth) Development and Welfare Funds;
- 2) Local loan agencies such as banks and insurance companies on a short-term basis;
- 3) Local growers' associations for working capital.

On the other hand, equity finance is comparatively rare for old enterprises in Jamaica; and, export farming is among the oldest. Of the £14.7 m. share capital authorized between 1957 and 1964, only £523,000 accrued to agriculture.<sup>(2)</sup> Evidently, the proportion of fixed capital formation financed by share capital is small.

For an evaluation of the role of the specialized loan agencies we refer back to Table 6, pp. 20. There again we note the substantial amounts allotted as medium and long-term loans by the Agricultural Credit Board. These loan categories refer to expenditures for such

(1) C. V. Callendar, op. cit., page 81.

(2) N. F. Girvan, op. cit.

purposes as repairs to and construction of farm buildings, and other capital expenditures such as drainage and irrigation.

Other evidence suggests that relative to other external financial sources, the bank has played a rather minor role in investment finance. The maturity structure of bank loans and the traditional preference for short-term loans suggest that much credit was not of the fixed investment nature. The ratio of loans repayable in less than 12 months to those repayable in more than 12 months varied between 1.6 to 3.3 for the period 1961-1968.<sup>(1)</sup> However, since we recognise that the extensive practice of renewing loans is one method of extending the payment period, the ratios may well understate the proportion of loans with an actual maturity in excess of 12 months, and thus understate the extent to which bank finance was used for longer term investment purposes. For small-scale agriculture, banks loans, as McMorris has noted, were essentially short-term. Funds for the entire range of medium and long-term capital projects on small farms had come almost solely out of farmers' savings and from gifts and grants from friends and relatives.

Granted its importance to the activity of the sector in general, bank credit has not been widely diffused and has consequently had an uneven impact. Advances have been concentrated on a few large-scale enterprises and those producing particular crops. Traditionally the emphasis has been on cane-farming. Arthur Brown wrote: "I think outside of the field of sugar ..... there are a few other crops that one would find to have had any assistance from the banks."<sup>(2)</sup> Brown's statement, though sweeping, is substantially

(1) Ratios are:

<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>
2.8	2.2	2.3	3.3	3.1	NA	2.2	1.6

(2) A. G. Brown, op. cit., Page 109.

valid; the banks have concentrated on export crops. McFarlane has noted the flow of credit to banana growers.<sup>(1)</sup>

Given the large volume of bank credit to agriculture in general, and the predominantly small farm nature of domestic agriculture, negligible flows to domestic agriculture indicate that loans are concentrated on large and medium-sized estates. Though no data for 1960 to 1966 is available, a guess based on McMorris' 1957 study,<sup>(2)</sup> can be hazarded. Out of loans totalling £5,892, the lender category "Other" which included commercial banks and excluded most other lenders accounted for only £342, of which £143 was for rice.

Unless radical changes have occurred since then, it can be inferred that bank loans have not been directly prominent in the transaction of small farmers generally, and those producing for the domestic market in particular.

#### BANK CREDIT AND MANUFACTURING ACTIVITY

The manufacturing sector has been one of the largest recipients of banks loans. Moreover, the trend has been for this sector to account for an increasing proportion of bank loans.

Its percentage share grew from 15.3% in 1961 to 21.5% in 1968. In only one year (1962) was there a slacking of its growth in absolute as well as percentage terms.

Despite the magnitude of these loans, there are some indications that bank finance did not feature importantly in the capital budgeting of the manufacturing sector. Gross internal finance rose rapidly throughout the period and accounted for much of the sector's capital transactions. For 1961, a year of very large fixed capital formation, total internal finance

(1) D. McFarlane, op. cit.

(2) C. S. McMorris, op. cit.

(depreciation allowances plus retained profits) approximated 89% of fixed capital investment. Ratios were generally higher. (See Tables 9 and 10 for details.) These high percentages are strongly suggestive of not too great a reliance on external finance. Other evidence leads to the same conclusion.

Firstly, much of Jamaica's manufacturing enterprises, by virtue of foreign-ownership, finances its capital formation by direct foreign investment. In 1962, foreign investment in manufacturing industry totalled £25.8 m.<sup>(1)</sup> Most was concentrated in sugar, chemicals and textiles, though Metal Products and Beverages accounted for considerable amounts. Further, foreign-owned enterprises produce a large part of the domestic output of their groups. Of the 18 large sugar manufacturing enterprises in 1962, eight were foreign-owned and produced 60% of total sugar 1946-1962. Of 59 large textile firms, 16 were U/S. owned. Their output, which by law, is mainly exported, in 1962 amounted to a little less than one-fifth of total sales. Two out of the 12 large units in Footwear industry were foreign-owned and four had significant external liabilities. The chemical industry is dominated by foreign firms which own £1.4m. out of total assets of £2.3m. Thus a tremendous amount of manufacturing business is financed from outside Jamaica.

R. Palmer's recent sample survey<sup>(2)</sup> also suggests that bank finance has not been generally very important for manufacturing industry. Questionnaires were sent to three large manufacturing corporations. He found that one firm, a long-established monopoly producer of beer, regarded bank finance as a rare practice; another, a monopoly producer of cement and cement products used bank advances of £.5m. for a project valued at £1.5m., the remainder being

(1) All data in this paragraph were obtained from Girvan, op. cit.

(2) Palmer, op. cit.

met by retained profits; and the last firm, a near-monopolist, was guaranteed bank loans of £170,000 and bank purchases of First Mortgages Bonds valued at £300,000. On this basis, he concluded that the degree of dependence on bank loans for capital projects was irregular.

However, one should be careful in drawing inferences from this survey, for several reasons. Firstly, it covered a small number of firms, though over a wide range of activities and therefore cannot yield any firm general results. Secondly, the enterprises were monopolists and therefore capable of having exceptionally large retained earnings. Moreover, one was a family firm and therefore able to pay out 'a very small proportion of (its) profits and (keep) by far the greatest proportion ..... in the business"<sup>(1)</sup>.

His findings seem more reliable for equity financing. Foreign-ownership, the family-nature of business, reluctance to dilute ownership and control and, until recently, the absence of a significant domestic capital market militated against debt finance - particularly so for sugar manufacturing.

Resort to share issue has been more marked for new firms. Between 1957-64, £3,568 had been authorised for 295 new firms. However, even here as is evident from the small volume of share capital in relation to the large number of firms, equity finance has not been particularly significant.

Another major source of finance has been the Jamaica Industrial Development Corporation. This unit was established for the explicit purpose of providing assistance by loans, construction and lease of factories, and lease of land to new and previously existing enterprises. Risk capital provided by the Corporation at December 1963 amounted to £946,000. Total fixed assets amounted to £1.6m. in December 1961.

(1) Letter from Chairman of Desnoes & Geddes Ltd., the beer producer, cited in Palmer, op. cit.



Nonetheless, the ratio of bank advances to the sector's GDP suggests that bank credit has featured prominently in the sector's activity as a whole. The explanation then is that the role of the banks was essentially as providers of short-term production funds.

Since the sector covers a wide range of activities and performance varied widely within the sectors, it is worthwhile to examine the inter-sectoral distribution of bank credit. Details are presented in Tables 1 and 2, pps. 9 and 10.

The prominence of the sugar-rum combine is noticeable. No details of the shares of individual industries within the "Food" group is available. However it is likely that, since rum-blending is an offshoot of the sugar-rum distilling operations and assuming that traditional bank links are extended to rum-blending, a considerable amount of the group's finance went towards the manufacture of rum. Similarly, the commercial banks traditional preference for large-scale export crops could indicate that a substantial proportion was lent to the tobacco industry. These two factors imply that the food industry may have received a very small share of bank credit.

"Other Manufacturing" covers many enterprises; but there is no reason for supposing that credit was evenly distributed among them. For instance, in 1962, advances amounted to £2.6m. Palmer's evidence reveals that in the same year, Caribbean Cement Company Ltd. received overdrafts of £.5m., and Caribbean Steel Co. was assured overdrafts of £170,000 - a total of approximately £.7m. In effect over one-fourth of loans to "Other Industries" was to two large firms.

This concentration of bank loans on a few large enterprises within a widely ranging sub-sector, populated extensively by small-scale operators gives rise to the hypothesis that the banks by and large neglected small-scale manufacturers. Two other features of the pattern of credit also suggest

the same possibility. Firstly, there is the large proportion of bank finance accounted for by the 'Sugar, Rum' and 'Food, Drink, and Tobacco' groups, which are mainly comprised by large-scale enterprises. Finally, there is the low proportion of loans to the 'Textiles' group where a large number of small establishments is known to be located. Admittedly, without more detailed information, the hypothesis must remain untested.

On much firmer ground is the conclusion that the criterion of credit-worthiness adopted by the banks has resulted in a situation wherein those enterprises which can finance themselves get bank assistance while those which cannot finance themselves do not receive help. From the data assembled so far, it is clear that bank loans were generally concentrated on those groups with the highest level of internal funds and greater access to non-bank external and quasi-internal sources of capital.

#### BANK CREDIT AND THE DISTRIBUTION SECTOR

The Distribution sector presents the clearest example of how important a permissive or constraining factor bank credit can be to the growth of economic activity. The capital requirements of enterprises engaged in retailing or wholesaling are significantly different to those of agriculture and manufacturing enterprises. By the nature of its output, the distribution sector has a higher ratio of working to fixed capital. Consequently its major needs would be for short-term capital. Insofar as faster turnover lead to shorter repayment periods, loan demands harmonise with the commercial banks' traditional preference for short-term loans and also represent a higher level of credit-worthiness from the banks' standpoint. Further, for firms engaged in the wholesaling of imported commodities, the need for short-term adjustment finance is strong. According to the Bank of Jamaica Annual Report 1961, trade credit granted by foreign exporters normally exceed 9 months, while wholesalers extend trade credit to retailers

for longer periods. Wholesalers therefore require longer term credit than is granted by foreign suppliers; this, the commercial banks supply. In effect, the local banks finance the movement of working stock throughout the whole chain of distribution. Consequently, loans can be expected to be large. Tables 1 and 2, pps. 9 and 10, show that the Distribution sector was the largest single recipient of bank advances. Even though its percentage share declined over the years, in absolute term such loans continued to rise. The data on bank advances as a percentage of GDP reinforces the conclusion that bank loans were essential to the sector's operations. For 1961-1967, the percentage averaged about 34%.

It is useful however to attempt an assessment of the contribution of bank finance to the long-term growth of activity. Since fixed capital formation movements are an important indicator of the basic trend of activity, we now discuss their financing.

Fixed capital formation remained at a consistently high level throughout the period. So did the volume of internal finance available. In 1960, the high point of fixed capital formation, retained profits plus depreciation allowances accounted for 51% of capital investment. In no year did the percentage fall below 51%; instead it was consistently in excess.<sup>(1)</sup> Consequently, it was hardly necessary for existing firms to resort to external financial sources.

(1) The high level of capital consumption allowances is one of the extremely puzzling features of Jamaican tax laws. Since capital stock is mainly liquid and fixed, capital is mainly in the form of buildings, with a low natural rate of physical depreciation.

New firms appear to have placed major reliance on share issues. Altogether, the Distribution sector accounted for almost one-half of the total new share capital authorized between September 1957 and March 1964 - a total of £6m. approximately for 571 new Companies. Thus neither the old nor new firms found it necessary as a rule to resort to substantial bank finance of capital programmes. Bank finance though crucial to short-term activity, was (directly) marginal to its long-term growth. Its indirect contribution we discuss in a more general context, at a later stage.

#### CREDIT AND CONSTRUCTION ACTIVITY

By 1967, bank advances to the Construction and Building sector had doubled its 1961 level; but as a proportion of total loans had not increased markedly. The data in Table 3 suggests that, if we take the ratio of Bank Advances to GDP as indicative of the influence of bank credit, the importance of bank finance has not been very great, though considerable and increasing over time, particularly during 1964-1967.

Though it is difficult to evaluate the precise role of bank credit, it is likely that much of it was confined to financing liquid capital requirements of 'builders. Three factors suggest this conclusion. Firstly, the banks' loan portfolios are weighted heavily in favour of short-term loans. Secondly, circulating capital (in the form of lumber, steel, cement, labour) comprises a large proportion of the total cost of a project. Thirdly, the time interval between contractual payments (to the builder) and his actual project expenditure may stretch into months.

It remains necessary, however, to attempt to establish what fixed capital financing role (if any) the banks played. It is evident that internal finance could have accounted for practically all of the sector's fixed capital formation in the earlier years. From 1960 to 1964, the two sources jointly represented not less than 78% of fixed capital formation, and for the first 3 years not less than 90%. Thus in these years, both equity capital and bank finance was almost irrelevant. New authorized share capital 1957-1964, amounted to only £487,000.

After 1964, the situation seems to have changed somewhat. Internal finance formed smaller, though still absolutely large, percentages of fixed capital formation. The ratio of advances to GDP as we have already noted rose from that time. Several factors seem to have contributed to the change. GDP and Fixed Capital Formation both rose rapidly in 1964 and remained at a permanently higher level. On the other hand, though undistributed profits rose substantially from 1964, capital consumption allowances recorded only small increases. Thus the change in potential internal finance was not sufficient to accommodate the higher level of current and long-term activity. Unfortunately, we have no information on share issues over those years. We know, however, that bank loans also rose substantially to a permanently higher level from 1964. As a result, and in the absence of evidence to the contrary, we conclude that the higher level of bank advances was in response to the increased demand for finance from the construction and building industries. Bank credit therefore increased its importance as a permissive agent in the activity of this sector from 1964 onwards.

## BANK FINANCE AND MINING

Bank loans to the mining sector have been practically constant in magnitude, for long periods of time though percentage-wise they have declined drastically and continuously. Nonetheless they bulk very large in the portfolio of bank loans. The ratio of loans to GDP for the mining sector suggests a fair degree of importance should be attached to bank loans as a determinant of sector activity, particularly in the earlier years when GDP was lower and credits larger in magnitude. Yet this inference must be strongly qualified.

Though the expansion of mining has been considerable, bank loans were never crucial because of the continuing heavy flow of direct foreign investment. Bank advances represent small and extremely short-term accommodation. As the Treasurer of Alcan stated: "Except for relatively small term loans from commercial banks (the company) has relied on (its) parent company for debt and equity financing (including retained earnings)"<sup>(1)</sup>.

Thus commercial bank loans are incidental to the operations of the mining industry and their discontinuation would cause no difficulties.

## BANK FINANCE AND THE HOTELS AND ENTERTAINMENT SECTORS

Bank advances to Hotels have been large though declining in absolute as well as percentage terms. Loans to 'Entertainment' enterprises have not been large though rising. In 1961, they totalled £0.4, and rose to £1m. by 1968. Percentage-wise, no

(1) Cited in R. W. Palmer, op. cit.

distinct trend is discernible. The data in Table 3 pp. 13, is indicative of a considerable though rapidly declining importance of bank credit to the hotel trades. The level of importance is understandable in view of the structure of the production process in the hotelling business. The trend is explained by the rapidly growing share of foreign investment in the hotel business. Here again, there is need for bridging finance. The Entertainment group reveals an opposite trend. There, bank finance grew from a position of lesser to a position of greater importance. The level, however, remained permanently lower than the counterpart for "Hotels".

Other information suggests that bank loans ranked high in relation to other financial sources. Retained profits and capital consumption allowances were small, particularly in relation to GDP. Though no data on equity capital is available, it seems reasonable to assume that share issue would not be a regular method of raising capital. Moreover, Girvan claims that 30% of total hotel capacity in Jamaica is U.S. owned, and therefore foreign-financed.

Thus the overall impression is that bank credit was an important determinant of activity in these two sectors.

#### OTHERS

These are other loan categories listed in Tables 1 and 2 pps. 9 and 10. Bank advances to the Government sector were generally small, though important as Table 3, pp.13, indicates. However, the major positive contribution of the banks lie more in their holdings of Government stock.

The absence of any detailed information on the category Land Development forestalls any discussion.

Non-bank financial institutions account for large absolute amounts of the banks' loanable funds. These loans appear to be of considerable influence on the sector's activity, as Table 3, pp. 13, suggests.

The National Accounts data is not sufficiently detailed to permit an evaluation of the type of activity financed by bank loans. However, it has been reported that loans to Credit and Financial Institutions have been mainly for construction and extension of buildings. It appears therefore that the investment by banks in the loan capital of other financial intermediaries noted in the U.K. and U.S.A. has not occurred so far in Jamaica.

#### THE INDIRECT CONTRIBUTION OF BANK CREDIT TO SECTOR ACTIVITY

Bank credit undoubtedly has influenced sector activity to a greater degree than is measured by a study of direct loans to sectors. A complete treatment should include indirect effects such as the multiplier effects dictated by inter-sectoral transactions, and the effects of loans to the Personal and Professional Category. This loan category was the second largest single recipient of loans. Moreover, advances grew rapidly from 1961 onwards. Borrowed funds are used largely for the purchase of consumer goods, of a greater or less durable nature. Therefore, though no details on expenditures are available, it is possible for instance that these loans contributed to the massive rise in imports of consumer durables and thereby to the increased activity of the distribution sector. Further, the Building industry, Manufacturing, and Agriculture too must have received stimulus from expenditures by this category of loan recipients.



SUMMARY

The volume of bank credit is very large and affects a wide range of activities. However, several distinct features of the pattern of credit emerge. Bank advances are concentrated on a few sectors. Within these, there has been an emphasis on a few types of enterprises. Major flows have often been to those groups of enterprises that have had access to large amounts of internal finance, either because of monopoly conditions, generous capital consumption allowances, or access to financial resources of overseas-based parent companies. Some of these enterprises have also had greater access to authorized share capital.

C. EXPLANATIONS OF THE CREDIT PATTERN

Our explanations of the sectoral composition of credit are based on inadequate data. However, existing information suggests strongly that asset-portfolios reflect great concern with the criteria of self-liquidation, short-maturity structure, and credit-worthiness. Our premise is that in an unregulated loan market (i.e. a market that is not under legal restrictions) the size of loans to a specified loan category is explained by the extent to which the loan demand meets any or all of these criteria. Let us therefore analyse the pattern of loans in this context.

It can be seen that loans to the export industries for the finance of production and sale of goods are self-liquidating in that the production process itself generates the means for liquidating the debt. Likewise are loans to firms engaged in the wholesaling and retailing of goods. Thus we hold that it is reasonable to explain the large magnitude of loans to Agriculture and Manufacturing by the concentration of export-oriented production in those sectors. Sugar, Bananas, Footwear, Chemicals, and Textiles are cases in point. Loans to the Distribution sector are not only explained by the import content of its transactions, but the engagement of the sector in intensive credit-financing of the sale: a process that is essentially self-terminating.

However, not everything must be attributed to the nature of the production process. There is an important historical feature of the banking system which must not be overlooked. Namely, the banks were established primarily to service the foreign trade sector and its extension, and has continued to do so.

Further, it is noteworthy that many large borrowers within the areas of concentration have credit needs that are short-term. The chain of credit financed by a wholesaler dealing in imports exceeds 9 months, but is hardly likely to exceed 1 year. On the other hand, the foreign exporter normally grants credits of up to about 9 months. Thus it is unlikely that, in the average case, loans to the Distribution sector would have a maturity in excess of 6 months. Agricultural credit is also generally short-term. The annual or biennial phasing of harvesting serves as a built-in time regulator. Moreover, as far as the Manufacturing sector is concerned, Palmer's survey provides some evidence that medium- or long-term finance by large manufacturing corporations is rare, though large relative to the total loans within that sector. Thus the bulk of loans to Manufacturing is short-term. Personal overdrafts (again of short-term character) would comprise a large percentage of loans to the Personal and Professional category. Finally, the global data on the maturity structure strengthens the contention. Thus the high degree of harmonization of bank preferences and credit needs was a major contributory factor to the sectoral pattern of credit.

Very often, optimal asset qualities combine to produce a given loan pattern. This was very much the case in Jamaica. It appears that the banks attached lower risk-coefficients to loans extended to the sectors of highest concentration. Low credit risks might have been the strongest factor for the Personal and Professional group, loans to this group frequently falling within the medium term bracket and are not self-liquidating. Insofar as loan recipients are generally persons with assured incomes, other marketable assets (a house, life insurance policy, etc.) and with accounts at the lending bank, these borrowers have high credit-rating on the score of voluntary or involuntary default. An added

factor, of course, is that 'personal' loans are higher earning assets, since the loan rate is frequently above the average, and often above those on business loans.

Further, it is possible that several institutional features of the economy - old family firms (often monopolists), foreign ownership or connections, and sometimes foreign management - have contributed to the observed credit pattern by instilling the belief (i) that the risk of voluntary default is less and (ii) that management techniques are similar to those abroad and therefore customary loan appraisal techniques can be applied.

Finally, some global statistics on bankruptcies, 1955-64, and by inference on credit risks also help to explain the concentration of loans on large firms, and therefore in those loan categories where large firms predominate. The data indicates that the number of bankruptcies was higher among smaller sized firms, with fewer failures among enterprises with liabilities in excess of £3,000. Credit risk is therefore apparently minimised at the upper end of the liability scale. This inference however must be tempered by the presence of a downward trend in numbers at the lower end of the scale, and an upward trend for enterprises at the other extreme. We sketch the situation diagrammatically in Figure I.

Our final conclusion therefore is that the pattern of bank credit described above is explained largely in terms of the extent to which particular groups of borrowers located in particular sectors of the economy satisfied the traditional loan criteria of the expatriate commercial banking system. Subsidiary factors were the historical origins of commercial banking in Jamaica and the organisation of ownership finance, and management of some enterprises. Whether this sectoral distribution of credit, and its intersectoral composition was optimal from the national standpoint is an issue, I hope the conference will pursue.

FIGURE I

BANKRUPTCIES PER LIABILITY GROUPS 1953-64

NO OF BANKRUPTCIES

100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
1953 54 57 58 59 60 61 62 63 64

LESS THAN £100 LIABILITY GROUP

£500-£999 LIABILITY GROUP

£1000-£4000 LIABILITY GROUP

MORE THAN £4000 LIABILITY GROUP

YEAR

