

A MONETARY RESEARCH AGENDA FOR THE FUTURE

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INTRODUCTION

Caribbean economic research is alive and well. No less so in the monetary and financial fields, than in the broader subject area of development economics. Monetary research, whether conducted within the framework of the Regional Programme of Monetary Studies established in 1968 or stimulated by those activities, has added considerably to knowledge of the structure and functioning of Caribbean economics. As in all fields of endeavour there are gaps still to be filled, new areas to be analysed, and relationships in need of further elaboration and refinement. Many suggestions are contained in the earlier papers. This presentation identifies several issues and topics which seem eminently suitable for the research agenda now being formulated. It does so against a brief background on the evolution and scope of monetary and financial sector research thus far.⁽¹⁾

RESEARCH 1968-1972

Much of the research until the early 1970s focussed upon monetary and financial structure, social efficiency of financial intermediation, and central banking policy. Thomas (1972) analysed the organisation and performance of early central banking, concluding pessimistically about the scope for efficacious policy. Odle (1972-1974) analysed non-bank financial intermediation, arriving at generally critical conclusions about the social efficiency of the operations of insurance companies and other non-bank financial institutions. Similar stances were adopted by McClean (1975) in his study of money and banking in the now OECS countries and Barbados, Bourne (1975) in a study of commercial banking in Guyana, and Millers (1972) study of commercial banking in Jamaica. Financial operations received a little attention at the level of specific production sectors. Bourne (1972) surveyed and analysed corporate financial practices, while Lewars (1974) reported on the basis of small farm survey data collected by Bourne. An interesting aspect of the research programme was the system of flow of funds accounts produced by Alleyne (1971).

RESEARCH: 1972-1980

A discernible shift in the nature of monetary and financial research took place around 1972. The research agenda became more short-term and policy oriented; its ambit was interpreted more widely to include practically all economic issues; the research approach became less historico-structural and more behavioural; and greater emphasis was placed on econometric estimation.

These changes reflected a combination of circumstances. The onset of seemingly transient macro-economic problems such as inflation, international payments deficits, and fiscal deficits, and anxiety about economic integration required immediate attention. Moreover, the Programme's sponsors insisted on a short period focus as the mark of relevance. No less important was the arrival at the Mona Campus of the University of the West Indies of a then younger group of Caribbean Economists: Delisle Worrell, Wallace Joefield-Napier, Ramesh Ramsaran, Dwight Venner, and Compton Bourne, latter to be joined by Simon Jones-Hendrickson, and to be reinforced by Winston Barton at the University of Guyana. This group shared similar views about the need to strengthen the analytical foundations of monetary and financial research, to quantify behavioural relationships, and to broaden the research agenda. The establishment of a monetary workshop at Mona, the appointment of Bourne as Coordinator of the Programme from 1974 to 1979, and Worrell as Director of Research at the Central Bank of Barbados from 1974 provided organisational vehicles for their work and influence.

The impact of this conjuncture of circumstances on the research of the 1970s can be seen from the topics and methodology of both published and unpublished work. In addition to Bourne's (1977) *Inflation in the Caribbean*, which contained essays by Errol Allen, Gloria Francis, Huntley Manhertz, Joe Field-Napier, and Bourne and Wilberne Persaud, there is his *Public Finances in the Caribbean* (1977) with papers by Bourne, Maurice Odle, Fitz Francis, and Marion Williams. Other research on inflation included Latibeaudierre's (1974) and Ramjeesingh's (1974) analyses of Jamaica, St. Cyr (1975) on

1974.

Trinidad and Tobago, and Bourne (1974, 1979) on Wage-Price Policy. Jones-Hendrickson almost single-handedly continued the work on the fiscal sector, culminating in his 1985 publication Public Finance and Monetary Policy in Open Economies, although Michael Howard (1979) began to contribute towards the end of the sub-period with a study of the Barbadian Fiscal System. The foreign sector was studied by Delisle Worrell who formulated a model of optimal foreign reserve holdings (Worrell 197) and theoretically examined the relationship between the exchange rate and economic growth. Analytical work on income and price determinants of foreign trade was conducted by Joefield-Napier (1978, 1984). The 1974 Conference was devoted to the subject of monetary and financial integration, a line of work picked up by Karl Bennett in 1979 and continued into the next decade. Monetary institutions and monetary behaviour received considerable scholarly attention. Quantitative monetary sector models were constructed by Bourne (1974, 1975, 1976, 1977, 1978, 1979), Joefield-Napier (1974, 1978), Ramsaran (1977), Barton (1977), and Howard (1976, 1978, 1979). These studies concentrated on macro-monetary relationships such as money demand, money supply and interest rates as well as credit allocation. Several other financial sector studies have been undertaken. Odle (1980) dealt with multinational banking, Bourne and Bailey (1977) with life insurance, Bourne (1973,1977) with savings mobilisation, Bourne and Ally (1977) with flow of funds planning models, and Bourne (197), Worrell () and Howard (1976,1978) with commercial bank behaviour.

THE 1980-1986 SUB-PERIOD

Many of the research trends established during the second half of the 1970s were maintained in the present decade. Several demand for monetary studies appeared, notably McClean (1984), Keith Worrell (1985), and Ramsaran (1986). Money Supply models were refined by Terrence Farrell in a series of papers. Price determination and inflation were further investigated by Downes (1985), St Cyr (1981) and by Worrell and Holder (1985). Monetary sector models have been elaborated by Ramsaran (1986), Bourne (1986), Delisle Worrell (1985), Arnold McIntyre (1985) and Watson and Ramkissan (1984). Several studies have addressed the topic of financial structure e.g. Bourne (1983, 1986), Worrell

and Prescod (1983); commercial banking e.g. Bourne (1985,1986), Kowlessar (1985), Worrell (), Ramkissoon (1983); Non-bank financial intermediaries (Bourne, 1986) and Stock Markets (Bourne, 1986). → 2016. 10. 14

The foreign sector became a major research area, prompted mainly by endemic balance of payments crises and the professional orientation of Adlith Brown who succeeded Bourne as Coordinator in 1980. In a series of papers, Karl Bennett (197 ,) analysed foreign debt, monetary cooperation, and foreign exchange markets. Bourne (1981, 1982, 1985) also studied foreign debt, as did Bernal (1985). Trade matters received attention from Bourne and Joefield-Napier (1983), while wider payments adjustments problems were analysed by Thomas (1983), Worrell (198 ,) Brown () and Girvan, Bernal and Hughes (1980).
* Exchange rates and international reserves have received a little attention (Worrell,) Bourne, Cox, Solis and Worrell 1985, Blackman 1981), as have international investment capital flows (Ramsaran 1985) → above is the report on the work of the ...

An independent research programme has produced a large number of useful studies of rural financial markets, with particular reference to Jamaica. A comprehensive review of the main Jamaican studies can be found in Bourne (1983).

A considerable body of research is contained in graduate theses and dissertations prepared mainly under the supervision of Bourne at the University of the West Indies. Over the past 12 years, a total of (13) theses and dissertations have dealt with foreign trade financing, rural financial markets, commercial bank behaviour, monetary sector models, stock exchanges, financial development, and exchange rate policy.

FUTURE MONETARY RESEARCH AGENDA

Despite (Perhaps because of) the impressive output of the past two decades, there is still much to be done in terms of deepening analytical understanding of the operations of Caribbean economies and strengthening ^{the content of} monetary and financial policy. The papers delivered during the first two days of the Conference would have identified several issue areas. What is provided in the remainder of this paper is a listing of several topics on the basis of my own assessment of the state of our knowledge. They are grouped under three broad rubrics: financial intermediation, investment, and trade and payments.

Financial Intermediation

A fair degree of analytical information now exists with respect to the evolution and structure of financial intermediation. However there is still a remarkable geographical unevenness of the stock of ~~imperial~~ ^{empirical} material and a paucity of analyses of non-bank financial intermediaries in all countries. The financial sector of Belize and the OECS countries remain relatively uncharted; and pretty much nothing has been done on development banks, and non-banks other than life insurance companies in Guyana, Barbados, and Trinidad and Tobago.

Perhaps the most acute gaps exist with regards to microeconomic aspects of the intermeidaiton process. Credit pricing, deposit pricing, savings mobilisation strategies and policies, credit delivery systems, the extent of credit rationing, financial innovation, financial solvency and crises, and the efficacy of regulatory policy are all fundamentally linked to the micro-economics of resource demand and use in the financial services industry. It is highly important to understand the level and structure of costs and earnings and their determinants among financial institutions, transactions costs experienced by savers and borrowers, financial resource management systems, and loan delinquency probelms. Research into these topics can yield information utilizable in answers to several highly important policy questions including the optimal size and structure of the financial system, appropriate mechanisms for financial resource allocation and mobilization, the so far intractable problem of establishing viable rural financial markets, and the economic policy requirements for financial solvency.

Private Investment

One is hardpressed to cite studies of private investment behaviour in the Caribbean. Although investment equations have been incorporated in macroeconometric models constructed by several persons, e.g. Harris (1970), Manhertz (1971), Manhertz (1971), the treatment is superficial and ^{or more superficial} unhelpfully aggregative. As a consequence, it is impossible to be precise about the influence of internal liquidity, credit, interest rates, fiscal concessions, and other theoretically eligible variables on investment expenditures.

International Trade and Payments

On the trade side, a reasonable body of evidence exists with respect to the main structural influences on import demand. Much less attention has been paid to exports. Supply conditions have received insufficient analytical scrutiny. In future work on exports, it would be desirable to proceed at a highly disaggregated level, to carefully analyse industry production and marketing characteristics, and to distinguish between regional and extra-regional markets. Although there is still value in analysing export demand conditions, the net marginal gains are likely too small.

Exchange rates have on the whole been rather superficially treated in the Caribbean literature. Apart from the empirical work by Worrell, Bennett, Bourne and Cox, discussions have proceeded on a largely axiomatic basis with little reference to the rapidly evolving theoretical and empirical literature and to changing institutional conditions. Because of generalised floating, exchange rates have to be defined more realistically for use in macro analyses. The Jamaican float and parallel systems suggests the need for research on exchange rate determination, especially within a dynamic framework, central bank intervention, uncertainty, and international payments adjustments.

Foreign debt is a topic which warrants further research. What is the trade-off between foreign debt and domestic debt? What are the short-term and long-term effects of debt expansion or debt contraction? How can one gauge

the sustainability of the foreign debt? What are the debt market conditions as they pertain to Caribbean economies? These are a few of the questions which cannot be answered properly without considerably greater research effort than currently obtains.

REFERENCES

1. ALLEN, Errol, N. "A Note on Inflation in the East Caribbean Currency Area" in C. Bourne (ed) Inflation in the Caribbean.
2. ALLEN, William C. "Inflation in the Bahamas" in C. Bourne (ed) Inflation in the Caribbean.
3. ALLEYNE, Frank "A Critical Evaluation of financial accounting in the Caribbean", Mona: ISER, 1969.
4. ANDIC, Suphan "Government Finances in Surinam", Social and Economic Studies 26, 4, 1977.
5. BAPTISTE, Patrick "Public Finance in Trinidad and Tobago", Social and Economic Studies 26, 4, 1977.
6. BARNETT, Carla "Commercial Banking in Belize: 1960-80", Social and Economic Studies 31, 4, 1982.
7. BARTON, Winston E. Money in the Process of Income Determination, PhD. thesis, UWI, 1977.
8. BENNETT, Karl M. Trade and Payments in the Caribbean Common Market: the case for a Caricom Reserve Fund. 11th Regional Programme of Monetary Studies Conference, October 1979.
9. BENNETT, Karl M. "Mobilizing foreign exchange reserves for economic growth in Caricom." Social and Economic Studies, Vol. 30, No. 4, December 1981.
10. BENNETT, Karl M. An investigation of foreign exchange requirements for economic growth in CARICOM countries. Ontario: University of Waterloo, 1981.
11. BENNETT, Karl M. "An exploration of alternative methods of external financing for the Jamaican economy in the eighties." Social and Economic Studies, Vol. 31, No. 4, December 1982.
12. BENNETT, Karl M. "Exchange rate policy and external imbalance: the Jamaican experience, 1973-1982." Social and Economic Studies 32, 4, 1983.

13. BENNETT, Karl M. "A Note on Exchange Rate Policies and Caribbean integration." *Social and Economic Studies*, Vol 34, No. 4, December 1985.
14. BENNETT, Karl M. "An analysis of the Jamaican foreign exchange auction." *Social and Economic Studies*, Vol 35, No. 4, December 1986.
15. BERNAL, Richard "Transnational Banks, the International Monetary Fund and External Debt of Developing Countries", *Social and Economic Studies* 31, 4, 1982.
16. BERNAL, Richard "The Vicious Circle of Foreign Indebtedness: The Case of Jamaica" in Antonio Jorge et al (eds) *External Debt and Development Strategy in Latin America*, (New York: Pergamon Press, 1985).
17. BLACKMAN, Courtney "The Management of Foreign Exchange Reserves in Small Developing Countries", *Social and Economic Studies* 30, 4, 1981.
18. BOURNE, Compton "Business financial behaviour and the credit system in Guyana. Mona: ISER, 1972.
19. BOURNE, Compton "The political economy of indigenous commercial banking in Guyana." *Social and Economic Studies*, Vol. 23, No. 1, March 1974.
20. BOURNE, Compton "Structure, Power and Wage Price Policy in the West Indies", *Journal of Social and Behavioural Sciences* 20, 4, 1974.
21. BOURNE, Compton "Dynamic Utility Maximising Models of the Demand for Money in the Caribbean (with an application to Jamaica)", *Social and Economic Studies*, 23, 3, 1974.
22. BOURNE, Compton "Econometric Study of Monetary Behaviour in Jamaica, Ph.D thesis, UWI, 1975.
23. BOURNE, Compton "The Determination of Jamaica Money Stock", *Social and Economic Studies* 25, 4, 1976.
24. BOURNE, Compton and BAILEY J. "Economic Aspects of Life Insurance in Jamaica", *Central Statistical Office Research Papers* 9, 1977.

25. BOURNE, Compton Commercial bank portfolio behaviour in Jamaica. Mona: ISER, 1977.
26. BOURNE, Compton (ed) Public Finances in the Caribbean, Special Issue Social and Economic Studies 26, 4, 1977.
27. BOURNE, Compton (ed.) Inflation in the Caribbean. Mona: ISER, 1977.
28. BOURNE, Compton; ALLY, Asger "Use of flow funds accounts in economic planning in Caribbean economies." C.S.O. Research Papers, No. 9, 1977.
29. BOURNE, Compton and PERSAUD, Wilberne "Financial Variables in the Inflationary Process: Two Caribbean Cases" in C. Bourne (ed) Inflation in the Caribbean.
30. BOURNE, Compton The IMF model and Jamaica. Kingston: UWI, 1978.
31. BOURNE, Compton "Structural Methods of Forecasting the Money Stock", Working Paper No. 1, Caribbean Research Institute, College of the Virgin Islands, 1978.
32. BOURNE, Compton "Commercial Bank Interest Rates in Trinidad and Tobago", Central Statistical Office Research Paper No. 10, 1979.
33. BOURNE, Compton "Wage Determination in the Caribbean Countries: Trends and Issues" in Wage Determination in English Speaking Caribbean Countries, International Labour Office, Labour Management Series No. 57, 1979.
34. BOURNE, Compton "Jamaica and the International Monetary Fund: Economics of the 1978 Stabilisation Programme", Department of Economics and Rural Sociology, Ohio State University Occasional Paper No. 729, 1980.
35. BOURNE, Compton "Government foreign borrowing and economic growth: the Jamaican experience", Social and Economic Studies, Vol. 30, No. 4, December 1981.
36. BOURNE, Compton "Problems and Issues in Public Financial Enterprises: The Case of the Jamaica Development Bank",

37. BOURNE, Compton "External Debt and Economic Growth in the Commonwealth Caribbean" in Antonio Jorge and Jorge Salazar-Carillo (eds.), *Foreign Debt and Latin American Economic Development* (Pergamon Press, 1982).
38. BOURNE, Compton "Structure and Performance of Jamaican Rural Financial Markets", *Social and Economic Studies* 32, 1, 1983.
39. BOURNE, Compton and JOEFIELD-NAPIER, Wallace "Export Performance and Prospects for the Commonwealth Caribbean", in Antonio Jorge, Enrique P. Sanchez and Jorge Salazar-Carillo (eds.), *Latin American Trade and Economic Growth* (Pergamon Press, 1984).
40. BOURNE, Compton "The International Debt Crisis and Development Strategies in the Caribbean", in Antonio Jorge, Jorge Salazar-Carillo and Frank Diaz-Pou (eds.), *External Debt and Development Strategy in Latin America* (Pergamon Press, 1985).
41. BOURNE, Compton, COX, Winston, SOLIZ, Felix and WORRELL, DeLisle *Exchange Rate Policy Within the Caribbean Community*. (Inter American Development Bank and Caribbean Community Secretariat, 1985).
42. BOURNE, Compton "Banking in Boom and Bust Economies: Lessons From Trinidad and Tobago and Jamaica", *Social and Economic Studies* 34, 4, 1985.
43. BOURNE, Compton "Contemporary financial structure of Trinidad and Tobago." In C. Bourne and R. Ramsaran, *Essays on Trinidad and Tobago Money and Finance*, St. Augustine: RPMS, 1986.
44. BOURNE, Compton "Economic aspects of the Trinidad and Tobago stock market." In C. Bourne and R. Ramsaran, *Essays on Trinidad and Tobago Money and Finance*, St. Augustine: Regional Programme of Monetary Studies, 1986.
45. BOURNE, Compton "Financial deepening, domestic resource mobilization and economic growth: 1953-81." In C. Bourne and R. Ramsaran, *Essays on Trinidad and Tobago Money and Finance*, St. Augustine: RPMS, 1986.

46. BOURNE, Compton Financial deepening, domestic resource mobilization and economic growth: Jamaica, 1955-1982. St. Augustine: UWI, 1986. (Forthcoming in Antonio Jorge and Jorge Salazar Carillo eds. Foreign Investment, Debt and Economic Growth in Latin America, MacMillan-Press, 1988.
47. BOURNE, Compton "Flow of funds analysis of financial changes: 1966-1978." In C. Bourne and R. Ramsaran, Essays on Trinidad and Tobago Money and Finance, St. Augustine: RPMS, 1986.
48. BROWN, Adlith "Economic Policy and the IMF in Jamaica", Social and Economic Studies 30, 4, 1981.
49. BROWN, Adlith "Issues of Adjustment and Liberalisation in Jamaica: Some Comments", Social and Economic Studies 31, 4, 1982.
50. BULLOCK, Colin "IMF Conditionality and Jamaica's Economic Policy in the 1980s", Social and Economic Studies 35, 4, 1986.
51. CODDRINGTON, Harold "An Explanation of Shortterm Capital Movements in Barbados", Social and Economic Studies 34, 4, 1985.
52. DOWNES, A.S. "Inflation in Barbados: An Econometric Investigation", Economic Development and Cultural Change 33, 3, 1985.
53. FARRELL, Terrence W. "The Money Supply and Monetary Base in Open Dependent Economies", Central Bank of Trinidad and Tobago, Nov. 1980.
54. FARRELL, Terrence W. "The Government Budget and the Money Supply in Open Petroleum Economies: Trinidad and Tobago, 1973-1980", Central Bank of Trinidad and Tobago, July 1981.
55. FARRELL, Terrence W. "Money Supply Process and Monetary Equilibrium in the Open Petroleum Economy", Central Bank of Trinidad and Tobago, November 1981.
56. FARRELL, Terrence W., NAJJAR, Annette and MARCELLE, Hazel. "Corporate Financing and Use of Bank Credit in Trinidad and Tobago", Social and Economic Studies 35, 4, 1986.
57. FARRELL, Terrence W. Money supply process and monetary equilibrium in the open petroleum economy. Part of Spain:

Central Bank of Trinidad and Tobago, 1981.

57. FRANCIS, Carlene "Offshore Banking in the Bahamas", Social and Economic Studies 34, 4, 1985.
58. FRANCIS, Carlene "Monetary Policy in a Small Open Economy: The Case of the Bahamas", Social and Economic Studies 35, 4, 1986.
59. FRANCIS, F.A. "Government Financing in the Associated States, Social and Economic Studies 26, 4, 1977.
60. FRANCIS, Glorie "Price Trends in Barbados, 1968-1973" in C. Bourne (ed.) Inflation in the Caribbean.
61. GITVAN, Norman, BERNAL, Richard and HUGHES, Wesley "The IMF and the Third World: The Case of Jamaica", Development Dialogue, 1980: 2.
62. HOWARD, Micheel "A Preliminary Investigation of the Demand for Money in Barbados 1950-1976", Social and Economic Studies 28, 4, 1979.
63. HOWARD, Michael The Fiscal System of Barbados, 1946-1965 (Occasional Papers Series 12, ISER, Cave Hill, 1979).
64. HOWARD, Michael "The Demand for Money in Guyana: Some Empirical Findings", Transition 3, 1, 1980.
65. HOWARD, Michael "A Note on the Cost and Revenue Structure of Commercial Banking in Barbados", Social and Economic Studies 29, 2, 1980.
66. HUMES, Dorla "Foreign Reserves Management in Belize: An Assessment of Liquidity Constraints", Social and Economic Studies 30, 4, December 1981.
67. JEFFERSON, Owen, and BOYCE, Dancy "The Effect of Inflation on Caribbean Economies" in C. Bourne (ed.) Inflation in the Caribbean.
68. JOEFIELD-NAPIER, Wallace "Inflation, Inflationary Expectations and Monetary Behaviour in Jamaica" in C. Bourne (ed.) Inflation in the Caribbean.

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69. JOEFIELD-NAPIER, Wallace Financial integration and interest rate linkages between North Atlantic and Caribbean economies: January 1968 to December 1976. St. Augustine: ISER, 1977.
69. JOEFIELD-NAPIER, Wallace "Inflation, inflationary expectations and monetary behaviour in Jamaica." In C. Bourne (ed), Inflation in the Caribbean, Mona, ISER, 1977.
70. JOEFIELD-NAPIER, Wallace "Trinidad and Tobago's Economic Growth and the Balance of Trade: 1954-1968", Social and Economic Studies 27, 4, December 1978.
71. JOEFIELD-NAPIER, Wallace A quarterly monetary model of the Trinidad and Tobago economy: 1970(1)-1978(IV). St. Augustine: ISER, 1979.
72. JOEFIELD-NAPIER, Wallace Monetary supply and interest rates: an analysis of the Trinidad and Tobago case: January 1970-December 1980. St. Augustine: ISER, 1981.
73. JOEFIELD-NAPIER, Wallace Demand for imports: the case of Barbados, 1954-1970. Mona: ISER 1982.
74. JOEFIELD-NAPIER, Wallace "External Public Debt and Public Finances in OECS Member Countries and Belize", Social and Economic Studies 34, 4, 1985.
75. JONES-HENDRICKSON, S.B. "Fiscal Capacity and Performance in the Virgin Islands", Social and Economic Studies 26, 4, 1977.
76. JONES-HENDRICKSON, S.B. and ANDIC, Fual (eds.) Readings in Caribbean Public Sector Economics (Kingston, Jamaica: ISER, 1981).
77. JONES-HENDRICKSON, S.B. "Rational Expectations, Causality and Integrative Fiscal-Monetary Policy in the Caribbean", Social and Economic Studies 34, 4, 1985.
78. JONES-HENDRICKSON, S.B. Public Finance and Monetary Policy in Open Economies: A Caribbean Perspective (Kingston, Jamaica: ISER 1985.).
79. KIRTON, Clement "Bank Lending and Economic Underdevelopment in Jamaica: Can An Indigenous Bank Solve the Problem", Social and Economic Studies 26, 3, 1977.

80. KOWLESSAR, Seisnarine "Technological Innovation in the banking sector: a study of new technology introduced into the commercial banking system in the Caribbean", 17th Regional Programme of Monetary Studies Conference, 1985.
81. LATIBEAUDIERE, D.M. "An Analysis of Inflation in Jamaica" (unpublished) Bank of Jamaica, September 1974.
82. LEWARS, Gladstone Small farm financing in Guyana, 1968-1970. Mona: ISER, 1977.
83. MANHERTZ, Huntley G. "The Price Determination Process in a Small Open Economy - The Jamaican Experience" in C. Bourne (ed.) Inflation in the Caribbean.
84. MC BAIN, Helen "The Political Economy of Capital Flows: The Case of Jamaica", Social and Economic Studies 30, 4, 1981.
85. MC CLEAN, Wendell A. Money and banking in the East Caribbean Currency Area. Mona: ISER, 1975.
86. MC CLEAN, Wendell A. "Some Evidence on the Demand for Money in a Small Open Economy: Barbados", Social and Economic Studies 31, 3, 1982.
87. MC INTYRE, Arnold "Finance, growth and the balance of trade in the OECS countries", Social and Economic Studies, Vol. 35, No. 4, December 1986.
88. MILLER, Nugent Organization and structure of commercial banking in Jamaica. Mona: ISER, 1971.
89. ODLE, Maurice A. Significance of non-bank financial intermediaries in the Caribbean. ISER, 1972.
90. ODLE, Maurice A. Pension funds in labour surplus economies. ISER, 1974.
91. ODLE, Maurice A. Multinational Banks and Underdevelopment (New York: Pergamon Press 1981).
92. RAMJEEESINGH, D.H. "Inflation in Trinidad and Tobago" unpublished, Department of Economics, UWI, Mona, 1974.
93. RAMKISSON, Ronald "Commercial Bank Portfolio Behaviour in

Trinidad and Tobago", 13th Regional Programme of Monetary Studies Conference, November 1981.

94. RAMSARAN, Ramesh "Aspects of Public Finance in a Tax Haven", *Social and Economic Studies*, 26, 4, 1977.
95. RAMSARAN, Ramesh "A Note on The Relationship Between the Balance of Payments and the Money Supply in Trinidad and Tobago 1966-1975", *Central Statistical Office Research Papers* 10, 1979.
96. RAMSARAN, Ramesh F. *The Monetry and Financial System of the Bahamas: Growth Structure and Operations* (Kingston, Jamaica: ISER, 1984).
97. RAMSARAN, Ramesh *U.S. Investment in Latin America and The Caribbean: Trends and Issues* (London: Hodder and Stoughton, 1985).
98. RAMSARAN, Ramesh "The Demand for Money in Trinidad and Tobago - Experiments with Data for the 1970-1984 Period", *Essay VII in Bourne and Ramseran* (1986).
99. ST.CYR, E.B.A. "Rising Prices: An Explanatory Theoretical and Empirical Study of Trinidad and Tobago", *Central Statistical Office Research Papers* 4, 1974.
100. ST.CYR, E.B.A. "A Note on the Trinidad and Tobago Inflationary Experience", *Social and Economic Studies* 28, 3, 1979.
101. ST.CYR, E.B.A. "Wages, Prices and the Balance of Payments: Trinidad and Tobago, 1956-1976", *Social and Economic Studies* 30, 4, 1981.
102. TAYLOR, E.S. "Public Finance in Jamaica 1971-1976", *Social and Economic Studies* 26, 4, 1977.
103. THOMAS, Clive Y. *Structure, performance and prospects of central banking in the Caribbean*. Mona: ISER, 1972.
104. THOMAS, C.Y. "Tugans, the IMF/World Bank Group and the Economic Crisis", *Social and Economic Studies* 31, 4, 1982.
105. WATSON, Patrick and RAMKISSOON, Ronald "A Model of the Financial Sector of Trinidad and Tobago", *Proceedings 5th IFAC/IFORS*

Conference on Dynamic Modelling and Control of National Economies, Budapest, 1986.

106. WHITTINGHAM, Wilfred L. "Inflation in the Caribbean Community and Latin America", in C. Bourne (ed.) Inflation in the Caribbean.
107. WILLIAMS, Marion "Aspects of Public Policy in Barbados, 1964-1976", *Social and Economic Studies* 26, 4, 1977.
108. WILLIAMS, Marion "An Analysis of Regional Trade and Payments Arrangements in Caricom: 1971-1982", *Social and Economic Studies* 34, 4, 1985.
109. WITTER, Michael "Exchange Rate Policy in Jamaica: A Critical Assessment", *Social and Economic Studies* 32, 4, 1983.
110. WORRELL, Delisle The exchange rate and economic development: a Caricom perspective. Bridgetown: Central Bank of Barbados, 1974.
111. WORRELL, Delisle "The Theory of Optimal Foreign Reserves in a developing Country", *Social and Economic Studies* 25, 1976.
112. WORRELL, Delisle Exchange rate and the rate of economic growth. Bridgetown: Central Bank of Barbados, 1977.
113. WORRELL, Delisle "Exchange Rate Policy for Less Developed Countries", *Social and Economic Studies* 29, 2, 1980.
114. WORRELL, Delisle "External influences and domestic policies: the economic fortunes of Jamaica and Barbados in the 1970's." *Social and Economic Studies*, Vol. 30, No. 4, December 1981.
115. WORRELL, Delisle "Banking in Barbados, 1960-82". Bridgetown: Central Bank of Barbados, 1983.
116. WORRELL, Delisle and PRESCOD, Ronald "The Development of the Financial Sector in Barbados 1946-1982", *Central Bank of Barbados Economic Review* X, 2, 1983.
117. WORRELL, Delisle "Monetary Mechanisms in Open Economies: A Model for the Caribbean" in Michael Connolly and John McDermott (eds.) *The Economics of the Caribbean Basin* (New York: Praeger, 1985).

118. WORRELL, DeLisle and Carlos E. Holder "A Model of Price Formation for Small Economies: Three Caribbean Examples", *Journal of Development Economics* 18, 2-3, 1985.
119. WORRELL, Keith "Preliminary Estimates of the Demand for Money Function: Jamaica 1962-79", *Social and Economic Studies* 34, 3, 1985.
120. ZEPHERIN, M.G. "The External Debt of Barbados", *Central Bank of Barbados Quarterly Review* 7, 4, 1980.