

AN IDEAL-TYPE ACCOUNTING FRAMEWORK FOR PLANTATION  
ECONOMY FURTHER MODIFIED

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AN IDEAL-TYPE ACCOUNTING FRAMEWORK FOR PLANTATION  
ECONOMY FURTHER MODIFIED

Here we present an Accounting Framework designed to capture the significant economic flows in post-war Caribbean economies. The framework is an ideal-type representing Plantation Economy Further Modified. It employs categories and codes corresponding to the Accounting Framework we have designed for Pure Plantation Economy<sup>1</sup> and is meant to be regarded as a genealogical development of that framework. This is in keeping with our postulate that the large majority of contemporary Caribbean economies can most profitably be studied in terms of the degree to which they conform to Pure Plantation Economy.

"Relevance" of the Framework

We have judged that the Framework is readily adapted to the needs of the following Caribbean countries: Antigua, Barbados, Cuba (pre-revolutionary), The Dominican Republic, Guyana, Jamaica, The Netherlands Antilles, Puerto Rico, St. Kitts, Suriname, Trinidad & Tobago, Venezuela, and the Virgin Islands. It is highly applicable also to Mauritius. Production in both the traditional and the new sectors of these territories is typically organised by corporations showing great self-sufficiency in relation to the

rest of the economy in that intermediate purchases have a high import content and factors incomes locally paid out have only limited secondary effects on national income and employment; and bearing close resemblance to the "total institutions" of Pure Plantation Economy.

In spite of a marked political fragmentation of the region, the territories have had a common economic and, to some extent, a similar cultural history. Besides, the legacy of the past is being re-inforced by the pursuit of similar contemporary policies of economic development.

All of the economies mentioned above show a high degree of passive incorporation into the international economy. They are export-propelled in the sense that they serve as a locus of production for corporate institutions which are the agencies of international resource combination and whose entrepreneurial decisions are made with respect to considerations which transcend any particular locus of supply. A large proportion of their trade is not autonomous in the sense that decisions concerning the products to be sold cannot be made in a manner which exploits to the full the earning potential of national resources.

Instead, exports are induced by metropolitan investment and ownership of productive assets; importation is undertaken as a necessary complement to that; and a high proportion of incomes and expenditures appear in the balance of payments. It is therefore characteristic of these economies

that the major adjustments are to be analysed in terms of external flows; and that there is a significant difference between the domestic and the national economy. The first refers to a statistical aggregation of activity involving the combination of resources in a geographical area; the second to a social aggregation of people who engage in production. Only the latter is an entity to which considerations of economic welfare can meaningfully be related.

The Caribbean economies which may be less readily investigated with the help of this Accounting Framework are: Haiti, Guadeloupe, Martinique, Dominica, Grenada, St. Lucia, St. Vincent, Montserrat. With the exception of Haiti, these economies are equally export-led. However, export production appears to be less dominated by external investment and corporate organisation.<sup>2</sup> At the same time, what we have elsewhere described as the general institutional framework is much the same in these countries as in other parts of the region. Conditions of external marketing, the character of public policy and the nature of the monetary system are, if anything, more representative of Pure Plantation Economy than in other territories. Moreover, the growing importance of the tourist sector as a typical traditional exporter is serving to bring some of these territories closer to the ideal-type than they have been since sugar plantation monoculture was displaced by more flexible patterns of agriculture.

2-

Even among the group for which the table is thought to be well-adapted, we acknowledge that there exist significant differences in size, in degree of diversification, in patterns of investment and ownership, and in metropolitan affiliation. Nevertheless, the available data do permit us, as a first approximation, to assume that the institutional-fix of the economies is sufficiently alike to justify a common approach and a common quantitative scheme.<sup>3</sup> We shall see to what extent our own studies confirm this hypothesis.

#### Nature of the Accounting Framework

The Accounting Framework is in some respects similar to the schemes suggested by Richard Stone and the United Nations, by Ragnar Frisch, and in particular by Dudley Seers.<sup>4</sup> Unlike the United Nations and the Frisch accounts, however, ours does not attempt to trace transactions in financial claims. The extension of the work into this dimension remains for the future.

As our point of departure we have taken the Seers' model which was developed to facilitate projections for specialised exporters of primary products (with special reference to Jamaica and Trinidad). Seers sought to take account of the fact that such economies are propelled by export demand. In accounting terms this means that the focus of attention is

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6

shifted away from the traditional input-output preoccupation with the matrix of domestic interdependence towards a more elaborate treatment of income "leakages" by way of taxation and transfers to the external world. The Seers' framework concentrates on the channels by which earnings of the export sector filter through the private and public sectors to create income and employment elsewhere. To this end, it is necessary to include more information than usual on the pattern of public finance, the structure of domestic final demand and the make-up of the external payments.

In pursuit of these objectives, Seers' model separates intermediate, purchases of domestic origin from intermediate purchases of imports. Competitive imports are added to domestic supply and are jointly disposed to final using sectors. The categories of factor income which constitute "value added" are elaborated to permit an easy transposition to a revenue and expenditure account for government households, and other income-disposal accounts.

The modifications which we have made to the model lie in our classification of the producing sectors and above all, in the high degree of disaggregation that we have proposed in regard to productive activities, imports, factor payments, consumption-expenditures, public sector accounts, and income disposal.

The differences reflect our primary interest in comparative research into the functioning of the Caribbean economies. Our approach however, also has relevance for techniques of short-term planning and projection extending beyond the conventional input-output variables of industry outputs, commodity imports, and contribution to value added to GDP. These extensions relate to projections of savings and investment flows. However, the price of the disaggregation we have proposed consist in the fact that many available statistical series cannot be used in their present form. In this regard, immediate convenience to planning offices has *deliberately been sacrificed for statistical innovation, which promises to yield a fully flexible system of rational and sectoral accounting.*

Moreover, we wished to have a schema which would not only bring out the characteristics which distinguish Plantation Economy among export-propelled economies but would also accomodate all the variants of the type.

#### Classification of Producing Sectors

Seers has suggested some criteria for selecting the sectors to be isolated. The obvious ones are those which play a strategic role in determining the level of total economic activity, which have exceptional cost structures, or are subject to peculiar demand influences. In

addition, it is also worth identifying sectors which are likely to run into bottlenecks, to which government expenditures are crucial, in which import substitution is conspicuously feasible and abnormal rates of productivity change likely, or where factors shares may behave in a peculiar manner.<sup>5</sup>

What these criteria reduce to is a classification of producing sectors according to differences in their structure of supply and demand. In this sense, he follows the traditional input-output approach. In this approach, the level of activity is unilaterally determined by the changes in demand.<sup>6</sup> The decisions of suppliers and by extension, possible controls of government are left out of account.<sup>7</sup> In other words, the schema as Seers recognizes, is adapted to the requirements of economic planning only in the very short-run.

Once the planning horizon is extended, however, we meet the well known problem of investment functions and it becomes necessary to identify units of decision-making. For this purpose we require a classification which focusses on the institutional as distinct from the technical aspect of economic organisation.

The agent which combines resources and makes decisions concerning the expansion of capacity is clearly not an "activity" but an enterprise or firm. The decisions of enterprises engaged in similar activities are



likely to differ markedly depending on whether a subsidiary of a multinational corporation, an independent local business, or a public corporation is involved. For one thing, each of these institutional types is likely to be guided by different objectives. For another, they are differently placed both in regard to their access to finance and in respect to the constraints on their use of it. It is for this reason that classification by institutional transactor provides the bridge between those accounts which deal in flows of product and income and those which register flows of funds in the form of transactions in financial claims.

In the present version of our Framework we have made a partial attempt to identify institutional transactors both in our grouping of production activities and in our disaggregation of the Savings-Investment Accounts. We frankly acknowledge that our treatment is incomplete since we have not devised a systematic scheme of cross-classification.

The producing sectors have been grouped so as to throw into relief the fracturing of the economies and the historical process by which this has occurred. We have assigned activities to three classes, each of which reflects behavioural characteristics associated with one of the three periods into which we have divided Caribbean history. Within these three broad categories we have grouped activities in accordance with

organisational characteristics. At the same time, it remains possible to identify single activities within these integrated units.

① \* The first major class is the Traditional Export Sector. Activities included here exhibit patterns of supply and demand which are distinctly mercantilist and akin to those which characterised the Pure Plantation Economy. Typically these activities are based on the extraction of a resource, are oriented towards metropolitan trade, and respond almost exclusively to metropolitan investment and other initiatives. They include both agricultural exports with a long history and mineral exports of more recent vintage.

② \* The second major class is the Traditional Residentiary Sector. This is comprised of activities akin to those introduced during the period following the breakdown of Plantation Economy when mercantilist ties loosened, labour was freed, and peasants and artisans established themselves. In the older plantation economies this period started in the middle of the nineteenth century and ended with the collapse of the international economy between the wars.

Included here are agricultural, processing, mining and service activities which developed in response to local and regional demand and are strongly oriented towards local supplies of factors and materials. Taken with the Traditional Export Sector, these activities describe Modified Plantation Economy.

③ New types of activity resulting from post-war policies of industrialisation and tourist promotion fall into the New <sup>\*</sup>Dynamic Sector. This third major class also exhibits markedly mercantilist patterns of behaviour but with some novel manifestations. The typical activity is manufacture and assembly rather than agriculture and extraction. Although some territories and some industries are engaged in exporting, the direction of commodity movements is usually from the metropolis to the hinterland rather than the reverse. Programs of import substitution predominate, the hinterland remains however, a locus of repercussion rather than a locus of economic initiative; it shares only slightly in that part of the product which is attributable to innovation and enterprise. Moreover, it is accorded a terminal role in the productive process and thus receives little opportunity to participate in the elaboration of the product. An economy characterised by this type of activity may be designated as Branch-Plant Economy which, placed alongside Modified Plantation Economy, yields Plantation Economy Further Modified.

This three part classification is intended to focus attention on the success or failure of economic policy in integrating the economy. Linkages in Caribbean economies have not, on the whole, been effected through the diversification of production for intermediate and final demand.

Instead, periodic political decisions have been taken to adjoin new sectors onto the legacy of the previous economic order.

It has been noted that the Traditional Export Sector and to a lesser extent the New Dynamic Sector are dominated by corporations which tend to be ~~total~~ institutions; that these corporations provision themselves with inputs imported from or through their organisational centres in the metropole; and that they dispose of their output within the framework of the financial entity to which they belong. However, they often organise the production of some of their input requirements in the hinterland. Aggregation on the basis of institutional transactors therefore shows a clustering of diverse activities (in much the same way as aggregation on the basis of activity may involve the joint production of diverse commodities). Assorted manufacturing, processing, refining and fabricating activities as well as a range of ancillary services must be placed along with the extractive activity on which they depend.

Where such institutional transactors predominate, it is necessary to identify particular firms. We have therefore suggested that the Traditional Export Sector be broken up so as to show the main firms. We acknowledge that there may be problems of access to the required data and that publication may not be permitted on grounds of statistical confidentiality. On the other hand, data for the firm as a

whole are not only more easily procured but are also in some ways more meaningful than the estimates which have to be made to allocate costs to single activities. In any event, our Framework is sufficiently disaggregated to permit re-aggregation at the level of both the productive activity and the decision-making category.

#### Disaggregation of Savings and Investment Accounts

A substantive innovation which we have made is the disaggregation of the Savings-Investment Account. The Account is divided into four parts so as to show the fragmentation of the capital market.

Specifically, the capital transactions of the plantation-mineral enterprises are separated from those of the remainder of the economy. Within this remainder there is a further division between the operations of the foreign enterprises in manufacturing and tourism and those of the rest. Further, the government transactions which cover the deficit (or surplus) on overall account are to be shown separately.

The aim of this treatment of the Savings-Investment Account is to acknowledge that in Plantation Economy, there does not exist an aggregate "pool" of savings available to finance investments of all types.<sup>8</sup> This is an attempt to establish a correspondence between institutional influences on the pattern of savings and investment and

the corresponding influences on the structure of "provisioning" and disposal.

While the sources and uses of savings may not be as specific as this treatment implies, there is no doubt that the structure of borrowing and lending depicted in our accounts conforms more closely to reality than the conventional picture.

The significance of this correspondence emerges most clearly in the external payments account. Here the rest of the world has been sub-divided into areas which describe the "general institutional framework"<sup>9</sup> within which trade and payments are organised. The profile of transactions which emerges facilitates appraisal of the role of particular institutions in forming patterns of international specialisation and resource combination.

The trade account records the flow of goods of different types and different degrees of elaboration originating from, and consigned to different areas. The income and capital account registers flows of funds associated with the pattern of production and trade.

If in addition, accounts are drawn up for single firms or sectors, we will be in a position to judge the degree to which patterns of linkage between the subsidiaries of multi-national corporations explain the structure of trade and payments.

## EVOLUTION OF NATIONAL ACCOUNTING

National Accounts have been prepared by the Puerto Rico Planning Board for the period reaching back to 1940.<sup>10</sup> The Central Banks in both Venezuela and the Dominican Republic have published series going back to 1950<sup>11</sup> while a number of estimates were devised for pre-revolutionary Cuba by the Banco National,<sup>12</sup> other official agencies and research scholars.

In the British islands, the earliest work was undertaken by the Colonial Office and this resulted in periodic estimates in the 1940's by some of the Development Secretariats, notably those in Jamaica and Guyana.<sup>13</sup> Sustained effort in the field came after the Institute of Social and Economic Research organised studies in the Windwards by Siffleet, in Jamaica by Thorne, and in Guyana and the Leewards by O'Loughlin.<sup>14</sup> Some of the Governments then took over the preparation of regular series as a normal task of their statistical agencies; while others collaborated with research scholars to have the work done.<sup>15</sup>

In the French islands, estimates have been prepared for the period since 1949 by the Societe d'Etudes Pour le Developpement Economique et Social and by the University of Bordeaux.<sup>16</sup> The Netherlands Antilles have also had accounts made.<sup>17</sup> Suriname is thus perhaps the only territory which has not published a series of

fully articulated accounts though the Planbureau has from time to time prepared rough and partial estimates in connection with the development plans as well as highly refined sector accounts in connection with the aluminium smelter complexes.<sup>18</sup>

The preparation of accounts on a regular basis led naturally to attempts at refinement and reform of methods, at first mostly within the framework of the conventional schema<sup>19</sup> and then beyond it into studies explicitly addressed to considerations of sectoral interdependence. We shall see that a smooth transition into the multi-sectoral dimension was possible not only because of the great volume of work accomplished by the statisticians of the region, but also in some cases, because of the methods which the pioneers were encouraged to use in the face of available data.

✕In the case of the English-speaking territories, the fact that metropolitan accounting procedures could not be adopted for lack of the necessary data turned out to be an advantage. The absence of data on personal income of the kind available from income-tax and social security records in countries such as the U.K., U.S., and Canada led to a reliance on the "value-added" method of estimating the national accounts.<sup>20</sup> Thus, from the beginning, this approach principally from the product rather than the income or expenditure side embraced multi-sectoral accounting and laid the basis for such



extensions as input-output. Suggestions made by Thorne for Jamaica and Seers for Barbados helped greatly to facilitate a meaningful classification of sectors.<sup>21</sup>

In the French territories,<sup>22</sup> the position has been much the same in regard to data. Social security records notwithstanding, income data were scarcely available. Moreover, there was the additional consideration that the statistical services are much more a metropolitan responsibility than in the British islands. But in some ways, this too, has turned out to be an advantage. French planning methods dictate or at least are biased towards studies of interdependence.

The first comprehensive accounts were prepared for 1958 and subsequently used as a basis for constructing less detailed Tables (Comptes Economiques Legers) for the period since 1949 (partly by backward and forward extrapolation). The procedures followed and the methods employed in the previous work were later subjected to a test of internal consistency with the aid of a model<sup>23</sup> of "économies à moteur externe", which was quantified in summary accounts (Esquisses Comptables) for 1961 and 1962. Finally, in 1964, the model was employed to make projections covering the years up to 1970 not only for Martinique and Guadeloupe but for Guyana and Reunion (which are "plantation" economies bearing strong resemblances to Guyana and Mauritius respectively).

The basic Table has from the start been set up to integrate Gross Product and National Income Accounts along lines which are in some ways similar to those on which we have drawn up the Accounting Framework presented below. The significant differences lie in the high degree of aggregation, and in the absence of an input-output account in the table for the French Speaking Antilles. Moreover the classification by institutional transactor is conventional.

The Table is in three parts.<sup>24</sup> First, there is a Matrix of sources of supply of five major commodity groups and disposition to users. These supply-demand balances relate to agricultural products, fuels and raw materials, industrial goods, construction and services. Supply is either from imports or from domestic production. In both cases there is a breakdown of gross value of supply whereby distribution margins and stock exchanges are identified. The total supply of each of the five commodity groups is disposed of to exports, personal consumption, investment and intermediate users including government. With respect to the last three users there is a further breakdown into local and imported shares.

The second matrix breaks down the cost structure of seven industrial sectors including Agriculture, Construction, Distribution and

Transport, miscellaneous commodity producing sectors, and public enterprises. For each of these the Table records intermediate purchases, final distribution margins, gross factor incomes and value of output.

In the third matrix receipts and expenditures associated with the transactions in the first two matrices are entered to four income-disposal accounts. Government, Business and Households, the rest of the world and Savings-Investment. The transactions which are not associated with the first two matrices are treated as transfers of the four accounts with the following seven additional accounts. Public Goods, Social Transfers, Taxes<sup>21</sup>, External Debt, Metropolitan Grant-in-Aid, Miscellaneous Transactions and Savings.

## Input-Output Tables

Experimental input-output Tables of differing degrees of sophistication are now available at least for the Dominican Republic, Puerto Rico, Jamaica, and Trinidad and Tobago.<sup>25</sup>

The W. Indian Tables are cast within the mould of the Dudley Seers framework which has been discussed above. The table prepared for the Dominican Republic refers to the year 1962. It aims principally to estimate input-co-efficients for forty-five manufacturing sub-sectors. Since the country is well served with annual censuses of industrial production<sup>26</sup> and has a manufacturing sector which is more residentary than in any other Caribbean country, the exercise has been well worth the effort. But the important need to investigate the functioning of the economy in relation to the dominant sugar industry remains a matter for exploration.

The first experimental Puerto Rican Table was prepared for 1959-60. It has 20 producing and 16 final using sectors, including accounts for the three levels of government. Imported inputs are treated as non-competitive and recorded as a single entry. Retained final imports are divided between consumer and investment goods. Again there is no commodity breakdown. Freight and insurance on external trade are recorded separately for each of the 20 sectors as well as for final imports. The sectoral contribution to GDP is given in aggregate only at market prices. It is therefore, impossible to identify factor income not to mention sub-categories such as wages and salaries.

In an economy where unilateral inflows constitute an important source both on personal and public account, the usefulness of input-output is limited unless these GDP based accounts are integrated with national accounts. Moreover, where government is especially vigorous in promoting economic development, it becomes important to breakdown the accounts of the public sector into functional as well as administrative categories. Further, where the propensity to import of both final and intermediate goods is high, it is necessary to disaggregate imports and to trace their disposition to different types of users. Finally, where a large proportion of domestic investment is undertaken by metropolitan branch-plants, the relevance of classification by institutional transactors is obvious.

Some of these considerations are well appreciated by the Planning Board and steps have been taken to construct a new Accounting Framework. A number of studies have been launched to make "a comprehensive computation and a full and detailed treatment of the various flows and stocks in the economy of Puerto Rico".<sup>27</sup>

The proposed new Table follows the closed Leontief model in which Households constitute a producing sector.<sup>28</sup> It is to contain 31 sectors on an "Aggregate Classification" and 76 on a Disaggregate Classification. Of these 40 refer to manufacturing which in comparison with other Caribbean countries, plays an unusually important role.<sup>29</sup>

However, the Table preserves a large degree of correspondence with the U.S. Industry Sales and Purchasing Sectors even after some "special breakdowns and groupings necessary to reflect the conditions of Puerto Rico were introduced". Classification of sectors is by activity alone and "an attempt has been made to maintain the homogeneity of input and use patterns of the various sectors".<sup>30</sup> Activities have however, been grouped into "international" and local sectors. The former relate to sectors whose output enters international trade, the latter to the residentiary sectors.

These proposals are now being evaluated in the light of some of the possibilities opened up by the Framework presented here.<sup>31</sup>

## The Treatment of Final Demand

The Accounting Framework proposes a high degree of disaggregation of final demand. Attention has traditionally been focussed almost exclusively on the conditions governing export demand. The corporations in the plantation and mineral sectors make their own market projections and the literature offers volumes of generalities concerning the terms of trade of primary producers and the possibilities of exporting manufactures. However, specific studies of the possibilities of developing Caribbean exports by active participation of local entrepreneurship in the international economy have yet to be undertaken.

So far as government expenditures are concerned, the advent of development planning has resulted in a number of partial exercises to serve the requirements of annual budgets, investment projects and five-year development plans. However, more systematic work in this area remains a high priority.

In contrast, considerable and important work has been done on the relationship between income growth and patterns of personal consumption. The strategy of industrialisation on the basis of branch-plants has resulted in a strong bias towards import-replacement. Thus, it has been necessary to analyse trends in personal expenditures as a basis for projections which are consistent with expected private investment.

In the English speaking Caribbean, most of the empirical work relates to Jamaica where both household budgets and time series data have been analysed. Here the work was pioneered by George Cumper in his study of household expenditures of six income groups in Kingston. The data derived from a Survey conducted by the Department of Statistics in 1953-54. Cumper's work was undertaken "in the hope that the results would throw some light on the probable future shape of demand patterns and particularly on the probable changes in the allocation of consumption between local and imported goods".<sup>32</sup>

A subsequent and more elaborate survey of household expenditures made in 1958 provided extensive data for the calculation of elasticity co-efficients of consumption for a large number of expenditure categories. In this survey the population was divided into three strata representing Kingston, main towns, and rural areas. This admitted investigation into differences in consumption patterns between social, (regional) as well as income groups. The study by Harris<sup>33</sup> utilizes these data but focusses on questions of methodology. It addresses itself to the relative merits of single as against double-log regressions of consumption expenditure on income per head. Taylor's study covers some of the same ground although more comprehensively.<sup>34</sup>



The most recent, lucid and informative study, however, is that of Adams.<sup>35</sup> Covering the period 1953-54, it examines the manner in which growth in Jamaica has affected the commodity pattern of demand for food and the relative importance of imports and domestic agriculture in meeting growing food needs. Elasticities of consumption based on time series data are compared with the estimates derived by Harris from budget studies.

The income elasticity for total food expenditure was found to be .45 and the price elasticity -.38. Income and price elasticities for imported foods were .86 and -1.17. This reflects the predominant role of imports in meeting growing food needs. Over the period 1950-61, the growth of GDP in real terms averaged 8.3% in real terms while the output of domestic agriculture grew by only 1.8%. The ratio of food supplied by imports rose from 16.1% in 1950 to 24.5% in 1963. While income elasticities for meat (1.41) and dairy products (1.17) were high, as is to be expected, fruits and vegetables (-.38) and root crops (-.50) have negative income elasticities reflecting a decline in total real consumption.

When we take into account the striking fact that the elasticity of demand for imported fruits and vegetables was very high and that the supply of root crops is entirely local, it remains an open question as to whether the cause of the declining consumption of these local foods lies in taste or in supply conditions. The fact that local food prices rose considerably more than prices of imported foods is suggestive of a

a supply shortage, and the question arises why the rise in relative price did not stimulate domestic production. The author notes that the ability of supply to respond would depend on competing demand for the factors of production concerned.

If the relevant factors were bid away to other uses, clearly supply would not respond. Since there are huge surpluses of labour both in the land and in the town, Adams offers the following explanation:

"It is apparent that a large variety of local fruits once abundant has now largely disappeared. As indigenous products many of these would no doubt be "inferior", or would in any event have rather low income elasticities. At the same time it seems clear that, quite independent of demand factors, supply has been sharply curtailed over the years, and that this was closely bound up with the pattern of economic development that took place. Thus, there seems no doubt that the absorption of land by mining, tourism, residential construction, etc. has had this effect".<sup>36</sup>

The rise in the share of food supplied from imported sources is reflected in high income elasticities: meat (2.21); dairy (2.85); fruit and vegetables (2.21). Further disaggregation of imported foods reveals extremely high income elasticities for specific products such as fresh meat (3.47) and fresh and frozen vegetables (3.82).

The difficulties of using time series data in studying consumption patterns in an open economy are obvious and recognised by the author: the results reflect both patterns of consumption (influenced by taste and income)

and patterns of supply. The difficulty is most severe in the interpretation of the elasticity of demand for the imported commodity. Some questions cannot be resolved without better and more frequent budget studies, stratified on the basis of categories such as those proposed in our Accounting Framework.

## USES OF THE ACCOUNTING FRAMEWORK

Insofar as the framework has captured the essential features of the regional economy, it is easily appreciated that it provides a powerful aid in explaining how the contemporary Caribbean economy works. The disaggregation of the accounts provides an insight into the pattern of interdependence and a link between the macro-economic approach and the study of conditions of supply and demand for particular industry outputs.

The uniformity in the selection and compilation of data renders it a particularly useful means of co-ordinating regional research and comparative studies. Even where researchers are forced by the practical necessities of data collection to depart from the categories we have suggested, the existence of a common point of departure will facilitate the interpretation and use of the results.

The analytical uses of a well-constructed set of accounts admit all the familiar exercises of input-output analysis. This includes estimates of the impact of a unit of final demand on local

income, commodity imports, tax revenue (or loss), and on the requirements of foreign exchange including transfers of profits, interest and similar charges.

By matching expenditure patterns against categories of factor income we can estimate the consumption multiplier appropriate to each of these income-consumption groups. With the use of these multipliers we can add to the direct and indirect impact, the further rounds of income and all "leakages" generated. This amounts to including within a "closed" Leontief system several categories of "households". The rows are yielded by the relevant information in our "value added" columns and the columns are derived from our disaggregation of personal expenditure patterns. The revenue and expenditure of government can similarly be included in a "closed" Leontief system, if we ascribe to revenue generated a matching set of expenditures.

In this way we can quantify, at least approximately, the secondary effects of each of the major export activities through purchases of intermediate goods, disbursement of wage and other incomes paid out locally, and the expenditure of taxation revenue yielded. The same exercise can be performed with respect to any set of exogenous final demands such as "exports to the metropolis" or "manufactured exports", or "infra-structure investment".

By varying some of the policy parameters implicit in the accounts, such as rates of taxation and duty concessions, the availability and cost of imports, and the structure of personal consumption, we can test the sensitivity of the system to policy changes.<sup>6</sup> By attaching a coefficient relating sector output to employment, the model can be used to calculate the indirect and induced employment-creating effects of any given final expenditure or set of expenditures. Indeed, each of these sectoral employment coefficients can be decomposed into a number of occupational requirements relating to any set of final expenditures. This use of the system is obviously helpful in manpower planning. The same information can also indicate the effects of a set of final expenditures on income distribution.

#### Data Requirements of the Framework

To the extent permitted by our aim to devise an ideal-type, we have chosen our categories in such a way as to minimise the difficulties of using existing Caribbean statistics. At the same time we are fully aware that the framework is not statistically operational on the basis of available data.<sup>37</sup> Because of the degree of disaggregation for which it calls, it entails a considerable widening of the scope and coverage of statistical series and an extensive modification of the

procedures now employed in data collection and collation.

The statisticians of the Caribbean countries, however, enjoy a number of significant advantages. Unlike the large industrialized countries, or many of the non-industrialized ones, Caribbean economies are small, open, and highly commercialized. What is more, most of them are dominated by a small number of large corporations and have an active government sector. Small size facilitates detailed knowledge of economic transactors. Openness to trade admits fruitful exploitation of external trade statistics in the estimation of expenditure on consumption, investment, and intermediate purchases.<sup>38</sup> The dominance of large corporations in production and distribution greatly facilitates the work of sectoral accounting. The relatively small amount of subsistence agriculture diminishes one of the more difficult aspects of national accounting in many countries. Indeed it may not be unrealistic to suggest that Caribbean statistical offices have a unique opportunity of pioneering concepts and methods of multisectoral accounting required for development planning. The basis of national accounting in the metropolitan countries derived from the Keynesian revolution and the need to plan large deployment of resources during the Second World War. Most of the work of the

statistical agencies since that time has been elaboration of procedures established 20 to 30 years ago. Nor is it insignificant that notable advances in multi-sectoral accounting have been made in countries which are relatively small and open to trade and not excessively affluent. Norway and Israel are obvious examples.



The data requirements of our framework are nevertheless formidable. The following discussion of the problem is indicative rather than exhaustive.

Because any inter-dependent accounts require a multitude of internal arithmetic balances, standardisation of classification holds the key to data collection and processing. Thus, external trade statistics should be classified by industry of origin, as well as by commodity group. This should present few difficulties on the export side. On the import side, however, the procedure requires a distinction between competitive and non-competitive imports, according to whether or not the import in question is the principal product of an industry which exists within the economy.

Many import items have users which are easily identified. In these cases, coding of import data by using sector presents little difficulty. In the case of imports with multiple users, surveys might be conducted from time to time. The combination of commodity code, industry-of-origin code, and industry-of-use code on import data, when it is first recorded, would yield a very great deal of information from external trade returns.

One gap in existing data in most territories lies in the infrequency and incompleteness of censuses of industry which are the only reliable source of data on industry outputs and costs. Application of industry codes to external trade statistics would enable easy

identification of the value of industry output exported, and provide a reliable breakdown of supply into local and imported components. Given the comparatively small size of the economies and the large number of manufacturing enterprises enjoying developmental concessions, it is both feasible and reasonable to conduct annual censuses of industry. At worst, it should be possible to collect yearly data on output and main cost components.

The collection of annual information on employment and investment statistics by industry is a prime requirement. A breakdown of employment by occupational categories, income groups and the state of labour organisation, may be obtained from occasional surveys. Information on the book value of assets and on the location of ownership and control may be collected in a similar manner.

Public sector expenditures are typically recorded in great detail. By classifying purchased goods and services to standard codes it will be possible to obtain a breakdown of government expenditure by functional categories of the kind required by the Accounting Framework.

Electronic methods of data storage and processing make it entirely feasible to record, edit and classify annual data without undue delay. Frequency of censuses may be expected to result in progressive improvement in response, to yield built-in checks on accuracy and to develop experienced staff. The standardisation of classification and codes, and the continuing flow of data will place the statistical

offices in a position to establish a data bank of integrated economic statistics.<sup>39</sup> By these means it will eventually become possible to produce simultaneous input-output tables and national accounts at short intervals.

Although the setting up of such a system will involve a heavy initial investment, the cost of producing regular, comprehensive, internally consistent, and increasingly reliable statistics will most probably diminish over time.

## MAKE-UP OF THE ACCOUNTING FRAMEWORK

The Accounting Framework is articulated in the chart which accompanies the text. To facilitate initial comprehension it may be pointed out that the Framework falls into eight parts. In the upper section of the matrix the accounts record the transactions of the producing sectors. In the lower section they record the receipts and disbursements of the income-disposal accounts. In both sections all rows sum to zero.

## Upper Section

Part I is the Matrix  $A_1 \times B_1$ , Part II the Matrix  $A_1 \times B_2$ . Rows represent the expenditures by producing sectors of domestic ( $A_1$ ) and imported ( $B_2$ ) intermediate inputs respectively. The  $B_1$  columns show sales of intermediate goods by the producing sectors. The  $B_2$  columns show the disposition of imports of intermediate goods and their associated margins and duties.

Part III is the Matrix  $A_1 \times B_3$  and Part IV the Matrix  $A_1 \& A_2 \times B_4$ .  $B_3$  Rows represent payments to factors of production while  $B_4$  rows show purchases of final imports and their associated margins and duties.

Accordingly, the B3 columns record factor incomes by industry of origin. The B4 columns yield the composition of supply as between domestic and imported supply. Competitive final imports appear on rows A1, non-competitive final imports on rows A2.

Part V is the Matrix A1 x B5 & B6. Rows represent the disposition of aggregate supply to final (B5) and intermediate (B6) purchasers. The columns represent the commodity and service composition of demand. More strictly, they show the distribution of demand between different industry outputs.

#### Lower Section

Part VI is the Matrix A7 x B2, B3 & B4. The rows show the receipts of the income-disposal accounts arising from the process of production. The columns distribute the earnings between the accounts. In Part VII the expenditures by the income disposal accounts on the various components of final demand are recorded. The Matrix concerned is A7 x B5. Part VIII shows transfers of purchasing power between the income disposal accounts. This is Matrix A7 x B7.

The Signs

At this point it is useful to identify the meaning of the signs entered in the cells of each Part of the Table.

Part	Sign	Rows	Columns
I	Negative	Purchases	Sales
II	Negative	Purchases	Sales
III	Negative	Purchases	Sales
IV	Negative	Purchases	Sales
V	Positive	Sales	Purchases
VI	Negative	Receipts	Payments
VII	Positive	Payments	Receipts
VIII		Transfers	Transfers
	Negative	Outflows	Inflows
	Positive	Inflows	Outflows

Non additive items are recorded in brackets (+).

## UPPER SECTION OF THE ACCOUNTING FRAMEWORK

## Domestic Intermediate Inputs of Producing Sectors (A1 x B1)

Sectors

The three groups of producing sectors comprise the rows and columns in this matrix. Not all sub-sectors are included. For a complete listing reference may be made to Appendix II.

In classifying activities so as to throw light on the structural facts and on the effectiveness of development policy, we have split certain sectors. Thus, manufacturing appears twice depending on whether the activities are traditional (122) in character or are intended to be dynamic (132). Agriculture is also in two parts: export staples are in 115 and domestic agriculture in 121. Sugar-cane production is treated along with the entire agro-industrial institution (111) within which it is undertaken. Tourism also is twice in evidence marking the distinction between those hotels which cater to the luxury external market and are usually located in geographically distinct areas (123), and those which cater to regional and local traffic (133).

The public sector is split into four producing sectors according to the different roles which government agencies are playing in the economy. First, we isolate Traditional Government as sector 127. This is defined to include the general "law and order" administration of the government inclusive of parish and municipal authorities. It also embraces the Traditional Public Corporations which existed before Governments accepted the role of promoting economic development.

Secondly, we isolate Traditional Public Utilities. (128). We have defined this to include some activities (e.g. medicine) which are not strictly in the public sector but tend to come under close scrutiny of development planners because of their "utility" character and because of large-scale government participation. On the other hand, we exclude some utilities (e.g. Railways and Buses) which are publicly owned and operated in some territories. Here it seemed convenient to treat them separately (125.1) because, in contrast to say, hospitals, public participation can be escaped. In this sector is included the Departments of Public Works.

Thirdly, there is Dynamic Government (137). This includes all organisations (public or private) engaged in education,<sup>40</sup> as well as the



corporations which have been established specially to promote agricultural, industrial and tourist development. Finally, there are the Dynamic Public Utilities (138). This sector includes utilities which have assumed a high importance since governments have accepted positive development functions. Typically, these utilities tend to run into bottlenecks as output expands and are accorded high priorities in development programmes.

Real Estate and Houseownership have been combined in sector 126. This is both a statistical convenience and a reflection of changing patterns of houseownership and building finance. Rapid urbanisation has resulted in the emergence of rental-mortgage as an important mode of house-acquisition.

#### Interdependence

In general the sectors may engage in transactions between themselves although, in the nature of Plantation Economy, the degree of interdependence is very small. In particular the corporations in the Traditional Export Sector and to a lesser extent, those in the New Dynamic Sector are likely to purchase only a limited quantity and range of intermediate inputs in the domestic market.

Where transactions may take place a minus sign is entered in the cell. Where, on definitional grounds, transactions may not take place, the cell is shaded in. This may be so for a number of reasons. For one example, Traditional Government is assumed to buy only the factor services of civil servants and the military.<sup>41</sup> For another, Tourism sells the bulk of its output to final demand. The only exceptions are purchases on expense-account made by parts of the public sector and large corporations.

### Prices

It is to be noted that all domestic intermediate purchases are recorded at "producer value". They are net of distribution margins, transportation charges, and indirect taxes. Distribution and transport services are bought directly from the sectors which supply them.

## II - Imported Intermediate Inputs (A1 x B2)

Goods

In this Matrix, the columns record the purchases of imported intermediate inputs. Under the column heads 21 we show imports of intermediate materials by sector of use. The three-digit extension (211, 212, etc.) permits a disaggregation of the "magazine" into its material components. We isolate Food, Fuels, Chemicals, Fibres, Building Materials and Metals.

For statistical convenience the entries are recorded at c.i.f. value, as they are presented in most of the Trade returns in the region. For analytical convenience, however, freight margins may have to be shown separately for some variants of Plantation Economy. For example, where "further modification" has taken the form of branch-plant manufacturing for export, inputs are typically imported from parent firms so that freight costs as well as wage costs are often important determinants of the competitive position of producers. The more wage rates rise with the metropolitanization of Unions which accompanies branch-plant industry, the more important it becomes to isolate freight costs. Ultimately, it also becomes important to explore possibilities of substituting domestic for imported inputs. To this end, it is necessary to distinguish between competitive

and non-competitive intermediate imports. We include summary columns for this purpose.

#### Duties, Producer Subsidies

Under column heads 22 we record duties associated with the procural of inputs. Duties on intermediate imports paid by purchasing sectors are entered under 221. Since some producers are awarded incentives in the form of duty concessions we enter the value of customs revenue foregone in Column 222. This provides a measure of one element of subsidy under the industrial development programme. Other elements of subsidy to producers are recorded in 223.

#### Distribution Margins

Under column head 23 we record the estimated distribution margins associated with the purchase of imports under column head 21. We return below to this item.

### Imported Producer Services

The final item in this part of the Table refers to imports of certain *producer services*. We have noted that industrial activity in Plantation Economy is typically organized by metropolitan parent corporations which provide patents, licences, and other ancillary services. The charges on these accounts are to be entered in Column 24.

## III - Payments to Factors of Production (A1 x B3)

The sum of each row in B3 yields the "value added" to GDP by a producing sector. The column formed by these sums (B30) represents the Gross Domestic Product by industrial origin.

Total factor costs of the producing sectors are divided into five components. First there are employment incomes (31). These are recorded net of tax but they include supplementals. They are subdivided so as to isolate components which may exercise different influences on costs and prices, on the pattern of demand, or on the choice of techniques. Hence we isolate from Other Wage and Salary Incomes (312), the Incomes of "Organised" Labour (311). The latter are defined to include earnings of all Government employees, of employees in the private sector who are organised by Trade Unions and Staff Associations. It also includes "executive" grades since these groups too, are well-placed to bargain for their share of the product and may have distinctive expenditure patterns.

The second type of factor income shown is Mixed Property Income (32). These are also recorded net of tax. Here again the columns distinguish

between significant components. Incomes from Public Property (321) include royalties, land taxes, rents and beach dues; Subsistence Incomes (322) are defined to include the imputed value of all output produced and consumed on own-account;<sup>42</sup> and Other Mixed Property Incomes (323) are comprised of income from unincorporated enterprises, rent and interest incomes accruing to persons.

The third element of gross factor income shown are Direct Taxes (33). These are sub-divided (331, 332 and 333) to correspond to the factor incomes from which they derive. Direct taxes on Profits are further sub-divided as between those on national (3331) and those on foreign (3332) controlled firms. A column is included (3333) to record the revenue foregone as a result of tax holidays granted as another subsidy under the development programme.

The fourth recorded element in the B3 matrix is Depreciation (34). This is sub-divided between Depreciation on nationally-controlled businesses (341) and Depreciation on foreign-controlled businesses (342).

Finally, we record Corporate Profits (35), net of tax. The subdivisions distinguish Retained Profits (351) from Distributed Profits (352).

Retained profits are sub-divided into their national and foreign components on the criterion of locus of control. Distributed profits are divided between profits accruing to nationals and profits accruing to foreigners on the basis of ownership of equity. These estimates are to be made on the basis of information relating to ownership and control of corporate business. Estimates of Depreciation are to be dealt with in a similar manner.

It is convenient at this point to notice that the information on the ownership and control of capital assets required for the above estimates are to be recorded in Matrix A5 x B1.



## IV - Composition of Supply (A1 &amp; A2 x B4)

This set of rows and columns shows the composition of total supply. The sum of domestic inputs (B1), imported inputs (B2), and value added (B3) equals the gross value of output of producing sector and is recorded in the non-additive column Gross Value of Domestic Output (B10 + B20 + B30). The valuation of output is at "producer" value, i.e. value of output as it leaves the factory or farm.

In the appropriate rows of A1, under column-head B41 are recorded imports of commodities similar to the output of a domestic producing sector, but destined exclusively for final use. This column, therefore, allocates so-called competitive final imports corresponding to supplying sectors. The imports are at c.i.f. values.

The next two columns (B42 & B43) record respectively taxes and distribution margins charged on all final goods.

Column B421 records customs duties levied on all final imports. B422 records the customs duties foregone as a result of incentive concessions granted to importers of capital goods. In B423 are entered excise and sales taxes on all final goods, domestic and imported. These are recorded net of consumer subsidies.

Columns B43 record distribution margins. The margins on domestic supply is entered in B431 and represents the difference between producer value and consumer outlay. The margin on imports for final use are placed in Column B432. The split between B431 and B432 is important for reasons of statistical convenience. The two sets of margins are better estimated separately because domestic and imported commodities typically flow through different channels of distribution. The split is also interesting for reasons of economic analysis. Column 432 shows the amount of revenue accruing to the commercial class which is engaged in the importation of final goods of a type which can be locally produced. It also permits identification of the sectors in which conflicts over import-substitution policy are most likely to exist between the new manufacturing and the old commercial interests.

The sum along any row of columns B41, B421 & B432, gives the total market value, inclusive of margin and duty of competitive final imports; the market value of domestic output is obtained by adding columns B423 & B431 to  $B10 + B20 + B30$ . When the two are summed, we then obtain the value of total supply at market prices which is equal to total demand for each-row.

To obtain the Aggregate Supply of all commodities it is necessary to add the non-competitive final imports to the supply of domestic goods and competitive final imports. The former are recorded in Row A2 under column B41. The associated customs duties are shown under column B421 and the distribution margins under column B432. These Non-competitive Imports may be classified as required (e.g. into Essential and Luxuries). It may be noted that commodity aid under international or bilateral arrangements are included as a type of non-competitive import. Also included are tourist expenditures incurred by nationals temporarily abroad.

### The Treatment of Distribution Services

Purchases of commodities by intermediate sectors are everywhere entered net of distribution margins. Thus purchased domestic intermediate inputs in the columns B1 are shown net of distribution margins. The associated distribution services are bought by the purchasing sectors under column B25.2. Distribution margins on imported intermediate goods are shown under column B23, while distribution margins on all final goods are shown under columns B43.

We note that the distribution margins on imports refer only to local distribution costs. Distribution charges incurred in transporting the goods to the country are included in the c.i.f. valuations of imports. We have noted that it may be important to show external freight and insurance charges separately from the f.a.s. value of imports where they can act as a limitation on industrialization programs.

We choose to treat all distribution as intermediate purchases. This means that all final demand sectors purchase goods inclusive of distribution margins. The sum of the totals of the four columns, B125.2, B23 and B431 and B432 equals the value of output of the distribution sector. B125.2 and B23 are distribution margins on domestic and on

imported intermediate inputs respectively; B431 and B432 are distribution margins on domestic output and on imports of final goods respectively.

### The Treatment of Indirect Taxes and Subsidies

Since we have treated royalties, rents, licenses, property taxes and similar returns to public property as factor incomes, indirect taxes on domestic output are confined to excise and sales taxes. Excise and sales taxes are, however, unlikely to be significant, since in most countries they are incompatible with current public policy of encouraging the use of local materials and protecting home production. Taxes on intermediate goods may therefore be netted out against subsidies to producing sectors which are entered in column 223. Sales and excise taxes on final goods are shown under column B423.

We have noted that customs' duties on intermediate imports are shown under column B221, while custom duties on final imports are located in column B421.

We re-iterate that in this treatment of indirect taxation, aggregate supply of each industry is entered at market valuation on rows A1 under column B40; non-competitive imports are similarly shown at market valuation under column B40 on rows A2.

The Composition of Demand (A1 and  $A2 \times B5 + B6$ )

## Final Demand

Final Demand is recorded in columns B5. Since demands generate revenues for suppliers, the entries are positive. The structure of demand is described by a sub-division into six categories.

## 1 -The Traditional Export Sector (B51)

Final Demand of the Traditional Export Sector is split into demand for Fixed Capital Formation (511) and demand for Current Consumption (512). The latter column shows how far the firms in the sector retain their traditional character as self-sufficient institutions which not only produce or import most of their own intermediate supplies but also provide directly for consumption needs of their employees.

## 2 - The Traditional Residentiary Sector (B52)

Final demand of the traditional residentiary sector is divided into the demand for fixed capital formation of private business (5211) and two categories of final demand of the public sector (5212, 5221). Column 5212 records purchases of construction, machinery and equipment of the government capital account. This account is defined to include capital expenditures relating only to administration buildings, community

centres, water and sewerage systems, health, housing and welfare services, "non-dynamic" public transportation, roads not regarded as having developmental significance and public facilities not elsewhere specified. In other words, only a part of public purchases on capital formation is included. The more important remainder is placed elsewhere.

New construction undertaken on Government account by the Public Works Department through the direct employment of labour and purchase of materials is shown as a sale by Traditional Public Utilities (128) to the final demand sectors which purchase Capital Formation for the Government.

Under column 5221, are recorded all final current government purchases except those associated with the maintenance of the armed forces.

### 3. The New Dynamic Sector (B53)

Final demand of the new dynamic sector is divided into three components. First, there is Fixed Capital Formation in "Commodity Production"(531). These purchases of construction, machinery and equipment are further divided into sub-columns. These record the value of purchases by the manufacturing sectors (5311) and by the tourist industry (5312).



Secondly, there is Infra-structure Investment (532).

This includes capital expenditure relating to electric, natural gas and nuclear power, to telephones, to harbours and airports, to land development and irrigation, to industrial estates including government-owned factories, to government hotels, to buildings and equipment for educational purposes, and to highways and access roads for the exploitation of agricultural, forest and other natural resources. These are subdivided into expenditures undertaken by Dynamic Government (5321) and outlays by Utility Industries (5322).

Thirdly, there is the column identifying an element which may be of increasing significance in public expenditures under the typically unstable conditions of Plantation Company. This is Military Purchases (533). Under this column we record directly all military purchases of goods and services, except the payroll. This latter item is shown to be purchased from government administration (127). This treatment isolates the bill of goods associated with military expenditures from other government purchases of goods and services.

#### 4. Households (54)

Current consumption of households comprises all personal consumption with two exceptions. These are consumer goods and services provided directly by the traditional export sector (512) and by the government (5221) on behalf of their employees.

Household expenditures are disaggregated in a manner which is intended to illuminate the structure of final demand. First, there is a distinction between "high income" and "low income" categories. It is a common presumption that the structure of demand of the higher income groups differs significantly from that of the rest of the population. The intention of the accounts is to explore the degree to which the assumption is valid in the various territories of the Caribbean.

Secondly, we separate "urban" from "rural" consumers. Differences in structure of demand on this account may not conform to the "high income - low income" dichotomy. Finally, there must be a split between "market" and "non-market" categories. Estimates of income in kind, which do not pass through the market must in any case be made in the construction of the tables.

We combine these distinctions so as to produce a classification of consumer demand which is exhaustive. The five components are additive. First there is Organised Wage and Salary Consumption Expenditure (5421). These are the outlays associated with the factor incomes of unionized labour and other workers who are well placed to bargain for their share of the product. Typically these workers are to be found both in the towns and in industrial or agro-industrial complexes established in rural areas by mining and sugar corporations. From this group, we isolate the presumably "pace-setting" Expenditures of Executive Grades under column 5423. The distinction may be useful for Household Budget Surveys aiming to test the validity of hypotheses regarding the "demonstration-effect".

Next we distinguish Low Income Consumption Expenditures in Urban Areas (5422) from Low Income Consumption Expenditures in Rural Areas (5424). Finally, to arrive at total consumption, we estimate Non-Market Consumption in Column 5425.

### 5. Inventory Changes (55)

This element of final demand is self-explanatory. It may be either positive or negative. There is, however, likely to be difficulty with some important commodities, including sugar, alumina and petroleum products because the absence of normal marketing conditions makes it difficult to establish accurate valuation of stocks.

### 6. Rest of the World (56)

The external demand for commodity exports is shown in three sub-sectors: Exports to the Metropolis (5611); Exports to the Caribbean (5612) and All Other Exports (5613). For this purpose the Metropolis is defined as all these countries with which the Caribbean has "traditional" ties of trade, investment and finance. Other exports could usefully be further sub-divided to show those going to Latin America.

Valuation problems mentioned in connection with inventory changes recur in connection with exports.

### Intermediate Demand from Domestic Production

The sum of all intermediate demand for the output of each of the producing sectors is recorded in the column B6. The entry in any one cell B6 is the sum of the corresponding column in the matrix  $A_1 \times B_1$ .

## LOWER SECTION OF THE ACCOUNTING FRAMEWORK

The entire lower section of the Table is devoted to the accounts of the income-disposal sectors. We have indicated that the section falls into three parts representing respectively, the Receipts (A7 x B2 to B4), the Payments (A7 x B5), and the Transfers (A7 x B7) of these sectors.

The rows show eleven accounts in four groups representing Households, Government, Savings and Investment, and the Rest of the World.

Households

The Households Sector (A71) is conventional except in so far as it is defined to exclude the direct provision of consumer goods and services to employees by the Traditional Export Sector and the Government.

### Government

The Government Sector (A72) records all revenues and all current and capital expenditures on public account.

### Savings and Investment

There is no single row representing the conventional Savings and Investment Account. Instead, three separate accounts are recorded for separate Savings and Investment Sectors. By this means we acknowledge some of the distinctive features of the process of accumulation in Plantation Economy: the limited scope of the national capital market, the tendency for savings to flow towards specific investment uses, and the decisive importance of traditional links with the metropolis in the mobilisation and allocation of savings.

The first of the three Savings and Investment Accounts is The Resident Private Savings and Investment Account (A731). This Sector is the one which finances the investment expenditures of nationally-controlled enterprises.<sup>43</sup>

The second account is the Non-Resident Traditional Savings and Investment Account (A74211), which finances the investment

expenditure of foreign-controlled corporations operating in the Traditional Export Sector. The third account is the Non-Resident New Dynamic Savings and Investment Account (74212) which finances the investment expenditures of foreign-controlled Corporations in manufacturing, tourism and public utilities.

The Savings Investment Account of the Government is not here shown as a row but as a column (B72).

The degree of disaggregation achieved by this classification is regarded as a minimum. Some of the fragmentation characteristic of Plantation Economy remains disguised. Thus it would be useful to distinguish further sub-groups. For example, the Traditional Savings and Investment Account may be split so as to isolate important corporations or groups of corporations, to differentiate mature industries from expanding industries, or to identify investments with different market orientations. The resident Private Savings and Investment Account could profitably be broken into family-business accounts and corporate accounts. The Non-Resident Savings and Investment Account might be usefully divided into accounts for export-seeking and import-substituting industries.



### Rest of the World

Here too, we have not followed the conventional procedure of treating all transactions on a single row. Instead, we employ six categories which are meant to acknowledge some of the institutional conditions within which Plantation Economy participates in the international economy. We have suggested elsewhere that such economies typically form part of metropolitan systems (Overseas Economies), that the bulk of their trade and payments is effected within that framework, and that there tends to be a high degree of specialization on the part of the constituents of the system. We therefore split the Overseas Economy into Metropolis (7423) and Commonwealth (7424). The former represents the centre of the system and is usually the locus of corporate head-offices while the latter represents peripheral or hinterland countries also attached to that centre.

Countries outside the metropolitan system are also split according to their apparent specializations. Rival Metrooles are identified on Row 7431 and Other Countries on row 7432. The latter is defined to exclude countries with which the Plantation Economy is likely to have extensive trade and payments once it passes from

passive to active participation in the international economy .

Hence we include a row for Caribbean (741) .

Finally, we include a row for International Agencies (744) .

These are defined to include government organisations of countries

which operate in a manner similar to the special agencies of the

United Nations .

## VI - Receipts of Income-Disposal Accounts (A7 x B2 to B4)

Receipts from Intermediate Imports

The receipts yielded by Imports of Intermediate Inputs in B21 accrue to Caribbean, Metropolis, Commonwealth, Rival Metropolises, and Other Countries according to the sources of supply of the imports. An indication of country specialization is given by the match of different commodity types given by the third digit in B2 with the flow of income to different rows. Customs Duties on imports (B 221) and Subsidies to producers (B223) are respectively receipts and payments (i.e. negative revenues) on Government account (A72). Imports of business services (B24) yield revenues to the Metropole and to Rival Metropolises which typically provided patents, licences, and consultant services. They also accrue to International Agencies which make some of the same services available. The finance in this case is assumed to be provided by unilateral transfer from the Rest of the World in Cell A744-B74.

### Receipts from Factor Incomes

"Organised" Labour Incomes (B311) are receipts by Households. Where foreigners are employed, there may be a corresponding flow of income to the Metropolis if a portion of salaries is deposited there.

Other Wage and Salary Incomes (B312) accrue solely to Households, while Income from Public Property (B321) accrue only to the Government Account. Subsistence Income (B322) and Other Mixed Property Incomes (B323) are both divided between Households and the Resident Private Savings and Investment Account. The division is to be based on an estimate of the allocation of such incomes between consumption and investment.

Direct Taxes (B33) flow into the Government Account. An exception is found in the case where because of differential rates of corporation tax, foreign-controlled businesses pay part of their income tax to the metropolitan government.

Depreciation allowances on businesses controlled by nationals or by Government (B341) are credited partly to the Resident Private Savings and Investment Account and partly to the Government Account. Depreciation

allowances on foreign-controlled businesses (B342) accrue to the two Non-Resident Savings and Investment Accounts.

Retained Profits (B35I) accrue to the Resident Savings and Investment Account or to the two Non-Resident Savings and Investment Accounts according to the locus of control.

Distributed Profits accruing to Nationals (B352I) are composed of corporate profits, and the profits or losses of the Traditional and New Dynamic Public Corporations. The first component goes to Households, the second to Government. Distributed profits going to foreigners (B3522) are credited to the Metropole, Commonwealth and Rival Metropolises.

#### Receipts from Final Imports

Imports of Final Goods (B4I) generate receipts for six external accounts. Commodity aid is included and is considered to generate a matching income to International Agencies which again, is assumed to be covered by a unilateral transfer from the Rest of the World (B74).

## VII - Payments by Income-Disposal Accounts. (A7 x B5)

## Capital Formation

Fixed Capital Formation of the Traditional Export Sector (B511) is bought either by the Resident Private Savings and Investment Account or by the Non-Resident Traditional Savings and Investment Account. The purchases of goods and services for direct consumption by the employees of the Traditional Export Sector are also financed out of the corresponding Non-Resident Savings and Investment Account (A74211). This procedure is not entirely a matter of accounting convenience. These expenditures are a sort of essential overhead for large foreign corporations operating in hinterland economies and recruiting key personnel in the metropolis. For these corporations, the overhead has also been an investment in securing an adequate and stable supply of local labour. It is necessitated by their position as total "social" institutions needing to perform many quasi-governmental functions including the provision of welfare services.

Fixed Private Capital Formation of the Traditional Residentiary Sector (B5211) is financed by the Resident Private Savings and Investment Account. Government purchases on both capital and current account (B5212 & 5221) are financed by the Government Account.

Fixed Capital Formation for Manufacturing and Tourism (B531) are undertaken both by the Resident Private and the Non-Resident Dynamic Savings and Investment Accounts. Infra-structure investments (B532) are financed in major part by the Government Account but also by the Non-Resident New Dynamic and the Resident Private Savings and Investment Accounts.

#### Consumption

Military Expenditures (B533) are financed from the Government Account. Household Consumption (B54) is paid for by the Households Account. Inventory Change (B55) is charged to all three Savings and Investment Accounts.

#### Exports

Commodity Exports (B56) are paid for by the foreign accounts concerned. Here Commodity Aid contributed to International Agencies and included in column B5613 is assumed to be charged to the Account of the International Agencies with a corresponding transfer in the balance of payments.

Customs Duties (B421) on imports of final goods are a receipt by the Government Account. Excise Duties and Sales Taxes (B423) on all final goods also flow to the Government Account.

It is evident that all the receipts in this lower part of the Table correspond to payments in the upper part. All column sums where receipts are shown are therefore zero.<sup>44</sup>



## VIII - Transfers Between Final Using Sectors (A7 x B7)

In order to show the transfer of purchasing power between the income disposal accounts it is necessary to include a set of columns representing Sou-Sou Account<sup>45</sup> and accounts for Established Financial Intermediaries, for Government Savings and Investment and for the Rest of the World. For any of these accounts (columns), an inflow of funds is recorded with a negative sign and an outflow with a positive sign. Where two transactions in one cell require the same sign we do not, it may be noted, repeat the sign.

## Sou-Sou Savings and Investment Account (B711)

The inclusion of a Sou-Sou Savings and Investment Account is an acknowledgement of the transfer implication of any increase in the cash holdings of persons, given the monetary system typical of Plantation Economy.

In practice sou-sous involve an accumulation of all-purpose cash. Usually, the fund is made up of contributions to a 'Box' by different individuals, but here we include the limiting case of one-man sou-sous so as to encompass all household cash accumulations. When a

'hand' is drawn, one part of it is spent on consumption and investment. The other part is transferred by Households to the Sou-Sou Savings and Investment Account in cell A71-B711. This residual is the incremental hoarding of currency for the public other than banks and financial intermediaries. This is tantamount to a loan to the Note-issuing Authority. Where, as is characteristic of either the formal or informal regulations in Plantation economy, the currency is based on a "Metropolitan Exchange Standard"<sup>46</sup> and is therefore fully backed by metropolitan securities, it follows that Households are lending to the Metropolis through the intermediation of the Issuing Authority.

Where this Authority is a private bank, the transactions can most conveniently be recorded in the Accounting Framework through the Resident Private Savings and Investment Account. A positive entry is made in cell A731-B711 and an equal negative entry is made in cell A731-B712. Where the Authority is a Currency Board or a Central Bank, it is registered by a positive entry in cell A72-B711 and a corresponding negative sign in A72-B72.

The Sou-sou Account can thus be seen to record the receipt and disposition of those Household savings which are not deposited with the

established financial institutions. Yet it is quite distinct from the "self-financing" investment component of Subsistence and Mixed Property Incomes. Its distinguishing characteristic is that the assets are held in currency only.

### Established Financial Intermediaries Account (B712)

The Account for the Established Financial Intermediaries shows the mechanism by which private national savings are made available to investors. It has already been noted that under the typical currency regulations, Sou-Sou cash savings in effect flow into this Account and out again to the Metropolis. Household savings also flow in by way of bank deposits and contributions or premia of one sort or another paid up to non-bank intermediaries.

The spare funds of nationally controlled business which accrue to the Resident Private Savings and Investment also flow into this Account as deposits.

The typical national business is an unincorporated enterprise, usually a family business in the commercial or service trades. Seldom is it a manufacturing enterprise of the kind which creates for itself many opportunities for sustained investment and growth, though there may be periodic expansion or replication of existing establishments.

Investible surpluses cannot be channelled into the Traditional Export Sector. The typical firm in that sector rules out this possibility.

Moreover, the businessmen have only limited access to external avenues of investment. In this context, the financial intermediaries constitute the natural depository for their spare funds. The transfer is here registered by a negative entry in cell A731-B712.

The typical financial intermediary in a Plantation Economy has its Head Office in the Metropolis. This is true in the case of Commercial Banks and Hire Purchase Companies, Insurance Companies and other non-bank intermediaries. Although they are controlled by nationals, Friendly Societies and Credit Unions are, in effect, part of this sector too, since in their financial operations they are effectively collecting agencies for the other intermediaries. Given institutional arrangements by which the links between financial intermediaries and their metropolitan Head Offices are stronger than the relations between intermediaries, the result is that funds from this Account tend to flow to and from the Metropolis as a matter of course. This is here shown by a positive entry in cell A7423-B712. Funds also <sup>flow</sup> were between this Account and the Accounts of Commonwealth and Rival Metropolises.

It is an aim of public policy to mobilize and retain national savings. To this end, attempts are being made in some Caribbean countries

to provide a wider range of acceptable securities from both the public and private sectors. With the aid of Central Bank regulations, it is hoped to establish markets where, without any alteration in the form of private financial organisation, the conditions of liquidity, profitability and security would induce intermediaries to raise their local assets ratio. The Account is therefore shown to be transferring funds to the Resident Private Savings and Investment Account (A731-B712) and to the Government. The latter transaction is effected by a positive entry in A731-B712 and a negative entry in A731-B72.

Finally, the Account of the Established Financial Intermediaries is shown to be making transfers to the Caribbean. In practice, these transfers are effected through the intermediation of the metropolitan money market. What is postulated is that before there is any net transfer of funds from the Metropolis to the Caribbean, the financial intermediaries switch surplus funds from one territory to another. It is therefore useful in measuring the real dependence of the region on metropolitan finance, to isolate what are in effect intraregional transfers. In these Accounts we register transfers of this nature by a positive entry in cell A7423-B712, a matching negative entry in A7423-B74, and an equal positive entry in A741-B74.

### Government Savings and Investment Account (B72)

The Government Savings and Investment Account recorded in column 72 is in essence the loan account of the public sector. In cell A72-B72 the positive entry registers the uncovered balance between Government revenue and its total expenditure on goods and services. The Account describes the manner in which Government development lending and the deficit balance in cell A72-B72 are covered by Government borrowings.

Possible sources of borrowing acknowledged in the Loan Account include: sale of securities to Households (A71), to Banks (A731) and to the Savings and Investment Account relating to the large corporations in the Traditional Export Sector (A74211). They also include the issue of bonds on the metropolitan money market (A7423), loans from Commonwealth (A7424) and Rival Metropolitan (A7431) Governments and from international lending Agencies (A744).

There are three positive entries representing loans out of the account. They go to increase the available funds of the Resident Private (A731) and the Non-Resident New Dynamic Sectors (A74212) and they flow

to the Metropolis (A7423). The first two items are in direct support of the development effort. The third is the increase in official foreign exchange holdings.

To complete the Account there are six positive entries representing servicing of debt held with Households, the Resident S/I A/C, the Metropolis, the Commonwealth, Rival Metropoles and the International Agencies; and there are three negative entries representing servicing of the loans made to the Resident Private and Non-Resident New Dynamic Accounts and to the Metropole.



The Rest of the World Account (B74]

The Rest of the World Account is shown in Column 74. The entries record the transactions between each of the Income-Disposal Accounts and the rest of the world. Thus, they represent the balance of payments. There are, however, two distinct types of entries in the column. In two cells there are no entries at all. This is because the revenue and expenditure account of the government (A72) and the Resident Savings and Investment Account (A731) do not enjoy direct access to external markets.

Of the Cells which do record transactions with the rest of the world, three involve domestic accounts. First, there are A71-B74 showing Household Income from factor employment abroad and other transfers. Secondly, there are A74211-B74 and A74212-B74 showing capital flows associated with non-resident investment. These entries are meaningful items in the balance of payments.

The six remaining cells register transactions for external Income Disposal Account: for the Caribbean, the Metropole, the Commonwealth, Rival Metropoles, Other Countries and International

Agencies. The entries are merely balancing items deriving from transactions elsewhere in the Accounting Framework. Transactions between producing sectors and the external world are registered along the six rows where most of the current balance of payments items are to be found. Capital transactions are recorded under the columns representing two more domestic accounts which involve transactions in the external capital market. These are the Financial Intermediaries' Account (A712) and the Government Savings and Investment Account (A72). The statement of the balance of payments is, therefore, to be constructed from the entries in the three cells of column 74 which represent domestic accounts and from all the entries along the six rows registering transactions for external Accounts.

We are now in a position to summarise all of the Accounts in the Matrix A7 x B7 of the Accounting Framework.

## A71 Household Account

## RECEIPTS

## INCOME EARNED IN THE DOMESTIC ECONOMY

B31	Employment Income (net of tax)
311	"Organised" Labour Income, including Supplementals
312	Other Wage and Salary Income
B32	Current Household Consumption
	FROM Property (net of tax)
322	Subsistence Income
323	Unincorporated Profits, Rent and Interest
B35	Distributed Profit and Interest
3521	Distributed Profits accruing to nationals from domestic business

SUB-TOTAL:

## INCOME EARNED IN THE EXTERNAL ECONOMY

B74	Interest and Dividends from foreign investments
	Earnings of Nationals employed abroad

SUB-TOTAL

A71. Household Account

RECEIPTS

TRANSFERS OF INCOME

B72 Social welfare payments

Interest and repayment on public debt held  
by households

TOTAL RECEIPTS

## A71. Household Account

PAYMENTS

## PURCHASE OF GOODS AND SERVICES

B542 Current expenditure on purchased  
goods and services including subsistence consumption \_\_\_\_\_

## PERSONAL SAVINGS

B711 Sou-sou Savings

B712 Deposits with Banks, payments for insurance  
premiums, employer contributions to  
pension plans, etc.

B72 Purchase of Government Savings Bonds  
and government contributions to pension funds, etc. \_\_\_\_\_

SUB-TOTAL \_\_\_\_\_

TOTAL PAYMENTS \_\_\_\_\_

## A72. Government Revenue and Expenditure Account

RECEIPTS

## CURRENT REVENUE

B33	Income and Corporation Taxes
331	Income taxes on employment income
332	Income Taxes on mixed property income
3331	Corporation taxes on nationally- controlled business
3332	Corporation taxes on foreign- controlled business
(B3333)	(Corporate income taxes foregone)
	Import Duties and Excise Taxes
B221	Duties on imported intermediate goods
B421	Excise duties and sales taxes on final goods
B423	Duties on imported final goods
B223	Subsidies (negative)
(B222)	(Import duties foregone)
(B422)	(Import duties foregone)

## A.72 Government Revenue and Expenditure Account

## RECEIPTS

## CURRENT REVENUE

## Royalties, Rents and Profits

- |       |  |
|-------|--|
| B321  | Royalty and rental income from public property |
| B3521 | Profits (or losses) of public corporations     |

## SUB-TOTAL

## DEPRECIATION

- |      |  |
|------|--|
| B341 | Nationally Controlled Firms (Dynamic Corporations and Utilities) |
|------|--|

## CAPITAL TRANSACTIONS

- |      |  |
|------|--|
| B711 | Increase in private non-bank holdings of currency  |
| B72  | minus Transfer of above item to government savings and investment account                  |
| B72  | Excess of Government Expenditure on all goods and services over Current Government Revenue |

TOTAL RECEIPTS

## A72. Government Revenue and Expenditure Account

## PAYMENTS

## PURCHASE OF GOODS AND SERVICES

B52	5212	Purchase of fixed capital formation
	5221	Current government expenditures
B53	532	Purchase of infra-structure investment
	533	Military expenditures

TOTAL PAYMENTS \_\_\_\_\_



## A.731. Resident Private Savings and Investment Account

## RECEIPTS

## FROM PRODUCING SECTORS

B322	Investment of subsistence economy
323	Self-financing investment from mixed property income
3511	Retained profits of nationally-controlled business
341	Depreciation of nationally-controlled business

## FROM CAPITAL TRANSFERS

B711	Sou-Sou Savings
B712	Loans from financial intermediaries
B72	Public development loans

## TOTAL RECEIPTS

A731. Resident Private Saving-Investment Account

PAYMENTS

PURCHASES OF GOODS AND SERVICES

BUSINESS INVESTMENT

B511	Fixed capital formation; sugar, other export agriculture
B5211	Fixed capital formation residentiary
B531	" " " manufacturing, tourism
B532	" " " infra-structure
B55	Inventory change

SUB-TOTAL

TRANSFERS

B712	Deposits with banks (incl. sou-sou)
	Service on Loans
B72	Service on loans

TOTAL PAYMENTS

## A74211 Non-Resident Traditional Saving &amp; Investment Account

## RECEIPTS

## FROM THE DOMESTIC ECONOMY

342 Depreciation allowance credited  
 3512 Retained Profits credited  
 B72 Repayment of Loans by Government

## TRANSFERS FROM HEAD OFFICE

B74 Inflow of new capital to cover difference  
 between new reserves credited and  
 expenditure on the account of the  
 domestic (hinterland) operation

TOTAL RECEIPTS

GROSS SAVINGS

Minus

Depreciation allowances credited

Equals

NET SAVINGS

## A74211 Non-Resident Traditional Saving-Investment Account

## PAYMENTS

B51 & B55	PURCHASE OF GOODS AND SERVICES	
	B511	Gross fixed capital formation
	B512	Current sector consumption
	B55	Inventory change
	LOANS TO DOMESTIC ECONOMY	
B72		Loans to government
B74	TRANSFERS TO HEAD OFFICE	
	Excess of credited increase in reserves over expenditure on the account of the domestic (hinterland) operations which show surpluses	

TOTAL PAYMENTS

GROSS INVESTMENT

Minus

Capital Consumption

Equals

NET INVESTMENT

A74212 Non-Resident New Dynamic Savings & Investment  
Account

RECEIPTS

FROM THE DOMESTIC ECONOMY

- B342 Depreciation allowances credited
- B3512 Retained profits credited
- B712 Borrowing from established financial  
intermediaries
- B72 Loans from government

TRANSFERS FROM HEAD OFFICE

- B74 Inflow of new capital to cover difference  
between new reserves credited and  
expenditure on the account of the  
domestic (hinterland) operation

TOTAL RECEIPTS      GROSS SAVINGS

Minus

Depreciation allowances credited

Equals

NET SAVINGS

## A74212 Non-Resident New Dynamic Saving-Investment Account

## PAYMENTS

B51 & B55	PURCHASE OF GOODS AND SERVICES
	B53          Gross fixed capital formation
	B55          Inventory change
	REPAYMENT OF LOANS
	B712        To Financial Intermediaries
	B72        To Government
B74	TRANSFERS TO HEAD OFFICE
	Excess of credited increase in reserves over expenditures on goods and services for those domestic (hinterland) operations which show surpluses

<u>TOTAL PAYMENTS</u>	GROSS INVESTMENT
-----------------------	------------------

Minus

Capital consumption

Equals

NET INVESTMENT

## B711. Sou-Sou Saving-Investment A/C

## INFLOWS

From Households:   A71       Sou-Sou Savings

## OUTFLOWS

To Financial Intermediaries

B712       Increase in currency hoarded\*

To Metropolis:     A7423    Increase in currency hoarded\*

\*A loan to the note-issuing authority treated either as a positive transfer to Resident Saving and Investment Account (A731-B711) followed by a negative transfer to Financial Intermediaries (A731-A712); or as a positive transfer to Government (A72-B711) a matching negative transfer to the Government Savings-Investment A/C (A72-B72) and a matching positive transfer from there to the Metropolis (A7423-B72).

## B712. Account of Established Financial Intermediaries

## INFLOWS

From Households:	A71	Deposits with banks, payments for insurance premiums, etc.
	A731	Increase in hoarding of currency by persons where private banks are note-issuing authorities
From Government:	B72	Interest and repayment re government securities, routed through A72 by positive entry in B72 and negative entry in B712
From Res. Private S/I A/C:		
	A731	Deposits with bank and non-bank intermediaries by local business interests on Loans
From Metropolis:	A7423	Transfers from Head Office
Commonwealth	A7424	including transfers from other
Rival Metropotes	A7431	Caribbean countries

---

TOTAL INFLOWS



## B712. Account of Established Financial Intermediaries

## OUTFLOWS

## To Government S/I A/C:

B72 Purchase of Government  
Securities. Routed as a transfer  
through A72.  
(Positive entry) to B72 (Negative entry)

## To Resident Private S/I:

A731 Loans

To Non-Resident New  
Dynamic S/I A/C:

A733 Loans

To Metropolis:	A7423	Transfers to Head Office including	
Commonwealth	A7424	transfers to other Caribbean	
Rival Metropolises	A7431	countries	<hr/>

TOTAL OUTFLOWS 

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## B72. Government Savings and Investment A/C

## INFLOWS (Loans to Government)

From Households:	A71	By purchase of savings bonds, etc. and by government contributions to employee pension funds, etc.
	A72	By increase in household holdings of currency through operation of Sou-Sou
<u>From Banks:</u>	B712	By purchase of government bonds by banks, treated as a transfer from Banks to Resident S/I Account and a further transfer from the resident S/I A/C to the Government S/I Account
From Non-Res. Trad. S/I A/C:		
	A74211	By purchase of government bonds
From Metropolis:	A7423	By loans raised <b>in the Metropolis</b> and
Commonwealth	A7424	Interest on foreign assets
Rival Metropolis	A7431	
From International Agencies:		
	A744	Unilateral transfers, soft loans, etc.

TOTAL INFLOWS

## B72. Government Savings and Investment A/C

## OUTFLOWS

To Households:	A71	Social welfare payments
		Interest and repayment of public debt held by households
To Resident S/I A/C:	A731	Interest and repayment of public debt held by banks
	A731	Development loans to local business
To Non-Resident New Dynamic S/I A/C:		
	A74212	Development loans to manufacturing and tourism
To Metroopolis:	A7423	Increase in metropolitan exchange
Commonwealth	A7424	for currency backing and other
Rival Metrocoles	A7431	official reserve funds
		Servicing and repayment of debt
To International Agencies:		
	A744	Servicing and repayment of debt
SUB-TOTAL		
A72	EXCESS OF PURCHASES OF GOODS AND SERVICES OVER CURRENT GOVERNMENT REVENUE	
TOTAL OUTFLOWS		

## THE BALANCE OF PAYMENTS

## RECEIPTS on Current Accounts

EXPORTS

B56	to	Caribbean	(A741)
		Metropolis	(A7423)
		Rival Metropoles	(A7431)
		Commonwealth	(A7424)
		Other Countries	(A7432)
		International Agencies	(A744)

## FACTOR INCOMES

B74	Earnings on Assets held in Metropolis by financial intermediaries	(B712)
B72	Earnings on foreign assets by Government	(A7423)
B74	Employment Income (Remittances)	(A71)
	from Caribbean Metropolis & International Agencies Commonwealth Rival Metropoles	

RECEIPTS ON CURRENT ACCOUNT

DEFICIT ON CURRENT ACCOUNT

TOTAL

## THE BALANCE OF PAYMENTS

## PAYMENTS on Current Account

IMPORTS

B21	Intermediate Imports (c.i.f.)	
	from: Caribbean	(A741)
	Metropolis	(A7423)
	Rival Metropolises	(A7431)
	Other	(A7423, A7432)
B4	Final Imports (c.i.f.)	
	from: Caribbean	(A741)
	Metropolis	(A7423)
	Rival Metropolises	(A7431)
	Other	(A7424, A7432)
	International Agencies	(A744)
B41	Visible Service Imports	
	from: Caribbean	(A741)
	Metropolis	(A7423)
	Rival Metropolises	(A7431)
	Other	(A7424 & A7432)
B24	Imports of Technical and Managerial , <u>Services</u>	
	from: Metropolises	(A7423)
	Rival Metropolises	(A7431)
	International Agencies	(A744)

THE BALANCE OF PAYMENTS  
PAYMENTS on Current Account

FACTOR INCOMES

B311	Wage and Salary Income		
	to: Metropolis		(A742)
B3331	Direct Taxes on Corporation Profits		
	to: Metropolis		(A7423)
	to: Rival Metropolises		(A7431)
B3522	Distributed Profits		
	to: Metropolis		(A7423)
	Commonwealth		(A7424)
	Rival Metropolises		(A7431)

PUBLIC DEPT. SERVICE

B72	Debt Servicing by Public Sector		
	to: Metropolis		(A7423)
	Commonwealth		(A7424)
	Rival Metropolises		(A7431)
	International Agencies		(A744)

INCREMENT TO CAPITAL RESERVES OF FOREIGN CONTROLLED BUSINESS

B3512	Retained Earnings		
	of: Non-Resident Traditional S/I A/C		(A74211)
	Non-Resident New Dynamic S/I A/C		(A74212)

TOTAL CURRENT PAYMENTS

## THE BALANCE OF PAYMENTS

## INFLOWS on Capital Account

B712	TRANSFERS BY PRIVATE FINANCIAL INSTITUTIONS	
	from: Caribbean	(A741)
	Head Office	(A7423)
	Commonwealth	(A7424)
	Rival Metropoles	(A7431)
B72	INFLOWS ON GOVERNMENT ACCOUNT	
	<u>Monetary</u>	
	Reduction in foreign exchange reserves	(A7423)
	<u>Non-Monetary</u>	
	New Government Borrowing	
	from: Metropolis	(A7423)
	Commonwealth	(A7424)
	Rival Metropoles	(A7431)
	International Agencies	(A744)
B74	INFLOWS ON BUSINESS S/I A/C	
	New Inflow of Direct Investment	
	to: Non-Resident Traditional S/I A/C	(A73211)
	Non-Resident New Dynamic S/I A/C	(A73212)
	Debenture Borrowing	
	by: New Dynamic S/C A/C	(A73312)

## THE BALANCE OF PAYMENTS

## INFLOWS on Capital Account

B351 Retained Earnings

of:	Non-Resident Traditional S/I A/C	(A74211)
	Non-Resident New Dynamic S/I A/C	(A74212)

TOTAL CAPITAL INFLOW



## THE BALANCE OF PAYMENTS

## OUTFLOWS on Capital Account

## B712 TRANSFERS BY PRIVATE FINANCIAL INSTITUTIONS

to:	Caribbean	(A741)
	Head Office	(A7423)
	Commonwealth	(A7424)
	Rival Metropole	(A7431)

## B72 OUTFLOWS ON GOVERNMENT ACCOUNT

Monetary

Increase in reserves of currency authority	(A7423)
---	---------

Increase in other foreign exchange holdings	(A7423)
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## Non-Monetary

## Repayment of Loans

to:	Metropolis	(A7423)
	Commonwealth	(A7424)
	Rival Metropolises	(A7431)
	International Agencies	(A744)

## B74 OUTFLOWS ON BUSINESS S/I A/C

## Surplus of New Capital Reserves

from:	Non-Resident Traditional S/I A/C	(A74211)
	Non-Resident New Dynamic S/I A/C	(A74212)

THE BALANCE OF PAYMENTS

OUTFLOWS on Capital Account

B74            OUTFLOWS ON BUSINESS S/I A/C  
                 Liquidation of Debenture Debt  
                 by:      New Dynamic S/I A/C                    (A74212)

TOTAL CAPITAL OUTFLOW

DEFICIT ON CURRENT ACCOUNT

TOTAL

## APPENDIX I

LIST OF ROWS AND COLUMNS OF IDEAL TYPE ACCOUNTING FRAMEWORK  
FOR PLANTATION ECONOMY FURTHER MODIFIEDROWS:

A 1. Producing Sectors (See listing of producing Sectors)

A 2. Total Final Imports (non-competitive)

211	Automobiles and parts
212	Other Durables
213	Other Commodities
22	Services (Tourist, etc.)

[ Essential ]

[ Luxuries ]

A 3. Employment or occupational classification

311	Nationals (no's)
311	Nationals (work-weeks)
32	Foreigners (no's)

## A 5. A Capital Stock (value of assets)

51	Nationally Controlled
52	Foreign Controlled

## A 5. B Final Demand

51	Essential Final Demand
52	Luxury Final Demand

## A 7. Final Income Disposal Accounts

71	Households
72	Government
731	Resident Private Savings-Investment Account
741	Caribbean
74211	Non-resident Traditional Savings-Investment Account
74212	New Dynamic Savings-Investment Account
7423	Metropolis
7424	Commonwealth
7431	Rival Metropolises
7432	Other Countries
744	International Agencies

COLUMNS:

B 1. Domestic Inputs (See listing of Producing Sectors)

[ B 10. ] [ Total Domestic Inputs ]

B 2. Imported Inputs (c.i.f.)

211 Food

212 Fuels

213 Chemicals

214 Fibres

215 Building Materials

216 Metals

219 Other

[ Freight and other external cost margins on 21 ]

221 Import Duties on Intermediate Imports

[ 222 Import Duties Foregone on Intermediate Imports ]

223 Subsidies to Industries

23 Distribution Margins on all Intermediate Imports

24 Licensing fees, royalties, patents

[ Sub. Tot. Competitive Imports ]

[ Sub. Tot. Non-competitive Imports ]

[ B 20. ] [ Total Imported Inputs of goods and services inclusive of  
margins and duties. ]

B 3. Value Added

311	"Organised" Labour Income (including supplementals)
312	Other Wage and Salary Income (including supplementals)
321	Income from Public Property
322	Subsistence Income
323	Other Mixed Property Income
331	Tax on all employment incomes
332	Tax on all mixed incomes
3331	Corporation Tax on Nationally-controlled Firms
3332	Corporation Tax on Foreign-controlled Firms
[ 3333 ]	[ Income Tax Foregone ]
3401	Depreciation on Nationally-controlled Firms
3402	Depreciation on Foreign-controlled Firms
3511	Retained Profit in Nationally-controlled Firms
3512	Retained Profit in Foreign-controlled Firms
3521	Distributed Profits accruing to Nationals
3522	Distributed Profits accruing to Foreigners

[ B 30. ] [ Total Gross Value Added, G.D.P. ]

B 4. Composition of Supply

[ B 20. & 30. ] [ Domestic Output ]

41 Imports of Final Goods, c.i.f.

[ Freight and Other External Cost Margins on 41 ]

421 Customs Duties on Final Imports

422 Customs Duties Foregone on Capital Goods

423 Excise, Sales Taxes and Subsidies on  
Final Goods

431 Distribution Margins on Domestic Output  
for Final Use.

432 Distribution Margins on Final Imports

[ B 40. ] [ Aggregate Supply at Market Value of Domestic Output and  
(final) Imports ]

## B 5. Final Demand

	511	Fixed capital Formation in Traditional Export Sector
	512	Consumption within Traditional Export Sector
	5211	Fixed Capital Formation in Residentiary Sectors
	5212	Government Capital Formation
	5221	Government Current Consumption
	5311	Private Fixed Capital Formation in New Dynamic Manufacturing
	5312	Private Fixed Capital Formation in Tourism
[ 531		Total Private Fixed Capital Formation in New Dynamic Sector ]
	532	Infrastructure Investment
	533	Military Expenditures
	5421	Urban High Income Consumption Expenditure
	5422	Urban Low Income Consumption Expenditure



	5423	"Executive" Consumption Expenditure
	5424	Rural Market Consumption Expenditure
	5425	Rural Non-market Consumption Expenditure
[ 542		Total Consumption Expenditure ]
	55	Inventory Change
	5611	Exports to Caribbean Countries
	5612	Exports to Metropolises
	5613	All other exports

[ B 50. ] [ Total Final Demand ]

B 6. Sales to Intermediate Sectors

B 7. Transfer Columns

	711	Sou-sou
	712	Established Financial Intermediaries
	72	Government Saving/Investment Account
	74	Rest of the World

## APPENDIX II

CLASSIFICATION OF PRODUCING SECTORS IN AN IDEAL TYPE ACCOUNTING  
FRAMEWORK FOR PLANTATION ECONOMY FURTHER MODIFIED

- 11. Traditional Export Sector
  - 111. Sugar
    - 111.1 Sugar cane growing
      - 114.11 Estates (plantation)
      - 114.12 Farmers (peasant)
    - 111.2 Sugar Milling
    - 111.3 Sugar Refining
    - 111.4 Other Products
      - 114.41 Molasses
      - 114.42 Rum
      - 114.49 All Other
    - 111.9 Own Account Services
      - 114.91 Construction
      - 114.92 Transport
      - 114.93 Distribution
      - 114.94 Utilities

112.

Bauxite

- 112.1 Dried
- 112.2 Calcined
- 112.3 Alumina
- 112.4 Aluminium
- 112.9 Own Account Services

113.

Petroleum

- 113.1 Crude petroleum
- 113.2 Petroleum products
- 113.3 Mineral tar
- 113.4 Petro chemicals
- 113.9 Own Account Services

114.

## All Other Minerals

- 114.1 Copper
- 114.2 Other Minerals
- 114.9 Own Account Services

115.

## Other Agricultural Exports

115.1	Bananas
115.2	Citrus
115.3	Cocoa (in shell)
115.4	Coffee
115.5	Tobacco
115.6	Coconut (in shell)
115.7	Pineapple
115.8	Ginger
115.9	Pimento
115.10	Arrowroot
115.11	Other spices
115.12	Cotton
115.19	Other Agricultural Exports

## Non-additive summary

[ 115 ]	Plantation
[ 115 ]	Peasant

## 12. Traditional Residentiary Sector

## 121. Traditional Residentiary Agriculture

121.1 Dairy Farms - commercial large

121.2 Poultry Farms - commercial large

121.3 Meat Animals - commercial large

121.4 Other Livestock Products - non-commercial  
small

121.41 Honey

121.42 Eggs

121.43 Meat

121.5 Rice and cereals

121.6 Forrestry

121.9 Other Agriculture

121.91 Fruits - large &amp; small

121.92 Vegetables - large &amp; small

121.93 Ground provisions - large &amp; small

121.94 Other - large &amp; small

## 122. Traditional Residentiary Manufacturing

122.1 Food processing

122.11 Cocoa and coffee

122.111 Cocoa preparations

122.112 Coffee preparations

- 122.12 Fruit & vegetable processing including  
canned citrus & juices
  - 122.13 Confectionery & sugar preparations
  - 122.14 Dairy products
  - 122.15 Meat products
  - 122.16 Grain mills including animal feeds
  - 122.17 Bakery products
  - 122.18 Vegetable & animal oils & fats
  - 122.19 Other food products including fish  
products & manufacturing ice.
- 122.2 Drinks
- 122.21 Alcoholic Beverages excluding rum &  
beer
  - 122.22 Beer & Malt
  - 122.23 Non-alcoholic beverages including  
flavourings excluding coffee & cocoa
- 122.3 Tobacco Products
- 122.31 Stemming & redrying
  - 122.32 Cigars & cigarettes

- 122.4 Wood Products excluding Furniture
  - 122.41 Sawmill & planing mills
  - 122.42 Millwork
  - 122.43 Boxes & Shooks
  - 122.44 Miscellaneous wood products
  
- 122.5 Furniture
  - 122.51 Household furniture
  - 122.52 Wood office furniture
  - 122.53 Public building furniture
  - 122.54 Mattresses & springs
  - 122.55 Other furniture - fixtures  
n.e.c. - including partitions, venetian  
blinds & shades
  
- 122.6 Non - metallic Mineral products  
- stone, clay & glass.
  
- 122.7 Paper & paperboard products
  - 122.71 Building paper - paperboard mills
  - 122.72 Paper & paperboard products
  - 122.73 Paperboard containers & boxes

122.8      Printing & Publishing

123.      Tourism

124.      Construction - Residentiary Mininc

124.1      Residentiary mining

124.2      Contract construction

[ Total Construction including own a/c ]

125.      Services

125.1      Transportation & Storage

125.11      Railways

125.121      Buses Public

125.122      Buses Private

125.13      Publicoes and Taxis

125.141      Water transport

125.142      Water - commercial

125.15      Trucks - warehouses

125.19      Other ground transport



125.2	Distribution	
125.21	Wholesale	
125.22	Retail	
125.221	Lumber, Building materials, hardware, farm equipment dealers.	
125.222	General merchant group stores	
125.223	Food stores, eating and drinking places.	
125.224	Automotive dealers, gas & service stations	
125.225	Apparel, accessory stores	
125.226	Furniture, furnishings	
125.227	Drugs, notions, jewelry, liquor, sports, books, etc.	
125.3	<u>Finance</u>	
125.31	Banks, insurance & other credit institutions	
125.32	Other finance	



- 126. House Ownership & Real Estates
  - 126.1 Own Account
  - 126.2 For Rental
  
- 127. Traditional Government
  - 127.1 Government Administration including Local Government
  - 127.2 Traditional Public Corporations
  
- 128. Traditional Public Utilities (excluding transport)
  - 128.11 Public Health
  - 128.12 Private Health including Doctors and  
Dentists in private practice
  
  - 128.2 Water & Sewage
  - 128.3 Public Recreation & Amusement

13. New Dynamic Sector

- 132. New Dynamic Manufacturing
  - 132.1 Textile Mills
    - 132.11 Weaving and narrow fabric mills
    - 132.12 Knitting mills

- 132.13 Textile finishing except wool
  - 132.14 Yarn & thread mills
  - 132.15 Floor covering mills
  - 132.16 Miscellaneous textile goods
- 
- 132.2 Clothing & Apparel
    - 132.21 Apparel
    - 132.22 Fabricated textiles n.e.c.
- 
- 132.3 Leather & Leather Products
    - 132.31 Tanning & finishing
    - 132.32 Shoes & finishing
    - 132.33 Other products - (only footwear cut stock)
    - 132.34 Luggage, gloves, purses & small leather goods
- 
- 132.4 Rubber & rubber products
    - 132.41 Rubber footwear
    - 132.42 Rubber & plastic products n.e.c.
- 
- 132.5 Chemicals & Allied products
    - 132.51 Basic chemicals
    - 132.52 Agricultural chemicals

132.53	Drugs, cosmetics and toilet preps.
132.54	Paints & allied materials
132.55	Plastics & synthetics
132.56	Miscellaneous chemical products
*132.6	Petroleum - Coal Products
132.61	Refining
132.62	Paving-roofing materials
132.7	Metal Products
132.71	Primary Metal
132.711	Steel rolling & finishing
132.712	Iron & Steel foundries

\* This subsector applies in countries in which there is no petroleum mining, but in which crude petroleum is imported for refining and further manufacture. This is taken to mean that there does not exist the integrated institutional complex (the total economic institution) which distinguishes the Traditional Export Sector. Hence, if there were fabrication of aluminium or other metals produced independently, vertically-integrated multinational enterprise, the activity would be included under the appropriate manufacturing head.

132.713 Non-ferrous rolling and  
drawing.

132.714 Non-ferrous foundries  
including secondary  
non-ferrous metals.

132.72 Fabricated Metal Products

132.721 Metal Cans

132.722 Cutlery, hand tools,  
hardware

132.723 Heating equipment -  
not electric

132.724 Structural metal products.

132.725 Bolts, nuts, screw machine  
products

132.726 Metal stampings & services

132.727 Fabricated wire products  
n.e.c.

132.728 Fabricated metal products  
n.e.c.

132.8 Machinery - Electrical

132.81 Electrical distribution products

132.82 Electrical industrial apparatus

132.83 Household appliances

132.84 Electrical lighting & wiring devices.







- 132.85 Radio/TV receiving equipment
- 132.86 Communications equipment
- 132.87 Electrical components
- 132.88 Electrical products n.e.c.
  
- 132.9 Transport equipment
  
- 132.10 Other Machinery & Equipment
  
- 132.11 Miscellaneous manufactures
  - 132.111 Professional Scientific Instruments
  - 132.112 Ordnance and Miscellaneous
  
- 133. Tourism
  
- 137. Dynamic Government
  - 137.2 Dynamic Public Corporations
  - 137.3 Education
  
- 138. Dynamic Public Utilities
  - 138.1 Seaports
  - 138.2 Airports & Airlines
  - 138.3 Electricity
  - 138.4 Telegraph, telephone

65. FINAL DEMAND

67. TRANSFER COLUMNS

C + I + G + X										67 TRANSFER COLUMNS				BALANCE	
AGGREGATE DEMAND	71	72	73	74	71	72	73	74	71	72	73	74			
REST OF THE WORLD GOVERNMENT S/I ACCOUNT ESTABLISHED FINANCIAL INSTITUTIONS														111. SUGAR CORPORATION A	£0
SALES TO NON-RESIDENTS, OTHER THAN FINANCIAL INSTITUTIONS														111. CORPORATION N	0
EXPORTS TO ALL COUNTRIES														112. BAUXITE CORPORATION A	0
EXPORTS TO CARIBBEAN COUNTRIES														112. CORPORATION N	0
EXPORTS TO ALL COUNTRIES IN U.S. DOLLARS														113. PETROLEUM CORPORATION A	0
EXPORTS TO CARIBBEAN COUNTRIES IN U.S. DOLLARS														113. CORPORATION N	0
TOTAL EXPORTS														114. ALL OTHER MINERALS CORP. A	0
IMPORTS FROM ALL COUNTRIES														114. CORP. N	0
IMPORTS FROM CARIBBEAN COUNTRIES														115. OTHER AGRICULTURAL EXPORTS A.	0
IMPORTS FROM ALL COUNTRIES IN U.S. DOLLARS														115. O. A. E. B.	0
IMPORTS FROM CARIBBEAN COUNTRIES IN U.S. DOLLARS														115. O. A. E. OTHER	0
TOTAL IMPORTS														[115] NON-ADDITIVE SUMMARY, PLANTATION	0
NET EXPORTS														[115] PLANTATION	0
NET EXPORTS IN U.S. DOLLARS														121. AGRICULTURE	0
NET EXPORTS IN U.S. DOLLARS														122. MANUFACTURING	0
NET EXPORTS IN U.S. DOLLARS														123. TOURISM	0
NET EXPORTS IN U.S. DOLLARS														124. CONSTRUCTION, MINING	0
NET EXPORTS IN U.S. DOLLARS														125.1. TRANSPORTATION & STORAGE	0
NET EXPORTS IN U.S. DOLLARS														125.2. DISTRIBUTION	0
NET EXPORTS IN U.S. DOLLARS														125.3. FINANCE	0
NET EXPORTS IN U.S. DOLLARS														125.4. OTHER SERVICES	0
NET EXPORTS IN U.S. DOLLARS														126. HOUSE OWNERSHIP & REAL ESTATE	0
NET EXPORTS IN U.S. DOLLARS														127. TRADITIONAL GOVERNMENT	0
NET EXPORTS IN U.S. DOLLARS														128. TRADITIONAL PUBLIC UTILITIES	0
NET EXPORTS IN U.S. DOLLARS														132. MANUFACTURING	0
NET EXPORTS IN U.S. DOLLARS														132.1. TEXTILES, CLOTHING, APPAREL	0
NET EXPORTS IN U.S. DOLLARS														132.3,4. LEATHER, RUBBER PRODUCTS	0
NET EXPORTS IN U.S. DOLLARS														132.5,6. CHEMICALS (ALIBED PRODUCTS) (PETROLEUM)	0
NET EXPORTS IN U.S. DOLLARS														132.7. METAL PRODUCTS	0
NET EXPORTS IN U.S. DOLLARS														132.8,9. MACHINERY & EQUIPMENT	0
NET EXPORTS IN U.S. DOLLARS														132.11. MISCELLANEOUS MANUFACTURES	0
NET EXPORTS IN U.S. DOLLARS														PROCESSING PRIMARY MATERIALS	0
NET EXPORTS IN U.S. DOLLARS														ASSEMBLY OF PARTS	0
NET EXPORTS IN U.S. DOLLARS														135. TOURISM	0
NET EXPORTS IN U.S. DOLLARS														137. DYNAMIC GOVERNMENT	0
NET EXPORTS IN U.S. DOLLARS														138. DYNAMIC PUBLIC UTILITIES	0
NET EXPORTS IN U.S. DOLLARS														TOTALS	£0
NET EXPORTS IN U.S. DOLLARS														211. AUTOMOBILES & PARTS	
NET EXPORTS IN U.S. DOLLARS														212. OTHER DURABLES	
NET EXPORTS IN U.S. DOLLARS														SERVICES	
NET EXPORTS IN U.S. DOLLARS														[ ESSENTIALS ]	
NET EXPORTS IN U.S. DOLLARS														[ LUXURIES ]	
NET EXPORTS IN U.S. DOLLARS														311. NATIONALS: NUMBERS	
NET EXPORTS IN U.S. DOLLARS														311. WORK WEEKS	
NET EXPORTS IN U.S. DOLLARS														32. FOREIGNERS: NUMBERS	
NET EXPORTS IN U.S. DOLLARS														51. A. NATIONALLY-CONTROLLED FOREIGN-CONTROLLED	
NET EXPORTS IN U.S. DOLLARS														52. B. ESSENTIAL & DEMAND LUXURY FINAL DEMAND.	
NET EXPORTS IN U.S. DOLLARS														71. HOUSEHOLDS	£0
NET EXPORTS IN U.S. DOLLARS														72. GOVERNMENT	£0
NET EXPORTS IN U.S. DOLLARS														731. RESIDENT PRIVATE S/I A/C	£0
NET EXPORTS IN U.S. DOLLARS														741. CARIBBEAN	£0
NET EXPORTS IN U.S. DOLLARS														74211. NON-RESIDENT TRADITIONAL S/I A/C	£0
NET EXPORTS IN U.S. DOLLARS														74212. NEW DYNAMIC S/I A/C NON-RES.	£0
NET EXPORTS IN U.S. DOLLARS														7423. METROPOLIS	£0
NET EXPORTS IN U.S. DOLLARS														7424. COMMONWEALTH	£0
NET EXPORTS IN U.S. DOLLARS														7431. RIVAL METROPOLES	£0
NET EXPORTS IN U.S. DOLLARS														747. OTHER COUNTRIES	£0
NET EXPORTS IN U.S. DOLLARS														INTERNATIONAL AGENCIES	£0

## FOOTNOTES

1. See above p.
2. In the case of Martinique, Guadeloupe and the French islands it is difficult to establish what that means since the territories are in theory departments of the metropole.
3. Among the richer sources, are, for Cuba, Henry C. Wallich, *Monetary Problems of An Export Economy*, Cambridge, Mass., 1950; International Bank for Reconstruction and Development, Report on Cuba, Baltimore, 1951, and Dudley Seers, *Cuba. the Economic and Social Revolution*, Chapel Hill, North Carolina, 1964. For the Dominican Republic, *Perspectives de la Economie Dominicaine para el Periodo 1967-1968* Oficina Nacional de Planificacion, Santo Domingo, 1966. For Venezuela, E.C.L.A., *Economic Bulletin for Latin America passim* and especially "Economic Development in Venezuela in the 1950's", March 1960; *The Economic Development of Venezuela*, International Bank for Reconstruction and Development, 1961.

For Puerto Rico, Junta de Planificacion, *Informe Economico al Gobernador*; Homans, Gaye and James, *The Sugar Economy of Puerto Rico*, Columbia University Press, 1938. Reynolds and Gregory, *Wages. Productivity and Industrialisation in Puerto Rico*, Irwin, Homewood, Illinois, 1965; and Jorge Freyre, *External and Domestic Financing in the Economic Development of Puerto Rico* Ph.D. thesis Yale, 1966. Werner Baer, *The Puerto Rican Economy and United States Economic Fluctuations*. University of Puerto Rico, Rio Piedras, 1962. For the U.S. Virgin Islands, *Overall Economic Development Program*. Government of the Virgin Islands of the United States, Development Board, 1966.

For Suriname, J. H. Adhin, *Development Planning in Suriname in Historical Perspective*, Smits, Utrecht, 1961. For the Netherlands Antilles, *Statistisch Jaarboek*. Government of the Nederlandse Antillen.

For the French territories, Societe d'Etudes pour le Developpement Economique et Social, *Comptes Economiques Legers Des Antilles Francaises Pour La Periode 1949-58*. (1961), *Comptes Economiques Semi-Detailles Des Antilles Francaises Pour Les Annees 1959 et 1960*, (1962); *Esquisses Comptables Des Economies Des Departements D'Outremer Pour 1961 et 1962* (1962); and *Esquisses Comptables Des Departements D'Outremer Pour 1970* (1964). Also Véne Plan, 1966-70, Paris.

The English speaking islands are all covered in the (1938) West India Royal Commission. London H.M.S.O., For the post-war period see, William Demas, Part II Economics of Development in Small Countries, McGill University Press, Montreal, 1965; O'Loughlin and O'Neale, A Survey of Economic Potential and Capital Needs of the Leeward Islands, Windward Islands, and Barbados, HMSO, London, 1963; and Arthur Lewis, Industrial Development in the Caribbean, Caribbean Commission, 1951, (Reprinted from Caribbean Economic Review).

4. Richard Stone, Input-Output and National Accounts, Organisation for European Economic Co-operation, 1961; U.N. Statistical Commission, 1967, Proposals for the Revision of the S.N.A. 1952, Document E/CN.3/356, August 1967 (U.N. Secretariat). Ragnar Frisch, Oslo Channel Model. University Institute of Economics, Oslo, 1962. Dudley Seers, An Accounting System in a Specialised Exporter of Primary Products. Mimeo, 1964.
5. Op. cit., p. 7
6. "All input-output models..... are strictly demand-oriented. From a certain viewpoint this is their fundamental weakness. They can take account of unidirectional influences only". p. 130, T. Gigantes and T.I. Matuszewski, The Representation of Economic Structure by means of Rectangular Input-Output Systems", Fourth International Conference on Input-Output Techniques. (Proceedings), Geneva, 1968, mimeo.
7. "Growth models (even if built on a sectoral breakdown) are inadequate. We need instead operational decision models with explicit specification of the large number of parameters that are subject to government control and decision". p.2. Macroeconomic Decision Models With Special Emphasis on Their Applicability in Less Developed Areas", Proceedings of the U.N. Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas. 1962.
8. The assumption that such a pool exists "is not valid in advanced countries and even less valid in underdeveloped ones. . There is first the practice of retained earnings. Business savings of the important growth sectors.....are not freely disposable throughout the economy. They are, to a large degree, earmarked for reinvestment

into those same industries.....Even personal savings are not freely available to all sectors. The bulk of these are in the form of institutional savings and the financial intermediaries which control these savings have established patterns of investment". Karl Levitt, p. 70, Comment on "Les Industries Mortrices et la Croissance d'une Economie Nationale" by Francois Perroux in Perroux et al., Problemes Economiques Contemporains. Presses de L'Ecole des Hautes Etudes Commerciales de Montreal, 1963.

9. The five "rules of the game" define "spheres of influence" in trade (Inter-Caetera); regulate the division of labour (Muscovado Bias); specify the origin, destination and carriage of trade (Navigation Provision); govern the character of the monetary system (Metropolitan Exchange Standard); and set the terms of marketing (Imperial Preference). Lloyd Best, "Outlines of a Model of Pure Plantation Economy", Social and Economic Studies, September 1968.
10. Ingreso y Producto, Junta de Planificacion, San Juan, Puerto Rico.
11. Memoria, Banco Central de Venezuela; Cuentas Nacionales de la Republica Dominicana, Banco Central de la Republica Dominicana.
12. Informe al Consejo de Ministerios, La Habana, 1959; Memoria. 1958-59, Banco Central de Cuba; Julien Alienes y Urosa, Caracteristicas fundamentales de la economia cubana. 1950, Cuadro No. 17; and Harry T. Oshima, The National Income and Product of Cuba in 1953, Food Research Institute Studies II, No. 3, Nov. 1961.
13. Phyllis Deane, The Measurement of Colonial National Incomes, Cambridge University Press, 1942; Frederic Benham, The National Income of Jamaica, 1942, Development and Welfare in the West Indies, Bulletin No. 5; A.I. Morais, The National Income of Jamaica, for 1943, 1946, Central Bureau of Statistics, Kingston, 1948; D.A. Percival and W.P. D'Andrade, The National Accounts of British Guiana, 1948-1951, Daily Chronicle, Georgetown.
14. Nora Siffleet, National Income and National Accounts Social and Economic Studies, Vol I, No 3; Alfred Thorne, Size. Structure and Growth of the Economy of Jamaica, ibid, Supplement to Volume IV, No. 4; Carleen O'Loughlin, "The Economy of British Guiana, 1952-56, A National Accounts Study", ibid, Vol 8, No. 1; "The Economy of Montserrat", Vol 8, No. 2, The Economy of Antigua, Vol 8, No. 3, "The Economy of St. Kitts-Nevis-Anguilla", Vol 8, No. 4.

15. National Income, Central Statistical Office, Trinidad & Tobago; National Accounts. Income & Expenditure, and National Income and Product, Department of Statistics, Government of Jamaica; Statistical Digest Bureau of Statistics, Guyana. Studies by researchers include: A. Kundu, "Inter-Industry Table for Guyana, 1959, and National Accounts. 1957-60," Supplement to Social and Economic Studies, Vol. 12, No. 1; C. O'Loughlin, "Problems in the Economic Development of Antigua," ibid Vol. 10, No. 3; Hugh O'Neale, "The Economy of St. Lucia," ibid, Vol. 13, No. 4; Ione Marshall, "The National Accounts of British Honduras," ibid, Vol. 11, No. 2; R.L. Bonnett, "The National Income and National Accounts of Barbados," ibid, Vol. 5, No. 3; and Jeanette Bethel, "A National Accounts Study of Barbados," ibid, Vol. 9, No. 2.
16. Societe d'Etudes pour le Developpement Economique et Social, op. cit., 1961, 1962, 1964. See also, Roland Jouandet, "Notes Sur les Revenus en Martinique....." Caribbean Studies, 1966.
17. Statistisch Jaarboek, loc cit.
18. U.N. Statistical Yearbook.
19. See Dexter Rose, A Framework for Revising the National Accounts of Jamaica, Department of Statistics, Kingston; Alfred Thorne, "Revisions and Suggestions for Deflating Gross Product Estimates," Social and Economic Studies Vol. 9, No. 1; Jeannette Bethel, "Some National Income Aggregates for Jamaica, at Constant Prices," ibid, Vol. 10, No. 2; and Frank Rampersad, "An Integrated System of Real and Financial Accounts," ibid, Vol. 11, No. 2.
20. "The income approach is ..... barred ..... for want of a sufficient coverage of the population by income-tax statistics and through the lack of unemployment insurance and employment exchanges and their statistics." Alfred Thorne, "Size, Structure and Growth of the Economy of Jamaica," Supplement to Vol. IV, No. 4, Social and Economic Studies.

21. Jeannette Bethel, A National Accounts Study of the Economy of Barbados, loc. cit, p. 219.
22. The discussion below is based on the documentation given in note 16.
23. Societe d'Etudes, op. cit, 1962.
24. Ibid, 1961, p. 4.
25. None of these tables has as yet been officially published but for Trinidad and Tobago, see A.A. Francis in Research Papers, No. 2, Central Statistical Office, Port of Spain. There is also A.A. Kundu, "Inter-Industry for the Economy of British Guiana, 1959 and National Accounts 1957-60," Supplement to Social and Economic Studies, Vol. 12, No. 1.
26. Estadistica Industrial de la Republica Dominicana, Oficina Nacional de Estadistica, Division de Publicaciones, Santo Domingo.
27. Classification and Aggregation of the Input-Output Tables for Puerto Rico, Puerto Rico planning Board, 1966. See also, Proposed Questionnaire for Estimating Input-Output Relations in the Manufacturing and Other Sectors. 1963, Planning Board, 1966. 1966.
28. Classification and Aggregation p. 5.
29. The manufacturing sector contributes approximately 24% of G.D.P.
30. Ibid. p. 2.
31. Report of a Seminar on the Simultaneous Production of Input-Output Tables and National Accounts in the Caribbean CODECA, Hato Rey, Puerto Rico, forthcoming.
32. George Cumper "Expenditure Patterns, Kingston, Jamaica, 1954," Social and Economic Studies, Vol. 7, No. 2, 1958. p. 165. See also The Differentiation of Economic Groups in the West Indies, Social and Economic Studies Vol. 11, No. 4 1952; and "An Experimental comparison of some Alternative Methods of Computing Demand Elasticities ." Social and Economic Studies. Vol. 15, No. 2, 1966.

33. Donald J. Harris, "Econometric Analysis of Household Consumption in Jamaica," *Social and Economic Studies*. Vol. 13, No. 4, 1964.
34. Leroy Taylor, "Consumers Expenditure in Jamaica. An Analysis of Data from the National Accounts. (1832-1960) and from the Household Budget Surveys. 1938-1958. ISER, Jamaica, 1964.
35. Nassau A. Adams, "An Analysis of Food Consumption and Food Import Trends in Jamaica, 1963," *Social and Economic Studies*, Vol. 17, No. 1, 1968.
36. *Ibid.* p. 12.
37. During the course of 1967, the Accounting Framework was presented before two Conferences of Caribbean Economic Statisticians. Representatives from statistical agencies from both the Hispanic and Anglo Caribbean agreed on the desirability and the feasibility of adjusting some of their data collection and collation to the needs of the Framework. At the same time, it became clear in discussion that data already available from the agencies could be organised to yield estimates of the entire set of entries required to complete the Table. See, Report of the Second Conference of Commonwealth Caribbean Statisticians, Government Printer, Georgetown, 1967. Also, Report of a Seminar on the Simultaneous Production of Input-Output Tables and National Accounts, CODECA, Hato Rey Puerto Rico, forthcoming.
38. Dudley Seers, "The Role of Merchandise Trade Statistics in Statistical Policy," *Social and Economic Studies*, Vol. 4, No. 2, 1955.
39. A beginning towards such a data bank has been made by this Project at the Centre for Developing Area Studies, McGill University, Montreal. External trade statistics (for three Caribbean countries and for the period 1954-64) have been recorded on computer tapes.
40. Both Education and Health have in fact been greatly expanded as part of the development effort. Both may therefore be legitimately considered as new dynamic activities. The decision to treat Health as Traditional and Education as Dynamic reflects a view that the latter is more of an investment being more directly aimed at an expansion of the productive capacity of the economy through an increase in the supply of knowledge and skills.



41. Its purchases of supplies are all final and are therefore in columns showing government consumption or investment in Part IV of the Table.
42. Only in an exceptional Plantation Economy is this item significant. The so-called subsistence sector, contrary to classical assumptions, has here been formed by the destruction of employment in the comparatively "modern" plantation sector. Its members therefore not only have a taste for imported consumption goods but also have very little tradition of craft. This we show by altogether disallowing the possibility that some subsistence income may flow from the manufacturing sector.
43. This and the other two Savings and Investment Accounts have been defined in terms of the operative control of the enterprise undertaking the investment.
44. The column-sums of Distribution Margins on Intermediate Imports (B23) and on Final Imports (B43) are not matched by any receipt because they represent intermediate purchases.
45. This type of informal financial intermediation is practised throughout the region. Sou-sou is its name in Trinidad. In Jamaica it is known as 'Pardner', in Guyana as 'Box', in Barbados as 'Meeting Turn', and in Puerto Rico and the Dominican Republic as 'Sam'. This is a generalization of the "Sterling Exchange Standard".