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OF
WORLD DEVELOPMENT SYSTEM

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II. 1. Methodology for Construction of World Economic Model

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Construction of a model for the world economic system is a very ambitious and complex task which becomes almost overbearing if one is aiming at, as we are, to analyze the total world system as such rather than solely its economic component. The success or failure of such an undertaking depends on how one approaches the problem of complexity both in the model as well as in the process of constructing the model. One would like to structure the model so as to be able to grasp the essential causes for its behavior while at the same time the model is sufficiently detailed and specific to allow for satisfactory validation with data as well as assessment of changes in structure caused by the changes in technology and the likes. Regarding the model construction process, one would like to be able to assess the progress in the "final model" construction at various stages of development rather than wait for the test at the very end when the corrections might be hard and expensive to implement.

To accomplish these objectives we are using a methodology based on the multilevel, hierarchical, systems theory. Essential feature of the methodology, as far as our present purpose is concerned is the concept of having a model with 'hierarchical structure' as well as a 'hierarchy of models'.

Specifically, as far as world economic model is concerned, the model is being developed on three levels:

(i) *Growth Level* - which is aimed at representing the most important feature in a dynamic fashion.

(ii) *Macro level* - which is aimed at explaining that behavior in terms of internal variables.

(iii) *Micro level* - which is aimed at disaggregating the variables and subsystems from the macro level for the purpose of a more detailed investigation.

Of course, each of the levels can be divided further into a hierarchy of sublevels.

Using such an approach an overall structure for the world economic system is developed as shown in Figure 1. There are ten regions in our model. For each of these regions models on growth, macro and micro level have been developed first.

Two problems had to be solved next to implement this strategy: Interrelationship between the regions and between the levels.

On the macro level the *total world* model is being developed from the start so that very implementation itself is possible only by making adequate provisions for interregional exchange. On the growth level the interconnection is possible only by using the macro variables; in essence, therefore, the growth models are interconnected through the macro level. On the micro level, the considerations regarding regional interconnection must be based on the trade-off between the increased complexity of the model and benefits accrued by having detailed information on exchange. We have developed micro models on three levels of disaggregation: two sectors, four sectors and nine sectors. Two sector models are used for the consideration of special problems, such as

the world food supply and are appropriately interconnected reflecting commodity exchange. The higher levels of disaggregation models, however, are not interconnected at this stage for the obvious reason of complexity. To derive the trade matrix change over twenty years of data validation period requires estimation of $20 \times 10 \times 10 = 2000$ parameters. To further disaggregate this matrix to accommodate for five or more sectors exchange would increase the complexity enormously and to such a degree that a rather convincing justification must be provided for such an effort. All the preparations are made to implement these links, however in particular, a five sectors interregional trade matrix which gives flows and distribution coefficients by origin and destination is prepared.[†]

Regarding the interlevel relationships the situation is the following: The growth level models can be simply viewed as generated from the macro level by aggregation. The micro models given in nine sectors disaggregation have been implemented as satellites to the macro models using input-output matrix and other information available on the micro level. The specific relationship between the macro and micro level models are, in general, determined by iteration. The two sector models, on the other hand, are developed in terms of its own dynamics.

[†] W. Strobele, A. Erdilek, et. al., "Economic Data Base For Regionalized Multilevel World Model", March, 1974.

II. 2. Specification of Structure for a Macro-Economic World Model

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1. Introduction: Motivation and Objectives

The objective of this paper is to outline a specification for the macro economic submodel within a hierarchical and regionalized model of the world development system. The basic motivation for the construction of such a model and the overall approach on which the effort is based are described elsewhere. However, some remarks to that effect are appropriate here in order to provide a background for the selection of relationships in terms of which the economic submodel is specified.

(i) The model is aimed at the assessment of *very long time trends*, i.e. for a period of 25 to 50 years or more. The difficulties in making such long term assessments are fully appreciated; yet, the time horizon of interest had to be selected so as to commensurate with the time constants of the dynamics of various systems involved. The population subsystem, for one, has such long time constants. For instance, if the birth rate would reach abruptly the replacement level it would take 30 to 50 years for the population system to reach an equilibrium, depending on the age distribution of the population. The economic submodel will have to be considered over the same period of time. Clearly only the most basic economic trends should be represented in such a model.

(ii) The world system is represented in terms of a set of *interacting regions*. The economic relationships between the countries included in any given region ought to be represented only insofar as they affect the aggregate regional development and the interregional relationships.

(iii) The *economic submodel* is *interconnected* with numerous *other submodels*, population, food, energy, water resources, to mention

a few. It is essential that the economic submodel provides the points for establishing such interconnections.

(iv) In view of the uncertainties associated with such a long term view the model is intended to be used for the *assessment of alternative developments*, under a variety of plausible sequences of events and conditions rather than for predicting the future. In the overall methodology used in the project this will be done by means of scenarios which define sequences of plausible events which are then applied to the model in order to assess the feasibility of such a scenario and the likely consequences. For that purpose the model should not be overly endogenized so as to become an autonomous, closed, system. Rather, it ought to be an open system with sufficient entries to implement various scenarios while, of course, capturing the essential relationships endogenously.

(v) In order to represent the *adaptive* characteristics of the *system* - which surely will manifest itself over such a long period of time - the overall model will have decision-making and normative stratum in addition to dynamical systems part representing the historical patterns of development. These higher strata are being implemented through man-machine interaction and the dynamic, lower stratum model, ought to have the entry points for the implementation of various policy measures.

2. Hierarchical and Regionalized Approach

One of the principal difficulties in both construction and use of the overall model is due to its complexity. In order to deal with the complexities the hierarchical approach is used in the project not only for the specification of the overall structure but also in the development of specific submodels and in reference to different levels of aggregation. For example, the economic submodel is developed on three levels termed *growth level*, *macro level* and *micro level*. On the growth level a regional economy is represented simply in terms of the changes in the gross regional product with the changes in the growth rate as the scenario or policy variable. On the macro level the total capital formation and the final demand components are represented together with the total production function, total trade matrix and other macro variables. On the micro level the regional output is specified in terms of several production sectors on an appropriate level of aggregation and the intermediate demands are represented in terms of input-output relationships.

The basic regionalization of the world system is given in terms of ten regions: (1) North America, (2) Western Europe, (3) Japan, (4) Rest of Developed, (5) Eastern Europe, (6) Latin America, (7) Middle East, (8) Africa, (9) Southeast Asia, (10) China. However again in the spirit of the hierarchical approach - several higher and one lower level aggregation will also be used namely:

- (a) Total world
- (b) Two regions: 1-5 and 6-10
- (c) Three regions: 1-4, 5, 6-10

- (d) Four regions: 1-4, 5, 6-9, 10
- (e) Ten regions
- (f) Eleven regions: the same as in (e) except that the region 9 is divided in two: 9a - Pakistan, India, Bangladash;
9b - rest of 9.

Two additional advantages of the hierarchical approach ought to be mentioned:

(a) It facilitates the grasp of the structure of the model and therefore an understanding of why a certain behavior is observed.

(b) It enables the construction of the model in stages; at each stage one has a definite version of the model which can be verified by data and used appropriately.

Finally, it should be mentioned that the model can be also used for the analysis of any particular country in the context of regional and world development by the addition of an appropriate satellite model.

3. Structure of Regional Macro-Economic Model

We shall first outline the structure for a general model applicable with modest changes to different regions; then we shall specify these changes consistently with interlocked regions to be specified by adapting the general model for each of the separate cases.

The general model which we have adapted for the world model is based on the flow of aggregate production (supply) and demand associated with that production. The balance between supply and demand closes the system. This is a "real" model; in a closing section reference will be made to extensions of the model to include market phenomena more explicitly.

(a) *Production*

A technological production function with labour and capital inputs determines the aggregate supply of goods.

$$Y_t^S = f(K_{t-1}, LF_t) \quad (1)$$

This is an equation of potential supply, showing how much production (value added), Y_t^S , could be supplied from full use of capital available, K_t , and labour force, LF_t . The input values are developed as

$$K_t = K_{t-1} - D * K_{t-1} + I_t \quad (2)$$

$$LF_t/N_t = P_t \quad (3)$$

Equation (2) is an accounting identity that states that change in capital stock, K_t , is defined as gross capital outlay, I_t , less capital consumption

or depreciation, $D * K_{t-1}$, where D is a depreciation rate. The variable I_t will be determined from the demand side of the system, below.

Equation (3) defines the labour-force participation rate, P_t , as the ratio of labour force, LF_t , to population N_t . In some countries and historical episodes the participation rate may be essentially constant.

In general, however, it depends on:

- (i) age composition of the population
- (ii) income per worker
- (iii) regulations of the educational system
- (iv) retirement practices
- (v) facilities for child care

Ultimately, participation rates could be explained by additional equations of the system. At this stage they are treated as fixed or time variable parameters, as estimated from the data. As for total population, it will be determined in the demographic model and regarded as exogenous for this version of the model. This provides for one-way linkage between the demographic and economic models in the hierarchical system which will be augmented with economic determinants to complete a two-way linkage.

There are two significant implications as a result of this approach to the supply side. (i) The system will have trend dynamics since equation (2) is a finite difference or accumulation process, affected by current flows, I_t , and having an effect on current flows in (1). (ii) No allowance is made for idle capital or labour force; i.e., there is no recognition of the

cyclical effects of underutilization of capacity or unemployment in (1); it shows the trend of potential output. Care must be taken in estimation of the production function to allow for variation in factor utilization over the sample period, however, in order not to bias the parameter estimates. Potential output is then determined by extrapolations holding utilization rates constant at their full capacity levels.

Actual output, Y_t , as contrasted with potential output, depends on employment, L_t , and capital utilized. Since the latter variable is not customarily observable in most economic data collections we simply use K_t , capital available or some index of capital utilization.

$$Y_t = f(K_{t-1}, L_t) \quad (4)$$

In (4) the same f-function is used as in (1). This implies that actual output and potential output are simply two different performance points on the same production surface -- one using full capacity inputs and the other using actual inputs. The equation in (4) could be a different function, but that is not essential.

In many studies nowadays, (4) is inverted or renormalized in the form

$$L_t = f^{-1}(K_{t-1}, Y_t)$$

This has no bearing on the simulation properties of the system but may affect estimation of parameters. This is the form we are using in the present model for developing countries since Y_t is determined by aggregate demand and the inverted production function is needed to assess employment in disequilibrium situations.

Consistent with our model, different parametric forms of f can be used (e.g., linear, log linear, or some other well-known variant). In the case of production relationships to be used in long run analysis, we have used a nonlinear form of production function.[†]

The foregoing development implicitly assumes constant hours per employee. Labour input in the production function is measured in man-hours rather than men, however, and any significant trend in hours of work would affect the trend in labour input. To take account of this (1) and (4) are rewritten as

$$Y_t^S = f(K_{t-1}, HF_t * LF_t) \quad (1a)$$

$$Y_t = f(K_{t-1}, H_t * LF_t) \quad (4a)$$

where HF_t and H_t are hours worked per employee under full employment and actual employment conditions. Cyclical variations in H_t should be accounted for in estimating the production function, but for extrapolation purposes H_t could set equal to HF_t and the trend in hours specified exogenously. In a more detailed model hours of work may be partly explained by the real wage rate as a determinant of the work-leisure choice.

(b) *Demand*

By definition and social accounting practice, total production is obtained as the sum of well-defined components of demand.

[†] M. McCarthy and G. Shuttic, "Cobb-Douglas Production Function for the World Model Project and a One Sector Growth Model Interpretation", in this volume.

$$Y_t = C_t + I_t + G_t + X_t - M_t \quad (5)$$

where

C_t = consumer expenditures

I_t = gross investment expenditures

G_t = government expenditures

X_t = exports

M_t = imports

It is defined to include an inventory component, which assures an accounting identity between actual production and total demand. There can, however, be a discrepancy between potential production and actual production

$$Y_t^S - Y_t .$$

This could serve in an enlarged model as an indicator of pressure on the price level or as a dynamic adjustment factor for output, i.e.,

$$\Delta p_t = F(Y_t^S - Y_t)$$

$$\Delta Y_t = G(Y_t^S - Y_t) .$$

These dynamic relations are of more importance for short run business cycle modeling and are less relevant in the present context where attention is centered on the long run.

A simple formulation of the domestic demand components is

$$C_t = GC_t * Y_t \quad (6)$$

$$I_t = GI_t * Y_t \quad (7)$$

$$G_t = CG_t * Y_t \quad (8)$$

These are all expressed as proportions of total production. The ratios are not and will have to be either constant, estimated as time functions from the data or explained endogenously by additional set of relationships reflecting also policy variables.

The consumption-income ratio GC_t depends on income history (or past levels of consumption), the tax/welfare system, wealth, income distribution, and in the extended model on market values for interest rate and inflation rate. The investment-income ratio depends on productivity of capital, the labour/capital ratio, output history, interest rate and inflation rate. Finally, the government expenditures ratio depends on fiscal policy parameters such as tax and public spending rates.

In the first round applications of this system, market variables will not be used, therefore income history, output history, capital productivity, capital/labour ratios and similar variables already contained in the physical model will be used as the variables for explaining these ratios in addition to policy variables such as tax and public expenditure rates.

The final two variables in the accounting identity (5) are exports and imports. They must be explained in each regional or country model in a way that is consistent with the treatment of partner trading areas. On an individual country or area basis, however, we can formulate two simple relationships

$$X_t = GX_t * WT_t \quad (9)$$

$$M_t = GM_t * Y_t \quad (10)$$

The new variable WT_t is world trade; it is defined as the sum of all countries' exports or imports

$$WT_t = \sum_i M_{it} = \sum_i X_{it}$$

In making a world model composed of the basic regions outlined above, special attention is paid to structure in order to preserve this accounting "law of conservation" for the system.

The ratios GX_t and GM_t depend on income history, exchange rates, terms of international trade (export and import prices), tariffs, and trade policies. Exchange rates and terms of trade will not be introduced in the first round models.

For some areas of the world, foreign exchange resources impose a limitation on imports. Imports, for these countries, tend to move with exports. This idea will be explicitly introduced later.

World trade are external variables to each regional model, which is endogenized in the system of inter-locking regional models described below. They drive the system, together with policy variables or parameters. There are ten variables to be determined by ten equations. The variables are Y_t^S , K_t , LF_t , I_t , L_t , Y_t , C_t , G_t , X_t , M_t . If we want to determine unemployment, it is computed from the identity

$$U_t = LF_t - L_t .$$

Similarly, savings are incomes not spent, or

$$S_t = Y_t - C_t ,$$

while the trade balance is

$$B_t = X_t - M_t .$$

4. A World Macro-Economic Model

The regional prototype model described in Section 3 is used as a starting point for each region in the world system, but there are important structural differences between main types of economic systems that should usefully be taken into account in getting a consistent system for the whole world. We differentiate among three types of economies:

- D. Developed market economies--Regions 1, 2, 3, 4
- C. Centrally planned economies--Regions 5, 10
- L. Less developed economies--Regions 6, 7, 8, 9

In the three cases, the production functions may be different, reflecting the differences in degrees of marginal returns to scale associated with stages of development, or the factors influencing the key ratios GC_t , GI_t , GG_t , GX_t , GM_t may be different. Certainly the main policy parameters are, in general, different.

We are going to vary the specifications of production, employment and trade among the three regions. We assume that centrally planned and less developed economies export their surplus output and purchase imports to the extent that they can pay for them with exports. In the case of the developed economies, we assume that they export according to the trading demand (inputs) of other countries and import according to their income levels. We shall further assume that centrally planned economies try to maintain trading balance with each of their two partners in separate bilateral agreements and that developing countries' purchases from developed

countries are constrained by the credits and grants that the latter are willing to make for the purpose of development assistance.

Other special features will be explained as we progress through the outline of each model.

(a) *Developed Market Economies (D)*

This system is most like the general prototype model outlined above. There are equations of potential output, capital supply, and labour force participation.

$$Y_{Dt}^S = f_D(K_{Dt-1}, LF_{Dt}) \quad (1D)$$

$$K_{Dt} = K_{Dt-1} - D_D * K_{Dt-1} + I_{Dt} \quad (2D)$$

$$LF_{Dt}/N_{Dt} = P_{Dt} \quad (3D)$$

In the framework of a world system, however, there is one refinement to the specification for (1D) that may prove to be important, namely, that imports from C and L are factors of production in the same way that K_t and LF_t are. The reason for this modification to the developed economy model is that imports of basic materials are essential to the production process, and these basic materials come to a significant degree from the socialist and developing countries of the world. Some basic materials are shipped from one developed to another developed economy, but this is less prevalent than the lines of trade that we have assumed between C and L on the one hand and D on the other. This is the simplest assumption that can be made short of disaggregation of the model by distinguishing among types of traded goods.

In the context of modeling a single country in DC or L, we generally use a value-added concept for measuring Y^S and Y . This means that domestic intermediate materials cancel, as outputs for some sectors and inputs for others. For this reason, they have been neglected as factor inputs in the study of aggregative production relations. This is proper for the economy as a whole, but not for separate treatment of industrial sectors. Foreign trade in intermediate materials does not cancel out by being simultaneously on the production and input sides; it is only an input. This point became dramatically apparent in the fuel crisis of 1973-74. Models that included imported fuel as a factor input would have been in an extraordinarily good position for analyzing the effects of shortages in industrial market economies.

We introduce a bilateral trade matrix

$$X = \begin{matrix} & X_{DD} & X_{DC} & X_{DL} \\ X_{CD} & X_{CC} & X_{CL} \\ & X_{LD} & X_{LC} & X_{LL} \end{matrix}$$

where X_{ij} shows the flow of goods from region i to region j , all measured in a common numéraire unit.

The trade flows X_{CD} and X_{LD} are the ones that should be entered as factors of production.

Instead of entering these material flows into the value added production function, they will be treated as separate fixed proportion constraints, so

that the production sector consists of the triplet

$$Y_{Dt}^S = f_D(K_{D,t-1}, LF_{Dt}) \quad (1D)'$$

$$X_{CDt} = GX_{CDt} * Y_{Dt}^S$$

$$X_{LDt} = GX_{LDt} * Y_{Dt}^S$$

The last two equations are production requirement functions for imported materials. The coefficients GX_{CDt} and GX_{LDt} reflect both the ratio of gross output to value added and the production coefficient in gross output. These are demand relations as long as supplies are unconstrained, giving required material imports determined by full-employment output. In the event that supplies of external materials are constrained below the levels needed for full employment production, the corresponding requirement equation will become a boundary condition determining Y_{Dt}^S . This formulation gives more structural content to the workings of the world economy and is in the spirit of existing macroeconomic models which combine aggregative value-added production functions with an input-output system for determining industrial inputs and outputs.

An alternative formulation would shift the aggregate production concept to gross output and incorporate material inputs directly in the production function. The present procedure makes it unnecessary to distinguish explicitly between gross output and value-added, yields explicit demand equations for imported materials, and is easier to implement empirically. Substitution between materials and other factors may be handled by varying GX_{CDt} or GX_{LDt} .

A similar triplet of equations will define the corresponding flow of actual production Y_{Dt} , with the value added production function used in inverted form to determine actual employment LDt .

The aggregate demand accounting identity and associated domestic demand relations of the general model hold for the developed economy case.

$$Y_{Dt} = C_{Dt} + I_{Dt} + G_{Dt} + X_{Dt} - M_{Dt} \quad (4D)$$

$$C_{Dt} = GC_{Dt} * Y_{Dt} \quad (5D)$$

$$I_{Dt} = GI_{Dt} * Y_{Dt} \quad (6D)$$

$$G_{Dt} = GG_{Dt} * Y_{Dt}$$

The expenditure ratios GC_t , GI_t , and GG_t are determined terms of other variables in the D model or as time functions by estimation from the data.

The equations for total exports and imports of the developed market economies consist of the accounting identities from the bilateral trade matrix

$$X_{Dt} = X_{DDt} + X_{DCt} + X_{DLt} \quad (8D)$$

$$M_{Dt} = X_{DDt} + X_{CDt} + X_{LDt} \quad (9D)$$

The import equations for X_{CDt} and X_{LDt} were already specified in the production sector. In order to complete the import side we add the remaining import demand function

$$X_{DDt} = GX_{DDt} * Y_{DDt}$$

If the D sector consisted of only one country, X_{DD} would be zero, but since we do account for all world trade flows among the countries in an aggregated regional system, the intra-regional imports are incorporated as above.

With regard to exports, it remains to determine X_{DCt} and X_{DLt} . Instead of supplying specific export functions for these flows, we treat them as exogenously determined from the viewpoint of the developed market economies. They are determined endogenously as import flows in the other regional models, as described below.

The closing of the gap between potential and actual aggregate output in the developed market economies ordinarily is brought about by adjustments in the production flow. In the short-run dynamics of the system, we could use

$$\Delta Y_{Dt} = G_D (Y_{Dt}^S - Y_{Dt})$$

or assume an equilibrium growth path for these economies in line with potential output and impose the restriction

$$Y_{Dt}^S = Y_{Dt}$$

This permits the deletion of one variable and one equation.

(b) *Centrally Planned Economies*

A basic assumption for this model is that the planners are committed to full employment; therefore we begin with a formulation in which actual output coincides with potential output and labour force with total employment. We do not consider an adjustment process or an unemployment calculation after labour force and employment requirements are determined.

The production relations are

$$Y_{Ct} = f_C(K_{Ct-1}, L_{Ct}) \quad (1C)$$

$$K_{Ct} = K_{Ct-1} - D_C * K_{Ct-1} + I_{Ct} \quad (2C)$$

$$L_{Ct}/N_{Ct} = P_{Ct} \quad (3C)$$

As in the general case, we have an accounting identity and domestic expenditure relations.

$$Y_{Ct} = C_{Ct} + I_{Ct} + G_{Ct} + X_{Ct} - M_{Ct} \quad (4C)$$

$$C_{Ct} = GC_{Ct} * Y_{Ct} \quad (5C)$$

$$I_{Ct} = GI_{Ct} * Y_{Ct} \quad (6C)$$

$$G_{Ct} = GG_{Ct} * Y_{Ct} \quad (7C)$$

Particular trade content of an inter-related system can be introduced here by making GI_{Ct} explicitly dependent on capital goods imports from developed market economies. For simplicity we assume that all flows in X_{DC} are capital goods, which is presently a major aspect of trade between D and C.

The trade relationships for centrally planned economies are now going to be different from those in the general model. Since there are no distinctions between Y^S and Y , LF and L in the centrally planned economies, according to the assumption of a commitment to full employment and full utilization of all economic resources, this eliminates two separate variables, but only one equation; therefore the accounting equation can be used to determine total exports. If it is rewritten as

$$X_{Ct} = Y_{Ct} - C_{Ct} - I_{Ct} - G_{Ct} + M_{Ct}$$

we see clearly that exports are calculated as production that is not consumed. We need, however, an import equation. It is

$$M_{Ct} = X_{DCt} + X_{LCt} + X_{CCt} \quad (8C)$$

As remarked previously, we assume that centrally planned economies negotiate bilateral trading agreements with market and developing economies in such a way as to maintain zero balances with each.

$$X_{DCt} = X_{CDt} \quad (8C1)$$

$$X_{LCt} = X_{CLt} \quad (8C2)$$

These are essentially barter agreements and are not unusual for the economies concerned. Given the export flows X_{CD} and X_{CL} , as established by import demand functions of the market and developing economies, the corresponding imports of the centrally planned economies are fully determined by the assumption of negotiated zero bilateral balances. Since the intra-regional trade flows must necessarily balance whether viewed as exports or imports, the assumption of zero bilateral external balances also implies equality of total imports and exports of the centrally planned economies. Therefore intra-regional imports are given residually as

$$\begin{aligned} X_{CCt} &= M_{Ct} - X_{DCt} - X_{LCt} \\ &= X_{Ct} - X_{DCt} - X_{LCt} \end{aligned} \quad (8C3)$$

Thus aggregate exports are determined as production which is not consumed and the export proceeds are spent exhaustively on an equal flow of imports, with the three bilateral components given by (8C1) - (8C3).

The assumption of an automatic full utilization growth path, the residual treatment of exports, and the purchasing power over imports are thus seen as distinctive features of the macro model for the centrally planned economies.

(c) *Less Developed Economies*

A key problem in these economies is a surplus of labour together with a shortage of capital. Capital availability is, therefore, a limiting factor in production. Output and labour requirements are separately determined by capital in fixed-proportion relationships. This is a first approximation, which denies the existence of strong substitution possibilities.

$$Y_{Lt} = Q_{Lt} * K_{Ly-1} \quad (1L)$$

$$L_{Lt} = R_{Lt} * K_{Lt} \quad (2L)$$

$$K_{Lt} = K_{Lt-1} + D_L * K_{Lt-1} + I_{Lt} \quad (3L)$$

The ratios Q_{Lt} and R_{Lt} (capital-output and capital-labour reciprocals) depend on the determinants of technical progress. This is a very different production process form that envisaged for the developed market or centrally planned economies, but it is one that seems to be well suited to the description of the developing economy.

Since there exists a chronic reserve of disguised as well as open unemployment in these economies, owing to the inability of eliminating unemployment by demand stimuli because of inadequate opportunities for labour-capital substitution, the concept of a full employment labour force loses precision. Under these circumstances little purpose would be served by including a labour force participation equation and unemployment identities in the developing country model. Total population and various per capita statistics are useful to look at as output quantities of the model. These can be formed from the population estimates of a demographic model and the solution values of the economic system.

The total accounting identity and demand ratios stand, as in the other two cases,

$$Y_{Lt} = C_{Lt} + I_{Lt} + G_{Lt} + X_{Lt} - M_{Lt} \quad (4L)$$

$$C_{Lt} = GC_{Lt} * Y_{Lt} \quad (5L)$$

$$I_{Lt} = GI_{Lt} * Y_{Lt} \quad (6L)$$

$$G_{Lt} = GG_{Lt} * Y_{Lt} \quad (7L)$$

The ratio GI_{Lt} depend on imports from developed market economies, mainly in the form of capital goods imports. This is the same consideration that was mentioned for the centrally planned economies, and the explanatory variable is, in this case, X_{DL} .

Exports are calculated from a transposed form of (4L), as the flow of production that is not wholly consumed. We need only an import equation to close this modular component of the system

$$M_{Lt} = X_{DLt} + X_{CLt} + X_{LLt} \quad (8L)$$

We assume that imports of the developing countries are constrained by foreign exchange resources, as mentioned earlier. We therefore introduce the grant transfer relation

$$X_{DLt} = X_{LDt} + T_{DLt} \quad (8L1)$$

when T_{DL} is the total of development grants made available to L by D. T_{DL} is an external variable for the system. The volume of export receipts from developed countries is given by X_{LD} .

As discussed earlier, X_{LD} is determined as an import demand by the level of production in the market economies, unless it is constrained from the supply side by the developing countries, as in the oil embargo case. In such an event it is an exogenous variable in the present version of the model.

Imports from the centrally planned economies are related to the income levels of the developing economies

$$X_{CLt} = G_{X_{CLt}} * Y_{Lt} \quad (8L2)$$

Finally, intra-regional imports are given residually by

$$\begin{aligned} X_{LLt} &= M_{Lt} - X_{DLt} - X_{CLt} \\ &= (X_{Lt} + T_{DLt}) - X_{DLt} - X_{CLt} \end{aligned}$$

Thus aggregate exports are supply determined and the export proceeds, together with the exogenous flow of development grants, are spent exhaustively on imports, with the bilateral composition given by (8L1) - (8L3).

(d) *Interregional Linkage*

The trade sectors of the three regional models have been specified so as to determine a consistent set of bilateral trade flows and thus to satisfy the world law of conservation when the models are solved together as a world system. This may be shown as follows.

There are nine individual entries in the X matrix and six marginal totals:

$$\begin{array}{cccc}
 X_{DD} & X_{DC} & X_{DL} & X_D \\
 X_{CD} & X_{CC} & X_{CL} & X_C \\
 X_{LD} & X_{LC} & X_{LL} & X_L \\
 \\
 M_D & M_C & M_L &
 \end{array}$$

Total exports and imports of the three regions are proximately determined as follows:

- (a) $X_D = X_{DD} + X_{DC} + X_{DL}$
- (b) $X_C = Y_C - C_C - I_C - G_C + M_C$
- (c) $X_L = Y_L - C_L - I_L - G_L + M_L$
- (d) $M_D = X_{DD} + X_{CD} + X_{LD}$
- (e) $M_C = X_C$
- (f) $M_L = X_L + T_{DL}$

Thus total exports of the developed market economies are demand-determined by import functions in the other economies, whereas total exports of the C and L economies are supply-determined within their own economies. Total imports of the D economies are also demand-determined and vary with the level of domestic GNP, unless a supply constraint is imposed on their materials imports by the L or C regions. Imports of the C and L regions are governed by export proceeds and, in the case of the L economies, also by development grants from the D economies.

Each regional model contains three import equations to provide a breakdown by supplying region:

- (i) $X_{DD} = G_{DD} * Y_D$
- (ii) $X_{CD} = G_{CD} * Y_D$
- (iii) $X_{LD} = G_{LD} * Y_D$
- (iv) $X_{DC} = X_{CD}$
- (v) $X_{LC} = X_{CL}$
- (vi) $X_{CC} = M_C - X_{DC} - X_{LC}$
- (vii) $X_{DL} = X_{LD} + T_{DL}$
- (viii) $X_{CL} = G_{CL} * Y_L$
- (ix) $X_{LL} = M_L - X_{DL} - X_{CL}$

Import additivity is preserved for each region, since M_D is defined as the sum of (i) - (iii) and X_{CC} and X_{LL} are residuals in the import identities (vi) and (ix) for given values of aggregate imports as determined by expressions (e) and (f) for M_C and M_L .

Export additivity is also preserved, as is obvious for X_D , which is determined by the sum of its components in expression (a). As for the centrally planned economies, total exports X_C are independently determined by expression (b). The accounting identity

$$X_C = X_{CD} + X_{CC} + X_{CL}$$

is nevertheless satisfied, since the left hand side is equal to M_C by expression (e) and the sum of terms on the right hand side also equals M_C through expressions (iv) - (vi). Finally, for the developing regions, we again determine total exports independently by expression (c), but again we find that

$$X_L = X_{LD} + X_{LC} + X_{LL}$$

is satisfied. To see this, substitute for X_{LC} and X_{LD} from (v) and (vii) to obtain

$$X_L = X_{DL} - T_{DL} + X_{CL} + X_{LL},$$

which together with (ix) implies

$$X_L = M_L - T_{DL}$$

Thus the sum of component exports from the developing economies is seen to be equal to $M_L - T_{DL}$. The independently determined value of total exports X_L is also equal to $M_L - T_{DL}$ by expression (f), and hence export additivity is satisfied for the L economies.

The trade balances implicit in the system may be stated as follows:

$$\begin{aligned}
 (1) \quad B_D &= X_D - M_D \\
 &= X_{DD} + X_{DC} + X_{DL} - X_{DD} - X_{CD} - X_{LD} \\
 &= X_{DL} - X_{LD} \\
 &= T_{DL}
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad B_C &= X_C - M_C \\
 &= X_{CD} + X_{CC} + X_{CL} - X_{DC} - X_{CC} - X_{LC} \\
 &= 0
 \end{aligned}$$

$$\begin{aligned}
 (3) \quad B_L &= X_L - M_L \\
 &= X_{LD} + X_{LC} + X_{LL} - X_{DL} - X_{CL} - X_{LL} \\
 &= X_{LD} - X_{DL} \\
 &= -T_{DL}
 \end{aligned}$$

Thus the deficit and surplus sum to zero, as they must from the world trade identity $\Sigma X = \Sigma M$.

This particular system is internally consistent and captures some important aspects of the trade relationships which tie the various nations together in a world economy. The assumptions of zero bilateral balances for the external trade of the centrally planned economies and the grant-transfer relation between the D and L regions serve the purpose of closing the system but are somewhat arbitrary. They may be part of the contemporary economic scene but may not persist. Nevertheless, they provide a starting point for the analysis.

5. Concluding Remarks

The model with components put forward in the preceding section gives the essentials for the long term assessment of real growth and related magnitudes. Starting from such a macro model the following concerns appear immediately:

- a. disaggregation into economic sectors
- b. consideration of alternative technologies or processes
- c. geographical disaggregation
- d. introduction of market rates

The problems (a) - (c) are approached within the project in the framework of the hierarchical approach which provides methodological foundation. Disaggregated, micro-economic, models are developed in terms of nine sectors, namely,†

1. Agriculture
2. Mining
3. Energy
4. Food
5. Manufacturing
6. Construction
7. Services I
8. Services II
9. Dwellings

Four Sectors:

- I - *Food*, containing sectors 1 and 4
- II - *Mining and Energy*, containing sectors 2 and 3
- III - *Manufacturing*, containing sectors 5 and 6
- IV - *Services*, containing sectors 7, 8 and 9

†Thomas Shook, "Implementation of World Micro Economic Model."

and two sectors

- A - Food, containing sector I
- B - Non-Food, containing sectors II, III and IV.

Questions of alternative technological processes and technology assessment in general is approached by developing appropriate models on the technology stratum, i.e., in terms of actual physical phenomena, and in such a way that it can be used for the production function in the economic stratum. For an actual implementation of that approach for the analysis of the adequacy of the world food supply system we refer to the report on the assessment of the world food situation.[†]

These problems were approached within the project in the framework of the hierarchical approach which is used as the methodological foundation.

A minimal set of market rates to go along with the system as now structured consists of an interest rate, a wage rate, a price level. These are market rates in the sense that they are all determined in some long run fashion by the tendency to equate demand and supply in the capital market, the labour market, and the goods market. Most of the ingredients of these markets are already available in the present models, namely labour supply and employment, potential supply and demand for output. To complete the market equations money supply will be introduced in a rudimentary financial system. Other market rates to be considered are exchange rates for regional currencies and prices of internationally traded goods.

[†] J. Richardson, "Scenario Analysis of World Food Supply Situation".

In order to avoid the complications of introducing money and financial sectors only real market rates, the real wage rate and the real interest rate could be used. The real wage rate would be defined as the ratio of the nominal wage rate to the price level and the real interest rate as the difference between the nominal rate and the inflation rate. If all three market variables were determined within the complete system, it would be possible to derive the two real rates, but a short cut may be introduced by defining market processes that determine directly the real wage rate (demand and supply of labour) and the real interest rate (demand and supply of fixed capital).

II. 3. Cobb-Douglas Production Function for the World Model
Project and a One Sector Growth Model Interpretation

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March 1974

I. The Estimates

The Cobb-Douglas Production Law is as familiar to economists as Mendel's "ratios" to the biologist or Einstein's famous formula to the physical scientist. Those who need a serious review are invited to read Senator Douglas' amazing original work [3] or the later work by Brown [2].

Very briefly, for large economic aggregates such as the manufacturing sector of a country - or the entire country - it has been observed that the wage share (and hence the property share) in the value of total production has tended to remain constant over long periods of time and to have a very small variance. For the United States economy this wage share has been calculated to lie in the neighborhood of .67 to .75 (depending on the definitions used for labor compensation and output. A typical sample set of computations for the U.S. can be found in Solow [10]. It should also be noted that Senator Douglas found such constancy to persist when much smaller production units were examined.

The Cobb-Douglas production law stated that the value of output (qt) (stated in constant prices after having subtracted the value of intermediate purchases) is related to aggregate labor input (Lt) and the value of the aggregate stock of capital (Kt) as follows.

1. $q_t = A(t)L_t^\alpha K_t^{1-\alpha} \cdot \epsilon_t$, where t is a time index, ϵ_t is a random error which hopefully possesses the Gauss-Markov properties, $A(t)$ is an unspecified function of time reflecting productivity changes. Generally it was assumed that $0 < \alpha < 1$ and that, historically, $\frac{dA(t)}{dt} > 0$ as a rule. A common specification for $A(t)$ was $A(t) = Ae^{\lambda t}$

Douglas, and his associate (Charles Cobb) noted that if competitive forces in an economy were sufficiently strong, we might reasonably expect the value of the marginal product of labor to equal its observed nominal wage. This implied that

$$P_t \frac{\partial q_t}{\partial L_t} = w_t \quad \text{where } P_t = \text{output price at time } t \text{ and } w_t = \text{wage rate.}$$

In the case of the production law (1) this readily translates to

$$P_t \frac{q_t}{L_t} = w_t \text{ or}$$

$$2. \quad \alpha = \frac{w_t \cdot L_t}{P_t \cdot q_t} = \text{labor's share at time } t.$$

A test of the hypotheses that 1) strong competitive forces were at work in an economy, and 2) that the production law 1) was operative might be provided by a least squares regression of q_t on L_t and K_t provided suitable data were available. The test could be performed using time series data - assuming an appropriate simple functional form for $A(t)$ would do. Alternatively cross sectional data could be used. Douglas' results for the United States are now well known; regardless of variations in the definition of labor, capital, and output, least squares estimates

of α from (a log linear version) of 1) yielded estimates of α that would have to be considered close to the observed historical labor share.

Attempts to test more general production laws against the Cobb-Douglas law have generally met with failure. An example of one Waterloo can be found in Nerlove [7]. It is not surprising that for the first try we have chosen (1) as the production law for the World Model Project. The advantages are obvious.

1. In economies, where competitive forces are strong, wage share information may provide additional information which can be used to counter the problems created by the scarcity of data points. [The temptation to use formal Bayesian procedures in this case is difficult to resist.] It is expected that in the case of Western Europe, North America and countries such as Japan, Australia, and South Africa this will be an advantage.
2. Even in sectors of the world where competitive forces may be frustrated, the Cobb Douglas law may still work. The only problem here is that labor shares need not be equal to the labor exponent.

Time series are available for this study for eight economic regions:

1. North America - NA
2. Western Europe - WE
3. Eastern Europe - EE
4. Japan - J
5. Latin America - LA

6. Middle East - ME
7. South East Asia - SEA
8. Rest of the Developed World - ROW

As noted earlier the problem with time series data is that a suitable specification for $A(t)$ must be provided. Unfortunately a simple specification of $A(t) = Ae^{\lambda t}$ will simply not do. Regions experience periods of fast productivity growth and other periods of "slow" growth. Some nations - Japan - experience periods of technological catch-up in which formulations such as $A(t) = Ae^{a_0 t + a_1 t^2}$ would be appropriate. In fact, Japan has posed a relatively minor problem for this study; the major problem has been the identification of discrete breaks for the other regions - in which technical progress $A(t)$ has at first grown quickly and then not quickly; the reverse is also possible.

As noted above the countries for which competitive pressures are strong are not difficult to identify; in this case wage share data - when available - can be used to strengthen the regression results. In some cases, however, we are not without prior knowledge concerning regions where competitive pressures may not be strong. Some of these regions tend to be labor "rich"; SEA, and perhaps ME and LA are examples. It is these cases where we would expect the Cobb-Douglas labor exponent to be low. The Cobb-Douglas serves as a good statistical approximation to a body of data on q_t , L_t , and K_t as long as the sample data are selected from a stable statistical population. However, no one would seriously consider pooling data for North America - a relatively capital rich area, with data for South East Asia. A separate application of equation (1) to NA

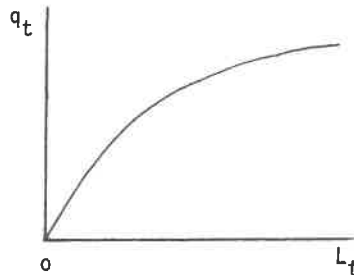
and SEA should show the latter area with a much lower labor exponent.

To see this observe that it is not unreasonable to assume that

$$3. \quad q_t = f(t, L_t, K_t)$$

where $\frac{\partial q_t}{\partial L_t}$ and $\frac{\partial q_t}{\partial K_t}$ are positive. It is also usual to assume 3) to be

homogeneous of degree one in L_t and K_t . Holding t and K_t fixed a graph of q_t against L_t (varying over a wide range) would show, according to the law of diminishing returns to variable proportions, something like



However, such a graph also implies that for large L_t

$$\frac{\frac{\partial q_t}{\partial L_t}}{\frac{q_t}{L_t}} = \frac{L_t}{q_t} \cdot \frac{\partial q_t}{\partial L_t} \quad \text{to be small.}$$

A check of equation 1 yields $\frac{L_t}{q_t} \cdot \frac{\partial q_t}{\partial L_t} = \alpha$.

As noted above the major estimation problem encountered in estimating the coefficients of 1 from observed data was that of identifying discrete breaks in the rate of growth of $A(t)$. [Given reliable data on wage shares, a confidence that competitive forces are strong, and a confidence in equation (1) this would pose no problem. Such wage share data are available for a number of regions and are being collected for the study; in the meantime we shall have to make do.] For the short term we have used a fairly crude procedure.

1. Simple Cobb-Douglas estimates of 1. were prepared for all regions using the assumption that $A(t) = Ae^{\lambda t}$. These least squares estimates were as a rule unsatisfactory.
2. Graphs of $[q_t / (L_t^\alpha K_t^{1-\alpha})] = A(t)$ were prepared using assumed values of $\alpha = \{.6, .65, .7, \text{ and } .75\}$. [These assumed values are admittedly too high for the labor rich countries.] On the basis of these graphs discrete breaks in $A(t)$ were inferred.

A single discrete break in $A(t)$ if it is of the (log) linear sort in t can only be represented as $A(t) = e^{a_0 t + a_1 dm + a_2 dm \cdot t}$ where dm is a "dummy variable" which takes a value of 0.0 before the break and 1.0 thereafter. For any time series sample two degrees of freedom are lost in accounting for the break. We end this paragraph by noting that if competitive forces are strong and (1) is an appropriate specification, the search on $\alpha = \{.6, .65, .7, \text{ and } .75\}$ is a very good device for identifying structural shifts; if the exponents are stable, the shift can only occur in $A(t)$.

The preliminary results are presented in Table I below. The "t" statistics are reported parenthetically; R^2 , s, standard errors and Durbin-Watson Statistics are also reported. [Graphs of actual q_t against predicted q_t from the regressions are given in the Appendix.] Some preliminary comments can be made. Note that 1) may be written as

$$1a. \quad \frac{q_t}{L_t} = A(t) \left(\frac{L_t}{K_t}\right)^\alpha n_t, \text{ since } 1) \text{ is homogeneous of degree one in}$$

L_t and K_t . The equations by region were estimated in log linear form. Discrete breaks, when identified, are indicated in Table I. We note that discrete breaks were found for all regions except Japan and South East Asia. The striking result for Japan was the accelerated growth in $A(t)$;

the "t" statistic of 3.3 cannot be ignored, especially given prior knowledge. Generally, the labor exponents are as expected as far as signs. The labor exponent for Japan was .575 and the observed labor share in 1960 was .52. See Morishima and Saito [6]. The labor rich countries have low coefficient estimates and the labor "poor" countries high coefficients - too high in fact for North America and Western Europe. We suspect the problem here is probably related to data. Fortunately, in the case of these areas labor share data is available. Also, in the case of North America a rich body of alternative data on q_t , L_t , and K_t can be used. The well known Cobb-Douglas study of Knowles [4] for the U.S. economy suggests corrective measures. We note here that McCarthy's [5] refinement of Knowles' U.S. study yielded a labor exponent of about $2/3$. At this point, rather than using labor share data it is our intention to begin by revising the data on K_t , and perhaps on the other variables. In the case of Western Europe it may be necessary to resort to labor share data. Edward F. Denison has suggested that, for the time being, we assume $\alpha = .8$ for both North American and Western Europe on the basis of his labor share calculations. (Personal Communication.) These calculations may be slightly revised on the basis of detailed material in Denison. Finally, we note that the time trend slopes appear to be positive as a rule with the exception of South East Asia; this is not surprising. [The quadratic time trend in the case of Japan requires special interpretation.]

II. One Sector Growth Model of the World Model

It is of some interest to note that the individual region equation systems without the foreign sector equations have a legitimate interpretation as belonging to a class of well known one sector growth models developed in the late 1950's and early 1960's. Examples of these growth models can be found among the work of Solow [9] and Phelps [8]. We present the Phelps version here. We suppose that the production function is given by (1) and add the following equations

$$4. L_t = L_0 e^{nt} \text{ where } L_0 > 0 \text{ and } n > 0$$

$$5. I_t = s q_t, \text{ and}$$

$$6. \frac{\dot{K}}{K_t} = \frac{I_t}{K_t} - \delta.$$

Equation 4 is a longrun full employment supply curve where the rate of proportional growth in the labor force is given by n . It is noted that n is taken as a policy (or control variable in the World Model as are parameters such as $S > 0$, which enters the gross investment demand curve, equation 5. Defining \dot{K} as the time derivative of K_t , equation 6 merely gives the rate of proportional change in K_t under the assumption that the net stock of capital is subject to geometric decay depreciation due to deterioration and obsolescence. [Phelps' capital variable $J(t)$ is easily rewritten to satisfy this assumption.] In what follows \dot{q} , and \dot{L} will also be taken as time derivatives of their associated variables. Note that

$$\frac{\dot{L}}{L} = n.$$

Total differentiation of 1 and arranging term yields

$$\frac{\dot{q}}{q} = \lambda + \alpha \frac{\dot{L}}{L} + (1 - \alpha) \frac{\dot{K}}{K} \quad \text{or}$$

$$1b. \quad \frac{\dot{q}}{q} - \frac{\dot{K}}{K} = \lambda + \alpha \eta - \alpha \frac{\dot{K}}{K}.$$

Using 6 and then 5 in 1b yields

$$d \ln(q_t/K_t) = \lambda + \alpha(\eta + \delta) - \alpha s \frac{q_t}{K_t} \quad \text{or}$$

$$1c. \quad d \ln(q_t/K_t) = a_0 - a_1 \frac{q_t}{K_t} \quad \text{where}$$

$$a_0 = \lambda + \alpha(\eta + \delta) > 0 \quad \text{assuming } \eta + \delta > 0, \quad \text{and } a_1 = \alpha s > 0.$$

Solution of this simple first order difference equation yields the conclusion that $d \ln(q_t/K_t) = 0$ in the long run or equivalently

$$7. \quad \frac{\dot{q}}{q} = \frac{\dot{K}}{K}. \quad \text{Substitution of } \frac{\dot{q}}{q} \text{ for } \frac{\dot{K}}{K} \text{ into 1b. immediately yields}$$

$$\frac{\dot{q}}{q} = \alpha^{-1}(\lambda + \alpha \eta). \quad \text{Also the rate of proportional growth in output per}$$

$$\text{labor unit } \frac{\dot{q}}{q} - \frac{\dot{L}}{L} = \lambda. \quad \text{In short, the rate of economic growth is}$$

independent of the savings rate (S) in the long run.

This section on the Solow-Phelps model is not included in this paper as an intellectual curiosity. It is important to recognize at an early stage the consequences of seemingly innocent assumptions. Taking equations 4, 5, and 6 as given the independence of growth rates from the savings rate is a consequence of the Cobb-Douglas assumption. Above we note the Cobb-Douglas may be a suitable approximation assuming that the data points

are taken from a suitably homogeneous sample. We also note that North America and South East Asia would not really be considered homogeneous. Another way of putting this that over very wide data ranges the Cobb-Douglas exponents may not be safely assumed to be constants. [The fact that the labor elasticities for the labor "rich" regions seemed to be low relative to their capital rich counterparts is certainly suggestive in this case.] What this seems to suggest is that for hyper-long future forecasts that a more general production function would be appropriate; perhaps a CES function should be used. [See Arrow, *et. al.* [1].

We close by noting that even if the Cobb-Douglas assumption is correct and rates of growth are independent of the savings rate, it is obvious that the solution of 1c will show that the level of the growth path of q_t will depend on the choice of s . The choice of a higher s will yield a higher growth path level. To the extent that regions do have some freedom in their choice of s they may vary their growth paths. To us, it seems intuitively clear that the capital rich regions have somewhat greater freedom in this area.

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EASTERN EUROPE

Eqn:

$$\ln\left(\frac{qt}{Kt}\right) = a_0 + a_1 \ln\left(\frac{Lt}{Kt}\right) + a_2 t + a_3(\text{Dummy}) + a_4 t(\text{Dummy})$$

$$[-6.0615] \quad [4.4009] \quad [4.2907] \quad [-1.6695] \quad [.82999]$$

$$a_0 = 1.3917 \quad a_1 = .4565 \quad a_2 = .0143 \quad a_3 = -.1476 \quad a_4 = .0048$$

Break in 1963

$$R^2 = .8969$$

$$\text{S.E.E.} = .0261$$

$$\text{D.W.} = 1.3833$$

REST OF DEVELOPED WORLD

Eqn:

$$\ln\left(\frac{qt}{Kt}\right) = a_0 + a_1 \ln\left(\frac{Lt}{Kt}\right) + a_2 t + a_3(\text{Dummy}) + a_4 t(\text{Dummy})$$

$$[-12.9307] \quad [3.3001] \quad [4.5661] \quad [.25649] \quad [.06357]$$

$$a_0 = -1.7100 \quad a_1 = .6294 \quad a_2 = .0180 \quad a_3 = .0064 \quad a_4 = .0001$$

Break in 1961

$$R^2 = .952855$$

$$\text{S.E.E.} = .0110$$

$$\text{D.W.} = 2.1689$$

JAPAN

Eqn:

$$\ln\left(\frac{qt}{Kt}\right) = a_0 + a_1 \ln\left(\frac{Lt}{Kt}\right) + a_2 t + a_3 t^2$$

$$[-2.6547] \quad [2.4882] \quad [-0.4657] \quad [3.2901]$$

$$a_0 = -2.1203 \quad a_1 = .5752 \quad a_2 = -.0068 \quad a_3 = .0017$$

$$R^2 = .97718$$

$$\text{S.E.E.} = .0297$$

$$\text{D.W.} = 1.0203$$

TABLE ICobb-Douglas Estimates

WORLD MODEL PROJECT

WESTERN EUROPE

Eqn:

$$\ln\left(\frac{qt}{Lt}\right) = a_0 + a_1 \ln\left(\frac{Lt}{Kt}\right) + a_2 t + a_3 (\text{Dummy}) + a_4 t (\text{Dummy})$$

[-9.9241] [7.7501] [4.4960] [-4.0251] [4.4873]

$$a_0 = -2.3013 \quad a_1 = .8794 \quad a_2 = .0213 \quad a_3 = .1539 \quad a_4 = .0170$$

Dummy from 1960

$$R^2 = .9991$$

$$\text{S.E.E.} = .0075$$

$$\text{D.W.} = 2.2608$$

MIDDLE EAST

Eqn:

$$\ln\left(\frac{qt}{Kt}\right) = a_0 + a_1 \ln\left(\frac{Lt}{Kt}\right) + a_2 t + a_3 (\text{Dummy}) + a_4 t (\text{dummy})$$

[-4.0761] [2.8380] [3.7319] [4.4487] [-4.9290]

$$a_0 = -1.3977 \quad a_1 = .3045 \quad a_2 = .0242 \quad a_3 = .2947 \quad a_4 = -.0195$$

Break at 1964

$$R^2 = .8380$$

$$\text{S.E.E.} = .0126$$

$$\text{D.W.} = 2.0019$$

SOUTH EAST ASIA

Eqn:

$$\ln \left(\frac{qt}{Kt} \right) = a_0 + a_1 \ln \left(\frac{Lt}{Kt} \right) + a_2 t$$

	[-1.70466]	[-1.5973]	[-3.85597]
$a_0 = -2.4514$	$a_1 = .2024$	$a_2 = -.0146$	
$R^2 = .9736$	S.E.E. = .0212	D.W. = .9789	

NORTH AMERICA

Eqn:

$$\ln \left(\frac{qt}{Kt} \right) = a_0 + a_1 \ln \left(\frac{Lt}{Kt} \right) + a_2 t + a_3 (\text{Dummy}) + a_4 t (\text{Dummy})$$

[-24.3674]	[4.3268]	[5.72828]	[-1.61474]	[1.34857]
-1.1316	1.3906	.0291	-.0636	.0045

Break at 1960

$R^2 = .9740$	S.E.E. = .0161	D.W. = 1.7118
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DATA APPENDIX AND GRAPHS OF ACTUAL AND PREDICTED
OUTPUTS FROM THE REGRESSIONS

GROSS REGIONAL PRODUCT (CNBB-DOLLARS)

WESTERN EUROPE

	1950	1955	1960	1965	1970
400,000					
542,092					
575,532					
577,034					
577,797					
563,510					
578,145					
548,914					
541,744					
534,247					
527,010					
512,354					
507,926					
497,797					
490,250					
483,199					
475,494					
467,556					
461,277					
454,000					
446,699					
439,365					
432,054					
424,767					
417,200					
410,104					
402,508					
395,250					
387,987					
381,000					
374,000					
366,186					
358,134					
351,287					
344,200					
337,199					
329,686					
322,543					
315,297					
308,100					
301,899					
293,396					
286,094					
278,797					
271,200					
264,199					
256,699					
249,000					
242,299					
235,000					

H-HISTORICAL
C-CALCULATED

H C

H

H

C

H

H

C

H

H C

C

H C

C

H

H

H

H

H

C

H

H C

C

H

H

H

H

H

H

H

H

H

H

H

H

H

H

H

H

GRASS REGIONAL PRODUCT (CORR-ROUGLAS)

MIDDLE EAST	H-HISTORICAL C-CALCULATED					
	1950	1955	1960	1965	1970	
50,000						
49,200						
48,400						
47,600						
46,800						
46,000						
45,200						
44,400						
43,600						
42,800						
41,200						
40,400						
39,600						
38,800						
38,000						
37,200						
36,400						
35,600						
34,800						
34,000						
33,200						
32,400						
31,600						
30,800						
30,000						
29,200						
28,400						
27,600						
26,800						
26,000						
25,200						
24,400						
23,600						
22,800						
22,000						
21,200						
20,400						
19,600						
18,800						
18,000						
17,200						
16,400						
15,600						
14,800						
14,000						
13,200						
12,400						
11,600						
10,800						
10,000						

EASTERN EUROPE		EDWINS REGIONAL PRODUCT (EDWIN-DUBUI AS)		H-HISTORICAL E-CALCULATED	
450,000					
443,000					H
435,000					H
429,000					C
422,000					H
415,000					C
409,000					
401,000					
394,000					
387,000					
380,000					
373,000					
366,000					
359,000					
352,000					H
345,000					
338,000					
331,000					H
324,000					
317,000					
310,000					
303,000					
296,000					
289,000					
282,000					
275,000					
268,000					
261,000					
254,000					
247,000					
240,000					
233,000					
226,000					
219,000					
212,000					
205,000					
198,000					
191,000					
184,000					
177,000					
170,000					
163,000					
156,000					
149,000					
142,000					
135,000					
129,000					
121,000					
114,000					
107,000					
100,000					
1950					
1955					
1960					
1965					
1970					

GROSS REGIONAL PRODUCT (CPIR-DUIGLAS)

	1950	1955	1960	1965	1970
REST OF DEVELOPED WORLD					
55,000					
54,500					
53,000					
52,900					
52,200					
51,500					
50,800					
50,100					
49,000					
48,700					
48,000					
47,500					
46,600					
45,900					
45,200					
44,500					
43,000					
43,100					
42,600					
41,700					
41,000					
40,300					
39,600					
38,900					
38,200					
37,500					
36,800					
36,100					
35,400					
34,700					
34,000					
33,300					
32,600					
31,900					
31,200					
30,500					
29,800					
29,100					
28,400					
27,700					
27,000					
26,300					
25,600					
24,900					
24,200					
23,500					
22,800					
22,100					
21,400					
20,700					
20,000					

REST OF DEVELOPED WORLD

H-HISTORICAL
C-CALCULATED

H
C

C
H

C
H

H
C

H

H

H
C

C
H

H
C

C
H

C
H

C
H

C
H

C
H

C
H

MIDDLE EAST

YEAR	Output	Capital	Labor	Predicted Output
1950	10,5000	17,1031	527,2969	10,6023
1951	11,2700	18,1111	532,2969	11,3381
1952	12,2900	19,2041	547,7031	12,2056
1953	13,0601	20,4150	564,2031	13,0959
1954	14,0900	21,7030	581,6016	14,0568
1955	15,3700	23,0911	569,0000	15,0978
1956	16,5899	24,6311	577,0000	16,2483
1957	17,4099	26,3569	565,0000	17,3391
1958	18,4399	28,0439	592,7889	18,8220
1959	19,7200	29,6621	566,3984	19,7756
1960	21,0000	31,2451	543,5000	20,7454
1961	22,0200	33,4121	546,8984	22,3123
1962	24,0701	35,7158	541,6016	23,9685
1963	25,6101	38,1660	543,5000	25,6443
1964	27,9099	41,1936	547,6016	27,0120
1965	30,4800	44,3672	588,2969	30,0732
1966	32,0094	48,0078	619,7969	32,4307
1967	33,8101	51,8560	627,7031	34,5459
1968	37,3301	56,0942	648,2031	36,9834
1969	40,2100	60,7710	684,2969	39,9409

EASTERN EUROPE

YEAR	Output	Capital	Labor	Predicted Output
1950	103.8604	161.5996	1348.9063	107.3916
1951	115.4004	171.0594	1309.7469	114.5596
1952	124.0596	183.4492	1455.5437	122.5830
1953	132.7109	195.8668	1504.9062	130.8672
1954	147.1406	209.3354	1907.9062	153.3457
1955	164.4492	225.1035	1950.2031	163.4453
1956	175.9902	243.6484	2014.7969	175.6955
1957	193.3008	266.0987	2092.4062	189.7088
1958	210.6094	290.7852	2126.9062	204.0078
1959	230.8008	320.9844	2159.1875	221.2637
1960	248.1094	354.7500	2349.0000	244.7383
1961	265.4219	391.8125	2529.3125	270.8437
1962	276.9609	429.6836	2581.3125	291.7852
1963	289.5000	470.0547	2610.5938	289.3672
1964	314.4687	506.5077	2712.5938	312.2109
1965	331.7812	550.4062	2755.4062	336.2461
1966	360.6280	590.0234	2853.4062	359.8789
1967	369.4405	633.7734	2916.5000	385.2031
1968	415.4414	681.1406	2942.0000	412.4861
1969	435.6406	730.2147	3039.4062	440.4883

REST OF DEVELOPED WORLD

YEAR	Output	Capital	Labor	Predicted Output
1950	21,3000	74,7998	146,0996	20,9980
1951	21,7560	77,3018	151,8008	22,0354
1952	22,7900	79,8623	150,3008	22,6941
1953	23,2300	82,6094	150,8008	23,5100
1954	24,6399	85,3584	152,4094	24,4070
1955	25,7900	88,5694	157,0000	25,5916
1956	26,2701	91,8770	159,0596	26,6606
1957	27,2400	95,0908	162,1992	27,7991
1958	28,9500	98,5127	164,3708	28,9319
1959	30,4760	102,2363	167,4704	30,2109
1960	31,7760	106,2744	172,0996	31,6477
1961	32,7600	110,6771	171,0996	32,8462
1962	34,6602	114,8945	176,8008	34,4982
1963	37,1099	119,3906	184,5996	37,1563
1964	39,7402	124,7383	192,9004	39,2686
1965	41,4102	131,4234	199,1992	41,5195
1966	43,4600	138,6563	203,8008	43,7827
1967	46,3901	145,7129	205,9004	45,8350
1968	48,3501	152,7480	213,1992	48,3662
1969	51,5801	160,3320	221,0000	51,0986

JAPAN

YEAR	Output	Capital	Labor	Predicted Output
1950	24,0800	27,2000	837,2931	23,3152
1951	25,2800	30,9419	847,6016	24,7764
1952	26,5701	34,6672	872,6016	26,5466
1953	27,9609	38,6292	920,8984	26,8414
1954	29,7000	43,0972	936,6016	30,7173
1955	35,4402	47,6944	966,2031	33,0127
1957	38,4002	52,3921	1004,1016	35,6855
1958	40,2002	56,3750	1024,9062	39,5436
1959	43,6000	57,3184	1027,5000	41,4199
1960	49,7402	61,4000	1048,4063	44,5459
1961	57,9199	62,7197	1055,2069	49,6797
1962	61,3301	62,7197	1058,7062	54,3701
1963	68,1366	104,1504	1036,4069	60,1182
1964	77,6797	124,1094	1036,4069	66,4267
1965	81,0498	141,9512	1038,2032	73,2620
1966	89,2598	163,0527	1098,7969	82,1020
1967	101,5303	183,7012	1124,2031	95,1020
1968	115,8398	206,9004	1140,9062	103,1172
1969	130,1504	235,7168	1152,5000	116,4549
		270,8672	1150,7969	130,8574

SOUTH-EAST ASIA

YEAR	Output	Capital	Labor	Predicted Output
1950	51,6799	62,5000	4723520.0000	51,5713
1951	53,3799	65,9236	4651904.0000	53,4926
1952	55,1299	69,7695	5117504.0000	55,2529
1953	58,5000	72,9697	5645600.0000	57,9953
1954	61,2500	76,7799	5905920.0000	59,8600
1955	63,6000	81,3193	6072256.0000	62,2109
1956	66,5000	86,7421	6302072.0000	65,0449
1957	67,3799	93,5762	6500672.0000	68,5127
1958	70,0000	100,4023	6700916.0000	71,6525
1959	72,6299	107,1024	6929726.0000	75,1143
1960	77,0000	114,0761	7097762.0000	79,1699
1961	80,5000	120,6777	7417472.0000	81,2891
1962	83,1299	126,5379	7494208.0000	84,3135
1963	87,5000	136,2199	7629960.0000	87,4375
1964	92,7500	145,0156	7855008.0000	91,0762
1965	97,7500	154,0410	8048192.0000	94,6934
1966	106,2500	165,2469	8284736.0000	98,4979
1967	103,7500	173,1230	8522752.0000	102,1152
1968	106,7500	183,3956	8773632.0000	105,8668
1969	114,5299	194,6750	8907992.0000	109,9629

II. 4. Computer Implementation of
World Macro Economic Model

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R. Pestel, T. Shook, W. Strobele

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2.	Some Results of Validation Test	B 72
3.	Comparison of Model Parameters and Historical Data	B 145
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1. Basic Assumptions

The macro economic model of the regionalized world system as specified by Mesarovic, Klein and Hickman[†] has been implemented using extensive set of data to estimate the required parameters. The data base is fully documented in the project report by Strobele, Erdilek and all^{††} while the results of some most challenging estimation to problems are reported by M. McCarthy and G. Shuttic^{†††}.

Several versions of the model have been designed, implemented and validated. They differ primarily in the alternative ways how some functions within the model have been specified and the way the interregional linkages have been implemented. In particular, the following versions of the model have been estimated from the data and validated by comparison with historical information:

(i) The production functions are specified by means of capital output ratio

$$Y = Q * K$$

(ii) The production functions are specified in the Cobb-Douglas form

$$Y = A * L^{\alpha} * K^{\beta}$$

(iii) The regional exports are given in terms of the total world output

$$X = GX * WY$$

[†]M. Mesarovic, L. Klein, B. Hickman, "Specification of Structure for a Macro-Economic World Model".

^{††}W. Strobele, A. Erdilek, et. al., "Economic Data Base for Regionalized Multilevel World Model".

^{†††}M. McCarthy and G. Shuttic, "Cobb-Douglas Production Function for the World Model Project and a One Sector Growth Model Interpretation".

$$\text{where } WY = \sum_{i=1}^{10} Y_i$$

(iv) The regional exports are given in terms of the total world trade

$$X = GX * WT$$

$$\text{where } WT \text{ is the sum of all exports or imports, } WT = \sum_{i=1}^{10} X_i = \sum_{i=1}^{10} M_i.$$

(v) The exports of developed regions are given in terms of world output or world trade while the centrally planned and developing regions essentially follow a balanced trade path except for the foreign aid.

(vi) The interregional linkage is determined by the world trade matrix whose time trade is estimated from the data.

All of these versions agree with the historical data to a satisfactory degree of accuracy. The selection which one to use therefore cannot be based on the test of validation by data but rather on the purpose for which the model is used; e.g. the types of scenario which will be evaluated.

As an illustration the performance of the world macro model is compared with the historical data in the tables and graphs which follow. The definitions of the variables are:

- CC - Consumption as computed by the model
- HC - Consumption as given by historical data
- CI - Investment as given by historical data
- HI - Investment as given by historical data
- CG - Government expenditure as given by historical data

HG - Government expenditure as given by historical data
CY - Output as given by historical data
HY - Output as given by historical data
CX - Export as given by historical data
HX - Export as given by historical data
CM - Import as given by historical data
HM - Import as given by historical data

The world trade matrix, as it changes over time is also given in the subsequent table followed by the computer program which fully specifies the model and can be used for computer implementation.

There is yet another way how the validity of the model can be tested, namely, by comparing with the historical data, the values of the parameters as used in the model and how they change in time. This is presented in the tables and graphs which follow. The comparisons also provide a useful insight into the consistency or time trends in the parameters, e.g. saving ratio GI, the propensity to consume GC etc. The constancy or regularity of these changes indicates strongly that the structure selected is well suited to the actual system modeled. The changes can be interpreted quite nicely by the policy decisions as actually recorded in historical period under consideration; e.g. the steady rise in GI for Japan and Western Europe, etc.

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2. Some Results of Validation Test

TABLE

	NORTH AMERICA									
	CC	HC	CI	HI	CS	HG	CX	HX	CM	HM
1950	259.703	259.258	76.020	79.796	80.172	56.889	19.610	19.425	18.116	17.387
1951	269.391	263.309	78.149	78.703	82.572	84.148	20.555	23.090	19.152	18.724
1952	273.531	271.410	80.379	77.610	85.096	101.926	21.560	22.357	20.215	20.062
1953	283.133	283.562	82.716	81.983	87.738	107.852	22.631	21.674	21.571	22.068
1954	293.242	287.613	85.166	84.169	90.514	96.000	23.771	22.357	22.611	21.065
1955	303.875	311.918	87.738	92.914	93.432	93.630	24.988	24.556	23.933	24.074
1956	315.078	320.020	90.438	96.193	96.500	93.630	26.285	28.221	25.351	26.080
1957	326.883	328.171	93.275	95.100	99.725	98.371	27.669	30.053	26.854	26.749
1958	339.352	332.172	96.256	90.727	103.123	100.741	29.149	30.121	28.491	26.749
1959	352.500	348.379	99.396	98.379	106.705	101.926	30.731	27.854	30.219	30.092
1960	366.398	360.527	102.699	98.379	110.479	103.112	32.423	31.519	32.084	29.758
1961	381.094	368.633	106.182	97.286	114.463	109.037	34.233	31.519	34.093	32.433
1962	396.636	388.887	109.854	104.938	118.672	116.149	36.177	34.085	36.253	33.436
1963	413.125	405.090	113.730	109.310	123.117	118.519	38.259	36.650	38.543	33.436
1964	430.586	429.395	117.824	116.962	127.822	120.899	40.495	41.415	41.630	35.777
1965	449.109	427.750	122.152	127.893	132.805	124.445	42.895	44.415	43.688	39.789
1966	468.773	478.004	126.730	135.545	138.078	141.037	45.476	46.546	46.578	45.807
1967	489.680	494.211	131.582	133.357	143.676	155.260	48.253	49.111	49.665	48.817
1968	511.922	518.516	136.723	142.104	149.621	160.000	51.246	53.876	53.011	55.504
1969	535.609	538.766	142.180	146.475	155.938	160.000	54.473	57.174	56.621	59.850
1970	560.875	546.867	147.975	142.104	162.660	156.445	57.956	61.939	60.523	60.519
ERROR	6.7493		4.66229		9.35010		1.93181		2.54190	
1950	413.391	401.438	19.610	19.425	18.116	17.387				
1951	426.547	439.668	20.555	23.090	19.152	18.724				
1952	440.355	452.410	21.560	22.357	20.215	20.062				
1953	454.852	471.527	22.631	21.674	21.571	22.068				
1954	470.082	465.156	23.771	22.357	22.611	21.065				
1955	486.102	503.387	24.988	24.556	23.933	24.074				
1956	502.957	509.762	26.285	28.221	25.351	26.080				
1957	520.703	522.506	27.669	30.053	26.854	26.749				
1958	539.398	516.133	29.149	27.121	28.491	26.749				
1959	559.117	547.992	30.731	27.854	30.219	30.092				
1960	579.922	560.734	32.423	31.519	32.084	29.758				
1961	601.891	573.477	34.235	31.886	34.093	29.424				
1962	625.125	611.711	36.177	34.085	36.253	32.433				
1963	649.688	637.203	38.259	36.650	38.543	33.436				
1964	675.703	669.062	40.495	41.415	41.630	35.777				
1965	703.266	713.664	42.895	42.514	43.688	39.789				
1966	732.492	764.641	45.476	46.546	46.578	45.807				
1967	763.531	783.758	48.253	49.111	49.665	48.817				
1968	796.508	821.984	51.246	53.876	53.011	55.504				
1969	831.594	847.477	54.473	57.174	56.621	59.850				
1970	868.945	841.102	57.956	61.939	60.523	60.519				
ERROR	17.67139		1.93181		2.54190					

	H - HISTORICAL	C - COMPUTED OR MODEL	INVESTMENT				
147.975	I	I	I	I	I	I	C
145.285	I	I	I	I	I	I	I
142.596	I	I	I	I	I	I	H C H
139.906	I	I	I	I	I	I	I
137.217	I	I	I	I	I	I	I
134.527	I	I	I	I	I	I	I
131.838	I	I	I	I	I	I	I
129.148	I	I	I	I	I	I	I
126.459	I	I	I	I	I	I	I
123.769	I	I	I	I	I	I	I
121.078	I	I	I	I	I	I	I
118.388	I	I	I	I	I	I	I
115.697	I	I	I	I	I	I	I
113.007	I	I	I	I	I	I	I
110.316	I	I	I	I	I	I	I
107.626	I	I	I	I	I	I	I
104.936	I	I	I	I	I	I	I
102.245	I	I	I	I	I	I	I
99.555	I	I	I	I	I	I	I
96.864	I	I	I	I	I	I	I
94.174	I	I	I	I	I	I	I
91.483	I	I	I	I	I	I	I
88.793	I	I	I	I	I	I	I
86.103	I	I	I	I	I	I	I
83.412	I	I	I	I	I	I	I
80.722	I	I	I	I	I	I	I
78.031	I	I	I	I	I	I	I
75.341	I	I	I	I	I	I	I
72.650	I	I	I	I	I	I	I
69.960	I	I	I	I	I	I	I
67.270	I	I	I	I	I	I	I
64.579	I	I	I	I	I	I	I
61.889	I	I	I	I	I	I	I
59.198	I	I	I	I	I	I	I
56.508	I	I	I	I	I	I	I
53.817	I	I	I	I	I	I	I
51.127	I	I	I	I	I	I	I
48.437	I	I	I	I	I	I	I
45.746	I	I	I	I	I	I	I
43.056	I	I	I	I	I	I	I
40.365	I	I	I	I	I	I	I
37.675	I	I	I	I	I	I	I
34.984	I	I	I	I	I	I	I
32.294	I	I	I	I	I	I	I
29.604	I	I	I	I	I	I	I
26.913	I	I	I	I	I	I	I
24.223	I	I	I	I	I	I	I
21.532	I	I	I	I	I	I	I
18.842	I	I	I	I	I	I	I
16.151	I	I	I	I	I	I	I
13.461	I	I	I	I	I	I	I
10.771	I	I	I	I	I	I	I
8.080	I	I	I	I	I	I	I
5.390	I	I	I	I	I	I	I
2.699	I	I	I	I	I	I	I
0.009	I	I	I	I	I	I	I
1950.							
1952.							
1954.							
1956.							
1958.							
1960.							
1962.							
1964.							
1966.							
1968.							
1970.							

	IMPORTS			
	HISTORICAL	C - COMPUTED OR MODEL	1950.	1970.
60.523				
59.473				
58.323				
57.223				
56.123				
55.022				
53.922				
52.822				
51.722				
50.622				
49.522				
48.422				
47.322				
46.222				
45.122				
44.021				
42.921				
41.821				
40.721				
39.621				
38.521				
37.421				
36.321				
35.221				
34.121				
33.021				
31.920				
30.820				
29.720				
28.619				
27.519				
26.419				
25.318				
24.218				
23.118				
22.017				
20.917				
19.817				
18.716				
17.616				
16.516				
15.415				
14.315				
13.215				
12.114				
11.014				
9.914				
8.813				
7.713				
6.612				
5.512				
4.412				
3.311				
2.211				
1.110				
0.010				

	H - HISTORICAL, C - COMPUTED OR MODEL	GROSS REGIONAL PRODUCT				
868,945	I	I	I	I	I	I
853,148	I	I	I	I	I	I
837,352	I	I	I	I	I	I
821,555	I	I	I	I	I	I
805,758	I	I	I	I	I	I
789,961	I	I	I	I	I	I
774,164	I	I	I	I	I	I
758,367	I	I	I	I	I	I
742,570	I	I	I	I	I	I
726,773	I	I	I	I	I	I
710,977	I	I	I	I	I	I
695,180	I	I	I	I	I	I
679,383	I	I	I	I	I	I
663,586	I	I	I	I	I	I
647,789	I	I	I	I	I	I
631,992	I	I	I	I	I	I
616,195	I	I	I	I	I	I
600,398	I	I	I	I	I	I
584,602	I	I	I	I	I	I
568,805	I	I	I	I	I	I
553,008	I	I	I	I	I	I
537,211	I	I	I	I	I	I
521,414	I	I	I	I	I	I
505,617	I	I	I	I	I	I
489,820	I	I	I	I	I	I
474,023	I	I	I	I	I	I
458,227	I	I	I	I	I	I
442,430	I	I	I	I	I	I
426,633	I	I	I	I	I	I
410,836	I	I	I	I	I	I
395,039	I	I	I	I	I	I
379,242	I	I	I	I	I	I
363,445	I	I	I	I	I	I
347,648	I	I	I	I	I	I
331,852	I	I	I	I	I	I
316,055	I	I	I	I	I	I
300,258	I	I	I	I	I	I
284,461	I	I	I	I	I	I
268,664	I	I	I	I	I	I
252,867	I	I	I	I	I	I
237,068	I	I	I	I	I	I
221,270	I	I	I	I	I	I
205,471	I	I	I	I	I	I
189,672	I	I	I	I	I	I
173,873	I	I	I	I	I	I
158,074	I	I	I	I	I	I
142,275	I	I	I	I	I	I
126,477	I	I	I	I	I	I
110,678	I	I	I	I	I	I
94,879	I	I	I	I	I	I
79,080	I	I	I	I	I	I
63,281	I	I	I	I	I	I
47,482	I	I	I	I	I	I
31,684	I	I	I	I	I	I
15,885	I	I	I	I	I	I
0,086	I	I	I	I	I	I

1950, 1952, 1954, 1956, 1958, 1960, 1962, 1964, 1966, 1968, 1970, 1972, 1974, 1976, 1978, 1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020

TABLE

		WESTERN EUROPE					2				
		CC	HC	CI	HI	CG	HG				
1950	155.105	150.387	39.828	38.452	40.787	37.762					
1951	160.742	153.070	42.418	40.574	41.898	39.650					
1952	166.738	158.441	45.192	41.535	43.075	44.685					
1953	173.121	169.194	48.165	45.181	44.320	45.944					
1954	179.922	177.240	51.354	50.948	45.641	45.944					
1955	187.152	187.982	54.773	56.716	47.036	45.944					
1956	194.840	196.039	58.441	60.561	48.509	47.203					
1957	203.023	204.096	62.376	63.445	50.065	48.661					
1958	211.719	209.467	66.601	65.368	51.705	49.091					
1959	220.965	217.521	71.135	70.174	53.436	51.608					
1960	230.797	228.264	76.005	77.864	55.258	54.126					
1961	241.234	241.691	81.236	86.516	57.177	56.643					
1962	252.340	255.119	86.855	92.284	59.196	60.420					
1963	264.148	268.547	92.886	96.129	61.323	62.937					
1964	276.695	281.973	99.387	106.703	63.561	64.196					
1965	290.039	292.715	106.364	110.548	65.912	66.713					
1966	304.227	306.141	113.871	116.316	68.385	68.601					
1967	319.313	316.683	121.943	118.239	70.986	71.748					
1968	335.359	330.313	130.629	124.968	73.717	73.636					
1969	352.430	346.426	139.973	135.543	76.590	76.154					
1970	370.594	365.223	150.035	145.154	79.604	78.671					
ERROR	4.14868		3.64713		1.44044						
		CC	HC	CI	HI	CG	HG	CM	HX	HM	
1950	239.191	229.986	32.738	33.796	29.270	32.762					
1951	248.436	238.504	35.352	37.176	31.978	35.348					
1952	258.285	251.281	38.152	37.176	34.875	34.486					
1953	268.777	264.059	41.155	39.710	37.987	36.210					
1954	279.961	276.836	44.378	44.780	41.334	41.383					
1955	291.867	293.871	47.840	49.004	44.939	45.694					
1956	304.547	310.906	51.559	51.539	48.808	50.005					
1957	318.043	323.684	55.557	55.763	52.983	52.591					
1958	332.410	327.941	59.862	57.453	57.479	53.453					
1959	347.699	344.980	64.497	62.523	62.334	58.626					
1960	363.977	370.531	69.492	71.817	67.574	68.972					
1961	381.301	391.828	74.880	75.196	73.230	73.283					
1962	398.734	408.863	80.694	79.421	79.354	79.318					
1963	419.367	425.898	86.976	84.490	85.978	86.215					
1964	440.266	451.453	93.769	92.094	93.149	94.837					
1965	462.504	472.750	101.115	100.543	100.927	101.734					
1966	486.199	489.785	109.072	108.147	109.358	106.631					
1967	511.430	506.820	117.693	114.906	118.512	113.804					
1968	538.305	532.375	127.051	128.426	128.455	125.012					
1969	566.930	566.445	137.209	144.479	139.266	142.256					
1970	597.485	592.000	148.248	157.996	151.041	158.637					
ERROR	6.82056		3.03595		2.80847						

	H - HISTORICAL, C - COMPUTED OR MODEL		CONSUMPTION		
370.594					C
363.859					H
357.125					
350.391					C
343.656					H
336.922					C
330.188					H
323.453					
316.719					H
309.984					
303.250					H
296.516					
289.781					H
283.047					C
276.313					H
269.578					C
262.844					
256.109					H
249.375					C
242.639					H
235.902					
229.166					H
222.830					C
215.693					H
208.957					
202.221					H
195.484					
188.748					H
182.012					C
175.275					H
168.539					C
161.803					H
155.066					C
148.330					H
141.594					
134.857					
128.121					
121.385					
114.647					
107.910					
101.173					
94.436					
87.698					
80.961					
74.224					
67.486					
60.749					
54.011					
47.273					
40.536					
33.798					
27.060					
20.322					
13.584					
6.846					
0.108					
1950.					1950.
1952.					1952.
1954.					1954.
1956.					1956.
1958.					1958.
1960.					1960.
1962.					1962.
1964.					1964.
1966.					1966.
1968.					1968.
1970.					1970.

	H - HISTORICAL	C - COMPUTED OR MODEL	INVESTMENT					
150.035								
147.309								
144.582								
141.855								
139.129								
136.402								
133.676								
130.949								
128.223								
125.498								
122.769								
120.041								
117.313								
114.586								
111.858								
109.131								
106.403								
103.676								
100.948								
98.221								
95.493								
92.766								
90.038								
87.311								
84.583								
81.855								
79.128								
76.400								
73.673								
70.945								
68.218								
65.490								
62.763								
60.035								
57.308								
54.580								
51.853								
49.125								
46.397								
43.670								
40.942								
38.215								
35.487								
32.760								
30.032								
27.304								
24.577								
21.849								
19.121								
16.393								
13.666								
10.938								
8.210								
5.482								
2.754								
0.026								

1950. 1952. 1954. 1956. 1958. 1960. 1962. 1964. 1966. 1968. 1970.

| | HISTORICAL | C - COMPUTED OR MODEL | GROSS REGIONAL PRODUCT | |
|---------|------------|-----------------------|------------------------|--|
| 597,445 | | | | |
| 586,586 | | | | |
| 575,727 | | | | |
| 564,867 | | | | |
| 554,008 | | | | |
| 543,148 | | | | |
| 532,289 | | | | |
| 521,430 | | | | |
| 510,570 | | | | |
| 499,711 | | | | |
| 488,852 | | | | |
| 477,992 | | | | |
| 467,133 | | | | |
| 456,273 | | | | |
| 445,414 | | | | |
| 434,555 | | | | |
| 423,695 | | | | |
| 412,836 | | | | |
| 401,977 | | | | |
| 391,117 | | | | |
| 380,258 | | | | |
| 369,398 | | | | |
| 358,539 | | | | |
| 347,680 | | | | |
| 336,820 | | | | |
| 325,961 | | | | |
| 315,102 | | | | |
| 304,242 | | | | |
| 293,383 | | | | |
| 282,523 | | | | |
| 271,664 | | | | |
| 260,805 | | | | |
| 249,945 | | | | |
| 239,084 | | | | |
| 228,223 | | | | |
| 217,361 | | | | |
| 206,500 | | | | |
| 195,639 | | | | |
| 184,777 | | | | |
| 173,916 | | | | |
| 163,055 | | | | |
| 152,193 | | | | |
| 141,332 | | | | |
| 130,471 | | | | |
| 119,609 | | | | |
| 108,747 | | | | |
| 97,885 | | | | |
| 87,022 | | | | |
| 76,160 | | | | |
| 65,298 | | | | |
| 54,436 | | | | |
| 43,573 | | | | |
| 32,711 | | | | |
| 21,849 | | | | |
| 10,986 | | | | |
| 0,124 | | | | |

1950.

1952.

1954.

1956.

1958.

1960.

1962.

1964.

1966.

1968.

1970.

TABLE

| | JAPAN | | | | | | | | | | | |
|-------|---------|---------|---------|--------|---------|--------|----|----|----|----|----|----|
| | CC | HC | CI | HI | CG | HG | CY | HY | CX | HX | CM | HM |
| 1950 | 15.643 | 15.451 | 3.378 | 4.548 | 3.936 | 3.928 | | | | | | |
| 1951 | 16.414 | 16.243 | 4.069 | 4.781 | 4.046 | 4.130 | | | | | | |
| 1952 | 17.311 | 17.075 | 4.829 | 5.026 | 4.178 | 4.341 | | | | | | |
| 1953 | 18.341 | 17.951 | 5.270 | 5.284 | 4.329 | 4.564 | | | | | | |
| 1954 | 19.516 | 19.386 | 6.005 | 5.614 | 4.501 | 4.681 | | | | | | |
| 1955 | 20.649 | 21.280 | 6.849 | 6.063 | 4.693 | 4.869 | | | | | | |
| 1956 | 22.355 | 22.805 | 7.819 | 7.234 | 4.907 | 4.810 | | | | | | |
| 1957 | 24.055 | 24.559 | 8.936 | 7.790 | 5.142 | 5.180 | | | | | | |
| 1958 | 25.966 | 25.593 | 10.222 | 8.963 | 5.398 | 4.932 | | | | | | |
| 1959 | 28.114 | 27.258 | 11.706 | 10.813 | 5.677 | 5.061 | | | | | | |
| 1960 | 30.226 | 30.515 | 13.418 | 13.578 | 5.977 | 5.444 | | | | | | |
| 1961 | 33.234 | 34.504 | 15.896 | 18.129 | 6.300 | 6.011 | | | | | | |
| 1962 | 36.273 | 35.830 | 17.684 | 19.086 | 6.645 | 6.195 | | | | | | |
| 1963 | 39.683 | 40.321 | 20.330 | 21.441 | 7.011 | 6.895 | | | | | | |
| 1964 | 43.511 | 45.191 | 23.394 | 25.325 | 7.397 | 7.360 | | | | | | |
| 1965 | 47.808 | 46.894 | 26.944 | 28.543 | 7.802 | 7.700 | | | | | | |
| 1966 | 52.632 | 50.969 | 31.060 | 28.730 | 8.282 | 8.167 | | | | | | |
| 1967 | 58.026 | 57.635 | 35.836 | 35.028 | 8.656 | 8.890 | | | | | | |
| 1968 | 64.150 | 62.890 | 41.382 | 42.354 | 9.097 | 9.488 | | | | | | |
| 1969 | 71.002 | 68.291 | 47.822 | 49.860 | 9.539 | 9.876 | | | | | | |
| 1970 | 78.715 | 74.507 | 55.311 | 55.905 | 9.973 | 10.615 | | | | | | |
| ERROR | 1.33067 | | 1.27859 | | 0.31567 | | | | | | | |
| 1950 | 22.461 | 24.046 | 0.820 | 1.735 | 1.017 | 1.616 | | | | | | |
| 1951 | 24.327 | 25.279 | 1.135 | 1.824 | 1.338 | 1.698 | | | | | | |
| 1952 | 25.909 | 26.575 | 1.476 | 1.918 | 1.684 | 1.785 | | | | | | |
| 1953 | 27.728 | 27.937 | 1.844 | 2.016 | 2.057 | 1.877 | | | | | | |
| 1954 | 29.807 | 29.982 | 2.243 | 2.267 | 2.458 | 1.964 | | | | | | |
| 1955 | 32.175 | 32.707 | 2.675 | 2.586 | 2.891 | 2.088 | | | | | | |
| 1956 | 34.665 | 35.433 | 3.142 | 2.985 | 3.359 | 2.400 | | | | | | |
| 1957 | 37.916 | 38.158 | 3.649 | 3.215 | 3.866 | 2.584 | | | | | | |
| 1958 | 41.373 | 40.203 | 4.199 | 3.596 | 4.413 | 2.879 | | | | | | |
| 1959 | 45.287 | 43.610 | 4.796 | 4.000 | 5.006 | 3.521 | | | | | | |
| 1960 | 49.718 | 49.742 | 5.445 | 4.675 | 5.649 | 4.470 | | | | | | |
| 1961 | 54.356 | 57.919 | 6.149 | 5.208 | 6.345 | 5.933 | | | | | | |
| 1962 | 60.417 | 61.326 | 6.915 | 5.771 | 7.100 | 5.655 | | | | | | |
| 1963 | 66.454 | 68.140 | 7.749 | 6.333 | 7.919 | 6.838 | | | | | | |
| 1964 | 74.148 | 77.680 | 8.657 | 7.713 | 8.810 | 7.903 | | | | | | |
| 1965 | 82.422 | 81.087 | 9.646 | 9.322 | 9.779 | 8.364 | | | | | | |
| 1966 | 91.811 | 89.263 | 10.725 | 10.827 | 10.829 | 9.425 | | | | | | |
| 1967 | 102.475 | 101.529 | 11.902 | 11.883 | 11.975 | 11.905 | | | | | | |
| 1968 | 114.594 | 115.838 | 13.187 | 14.481 | 13.223 | 13.372 | | | | | | |
| 1969 | 128.377 | 130.146 | 14.592 | 17.318 | 14.580 | 15.192 | | | | | | |
| 1970 | 144.066 | 143.094 | 16.129 | 19.103 | 16.063 | 17.036 | | | | | | |
| ERROR | 1.50102 | | 1.12349 | | 0.96363 | | | | | | | |

| | H - HISTORICAL | C - COMPUTED OR MODEL | CONSUMPTION | | | | |
|--------|----------------|-----------------------|-------------|-------|-------|-------|-------|
| | 1950. | 1952. | 1954. | 1956. | 1960. | 1966. | 1970. |
| 78.715 | | | | | | | |
| 77.284 | | | | | | | |
| 75.854 | | | | | | | |
| 74.423 | | | | | | | |
| 72.992 | | | | | | | |
| 71.562 | | | | | | | |
| 70.131 | | | | | | | |
| 68.700 | | | | | | | |
| 67.270 | | | | | | | |
| 65.839 | | | | | | | |
| 64.408 | | | | | | | |
| 62.978 | | | | | | | |
| 61.546 | | | | | | | |
| 60.115 | | | | | | | |
| 58.684 | | | | | | | |
| 57.253 | | | | | | | |
| 55.822 | | | | | | | |
| 54.391 | | | | | | | |
| 52.959 | | | | | | | |
| 51.528 | | | | | | | |
| 50.097 | | | | | | | |
| 48.666 | | | | | | | |
| 47.235 | | | | | | | |
| 45.804 | | | | | | | |
| 44.373 | | | | | | | |
| 42.941 | | | | | | | |
| 41.510 | | | | | | | |
| 40.079 | | | | | | | |
| 38.648 | | | | | | | |
| 37.217 | | | | | | | |
| 35.786 | | | | | | | |
| 34.354 | | | | | | | |
| 32.923 | | | | | | | |
| 31.492 | | | | | | | |
| 30.061 | | | | | | | |
| 28.630 | | | | | | | |
| 27.199 | | | | | | | |
| 25.768 | | | | | | | |
| 24.336 | | | | | | | |
| 22.905 | | | | | | | |
| 21.474 | | | | | | | |
| 20.043 | | | | | | | |
| 18.612 | | | | | | | |
| 17.181 | | | | | | | |
| 15.750 | | | | | | | |
| 14.318 | | | | | | | |
| 12.887 | | | | | | | |
| 11.456 | | | | | | | |
| 10.025 | | | | | | | |
| 8.594 | | | | | | | |
| 7.163 | | | | | | | |
| 5.731 | | | | | | | |
| 4.300 | | | | | | | |
| 2.869 | | | | | | | |
| 1.438 | | | | | | | |
| 0.007 | | | | | | | |

| | 1950. | 1952. | 1954. | 1956. | 1958. | 1960. | 1962. | 1964. | 1966. | 1968. | 1970. |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 55,905 | | | | | | | | | | | |
| 54,889 | | | | | | | | | | | |
| 53,873 | | | | | | | | | | | |
| 52,856 | | | | | | | | | | | |
| 51,840 | | | | | | | | | | | |
| 50,824 | | | | | | | | | | | |
| 49,808 | | | | | | | | | | | |
| 48,792 | | | | | | | | | | | |
| 47,776 | | | | | | | | | | | |
| 46,760 | | | | | | | | | | | |
| 45,744 | | | | | | | | | | | |
| 44,728 | | | | | | | | | | | |
| 43,711 | | | | | | | | | | | |
| 42,695 | | | | | | | | | | | |
| 41,679 | | | | | | | | | | | |
| 40,663 | | | | | | | | | | | |
| 39,647 | | | | | | | | | | | |
| 38,631 | | | | | | | | | | | |
| 37,615 | | | | | | | | | | | |
| 36,599 | | | | | | | | | | | |
| 35,583 | | | | | | | | | | | |
| 34,566 | | | | | | | | | | | |
| 33,550 | | | | | | | | | | | |
| 32,534 | | | | | | | | | | | |
| 31,518 | | | | | | | | | | | |
| 30,502 | | | | | | | | | | | |
| 29,485 | | | | | | | | | | | |
| 28,469 | | | | | | | | | | | |
| 27,453 | | | | | | | | | | | |
| 26,436 | | | | | | | | | | | |
| 25,420 | | | | | | | | | | | |
| 24,404 | | | | | | | | | | | |
| 23,387 | | | | | | | | | | | |
| 22,371 | | | | | | | | | | | |
| 21,354 | | | | | | | | | | | |
| 20,338 | | | | | | | | | | | |
| 19,322 | | | | | | | | | | | |
| 18,305 | | | | | | | | | | | |
| 17,289 | | | | | | | | | | | |
| 16,273 | | | | | | | | | | | |
| 15,256 | | | | | | | | | | | |
| 14,240 | | | | | | | | | | | |
| 13,224 | | | | | | | | | | | |
| 12,207 | | | | | | | | | | | |
| 11,191 | | | | | | | | | | | |
| 10,175 | | | | | | | | | | | |
| 9,158 | | | | | | | | | | | |
| 8,142 | | | | | | | | | | | |
| 7,125 | | | | | | | | | | | |
| 6,109 | | | | | | | | | | | |
| 5,093 | | | | | | | | | | | |
| 4,076 | | | | | | | | | | | |
| 3,060 | | | | | | | | | | | |
| 2,043 | | | | | | | | | | | |
| 1,027 | | | | | | | | | | | |
| 0,010 | | | | | | | | | | | |

HISTORICAL, C - COMPUTED OR MODEL INVESTMENT

H - HISTORICAL, C - COMPUTED OR MODEL

| | H - HISTORICAL, C - COMPUTED OR MODEL | GOVERNMENT | | | |
|--------|---------------------------------------|------------|--|--|--|
| | | | | | |
| 10.615 | | | | | |
| 10.422 | | | | | |
| 10.229 | | | | | |
| 10.036 | | | | | |
| 9.843 | | | | | |
| 9.650 | | | | | |
| 9.457 | | | | | |
| 9.264 | | | | | |
| 9.071 | | | | | |
| 8.878 | | | | | |
| 8.685 | | | | | |
| 8.492 | | | | | |
| 8.299 | | | | | |
| 8.106 | | | | | |
| 7.913 | | | | | |
| 7.720 | | | | | |
| 7.527 | | | | | |
| 7.334 | | | | | |
| 7.141 | | | | | |
| 6.948 | | | | | |
| 6.755 | | | | | |
| 6.562 | | | | | |
| 6.369 | | | | | |
| 6.176 | | | | | |
| 5.983 | | | | | |
| 5.790 | | | | | |
| 5.597 | | | | | |
| 5.404 | | | | | |
| 5.211 | | | | | |
| 5.018 | | | | | |
| 4.825 | | | | | |
| 4.632 | | | | | |
| 4.439 | | | | | |
| 4.246 | | | | | |
| 4.053 | | | | | |
| 3.860 | | | | | |
| 3.667 | | | | | |
| 3.474 | | | | | |
| 3.281 | | | | | |
| 3.088 | | | | | |
| 2.895 | | | | | |
| 2.702 | | | | | |
| 2.509 | | | | | |
| 2.316 | | | | | |
| 2.123 | | | | | |
| 1.930 | | | | | |
| 1.737 | | | | | |
| 1.544 | | | | | |
| 1.351 | | | | | |
| 1.158 | | | | | |
| 0.965 | | | | | |
| 0.772 | | | | | |
| 0.579 | | | | | |
| 0.386 | | | | | |
| 0.193 | | | | | |
| 0.000 | | | | | |
| 1950. | | | | | |
| 1952. | | | | | |
| 1954. | | | | | |
| 1956. | | | | | |
| 1958. | | | | | |
| 1960. | | | | | |
| 1962. | | | | | |
| 1964. | | | | | |
| 1966. | | | | | |
| 1968. | | | | | |
| 1970. | | | | | |

| | EXPORTS | | | | | | | | | |
|---------------------------------------|---------|--|--|--|--|--|--|--|--|-----|
| H - HISTORICAL, C - COMPUTED OR MODEL | | | | | | | | | | |
| 19.103 | I | | | | | | | | | H |
| 18.756 | I | | | | | | | | | I |
| 18.409 | I | | | | | | | | | I |
| 18.062 | I | | | | | | | | | I |
| 17.714 | I | | | | | | | | | H |
| 17.367 | I | | | | | | | | | I |
| 17.020 | I | | | | | | | | | I |
| 16.673 | I | | | | | | | | | I |
| 16.326 | I | | | | | | | | | I |
| 15.979 | I | | | | | | | | | C |
| 15.631 | I | | | | | | | | | I |
| 15.284 | I | | | | | | | | | I |
| 14.937 | I | | | | | | | | | I |
| 14.590 | I | | | | | | | | | H-C |
| 14.242 | I | | | | | | | | | I |
| 13.895 | I | | | | | | | | | I |
| 13.547 | I | | | | | | | | | I |
| 13.200 | I | | | | | | | | | C |
| 12.853 | I | | | | | | | | | I |
| 12.506 | I | | | | | | | | | I |
| 12.158 | I | | | | | | | | | H |
| 11.811 | I | | | | | | | | | I |
| 11.464 | I | | | | | | | | | I |
| 11.116 | I | | | | | | | | | I |
| 10.769 | I | | | | | | | | | H |
| 10.422 | I | | | | | | | | | I |
| 10.075 | I | | | | | | | | | I |
| 9.727 | I | | | | | | | | | C-H |
| 9.380 | I | | | | | | | | | H |
| 9.033 | I | | | | | | | | | I |
| 8.685 | I | | | | | | | | | C |
| 8.338 | I | | | | | | | | | I |
| 7.991 | I | | | | | | | | | I |
| 7.644 | I | | | | | | | | | C H |
| 7.296 | I | | | | | | | | | I |
| 6.949 | I | | | | | | | | | C |
| 6.602 | I | | | | | | | | | I |
| 6.254 | I | | | | | | | | | C H |
| 5.907 | I | | | | | | | | | I |
| 5.560 | I | | | | | | | | | C |
| 5.213 | I | | | | | | | | | H |
| 4.865 | I | | | | | | | | | C-H |
| 4.518 | I | | | | | | | | | H |
| 4.171 | I | | | | | | | | | C |
| 3.823 | I | | | | | | | | | I |
| 3.476 | I | | | | | | | | | C H |
| 3.129 | I | | | | | | | | | I |
| 2.781 | I | | | | | | | | | C H |
| 2.434 | I | | | | | | | | | I |
| 2.087 | I | | | | | | | | | H C |
| 1.739 | H | | | | | | | | | I |
| 1.392 | I | | | | | | | | | C |
| 1.045 | I | | | | | | | | | I |
| 0.697 | C | | | | | | | | | I |
| 0.350 | I | | | | | | | | | I |
| 0.003 | I | | | | | | | | | I |

1950. 1952. 1954. 1956. 1958. 1960. 1962. 1964. 1966. 1968. 1970.

TABLE

REST OF DEV WORLD 4

| | CC | HC | CJ | HI | CG | HG |
|------|---------|--------|---------|--------|---------|-------|
| 1950 | 14.711 | 14.639 | 4.665 | 4.836 | 2.356 | 2.407 |
| 1951 | 15.195 | 15.037 | 4.878 | 4.983 | 2.468 | 2.536 |
| 1952 | 15.708 | 15.430 | 5.105 | 5.298 | 2.588 | 2.660 |
| 1953 | 16.252 | 15.968 | 5.346 | 5.417 | 2.715 | 2.802 |
| 1954 | 16.826 | 16.710 | 5.602 | 6.110 | 2.851 | 2.893 |
| 1955 | 17.435 | 17.057 | 5.874 | 5.886 | 2.996 | 2.946 |
| 1956 | 18.070 | 17.787 | 6.165 | 6.098 | 3.150 | 3.076 |
| 1957 | 18.764 | 18.001 | 6.474 | 6.235 | 3.315 | 3.090 |
| 1958 | 19.488 | 18.857 | 6.804 | 6.531 | 3.490 | 3.280 |
| 1959 | 20.258 | 20.100 | 7.155 | 6.953 | 3.679 | 3.370 |
| 1960 | 21.075 | 20.581 | 7.531 | 7.339 | 3.880 | 3.529 |
| 1961 | 21.941 | 20.592 | 7.932 | 7.333 | 4.095 | 3.650 |
| 1962 | 22.864 | 21.471 | 8.361 | 7.494 | 4.326 | 3.882 |
| 1963 | 23.843 | 22.681 | 8.820 | 8.530 | 4.573 | 4.120 |
| 1964 | 24.886 | 24.768 | 9.312 | 9.660 | 4.838 | 4.520 |
| 1965 | 25.997 | 25.010 | 9.838 | 10.327 | 5.122 | 4.921 |
| 1966 | 27.178 | 26.389 | 10.403 | 10.784 | 5.428 | 5.413 |
| 1967 | 28.439 | 27.297 | 11.009 | 10.777 | 5.756 | 5.874 |
| 1968 | 29.784 | 29.179 | 11.659 | 11.718 | 6.110 | 6.259 |
| 1969 | 31.219 | 30.894 | 12.358 | 12.629 | 6.490 | 6.591 |
| 1970 | 32.751 | 32.667 | 13.110 | 13.562 | 6.900 | 7.282 |
| FROR | 0.69363 | | 0.35113 | | 0.24648 | |

| | CY | HY | CX | HX | CM | HM |
|-------|---------|--------|---------|--------|---------|--------|
| 1950 | 20.937 | 21.688 | 3.581 | 3.622 | 4.376 | 4.273 |
| 1951 | 21.754 | 22.049 | 3.772 | 3.726 | 4.559 | 4.608 |
| 1952 | 22.620 | 23.134 | 3.976 | 4.048 | 4.756 | 4.650 |
| 1953 | 23.538 | 23.351 | 4.192 | 4.063 | 4.967 | 4.623 |
| 1954 | 24.511 | 24.941 | 4.424 | 4.289 | 5.192 | 5.387 |
| 1955 | 25.545 | 25.645 | 4.671 | 4.729 | 5.433 | 5.375 |
| 1956 | 26.639 | 26.748 | 4.935 | 5.162 | 5.691 | 5.135 |
| 1957 | 27.802 | 27.110 | 5.218 | 4.879 | 5.968 | 5.341 |
| 1958 | 29.039 | 28.773 | 5.520 | 5.438 | 6.263 | 5.466 |
| 1959 | 30.354 | 30.363 | 5.844 | 5.920 | 6.582 | 5.981 |
| 1960 | 31.754 | 31.231 | 6.191 | 6.308 | 6.923 | 6.620 |
| 1961 | 33.244 | 32.026 | 6.564 | 6.789 | 7.288 | 6.052 |
| 1962 | 34.833 | 33.761 | 6.964 | 6.921 | 7.682 | 6.482 |
| 1963 | 36.526 | 36.147 | 7.393 | 7.771 | 8.103 | 7.554 |
| 1964 | 38.333 | 38.641 | 7.855 | 7.960 | 8.558 | 8.926 |
| 1965 | 40.262 | 40.340 | 8.352 | 7.906 | 9.047 | 9.278 |
| 1966 | 42.324 | 42.291 | 8.888 | 8.754 | 9.572 | 9.219 |
| 1967 | 44.529 | 44.171 | 9.465 | 8.480 | 10.140 | 10.006 |
| 1968 | 46.868 | 47.063 | 10.088 | 10.495 | 10.754 | 9.836 |
| 1969 | 49.414 | 50.316 | 10.761 | 11.472 | 11.415 | 11.924 |
| 1970 | 52.122 | 52.774 | 11.489 | 11.979 | 12.130 | 13.299 |
| ERROR | 0.54929 | | 0.34799 | | 0.61889 | |

TABLE
EASTERN EUROPE

| | CC | HC | CI | 5 | CG | HG |
|-------|---------|---------|---------|--------|---------|--------|
| 1950 | 88.754 | 79.141 | 17.724 | 14.851 | 9.417 | 9.140 |
| 1951 | 94.705 | 87.935 | 19.159 | 16.502 | 10.185 | 10.155 |
| 1952 | 101.064 | 94.530 | 20.710 | 17.740 | 11.016 | 10.917 |
| 1953 | 107.859 | 101.125 | 22.367 | 18.978 | 11.915 | 11.878 |
| 1954 | 115.115 | 111.822 | 24.700 | 21.776 | 12.887 | 12.859 |
| 1955 | 122.873 | 124.485 | 26.159 | 24.996 | 13.938 | 13.156 |
| 1956 | 131.156 | 130.932 | 28.276 | 29.389 | 15.075 | 13.727 |
| 1957 | 140.016 | 143.811 | 30.564 | 32.280 | 16.305 | 15.077 |
| 1958 | 149.477 | 153.951 | 33.038 | 38.541 | 17.635 | 16.217 |
| 1959 | 159.586 | 166.406 | 35.711 | 42.929 | 19.072 | 18.695 |
| 1960 | 170.399 | 176.654 | 38.600 | 47.141 | 20.628 | 20.841 |
| 1961 | 181.938 | 189.510 | 41.723 | 49.103 | 22.310 | 23.357 |
| 1962 | 194.277 | 196.088 | 45.098 | 52.622 | 24.128 | 24.649 |
| 1963 | 207.469 | 205.412 | 48.746 | 51.930 | 26.095 | 27.119 |
| 1964 | 221.563 | 224.527 | 52.688 | 56.289 | 28.222 | 30.503 |
| 1965 | 236.637 | 239.873 | 56.948 | 55.406 | 30.521 | 33.519 |
| 1966 | 252.734 | 259.289 | 61.554 | 60.585 | 33.008 | 36.931 |
| 1967 | 269.937 | 278.663 | 66.528 | 65.431 | 35.696 | 37.779 |
| 1968 | 288.336 | 298.699 | 71.907 | 68.548 | 38.604 | 40.298 |
| 1969 | 308.000 | 313.223 | 77.720 | 71.880 | 41.748 | 42.257 |
| 1970 | 329.023 | 340.187 | 84.002 | 78.068 | 45.147 | 45.895 |
| ERROR | 6.2711R | | 4.48151 | | 1.13582 | |

| | CX | HX | CM | HM |
|-------|---------|---------|---------|--------|
| 1950 | 116.067 | 103.660 | 4.790 | 3.978 |
| 1951 | 124.342 | 115.400 | 4.944 | 4.136 |
| 1952 | 133.215 | 124.055 | 5.626 | 4.913 |
| 1953 | 142.732 | 132.711 | 6.087 | 5.871 |
| 1954 | 152.939 | 147.135 | 6.574 | 6.151 |
| 1955 | 163.491 | 164.445 | 7.042 | 6.142 |
| 1956 | 175.633 | 175.984 | 7.668 | 6.470 |
| 1957 | 188.232 | 183.285 | 8.239 | 7.194 |
| 1958 | 201.746 | 210.605 | 8.868 | 8.024 |
| 1959 | 216.244 | 248.801 | 9.544 | 9.474 |
| 1960 | 231.801 | 248.109 | 10.263 | 9.775 |
| 1961 | 248.490 | 265.422 | 11.033 | 10.792 |
| 1962 | 266.398 | 276.961 | 11.860 | 12.636 |
| 1963 | 295.617 | 288.500 | 12.790 | 13.449 |
| 1964 | 306.334 | 314.665 | 13.704 | 13.503 |
| 1965 | 328.363 | 351.773 | 14.734 | 14.109 |
| 1966 | 352.105 | 360.625 | 15.843 | 14.420 |
| 1967 | 377.582 | 389.477 | 17.038 | 14.969 |
| 1968 | 404.930 | 415.441 | 18.327 | 16.338 |
| 1969 | 434.285 | 435.637 | 19.729 | 17.798 |
| 1970 | 465.789 | 473.141 | 21.252 | 18.444 |
| ERROR | 9.50073 | 0.64539 | 1.26375 | |

| | HISTORICAL, C - COMPUTED OR MODEL | | CONSUMPTION | | |
|---------|-----------------------------------|-------|-------------|-------|-------|
| | 1950. | 1952. | 1954. | 1956. | 1958. |
| 340.187 | I | I | I | I | I |
| 334.004 | I | I | I | I | I |
| 327.820 | I | I | I | I | I |
| 321.637 | I | I | I | I | I |
| 315.453 | I | I | I | I | I |
| 309.270 | I | I | I | I | I |
| 303.086 | I | I | I | I | I |
| 296.902 | I | I | I | I | I |
| 290.719 | I | I | I | I | I |
| 284.535 | I | I | I | I | I |
| 278.352 | I | I | I | I | I |
| 272.168 | I | I | I | I | I |
| 265.984 | I | I | I | I | I |
| 259.801 | I | I | I | I | I |
| 253.617 | I | I | I | I | I |
| 247.434 | I | I | I | I | I |
| 241.250 | I | I | I | I | I |
| 235.066 | I | I | I | I | I |
| 228.883 | I | I | I | I | I |
| 222.699 | I | I | I | I | I |
| 216.516 | I | I | I | I | I |
| 210.332 | I | I | I | I | I |
| 204.148 | I | I | I | I | I |
| 197.965 | I | I | I | I | I |
| 191.781 | I | I | I | I | I |
| 185.598 | I | I | I | I | I |
| 179.414 | I | I | I | I | I |
| 173.230 | I | I | I | I | I |
| 167.047 | I | I | I | I | I |
| 160.863 | I | I | I | I | I |
| 154.680 | I | I | I | I | I |
| 148.496 | I | I | I | I | I |
| 142.313 | I | I | I | I | I |
| 136.129 | I | I | I | I | I |
| 129.945 | I | I | I | I | I |
| 123.762 | I | I | I | I | I |
| 117.577 | I | I | I | I | I |
| 111.393 | I | I | I | I | I |
| 105.208 | I | I | I | I | I |
| 99.023 | I | I | I | I | I |
| 92.839 | I | I | I | I | I |
| 86.654 | I | I | I | I | I |
| 80.470 | I | I | I | I | I |
| 74.285 | I | I | I | I | I |
| 68.101 | I | I | I | I | I |
| 61.916 | I | I | I | I | I |
| 55.731 | I | I | I | I | I |
| 49.546 | I | I | I | I | I |
| 43.361 | I | I | I | I | I |
| 37.176 | I | I | I | I | I |
| 30.991 | I | I | I | I | I |
| 24.806 | I | I | I | I | I |
| 18.621 | I | I | I | I | I |
| 12.436 | I | I | I | I | I |
| 6.250 | I | I | I | I | I |
| 0.065 | I | I | I | I | I |

1950. 1952. 1954. 1956. 1958. 1960. 1962. 1964. 1966. 1970.

TABLE

| | | LATIN AMERICA | | | | | |
|-------|---------|---------------|---------|--------|---------|--------|----|
| | | CC | HC | CI | HI | CG | HG |
| 1950 | 32.054 | 30.306 | 7.095 | 7.113 | 4.855 | 4.507 | |
| 1951 | 33.416 | 32.055 | 7.423 | 7.523 | 5.020 | 4.767 | |
| 1952 | 34.871 | 33.220 | 7.774 | 7.797 | 5.195 | 4.940 | |
| 1953 | 36.423 | 34.386 | 8.149 | 8.070 | 5.381 | 5.114 | |
| 1954 | 38.081 | 37.967 | 8.550 | 8.744 | 5.578 | 5.599 | |
| 1955 | 39.856 | 41.064 | 8.979 | 9.280 | 5.788 | 5.998 | |
| 1956 | 41.756 | 42.801 | 9.440 | 9.360 | 6.012 | 6.051 | |
| 1957 | 43.795 | 45.242 | 9.934 | 9.902 | 6.250 | 6.446 | |
| 1958 | 45.980 | 48.065 | 10.465 | 10.239 | 6.504 | 6.611 | |
| 1959 | 48.328 | 48.757 | 11.036 | 10.866 | 6.775 | 6.988 | |
| 1960 | 50.853 | 50.972 | 11.651 | 12.076 | 7.065 | 7.112 | |
| 1961 | 51.569 | 54.299 | 12.314 | 13.089 | 7.374 | 7.528 | |
| 1962 | 50.439 | 56.424 | 13.030 | 13.292 | 7.706 | 7.750 | |
| 1963 | 50.660 | 58.048 | 13.804 | 12.839 | 8.061 | 8.223 | |
| 1964 | 63.074 | 63.232 | 14.641 | 14.450 | 8.442 | 8.759 | |
| 1965 | 65.771 | 66.634 | 15.549 | 14.581 | 8.852 | 8.813 | |
| 1966 | 70.771 | 69.461 | 16.534 | 15.720 | 9.291 | 9.373 | |
| 1967 | 75.113 | 72.529 | 17.604 | 16.671 | 9.765 | 9.546 | |
| 1968 | 79.828 | 76.197 | 18.769 | 19.525 | 10.276 | 9.608 | |
| 1969 | 84.959 | 81.881 | 20.037 | 20.686 | 10.827 | 9.922 | |
| 1970 | 90.547 | 87.168 | 21.422 | 22.285 | 11.422 | 10.604 | |
| ERROR | 1.78120 | | 0.54574 | | 0.35238 | | |
| | | CX | HX | CM | HM | | |
| 1950 | 42.974 | 41.964 | 4.265 | 4.742 | 5.295 | 4.666 | |
| 1951 | 44.861 | 44.385 | 4.606 | 5.016 | 5.504 | 4.936 | |
| 1952 | 46.874 | 45.999 | 4.973 | 5.198 | 5.948 | 5.115 | |
| 1953 | 49.023 | 47.613 | 5.365 | 5.380 | 6.295 | 5.295 | |
| 1954 | 51.320 | 51.648 | 5.787 | 5.568 | 6.677 | 6.286 | |
| 1955 | 53.778 | 54.876 | 6.240 | 5.784 | 7.066 | 7.282 | |
| 1956 | 56.409 | 57.297 | 6.726 | 5.861 | 7.525 | 6.904 | |
| 1957 | 59.231 | 60.525 | 7.249 | 6.186 | 7.997 | 7.293 | |
| 1958 | 62.259 | 64.560 | 7.812 | 6.430 | 8.502 | 7.011 | |
| 1959 | 65.512 | 66.174 | 8.418 | 7.001 | 9.046 | 7.438 | |
| 1960 | 69.010 | 70.209 | 9.071 | 10.591 | 9.630 | 10.342 | |
| 1961 | 72.778 | 75.051 | 9.776 | 10.950 | 10.258 | 10.815 | |
| 1962 | 76.440 | 78.279 | 10.537 | 11.797 | 10.932 | 11.037 | |
| 1963 | 81.225 | 80.700 | 11.359 | 12.347 | 11.660 | 10.854 | |
| 1964 | 85.963 | 87.156 | 12.247 | 12.481 | 12.443 | 11.906 | |
| 1965 | 91.093 | 91.998 | 13.208 | 14.095 | 13.288 | 12.282 | |
| 1966 | 96.649 | 96.033 | 14.249 | 14.501 | 14.197 | 12.897 | |
| 1967 | 102.682 | 100.068 | 15.277 | 14.940 | 15.179 | 13.779 | |
| 1968 | 109.235 | 106.524 | 16.602 | 16.959 | 16.242 | 15.904 | |
| 1969 | 116.369 | 113.787 | 17.931 | 17.819 | 17.385 | 16.658 | |
| 1970 | 124.142 | 121.050 | 19.375 | 18.605 | 18.625 | 17.831 | |
| ERROR | 1.62544 | | 0.81676 | | 0.87580 | | |

| H - HISTORICAL | C - COMPUTED OR MODEL | IMPORTS |
|----------------|-----------------------|---------|
| 18.825 | | |
| 18.287 | | |
| 17.948 | | |
| 17.610 | | |
| 17.271 | | |
| 16.932 | | |
| 16.594 | | |
| 16.255 | | |
| 15.917 | | |
| 15.578 | | |
| 15.239 | | |
| 14.901 | | |
| 14.562 | | |
| 14.223 | | |
| 13.885 | | |
| 13.546 | | |
| 13.208 | | |
| 12.869 | | |
| 12.530 | | |
| 12.192 | | |
| 11.853 | | |
| 11.514 | | |
| 11.176 | | |
| 10.837 | | |
| 10.499 | | |
| 10.160 | | |
| 9.821 | | |
| 9.483 | | |
| 9.144 | | |
| 8.805 | | |
| 8.467 | | |
| 8.128 | | |
| 7.790 | | |
| 7.451 | | |
| 7.112 | | |
| 6.774 | | |
| 6.435 | | |
| 6.096 | | |
| 5.758 | | |
| 5.419 | | |
| 5.081 | | |
| 4.742 | | |
| 4.403 | | |
| 4.065 | | |
| 3.726 | | |
| 3.387 | | |
| 3.049 | | |
| 2.710 | | |
| 2.372 | | |
| 2.033 | | |
| 1.694 | | |
| 1.356 | | |
| 1.017 | | |
| 0.678 | | |
| 0.340 | | |
| 0.001 | | |

1950. 1952. 1954. 1956. 1958. 1960. 1962. 1964. 1966. 1968. 1970.

TABLE

| | MIDDLE EAST | | | | 7 | | | |
|-------|-------------|--------|---------|--------|---------|--------|----|----|
| | CC | HC | CI | HI | CG | HM | CM | HM |
| 1950 | 10.406 | 10.502 | 1.796 | 2.109 | 1.307 | 1.593 | | |
| 1951 | 10.866 | 10.965 | 1.926 | 2.202 | 1.450 | 1.683 | | |
| 1952 | 11.547 | 11.633 | 2.066 | 2.302 | 1.607 | 1.739 | | |
| 1953 | 11.847 | 11.942 | 2.215 | 2.402 | 1.776 | 1.814 | | |
| 1954 | 12.366 | 12.460 | 2.375 | 2.503 | 1.961 | 1.890 | | |
| 1955 | 12.806 | 13.046 | 2.545 | 2.620 | 2.160 | 1.979 | | |
| 1956 | 13.466 | 13.449 | 2.727 | 2.819 | 2.377 | 2.286 | | |
| 1957 | 14.040 | 14.414 | 2.921 | 2.716 | 2.612 | 2.503 | | |
| 1958 | 14.651 | 14.366 | 3.129 | 2.819 | 2.867 | 2.756 | | |
| 1959 | 15.278 | 14.760 | 3.350 | 2.766 | 3.142 | 2.939 | | |
| 1960 | 15.926 | 14.487 | 3.587 | 3.320 | 3.440 | 3.002 | | |
| 1961 | 16.597 | 15.870 | 3.839 | 3.537 | 3.763 | 3.107 | | |
| 1962 | 17.292 | 16.519 | 4.108 | 3.682 | 4.111 | 3.427 | | |
| 1963 | 18.011 | 15.898 | 4.395 | 4.338 | 4.488 | 3.961 | | |
| 1964 | 18.753 | 17.021 | 4.702 | 4.586 | 4.895 | 4.439 | | |
| 1965 | 19.521 | 18.300 | 5.029 | 5.182 | 5.334 | 5.060 | | |
| 1966 | 20.352 | 19.024 | 5.377 | 5.459 | 5.808 | 5.459 | | |
| 1967 | 21.129 | 20.230 | 5.749 | 5.956 | 6.320 | 6.1239 | | |
| 1968 | 21.972 | 21.435 | 6.145 | 6.559 | 6.871 | 7.262 | | |
| 1969 | 22.839 | 23.099 | 6.568 | 6.866 | 7.466 | 8.095 | | |
| 1970 | 23.732 | 24.611 | 7.018 | 7.465 | 8.107 | 8.822 | | |
| ERROR | 0.88095 | | 0.28134 | | 0.38383 | | | |
| 1950 | 13.245 | 14.750 | 4.237 | 4.528 | 4.501 | 3.983 | | |
| 1951 | 14.028 | 15.400 | 4.481 | 4.728 | 4.667 | 4.158 | | |
| 1952 | 14.919 | 16.100 | 4.742 | 4.943 | 4.842 | 4.347 | | |
| 1953 | 15.831 | 16.800 | 5.020 | 5.158 | 5.027 | 4.536 | | |
| 1954 | 16.796 | 17.500 | 5.317 | 5.373 | 5.221 | 4.725 | | |
| 1955 | 17.818 | 18.323 | 5.635 | 5.625 | 5.427 | 4.947 | | |
| 1956 | 18.900 | 19.050 | 5.974 | 5.843 | 5.644 | 5.353 | | |
| 1957 | 20.045 | 19.400 | 6.338 | 5.044 | 5.875 | 5.277 | | |
| 1958 | 21.257 | 20.862 | 6.729 | 6.828 | 6.119 | 5.262 | | |
| 1959 | 22.540 | 21.610 | 7.147 | 6.894 | 6.378 | 4.927 | | |
| 1960 | 23.897 | 22.742 | 7.596 | 7.459 | 6.653 | 5.458 | | |
| 1961 | 25.333 | 23.900 | 8.078 | 7.457 | 6.945 | 6.071 | | |
| 1962 | 26.853 | 25.571 | 8.596 | 8.285 | 7.256 | 6.342 | | |
| 1963 | 28.460 | 26.945 | 9.154 | 9.161 | 7.589 | 6.413 | | |
| 1964 | 30.161 | 29.397 | 9.755 | 10.024 | 7.944 | 6.673 | | |
| 1965 | 31.961 | 32.065 | 10.402 | 10.902 | 8.326 | 7.343 | | |
| 1966 | 33.864 | 33.493 | 11.099 | 11.455 | 8.733 | 7.871 | | |
| 1967 | 35.877 | 35.244 | 11.852 | 11.208 | 9.173 | 8.423 | | |
| 1968 | 38.007 | 39.043 | 12.667 | 12.923 | 9.648 | 9.136 | | |
| 1969 | 40.259 | 42.384 | 13.547 | 14.538 | 10.161 | 10.215 | | |
| 1970 | 42.641 | 45.241 | 14.500 | 15.472 | 10.717 | 11.129 | | |
| ERROR | 1.18321 | | 0.50381 | | 0.80183 | | | |

| | H - HISTORICAL , C - COMPUTED OR MODEL | | INVESTMENT | | |
|-------|----------------------------------------|---|------------|---|---|
| 7.465 | I | I | I | I | I |
| 7.329 | I | I | I | I | I |
| 7.194 | I | I | I | I | I |
| 7.058 | I | I | I | I | I |
| 6.922 | I | I | I | I | I |
| 6.787 | I | I | I | I | I |
| 6.651 | I | I | I | I | I |
| 6.515 | I | I | I | I | I |
| 6.380 | I | I | I | I | I |
| 6.244 | I | I | I | I | I |
| 6.108 | I | I | I | I | I |
| 5.973 | I | I | I | I | I |
| 5.837 | I | I | I | I | I |
| 5.701 | I | I | I | I | I |
| 5.565 | I | I | I | I | I |
| 5.430 | I | I | I | I | I |
| 5.294 | I | I | I | I | I |
| 5.158 | I | I | I | I | I |
| 5.023 | I | I | I | I | I |
| 4.887 | I | I | I | I | I |
| 4.751 | I | I | I | I | I |
| 4.616 | I | I | I | I | I |
| 4.480 | I | I | I | I | I |
| 4.344 | I | I | I | I | I |
| 4.209 | I | I | I | I | I |
| 4.073 | I | I | I | I | I |
| 3.937 | I | I | I | I | I |
| 3.802 | I | I | I | I | I |
| 3.666 | I | I | I | I | I |
| 3.530 | I | I | I | I | I |
| 3.394 | I | I | I | I | I |
| 3.259 | I | I | I | I | I |
| 3.123 | I | I | I | I | I |
| 2.987 | I | I | I | I | I |
| 2.852 | I | I | I | I | I |
| 2.716 | I | I | I | I | I |
| 2.580 | I | I | I | I | I |
| 2.444 | I | I | I | I | I |
| 2.309 | I | I | I | I | I |
| 2.173 | I | I | I | I | I |
| 2.037 | I | I | I | I | I |
| 1.902 | I | I | I | I | I |
| 1.766 | I | I | I | I | I |
| 1.630 | I | I | I | I | I |
| 1.494 | I | I | I | I | I |
| 1.359 | I | I | I | I | I |
| 1.223 | I | I | I | I | I |
| 1.087 | I | I | I | I | I |
| 0.952 | I | I | I | I | I |
| 0.816 | I | I | I | I | I |
| 0.680 | I | I | I | I | I |
| 0.544 | I | I | I | I | I |
| 0.409 | I | I | I | I | I |
| 0.273 | I | I | I | I | I |
| 0.137 | I | I | I | I | I |
| 0.001 | I | I | I | I | I |

1950, 1952, 1954, 1956, 1958, 1960, 1962, 1964, 1966, 1968, 1970.

| | H - HISTORICAL | C - COMPUTED OR MODEL | GROSS REGIONAL PRODUCT | | | |
|--------|----------------|-----------------------|------------------------|-------|-------|-------|
| | 1952. | 1954. | 1956. | 1960. | 1966. | 1970. |
| 45.241 | I | I | I | I | I | I |
| 44.419 | I | I | I | I | I | I |
| 43.597 | I | I | I | I | I | I |
| 42.774 | I | I | I | I | I | I |
| 41.952 | I | I | I | I | I | I |
| 41.130 | I | I | I | I | I | I |
| 40.308 | I | I | I | I | I | I |
| 39.485 | I | I | I | I | I | I |
| 38.663 | I | I | I | I | I | I |
| 37.841 | I | I | I | I | I | I |
| 37.019 | I | I | I | I | I | I |
| 36.196 | I | I | I | I | I | I |
| 35.374 | I | I | I | I | I | I |
| 34.552 | I | I | I | I | I | I |
| 33.729 | I | I | I | I | I | I |
| 32.907 | I | I | I | I | I | I |
| 32.085 | I | I | I | I | I | I |
| 31.263 | I | I | I | I | I | I |
| 30.440 | I | I | I | I | I | I |
| 29.618 | I | I | I | I | I | I |
| 28.795 | I | I | I | I | I | I |
| 27.973 | I | I | I | I | I | I |
| 27.150 | I | I | I | I | I | I |
| 26.328 | I | I | I | I | I | I |
| 25.505 | I | I | I | I | I | I |
| 24.683 | I | I | I | I | I | I |
| 23.860 | I | I | I | I | I | I |
| 23.038 | I | I | I | I | I | I |
| 22.215 | I | I | I | I | I | I |
| 21.393 | I | I | I | I | I | I |
| 20.570 | I | I | I | I | I | I |
| 19.748 | I | I | I | I | I | I |
| 18.925 | I | I | I | I | I | I |
| 18.103 | I | I | I | I | I | I |
| 17.280 | I | I | I | I | I | I |
| 16.458 | I | I | I | I | I | I |
| 15.635 | I | I | I | I | I | I |
| 14.812 | I | I | I | I | I | I |
| 13.990 | I | I | I | I | I | I |
| 13.167 | I | I | I | I | I | I |
| 12.345 | I | I | I | I | I | I |
| 11.522 | I | I | I | I | I | I |
| 10.700 | I | I | I | I | I | I |
| 9.877 | I | I | I | I | I | I |
| 9.055 | I | I | I | I | I | I |
| 8.232 | I | I | I | I | I | I |
| 7.410 | I | I | I | I | I | I |
| 6.587 | I | I | I | I | I | I |
| 5.765 | I | I | I | I | I | I |
| 4.942 | I | I | I | I | I | I |
| 4.120 | I | I | I | I | I | I |
| 3.297 | I | I | I | I | I | I |
| 2.475 | I | I | I | I | I | I |
| 1.652 | I | I | I | I | I | I |
| 0.830 | I | I | I | I | I | I |
| 0.007 | I | I | I | I | I | I |

TABLE

| | MAIN AFRICA | | | | | | | | | | 8: |
|-------|-------------|--------|---------|-------|---------|-------|----|----|----|----|----|
| | CC | HC | CI | HI | CG | HG | CC | CM | HX | HM | |
| 1950 | 9.006 | 8.310 | 1.530 | 1.537 | 0.866 | 0.912 | | | | | |
| 1951 | 9.387 | 8.759 | 1.610 | 1.620 | 0.932 | 0.981 | | | | | |
| 1952 | 9.792 | 9.232 | 1.694 | 1.708 | 1.004 | 1.013 | | | | | |
| 1953 | 10.220 | 9.731 | 1.784 | 1.800 | 1.081 | 1.067 | | | | | |
| 1954 | 10.675 | 10.256 | 1.880 | 1.897 | 1.164 | 1.125 | | | | | |
| 1955 | 11.157 | 10.810 | 1.982 | 1.999 | 1.254 | 1.186 | | | | | |
| 1956 | 11.668 | 11.394 | 2.091 | 2.107 | 1.350 | 1.250 | | | | | |
| 1957 | 12.213 | 12.009 | 2.207 | 2.221 | 1.454 | 1.317 | | | | | |
| 1958 | 12.789 | 12.649 | 2.331 | 2.339 | 1.567 | 1.388 | | | | | |
| 1959 | 13.404 | 13.192 | 2.463 | 2.587 | 1.649 | 1.569 | | | | | |
| 1960 | 14.057 | 14.690 | 2.605 | 2.734 | 1.820 | 1.697 | | | | | |
| 1961 | 14.751 | 14.743 | 2.757 | 2.761 | 1.962 | 1.841 | | | | | |
| 1962 | 15.491 | 15.092 | 2.919 | 2.565 | 2.116 | 1.889 | | | | | |
| 1963 | 16.279 | 15.568 | 3.093 | 2.766 | 2.283 | 2.116 | | | | | |
| 1964 | 17.118 | 16.707 | 3.279 | 3.105 | 2.463 | 2.390 | | | | | |
| 1965 | 18.015 | 17.184 | 3.479 | 3.583 | 2.659 | 2.711 | | | | | |
| 1966 | 18.970 | 18.005 | 3.694 | 3.740 | 2.871 | 2.823 | | | | | |
| 1967 | 19.991 | 19.092 | 3.924 | 4.072 | 3.102 | 3.120 | | | | | |
| 1968 | 21.083 | 19.969 | 4.172 | 4.287 | 3.352 | 3.319 | | | | | |
| 1969 | 22.250 | 21.080 | 4.439 | 4.394 | 3.624 | 3.563 | | | | | |
| 1970 | 23.498 | 22.136 | 4.726 | 4.833 | 3.920 | 3.835 | | | | | |
| ERRDR | 0.69128 | | 0.13050 | | 0.10162 | | | | | | |
| 1950 | 10.735 | 10.600 | 2.037 | 2.109 | 2.704 | 2.268 | | | | | |
| 1951 | 11.267 | 11.172 | 2.173 | 2.223 | 2.835 | 2.391 | | | | | |
| 1952 | 11.832 | 11.776 | 2.318 | 2.343 | 2.976 | 2.520 | | | | | |
| 1953 | 12.433 | 12.412 | 2.474 | 2.470 | 3.127 | 2.656 | | | | | |
| 1954 | 13.072 | 13.082 | 2.640 | 2.603 | 3.287 | 2.800 | | | | | |
| 1955 | 13.752 | 13.780 | 2.819 | 2.744 | 3.459 | 2.951 | | | | | |
| 1956 | 14.476 | 14.533 | 3.010 | 2.892 | 3.644 | 3.110 | | | | | |
| 1957 | 15.247 | 15.318 | 3.216 | 3.048 | 3.843 | 3.278 | | | | | |
| 1958 | 16.070 | 16.134 | 3.436 | 3.211 | 4.054 | 3.453 | | | | | |
| 1959 | 16.947 | 17.244 | 3.674 | 3.794 | 4.283 | 3.697 | | | | | |
| 1960 | 17.884 | 18.858 | 3.928 | 3.960 | 4.527 | 4.243 | | | | | |
| 1961 | 18.884 | 19.172 | 4.203 | 4.007 | 4.789 | 4.180 | | | | | |
| 1962 | 19.953 | 19.884 | 4.498 | 4.156 | 5.072 | 3.818 | | | | | |
| 1963 | 21.097 | 20.953 | 4.817 | 4.758 | 5.375 | 4.253 | | | | | |
| 1964 | 22.321 | 22.336 | 5.161 | 5.718 | 5.701 | 5.584 | | | | | |
| 1965 | 23.632 | 23.572 | 5.532 | 6.270 | 6.054 | 6.176 | | | | | |
| 1966 | 25.036 | 24.766 | 5.933 | 6.315 | 6.432 | 6.018 | | | | | |
| 1967 | 26.542 | 26.443 | 6.367 | 6.452 | 6.842 | 6.241 | | | | | |
| 1968 | 28.159 | 27.658 | 6.837 | 6.666 | 7.286 | 6.583 | | | | | |
| 1969 | 29.895 | 29.690 | 7.346 | 7.244 | 7.764 | 6.591 | | | | | |
| 1970 | 31.760 | 31.178 | 7.899 | 7.576 | 8.282 | 7.202 | | | | | |
| ERROR | 0.30141 | | 0.26139 | | 0.66563 | | | | | | |

| | HISTORICAL | | COMPUTED OR MODEL | | INVESTMENT | | |
|--------|------------|---|-------------------|---|------------|---|-------|
| | H | C | H | C | H | C | |
| 19,255 | | | | | | | |
| 18,905 | | | | | | | H |
| 18,555 | | | | | | | C |
| 18,205 | | | | | | | |
| 17,855 | | | | | | | |
| 17,505 | | | | | | | |
| 17,155 | | | | | | | |
| 16,805 | | | | | | | H |
| 16,455 | | | | | | | |
| 16,104 | | | | | | | |
| 15,754 | | | | | | | C |
| 15,404 | | | | | | | H |
| 15,054 | | | | | | | |
| 14,704 | | | | | | | |
| 14,354 | | | | | | | |
| 14,004 | | | | | | | H |
| 13,654 | | | | | | | |
| 13,304 | | | | | | | H |
| 12,954 | | | | | | | |
| 12,604 | | | | | | | H |
| 12,253 | | | | | | | C |
| 11,903 | | | | | | | |
| 11,553 | | | | | | | |
| 11,203 | | | | | | | H |
| 10,853 | | | | | | | C |
| 10,503 | | | | | | | |
| 10,153 | | | | | | | |
| 9,803 | | | | | | | C |
| 9,453 | | | | | | | H |
| 9,103 | | | | | | | C |
| 8,752 | | | | | | | |
| 8,402 | | | | | | | C |
| 8,052 | | | | | | | |
| 7,702 | | | | | | | H |
| 7,352 | | | | | | | C |
| 7,002 | | | | | | | |
| 6,652 | | | | | | | C |
| 6,302 | | | | | | | H |
| 5,952 | | | | | | | C |
| 5,602 | | | | | | | H |
| 5,251 | | | | | | | H |
| 4,901 | | | | | | | |
| 4,551 | | | | | | | |
| 4,201 | | | | | | | |
| 3,851 | | | | | | | |
| 3,501 | | | | | | | |
| 3,151 | | | | | | | |
| 2,801 | | | | | | | |
| 2,451 | | | | | | | |
| 2,101 | | | | | | | |
| 1,750 | | | | | | | |
| 1,400 | | | | | | | |
| 1,050 | | | | | | | |
| 0,700 | | | | | | | |
| 0,350 | | | | | | | |
| 0,000 | | | | | | | |
| 1950. | | | | | | | 1950. |
| 1952. | | | | | | | 1952. |
| 1954. | | | | | | | 1954. |
| 1956. | | | | | | | 1956. |
| 1960. | | | | | | | 1960. |
| 1962. | | | | | | | 1962. |
| 1964. | | | | | | | 1964. |
| 1966. | | | | | | | 1966. |
| 1968. | | | | | | | 1968. |
| 1970. | | | | | | | 1970. |

TABLE

| | CHINA | | | | 10 | CG | HG |
|-------|---------|--------|---------|--------|---------|-------|----|
| | CC | HC | CI | HI | | | |
| 1950 | 34,852 | 28,448 | 7,369 | 5,319 | 3,464 | 2,888 | |
| 1951 | 36,108 | 32,967 | 7,867 | 6,164 | 3,665 | 3,346 | |
| 1952 | 37,316 | 36,805 | 6,415 | 7,257 | 3,868 | 3,937 | |
| 1953 | 38,483 | 36,519 | 8,955 | 9,411 | 4,072 | 4,835 | |
| 1954 | 39,614 | 38,990 | 9,507 | 10,329 | 4,279 | 4,175 | |
| 1955 | 40,715 | 40,211 | 10,672 | 11,030 | 4,489 | 4,486 | |
| 1956 | 41,787 | 44,305 | 10,650 | 12,631 | 4,703 | 4,228 | |
| 1957 | 42,839 | 45,623 | 11,244 | 12,885 | 4,920 | 4,624 | |
| 1958 | 43,866 | 50,012 | 11,852 | 14,604 | 5,141 | 5,819 | |
| 1959 | 44,876 | 49,027 | 12,476 | 14,518 | 5,366 | 5,704 | |
| 1960 | 45,868 | 48,021 | 13,117 | 14,023 | 5,586 | 5,587 | |
| 1961 | 46,846 | 40,315 | 13,774 | 12,175 | 5,831 | 5,322 | |
| 1962 | 47,809 | 40,806 | 14,449 | 11,807 | 6,071 | 5,261 | |
| 1963 | 48,760 | 43,437 | 15,142 | 13,704 | 6,316 | 5,628 | |
| 1964 | 49,697 | 47,596 | 15,853 | 15,110 | 6,566 | 6,118 | |
| 1965 | 50,627 | 51,756 | 16,583 | 18,353 | 6,822 | 6,974 | |
| 1966 | 51,546 | 54,080 | 17,333 | 20,433 | 7,084 | 7,770 | |
| 1967 | 52,456 | 53,714 | 18,103 | 17,558 | 7,352 | 7,341 | |
| 1968 | 53,359 | 53,698 | 18,893 | 18,292 | 7,627 | 7,628 | |
| 1969 | 54,256 | 56,101 | 19,704 | 19,149 | 7,908 | 8,239 | |
| 1970 | 55,144 | 60,015 | 20,537 | 21,473 | 8,196 | 9,238 | |
| ERROR | 3,73163 | | 1,62512 | | 0,49802 | | |

| | | | | | 10 | CG | HM |
|-------|---------|--------|---------|-------|---------|-------|----|
| | CY | HY | CX | HX | | | |
| 1950 | 45,017 | 36,472 | 2,033 | 1,585 | 2,701 | 1,564 | |
| 1951 | 47,014 | 42,267 | 2,112 | 1,606 | 2,760 | 1,817 | |
| 1952 | 48,975 | 49,739 | 2,195 | 1,887 | 2,821 | 2,146 | |
| 1953 | 50,910 | 50,450 | 2,284 | 2,206 | 2,896 | 2,521 | |
| 1954 | 52,825 | 52,738 | 2,378 | 1,890 | 2,954 | 2,646 | |
| 1955 | 54,727 | 55,223 | 2,477 | 2,895 | 3,026 | 3,359 | |
| 1956 | 56,620 | 61,547 | 2,583 | 3,501 | 3,104 | 3,119 | |
| 1957 | 58,509 | 63,564 | 2,696 | 3,320 | 3,189 | 2,898 | |
| 1958 | 60,397 | 70,570 | 2,815 | 3,747 | 3,277 | 3,613 | |
| 1959 | 62,287 | 69,180 | 2,942 | 3,673 | 3,374 | 3,582 | |
| 1960 | 64,183 | 67,762 | 3,078 | 3,598 | 3,476 | 3,469 | |
| 1961 | 66,084 | 57,995 | 3,222 | 3,120 | 3,589 | 2,928 | |
| 1962 | 67,995 | 58,731 | 3,376 | 3,120 | 3,708 | 2,264 | |
| 1963 | 69,918 | 63,626 | 3,540 | 3,242 | 3,839 | 2,386 | |
| 1964 | 71,853 | 69,498 | 3,715 | 3,670 | 3,979 | 2,936 | |
| 1965 | 73,801 | 77,654 | 3,902 | 4,221 | 4,299 | 3,670 | |
| 1966 | 75,777 | 82,773 | 4,102 | 4,527 | 4,479 | 4,038 | |
| 1967 | 77,749 | 78,675 | 4,316 | 4,038 | 4,479 | 3,854 | |
| 1968 | 79,749 | 80,082 | 4,546 | 4,038 | 4,676 | 3,610 | |
| 1969 | 81,770 | 84,059 | 4,792 | 4,160 | 4,891 | 3,610 | |
| 1970 | 83,812 | 90,665 | 5,057 | 4,221 | 5,122 | 4,340 | |
| ERROR | 5,44904 | | 0,53400 | | 0,78423 | | |

B 144

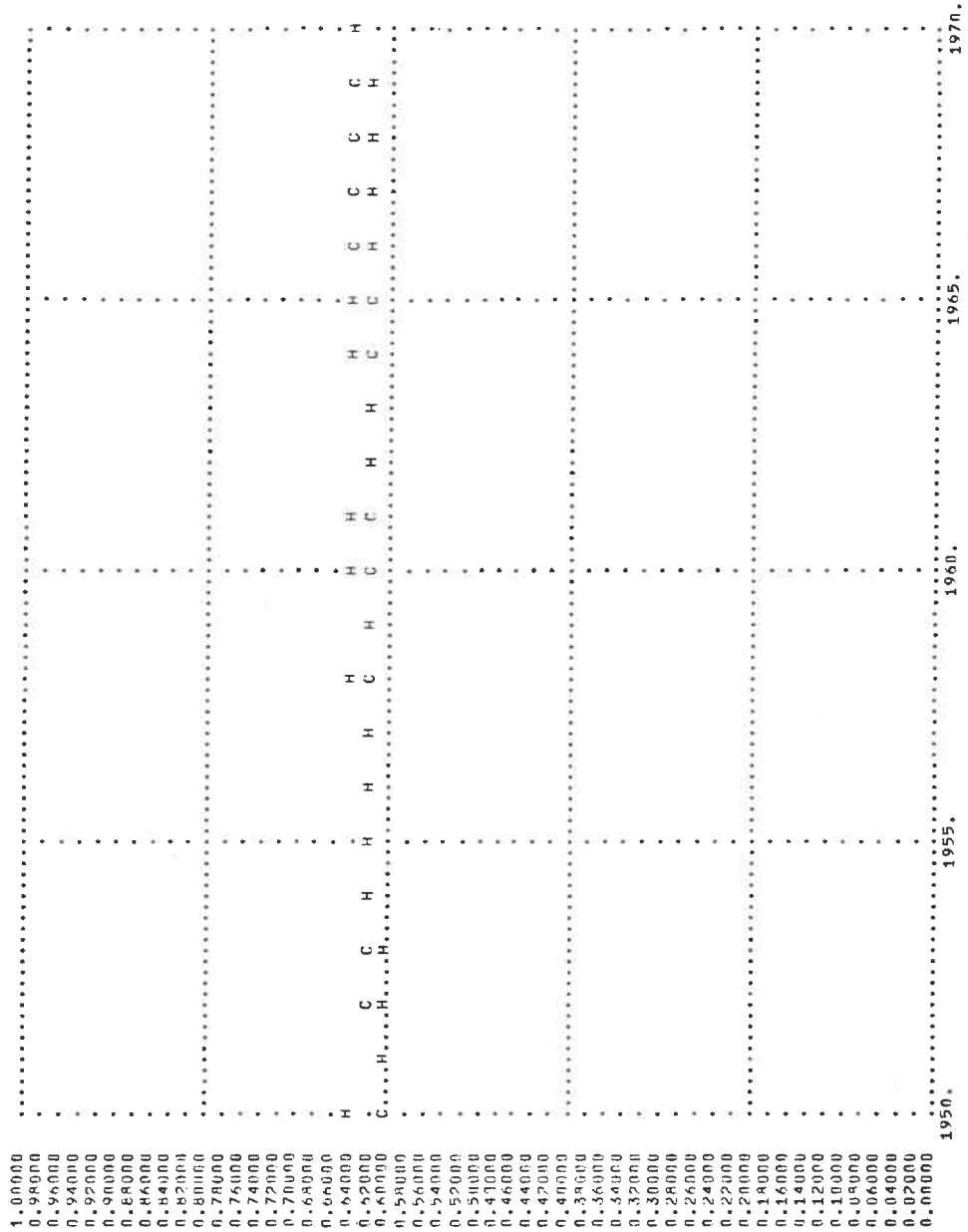
3. Comparison of Model Parameters and Historical Data

NORTH AMERICA
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.6458 | 0.6169 | 0.1988 | 0.1839 | 0.1417 | 0.1838 |
| 1951. | 0.5989 | 0.6178 | 0.1790 | 0.1832 | 0.1914 | 0.1930 |
| 1952. | 0.5999 | 0.6192 | 0.1715 | 0.1825 | 0.2253 | 0.1926 |
| 1953. | 0.6014 | 0.6206 | 0.1819 | 0.1819 | 0.2287 | 0.1923 |
| 1954. | 0.6183 | 0.6219 | 0.1812 | 0.1812 | 0.2064 | 0.1920 |
| 1955. | 0.6186 | 0.6233 | 0.1809 | 0.1805 | 0.1860 | 0.1916 |
| 1956. | 0.6278 | 0.6246 | 0.1846 | 0.1798 | 0.1837 | 0.1913 |
| 1957. | 0.6280 | 0.6260 | 0.1887 | 0.1791 | 0.1883 | 0.1910 |
| 1958. | 0.6436 | 0.6274 | 0.1820 | 0.1745 | 0.1885 | 0.1906 |
| 1959. | 0.6357 | 0.6287 | 0.1758 | 0.1778 | 0.1860 | 0.1903 |
| 1960. | 0.6430 | 0.6301 | 0.1795 | 0.1771 | 0.1839 | 0.1900 |
| 1961. | 0.6428 | 0.6314 | 0.1754 | 0.1764 | 0.1896 | 0.1896 |
| 1962. | 0.6357 | 0.6328 | 0.1696 | 0.1757 | 0.1899 | 0.1893 |
| 1963. | 0.6357 | 0.6342 | 0.1715 | 0.1715 | 0.1899 | 0.1890 |
| 1964. | 0.6418 | 0.6355 | 0.1748 | 0.1748 | 0.1860 | 0.1887 |
| 1965. | 0.6414 | 0.6369 | 0.1792 | 0.1737 | 0.1807 | 0.1883 |
| 1966. | 0.6251 | 0.6382 | 0.1773 | 0.1730 | 0.1845 | 0.1880 |
| 1967. | 0.6306 | 0.6396 | 0.1702 | 0.1723 | 0.1877 | 0.1877 |
| 1968. | 0.6308 | 0.6410 | 0.1717 | 0.1723 | 0.1991 | 0.1873 |
| 1969. | 0.6357 | 0.6423 | 0.1726 | 0.1717 | 0.1947 | 0.1873 |
| 1970. | 0.6502 | 0.6437 | 0.1788 | 0.1710 | 0.1888 | 0.1870 |
| | | | 0.1689 | 0.1703 | 0.1860 | 0.1867 |

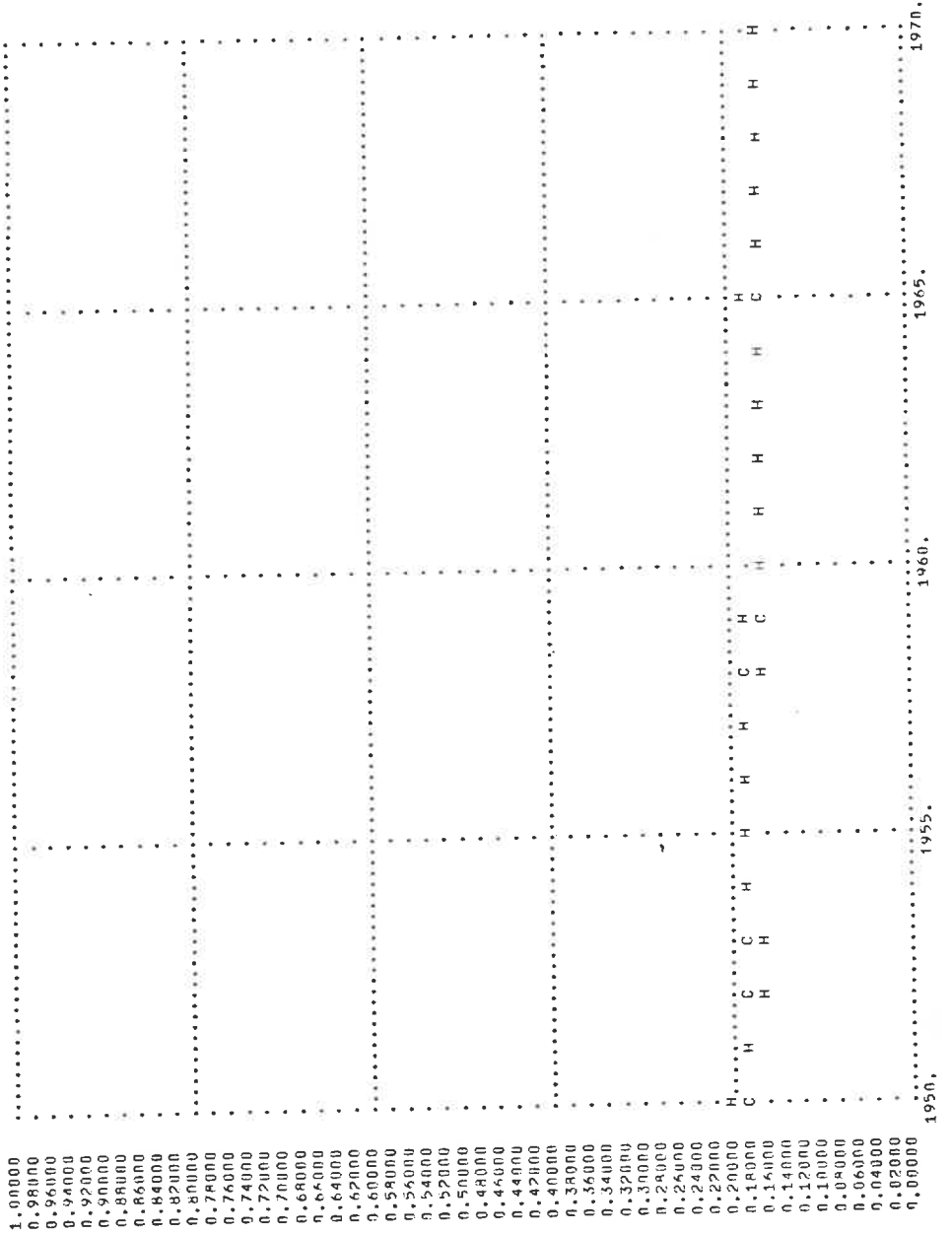
| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0207 | 0.0201 | 0.0433 | 0.0412 | 3.9182 | 3.9071 |
| 1951. | 0.0229 | 0.0202 | 0.0426 | 0.0425 | 3.6561 | 3.7622 |
| 1952. | 0.0212 | 0.0203 | 0.0443 | 0.0437 | 3.7173 | 3.7173 |
| 1953. | 0.0195 | 0.0205 | 0.0468 | 0.0450 | 3.5479 | 3.6774 |
| 1954. | 0.0196 | 0.0206 | 0.0453 | 0.0463 | 3.6690 | 3.6275 |
| 1955. | 0.0220 | 0.0208 | 0.0478 | 0.0475 | 3.4590 | 3.5326 |
| 1956. | 0.0221 | 0.0209 | 0.0512 | 0.0448 | 3.5017 | 3.5377 |
| 1957. | 0.0226 | 0.0211 | 0.0512 | 0.0501 | 3.4928 | 3.4928 |
| 1958. | 0.0199 | 0.0214 | 0.0518 | 0.0513 | 3.6267 | 3.4479 |
| 1959. | 0.0193 | 0.0214 | 0.0549 | 0.0526 | 3.4810 | 3.4030 |
| 1960. | 0.0208 | 0.0215 | 0.0531 | 0.0538 | 3.4803 | 3.3582 |
| 1961. | 0.0202 | 0.0216 | 0.0513 | 0.0521 | 3.4760 | 3.3133 |
| 1962. | 0.0206 | 0.0216 | 0.0530 | 0.0564 | 3.3233 | 3.2684 |
| 1963. | 0.0211 | 0.0219 | 0.0526 | 0.0576 | 3.2636 | 3.2235 |
| 1964. | 0.0211 | 0.0221 | 0.0535 | 0.0539 | 3.1827 | 3.1786 |
| 1965. | 0.0217 | 0.0224 | 0.0558 | 0.0602 | 3.0612 | 3.1337 |
| 1966. | 0.0224 | 0.0224 | 0.0614 | 0.0614 | 2.9426 | 3.0688 |
| 1967. | 0.0226 | 0.0225 | 0.0594 | 0.0627 | 2.8635 | 3.0439 |
| 1968. | 0.0235 | 0.0226 | 0.0623 | 0.0627 | 2.8070 | 2.8990 |
| 1969. | 0.0237 | 0.0226 | 0.0675 | 0.0639 | 2.9070 | 2.9541 |
| 1970. | 0.0247 | 0.0229 | 0.0706 | 0.0652 | 3.0201 | 2.9092 |
| | | | 0.0720 | 0.0665 | 3.0201 | 2.9092 |

NORTH AMERICA
 PLOT OF CONSUMPTION RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED



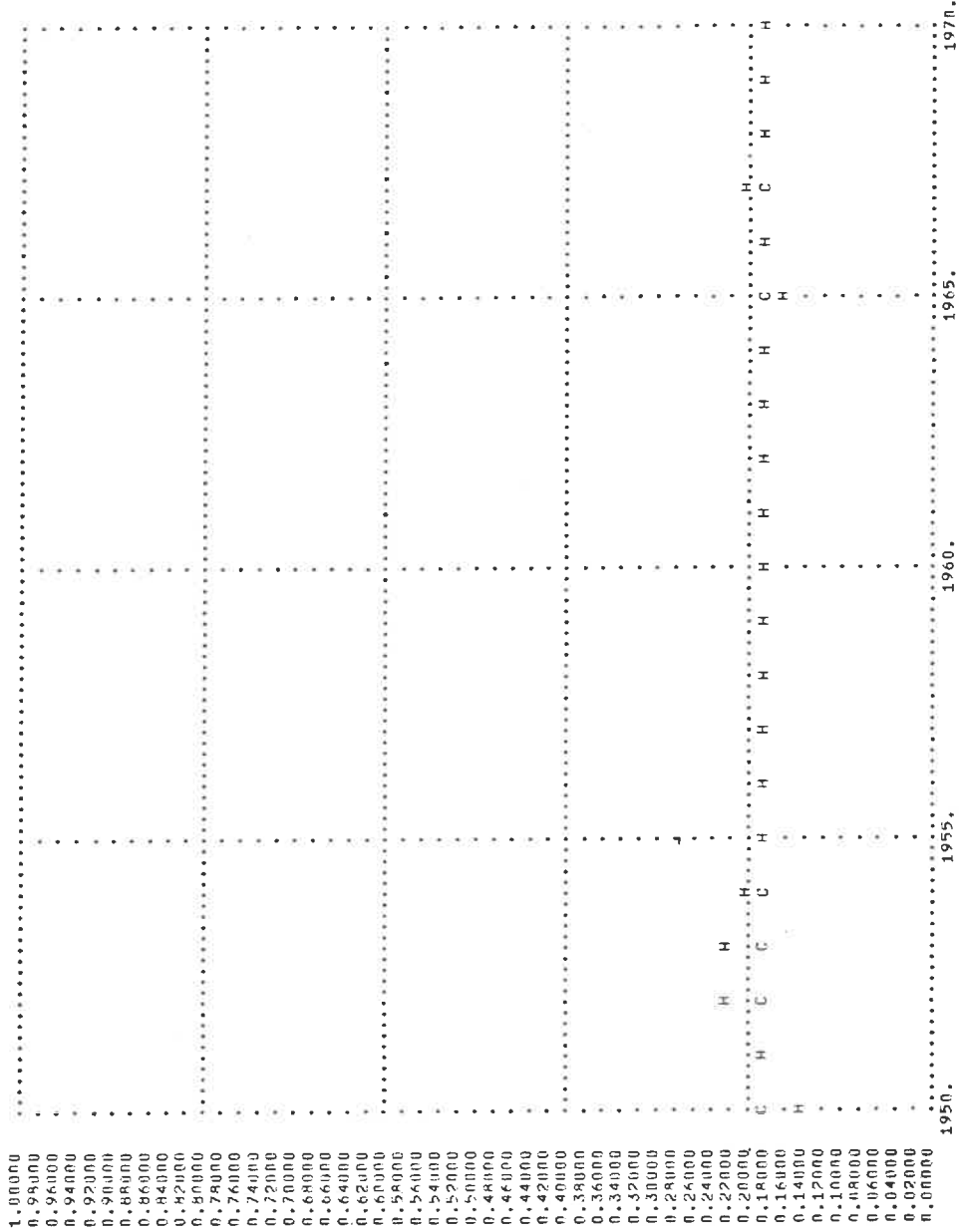
PLOT OF INVESTMENT RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

NORTH AMERICA



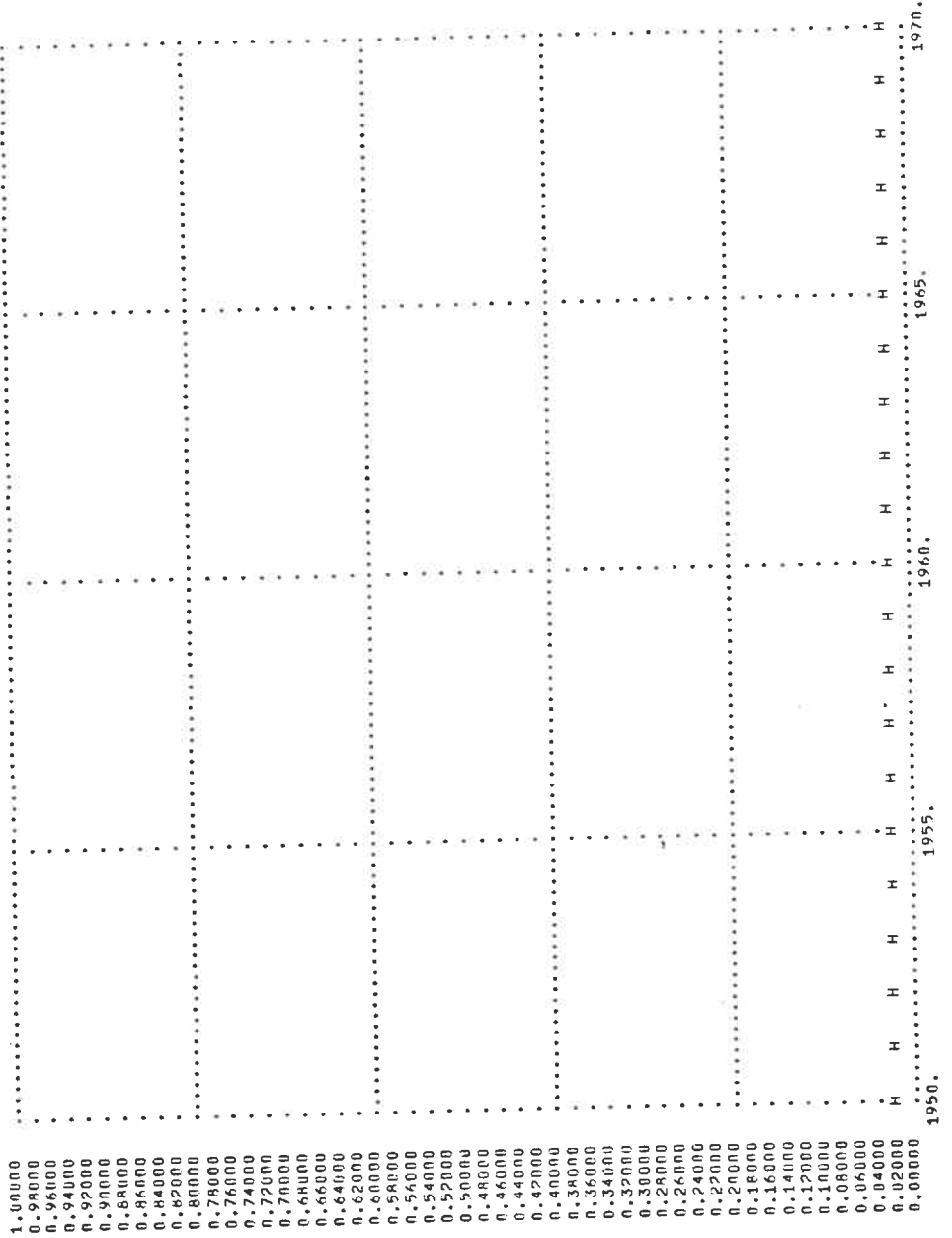
PLOT OF GOVERNMENT RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

NORTH AMERICA

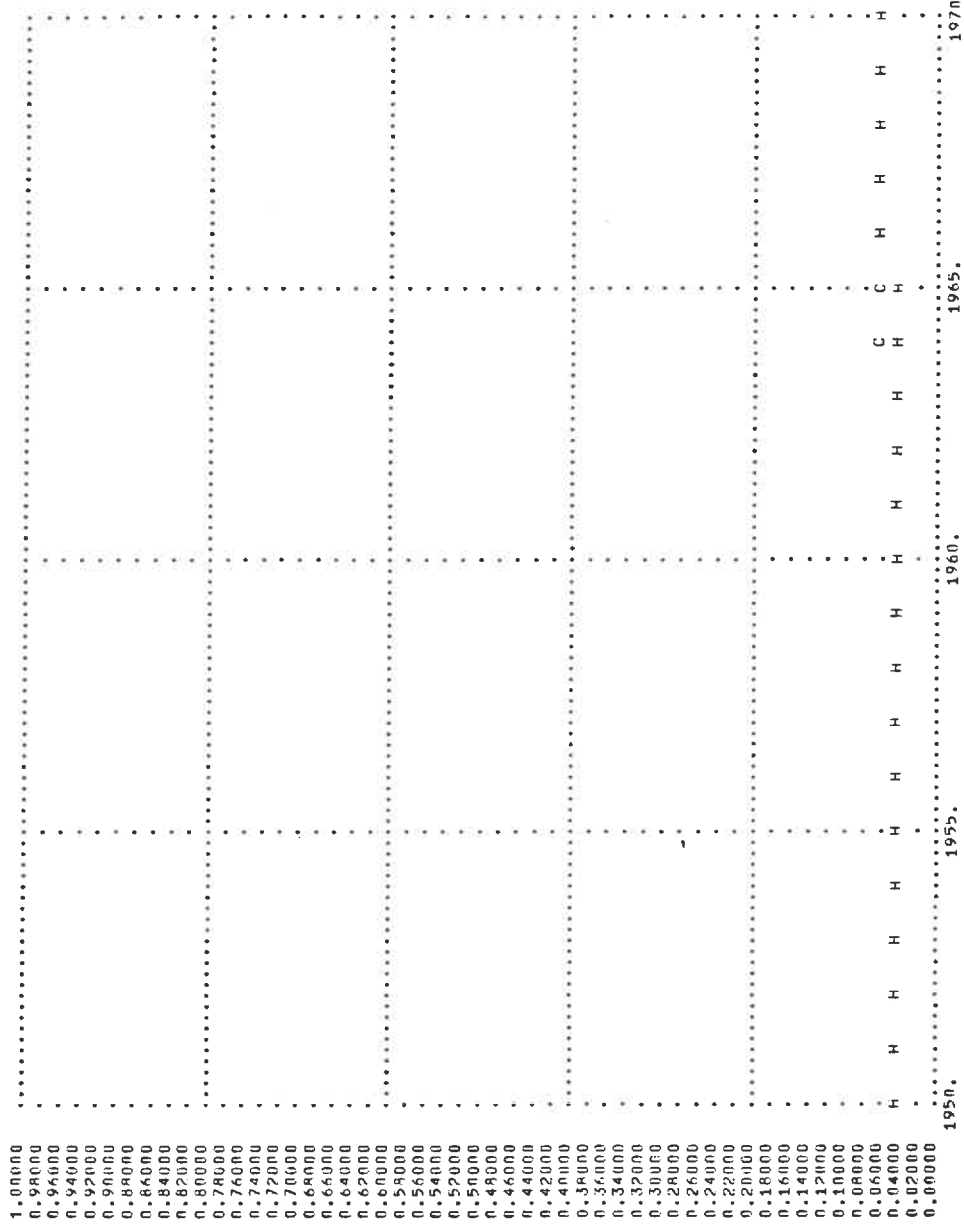


PLOT OF EXPORTS RATIO VS. TIME
H--HISTORICAL
C--CALCULATED

NORTH AMERICA

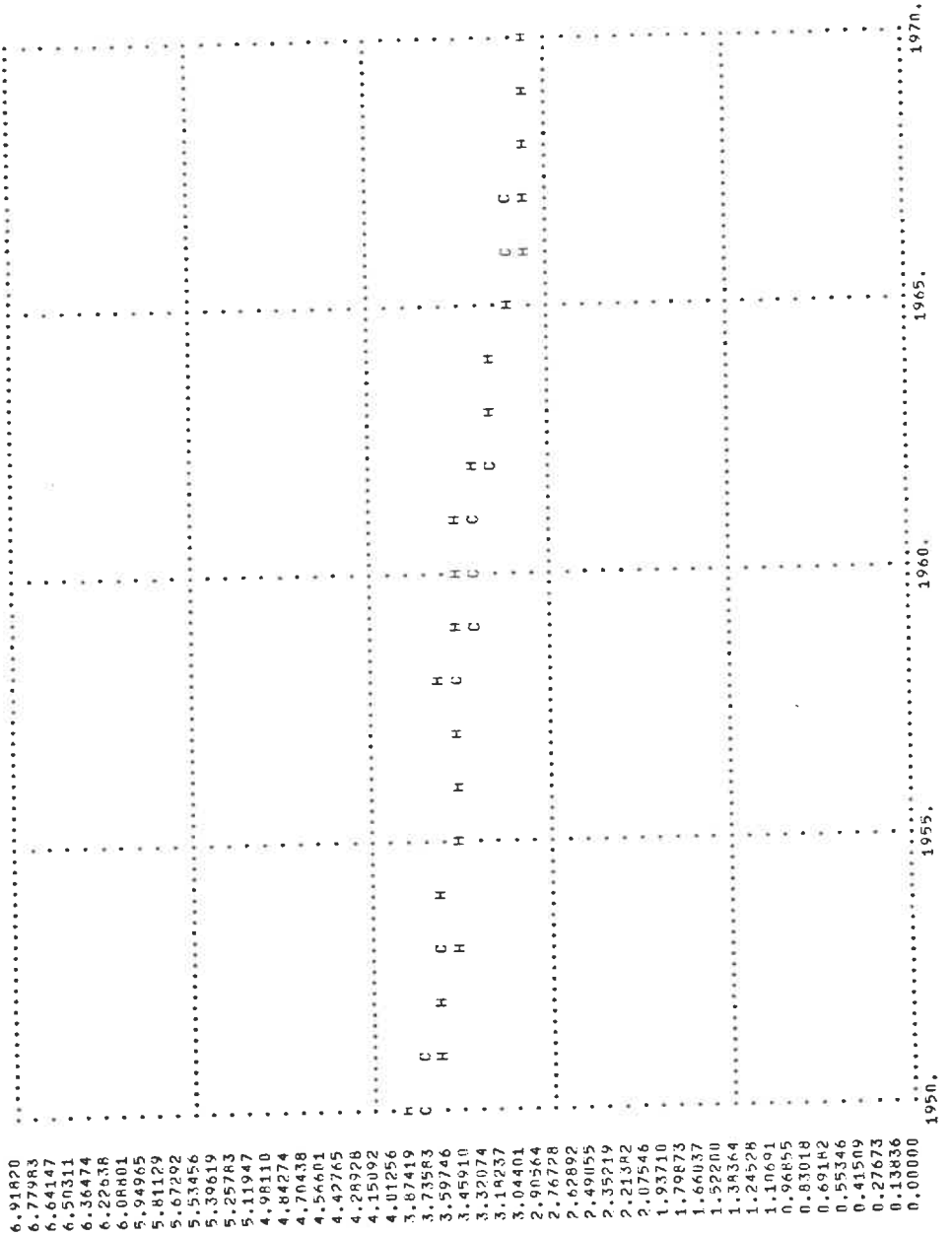


PLOT OF IMPORTS RATIO VS. TIME
H-HISTORICAL
C-CALCULATED



PLOT OF CAPITAL STOCK RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

NORTH AMERICA



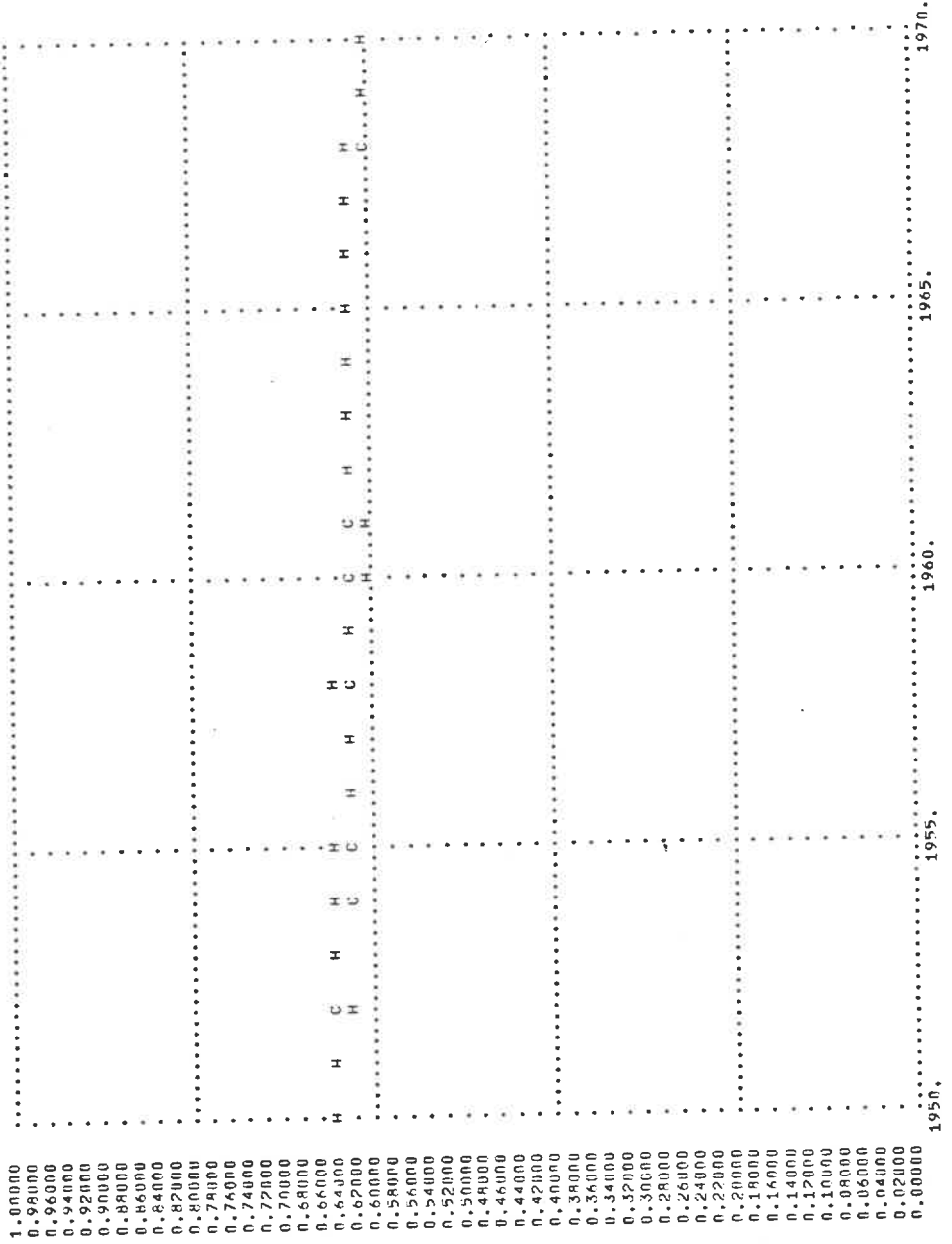
WESTERN EUROPE
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.6539 | 0.6431 | 0.1672 | 0.1665 | 0.1642 | 0.1691 |
| 1951. | 0.6418 | 0.6417 | 0.1693 | 0.1707 | 0.1662 | 0.1673 |
| 1952. | 0.6305 | 0.6403 | 0.1645 | 0.1750 | 0.1778 | 0.1654 |
| 1953. | 0.6407. | 0.6389 | 0.1711 | 0.1792 | 0.1740 | 0.1636 |
| 1954. | 0.6402 | 0.6374 | 0.1640 | 0.1834 | 0.1660 | 0.1617 |
| 1955. | 0.6397 | 0.6360 | 0.1930 | 0.1877 | 0.1563 | 0.1598 |
| 1956. | 0.6305 | 0.6346 | 0.1948 | 0.1919 | 0.1510 | 0.1560 |
| 1957. | 0.6305 | 0.6332 | 0.1960 | 0.1961 | 0.1497 | 0.1561 |
| 1958. | 0.6387 | 0.6318 | 0.1493 | 0.2004 | 0.1497 | 0.1543 |
| 1959. | 0.6305 | 0.6303 | 0.2034 | 0.2046 | 0.1496 | 0.1524 |
| 1960. | 0.6160 | 0.6289 | 0.2101 | 0.2088 | 0.1461 | 0.1506 |
| 1961. | 0.6168 | 0.6275 | 0.2208 | 0.2130 | 0.1446 | 0.1487 |
| 1962. | 0.6240 | 0.6261 | 0.2257 | 0.2173 | 0.1478 | 0.1469 |
| 1963. | 0.6305 | 0.6247 | 0.2257 | 0.2215 | 0.1478 | 0.1450 |
| 1964. | 0.6246 | 0.6233 | 0.2364 | 0.2257 | 0.1422 | 0.1432 |
| 1965. | 0.6192 | 0.6218 | 0.2338 | 0.2300 | 0.1411 | 0.1413 |
| 1966. | 0.6251 | 0.6204 | 0.2375 | 0.2342 | 0.1401 | 0.1395 |
| 1967. | 0.6252 | 0.6190 | 0.2333 | 0.2384 | 0.1416 | 0.1376 |
| 1968. | 0.6204 | 0.6176 | 0.2347 | 0.2427 | 0.1383 | 0.1358 |
| 1969. | 0.6116 | 0.6162 | 0.2393 | 0.2469 | 0.1344 | 0.1339 |
| 1970. | 0.6169 | 0.6148 | 0.2452 | 0.2511 | 0.1329 | 0.1320 |

| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0361 | 0.0335 | 0.1425 | 0.1257 | 2.0662 | 1.9936 |
| 1951. | 0.0369 | 0.0347 | 0.1462 | 0.1318 | 2.1029 | 2.0290 |
| 1952. | 0.0352 | 0.0360 | 0.1372 | 0.1370 | 2.1065 | 2.0644 |
| 1953. | 0.0359 | 0.0373 | 0.1371 | 0.1440 | 2.1106 | 2.0998 |
| 1954. | 0.0393 | 0.0395 | 0.1495 | 0.1501 | 2.1286 | 2.1352 |
| 1955. | 0.0400 | 0.0398 | 0.1555 | 0.1562 | 2.1210 | 2.1706 |
| 1956. | 0.0403 | 0.0410 | 0.1608 | 0.1623 | 2.1349 | 2.2060 |
| 1957. | 0.0419 | 0.0423 | 0.1625 | 0.1684 | 2.1478 | 2.2413 |
| 1958. | 0.0421 | 0.0435 | 0.1630 | 0.1745 | 2.2992 | 2.2767 |
| 1959. | 0.0433 | 0.0448 | 0.1699 | 0.1806 | 2.3179 | 2.3121 |
| 1960. | 0.0473 | 0.0451 | 0.1861 | 0.1867 | 2.2920 | 2.3475 |
| 1961. | 0.0477 | 0.0473 | 0.1870 | 0.1928 | 2.3138 | 2.3879 |
| 1962. | 0.0479 | 0.0486 | 0.1940 | 0.1989 | 2.3743 | 2.4183 |
| 1963. | 0.0487 | 0.0498 | 0.2024 | 0.2051 | 2.4373 | 2.4537 |
| 1964. | 0.0497 | 0.0511 | 0.2101 | 0.2112 | 2.4524 | 2.4891 |
| 1965. | 0.0514 | 0.0523 | 0.2152 | 0.2173 | 2.5075 | 2.5245 |
| 1966. | 0.0520 | 0.0536 | 0.2218 | 0.2234 | 2.5650 | 2.5599 |
| 1967. | 0.0550 | 0.0549 | 0.2245 | 0.2295 | 2.5659 | 2.5953 |
| 1968. | 0.0560 | 0.0561 | 0.2348 | 0.2356 | 2.6896 | 2.6306 |
| 1969. | 0.0598 | 0.0574 | 0.2511 | 0.2417 | 2.6822 | 2.6660 |
| 1970. | 0.0629 | 0.0586 | 0.2680 | 0.2478 | 2.7309 | 2.7014 |

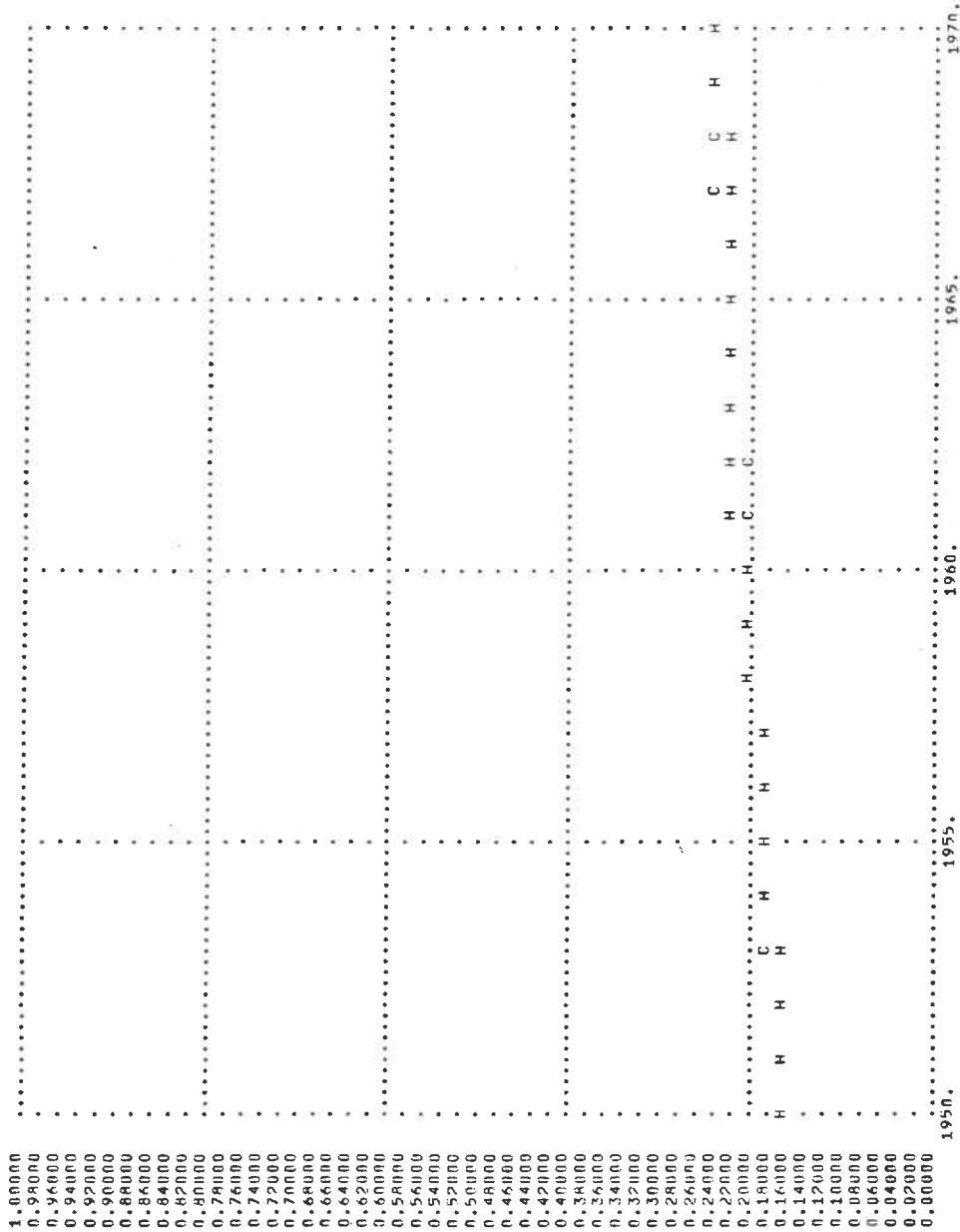
PLOT OF CONSUMPTION RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

WESTERN EUROPE



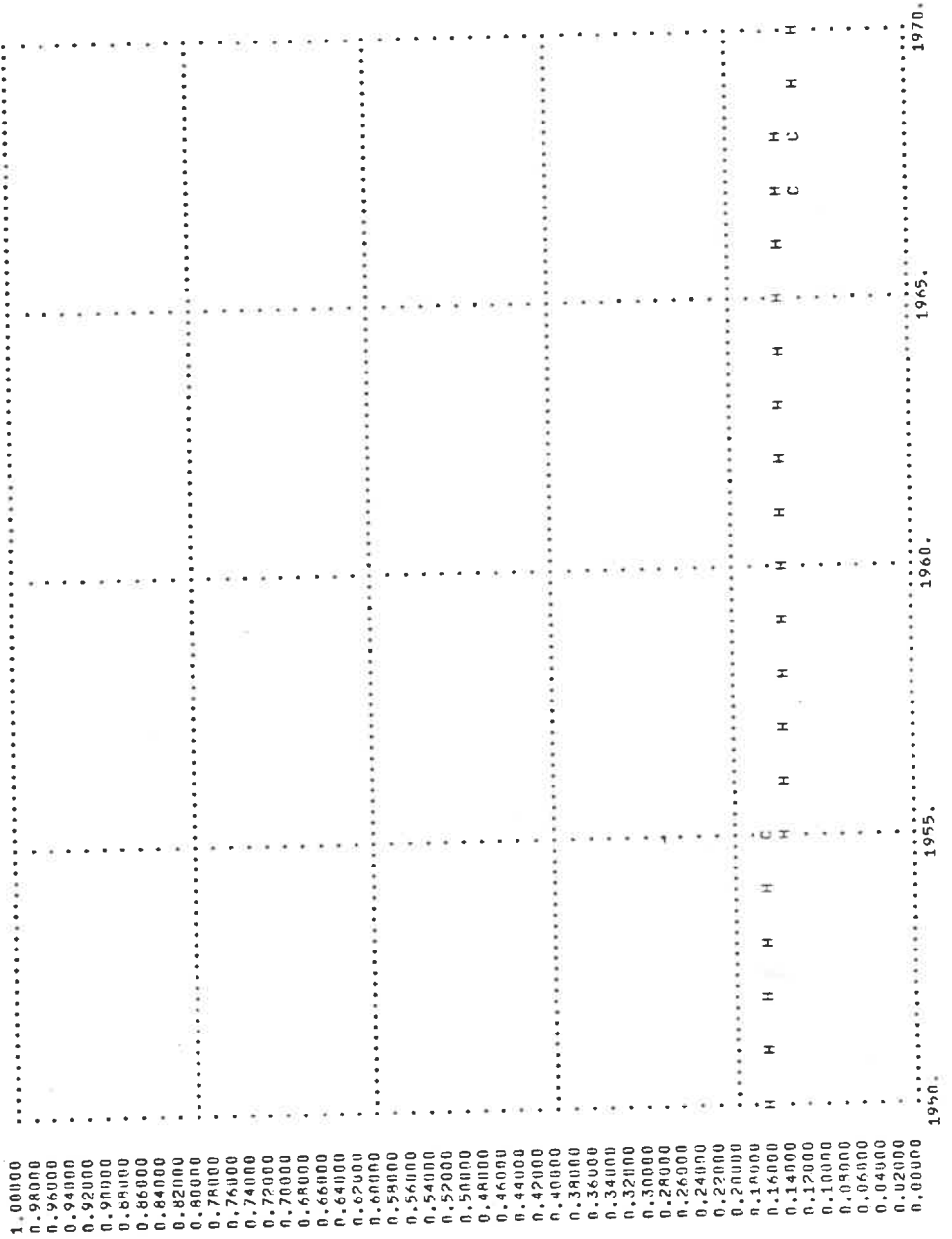
PLOT OF INVESTMENT RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

WESTERN EUROPE

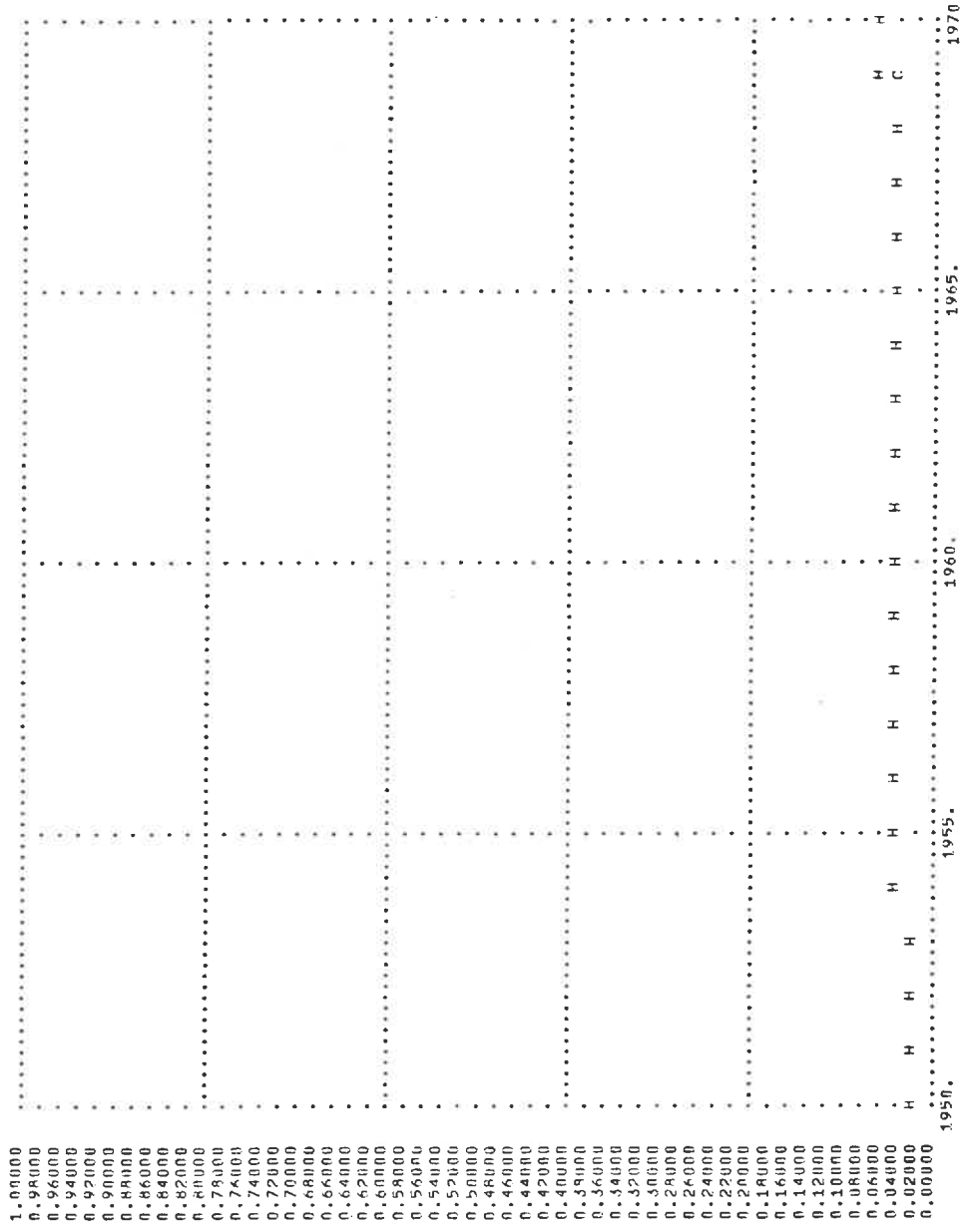


PLOT OF GOVERNMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

WESTERN EUROPE

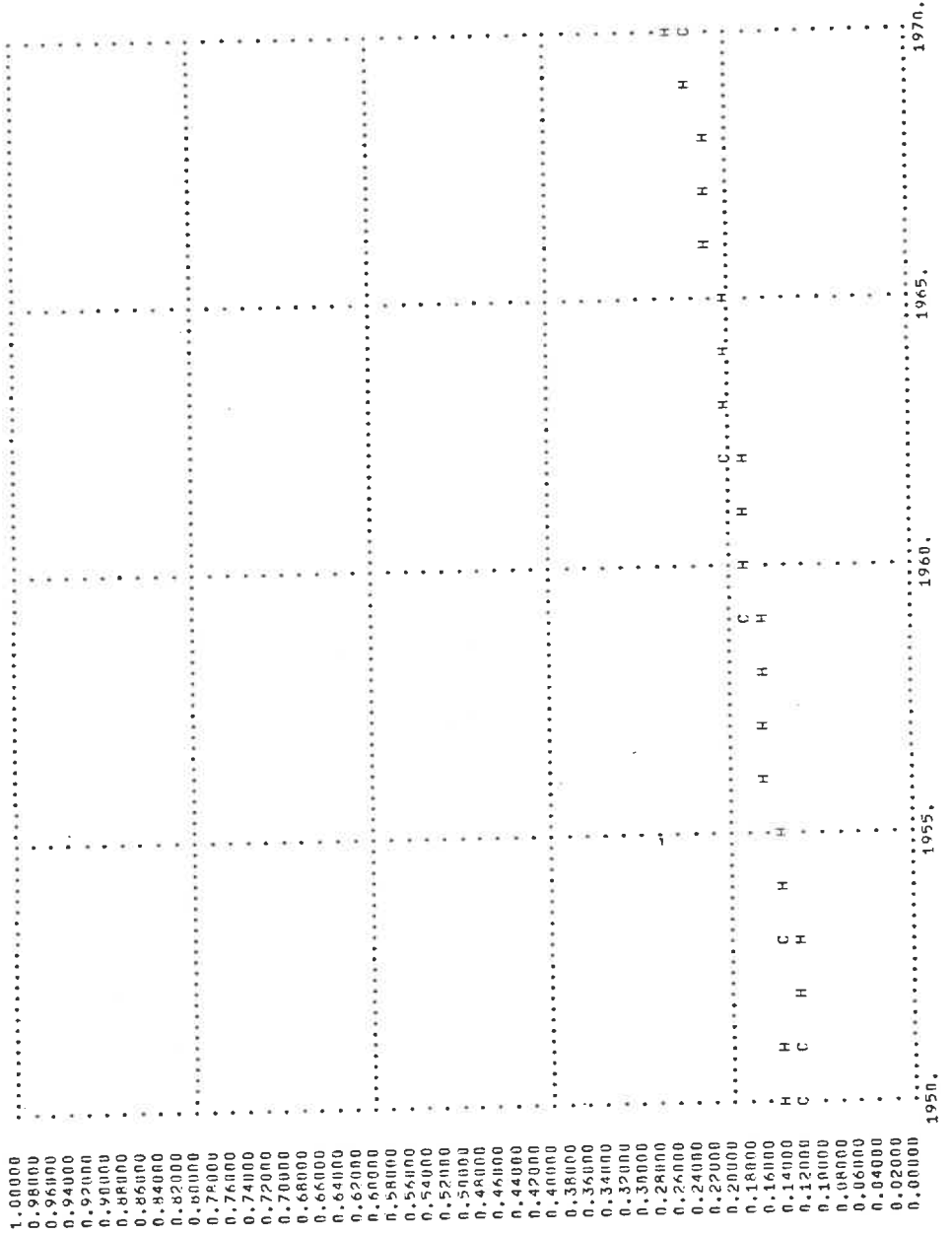


WESTERN EUROPE
PLOT OF EXPORTS RATIO VS. TIME
H--HISTORICAL
C--CALCULATED

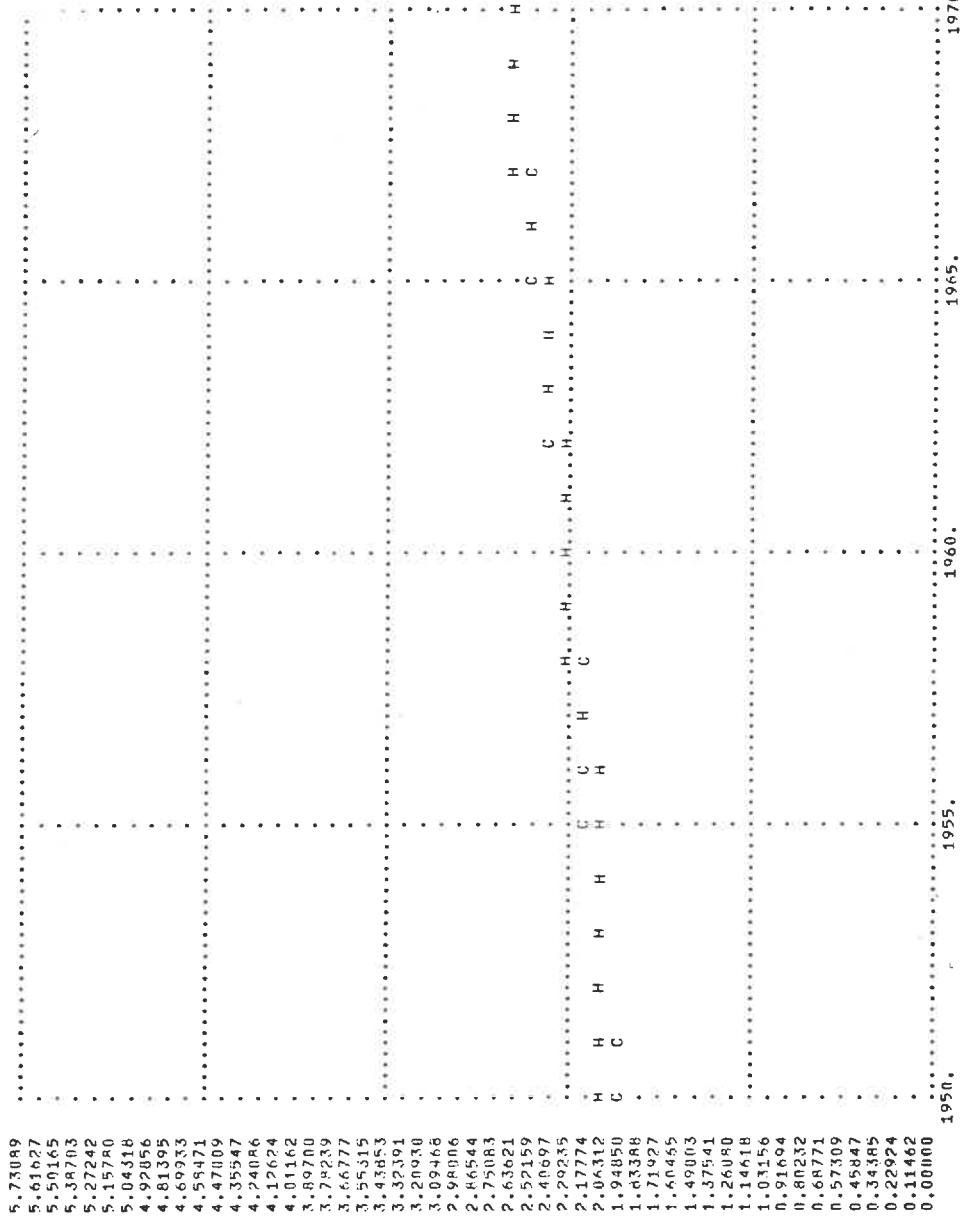


PLOT OF IMPORTS RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

WESTERN EUROPE



WESTERN EUROPE
 PLOT OF CAPITAL STOCK RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

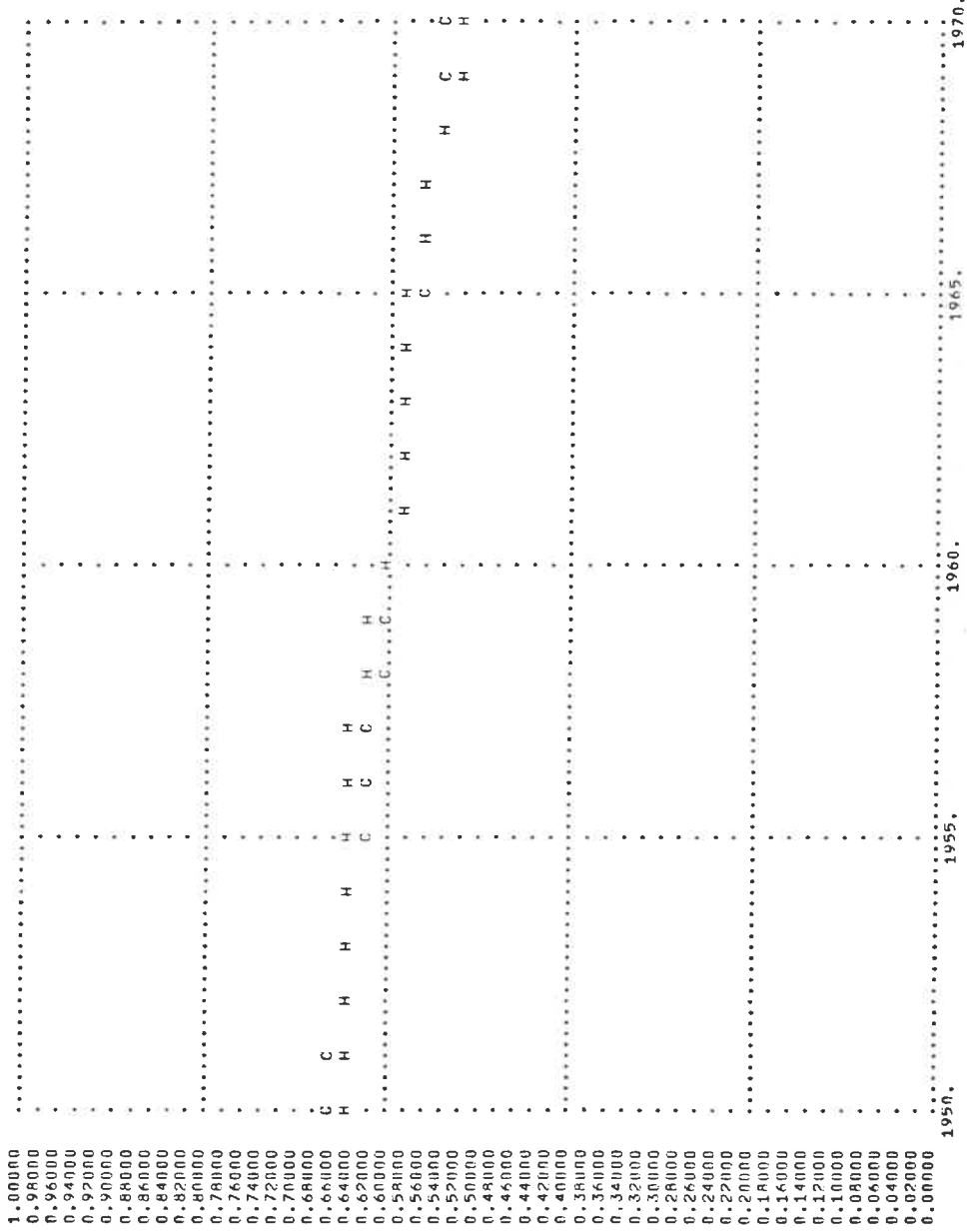


JAPAN
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.6426 | 0.6686 | 0.1891 | 0.1558 | 0.1634 | 0.1622 |
| 1951. | 0.6425 | 0.6671 | 0.1891 | 0.1672 | 0.1634 | 0.1632 |
| 1952. | 0.6425 | 0.6597 | 0.1891 | 0.1787 | 0.1635 | 0.1582 |
| 1953. | 0.6426 | 0.6493 | 0.1891 | 0.1901 | 0.1634 | 0.1532 |
| 1954. | 0.6466 | 0.6429 | 0.1872 | 0.2015 | 0.1661 | 0.1483 |
| 1955. | 0.6506 | 0.6364 | 0.1854 | 0.2129 | 0.1489 | 0.1433 |
| 1956. | 0.6436 | 0.6300 | 0.2042 | 0.2243 | 0.1357 | 0.1383 |
| 1957. | 0.6436 | 0.6236 | 0.2042 | 0.2357 | 0.1358 | 0.1353 |
| 1958. | 0.6366 | 0.6171 | 0.2229 | 0.2471 | 0.1227 | 0.1283 |
| 1959. | 0.6250 | 0.6107 | 0.2476 | 0.2645 | 0.1161 | 0.1233 |
| 1960. | 0.6135 | 0.6043 | 0.2730 | 0.2699 | 0.1094 | 0.1183 |
| 1961. | 0.5957 | 0.5979 | 0.3130 | 0.2813 | 0.1038 | 0.1133 |
| 1962. | 0.5859 | 0.5914 | 0.3112 | 0.2927 | 0.1010 | 0.1083 |
| 1963. | 0.5917 | 0.5850 | 0.3147 | 0.3041 | 0.1010 | 0.1033 |
| 1964. | 0.5818 | 0.5786 | 0.3260 | 0.3155 | 0.0947 | 0.0984 |
| 1965. | 0.5723 | 0.5722 | 0.3150 | 0.3269 | 0.0950 | 0.0934 |
| 1966. | 0.5710 | 0.5657 | 0.3219 | 0.3383 | 0.0915 | 0.0884 |
| 1967. | 0.5677 | 0.5593 | 0.3450 | 0.3497 | 0.0876 | 0.0834 |
| 1968. | 0.5429 | 0.5529 | 0.3656 | 0.3611 | 0.0819 | 0.0784 |
| 1969. | 0.5247 | 0.5464 | 0.3831 | 0.3725 | 0.0759 | 0.0734 |
| 1970. | 0.5207 | 0.5400 | 0.3907 | 0.3839 | 0.0742 | 0.0694 |

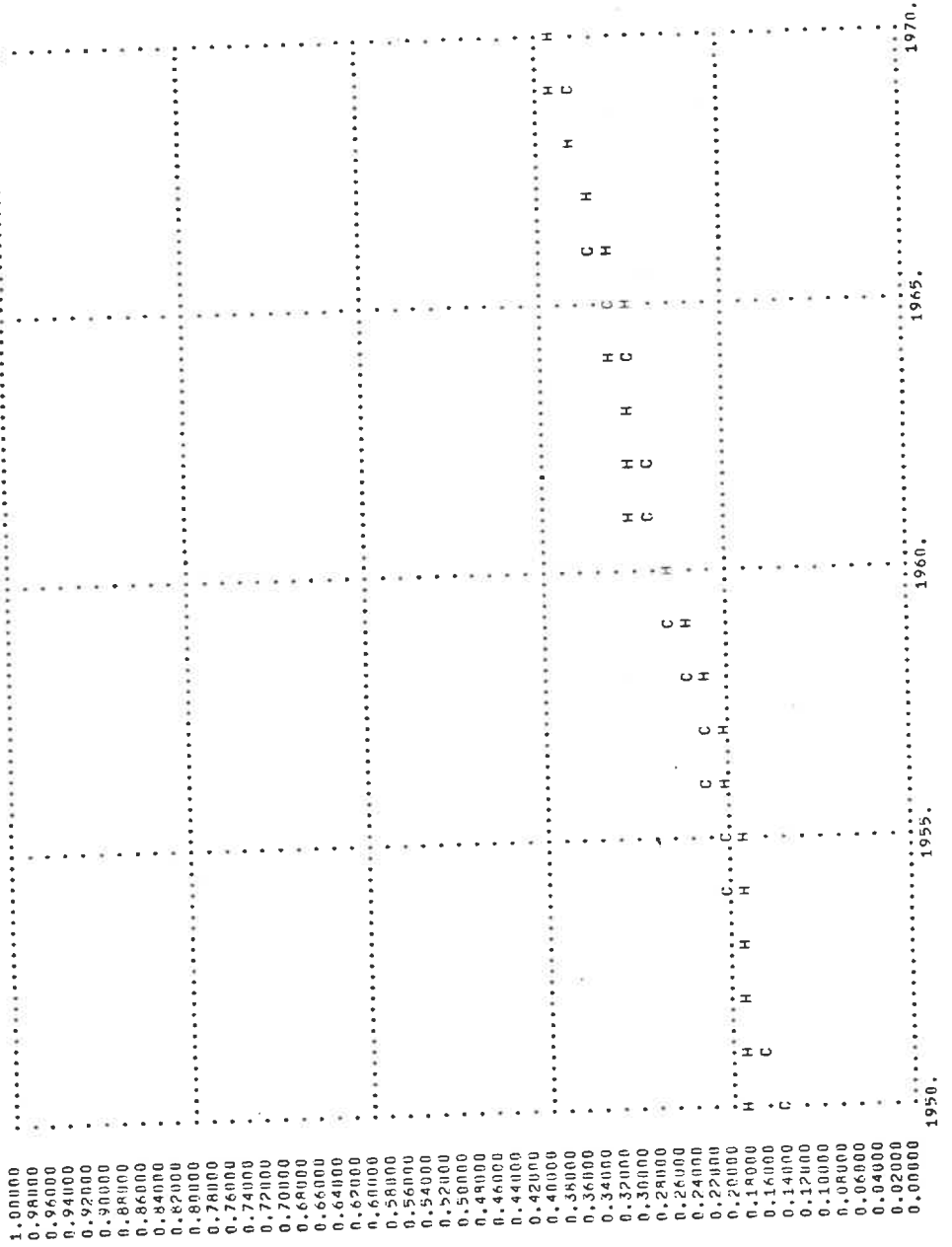
| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0019 | 0.0088 | 0.0672 | 0.0565 | 1.1312 | 1.1943 |
| 1951. | 0.0018 | 0.0014 | 0.0672 | 0.0596 | 1.2256 | 1.2435 |
| 1952. | 0.0018 | 0.0017 | 0.0672 | 0.0629 | 1.3128 | 1.2921 |
| 1953. | 0.0018 | 0.0019 | 0.0655 | 0.0691 | 1.3935 | 1.3408 |
| 1954. | 0.0020 | 0.0019 | 0.0638 | 0.0723 | 1.4374 | 1.3894 |
| 1955. | 0.0021 | 0.0022 | 0.0677 | 0.0754 | 1.4583 | 1.4381 |
| 1956. | 0.0023 | 0.0025 | 0.0677 | 0.0786 | 1.4786 | 1.4867 |
| 1957. | 0.0024 | 0.0026 | 0.0716 | 0.0818 | 1.5293 | 1.5353 |
| 1958. | 0.0026 | 0.0031 | 0.0807 | 0.0849 | 1.6247 | 1.5920 |
| 1959. | 0.0028 | 0.0033 | 0.0899 | 0.0891 | 1.6601 | 1.6326 |
| 1960. | 0.0031 | 0.0036 | 0.0912 | 0.0912 | 1.6384 | 1.6813 |
| 1961. | 0.0033 | 0.0039 | 0.1024 | 0.0922 | 1.6009 | 1.7299 |
| 1962. | 0.0035 | 0.0042 | 0.0922 | 0.0944 | 1.7635 | 1.7786 |
| 1963. | 0.0036 | 0.0044 | 0.1004 | 0.0976 | 1.8214 | 1.8272 |
| 1964. | 0.0042 | 0.0047 | 0.1017 | 0.1007 | 1.8214 | 1.8759 |
| 1965. | 0.0048 | 0.0050 | 0.1031 | 0.1039 | 2.0108 | 1.9245 |
| 1966. | 0.0052 | 0.0053 | 0.1056 | 0.1071 | 2.0580 | 1.9732 |
| 1967. | 0.0055 | 0.0055 | 0.1173 | 0.1102 | 2.0378 | 2.0218 |
| 1968. | 0.0055 | 0.0058 | 0.1154 | 0.1134 | 2.0349 | 2.0704 |
| 1969. | 0.0063 | 0.0063 | 0.1154 | 0.1165 | 2.0812 | 2.1191 |
| 1970. | 0.0072 | 0.0064 | 0.1167 | 0.1197 | 2.0812 | 2.1677 |

JAPAN
PLOT OF CONSUMPTION RATIO VS. TIME
H-HISTORICAL
C-CALCULATED



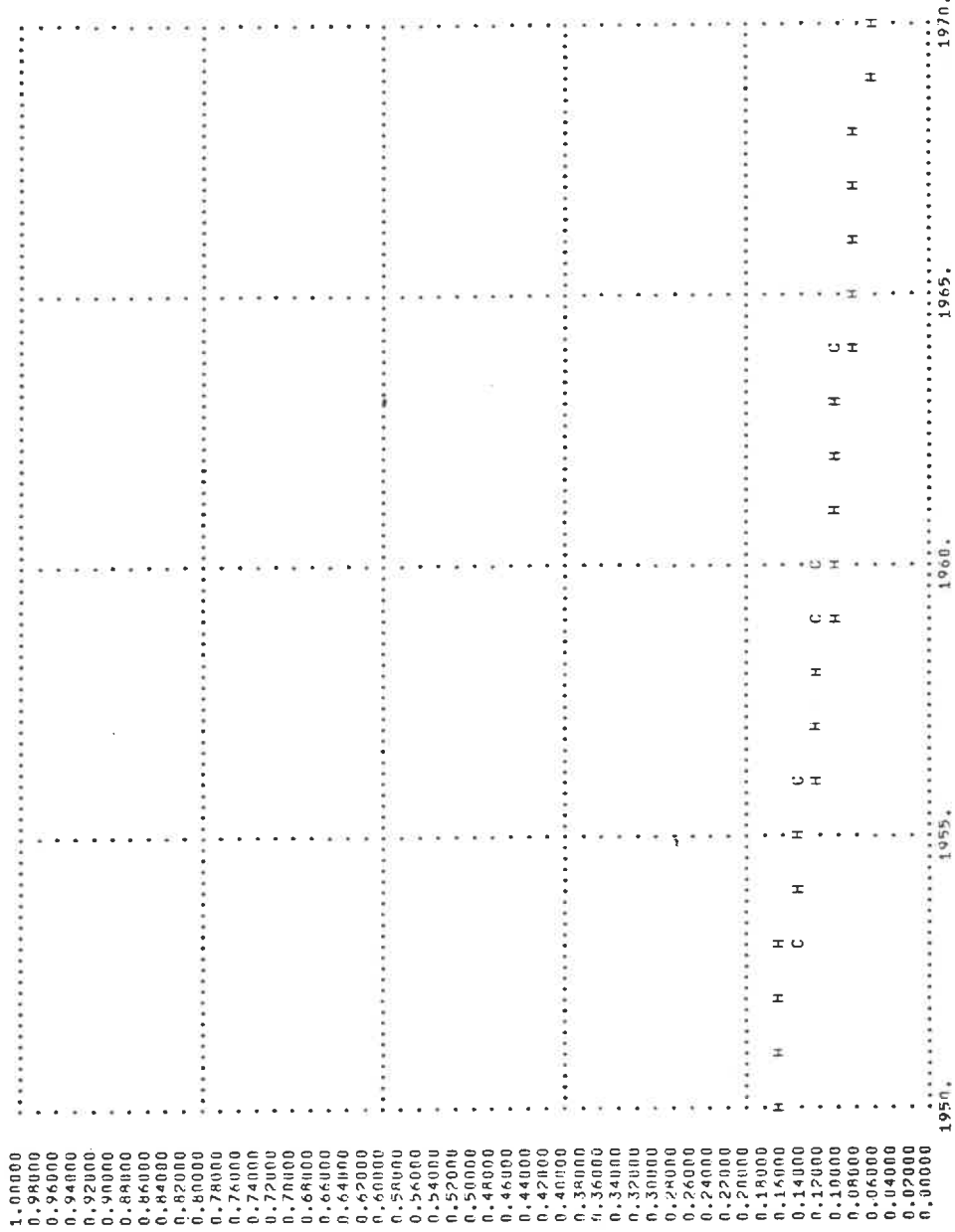
PLOT OF INVESTMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

JAPAN



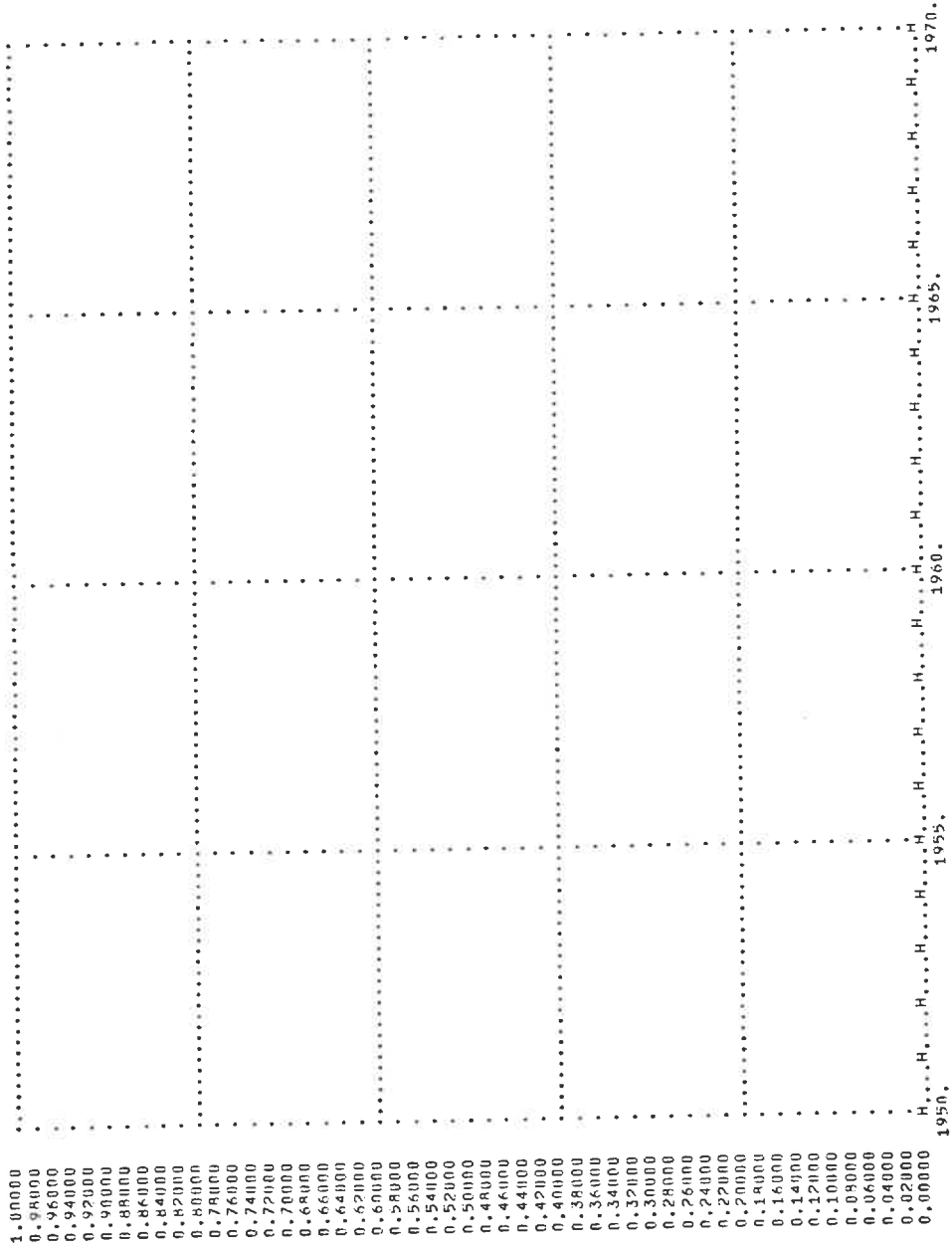
PLDT OF GOVERNMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

JAPAN



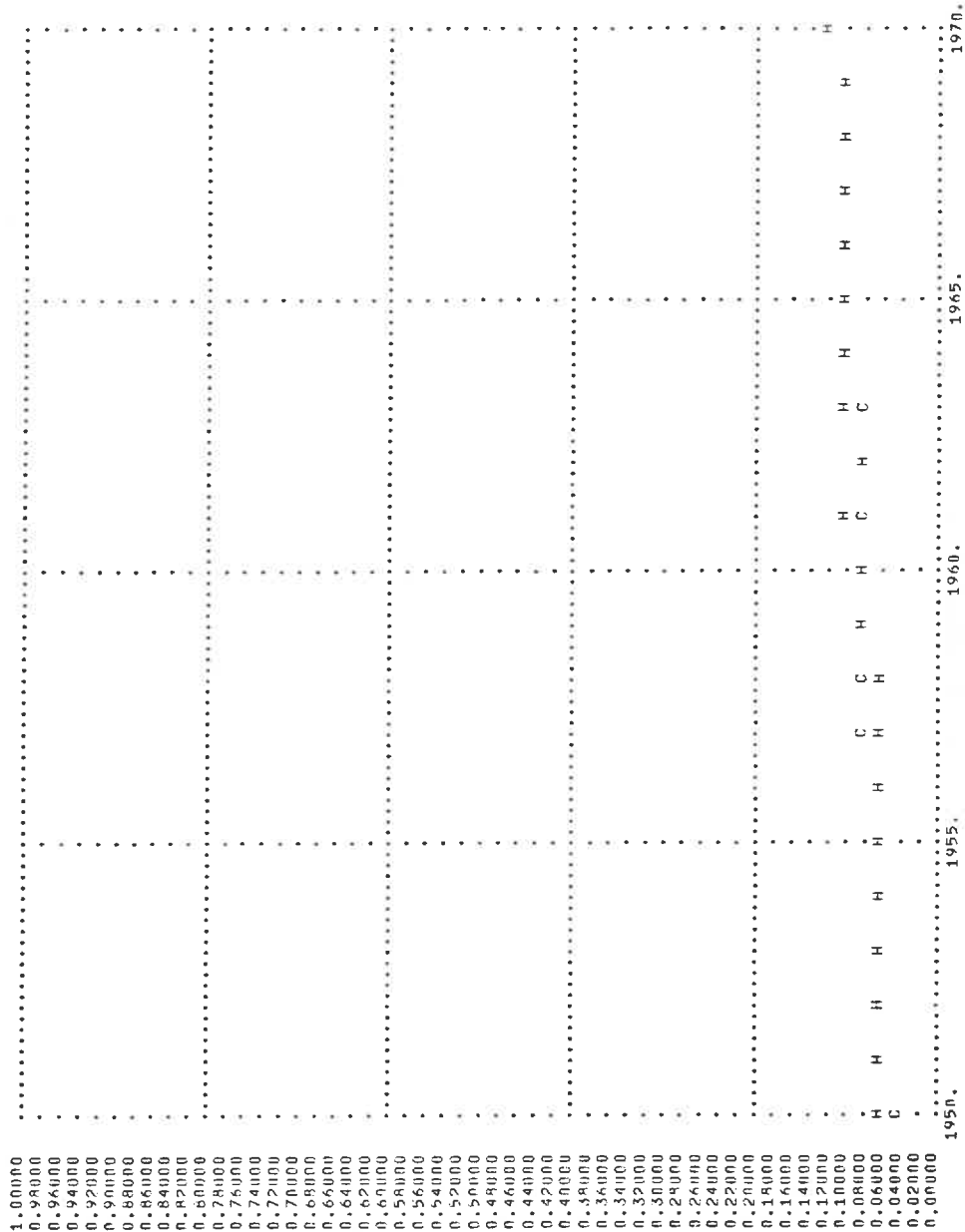
PLOT OF EXPORTS RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

JAPAN



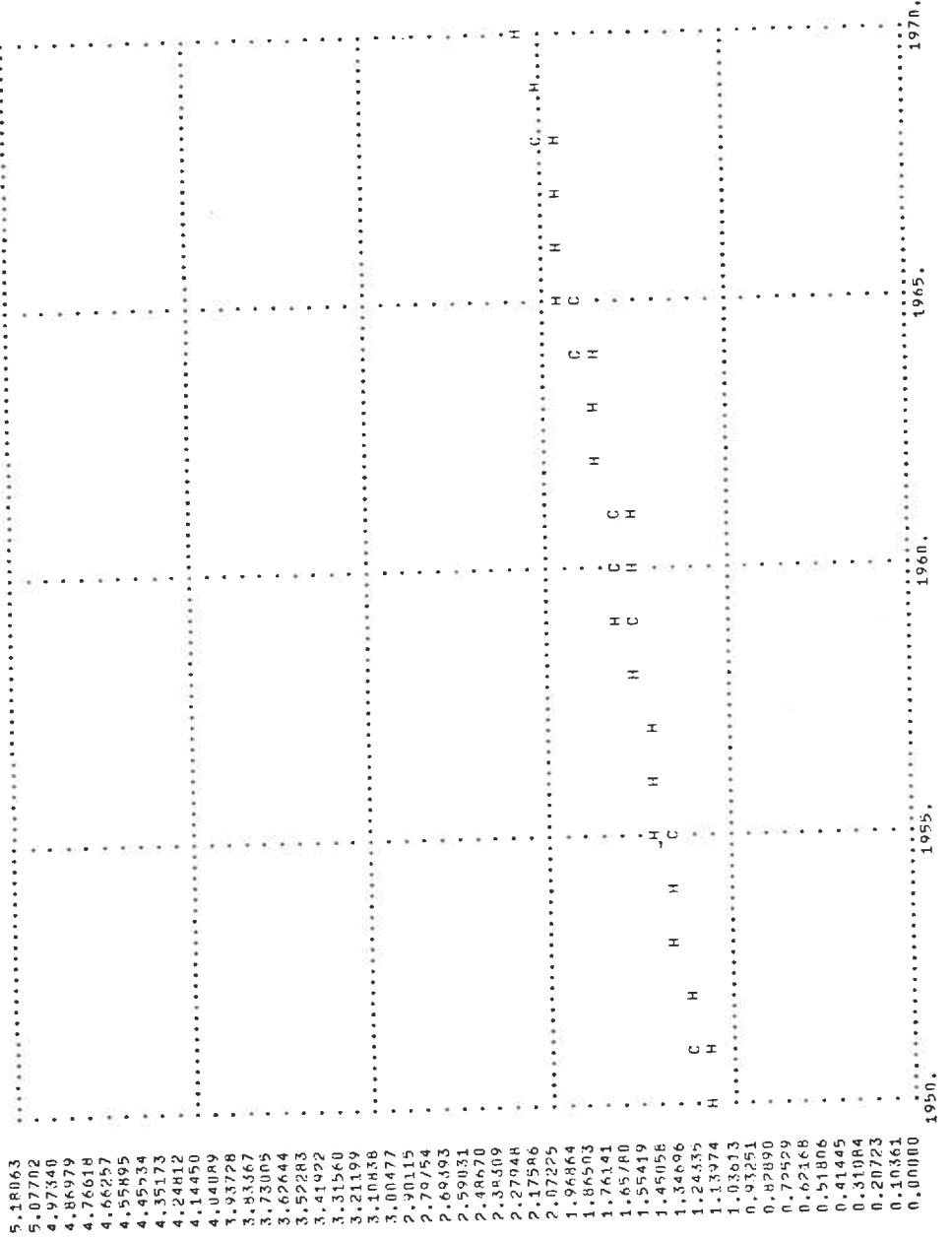
PLOT OF IMPORTS RATIO VS. TIME
 H--HISTORICAL
 C--CALCULATED

JAPAN



..... PLOT OF CAPITAL STOCK RATIO VS. TIME
..... H-HISTORICAL
..... C-CALCULATED

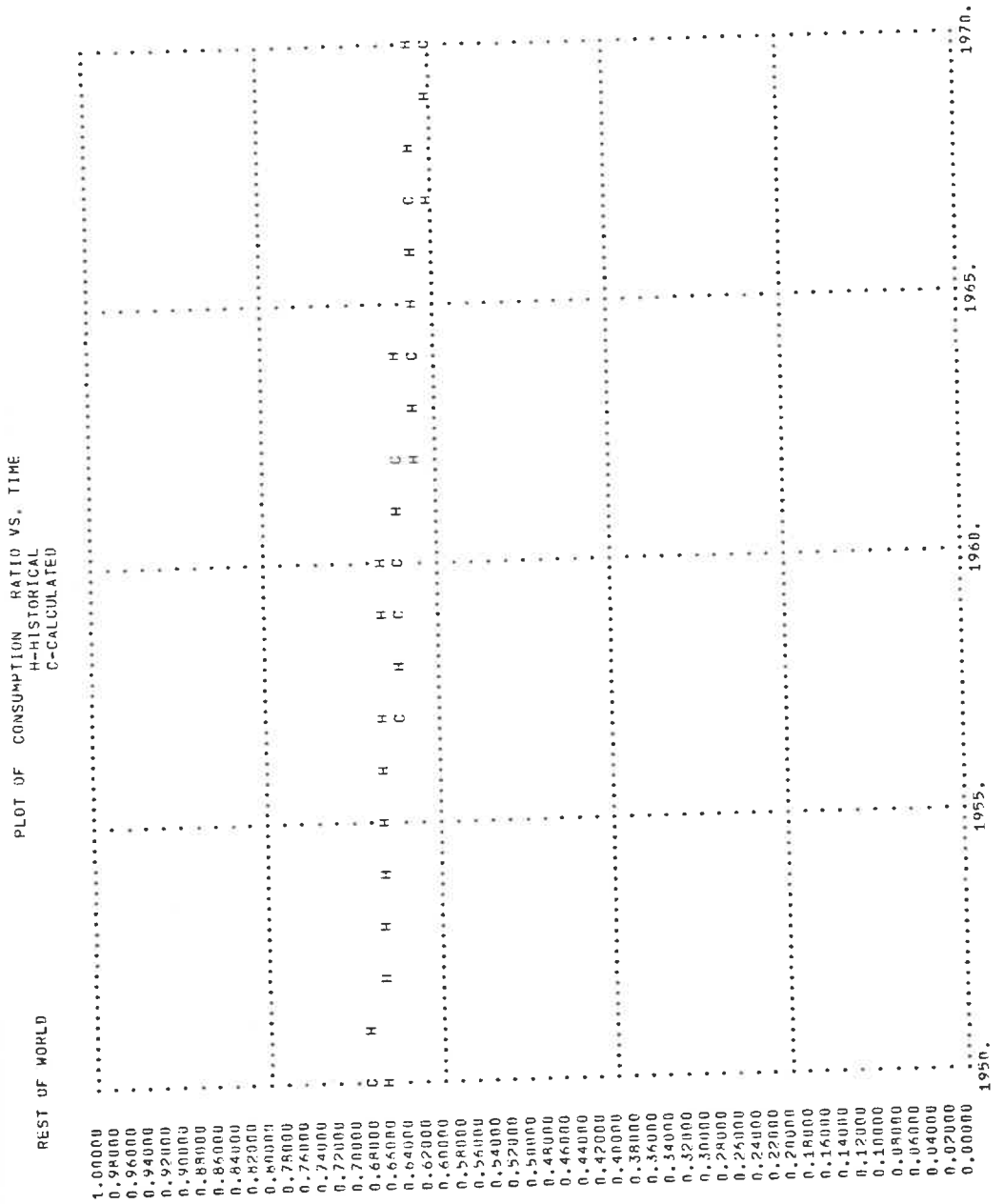
JAPAN



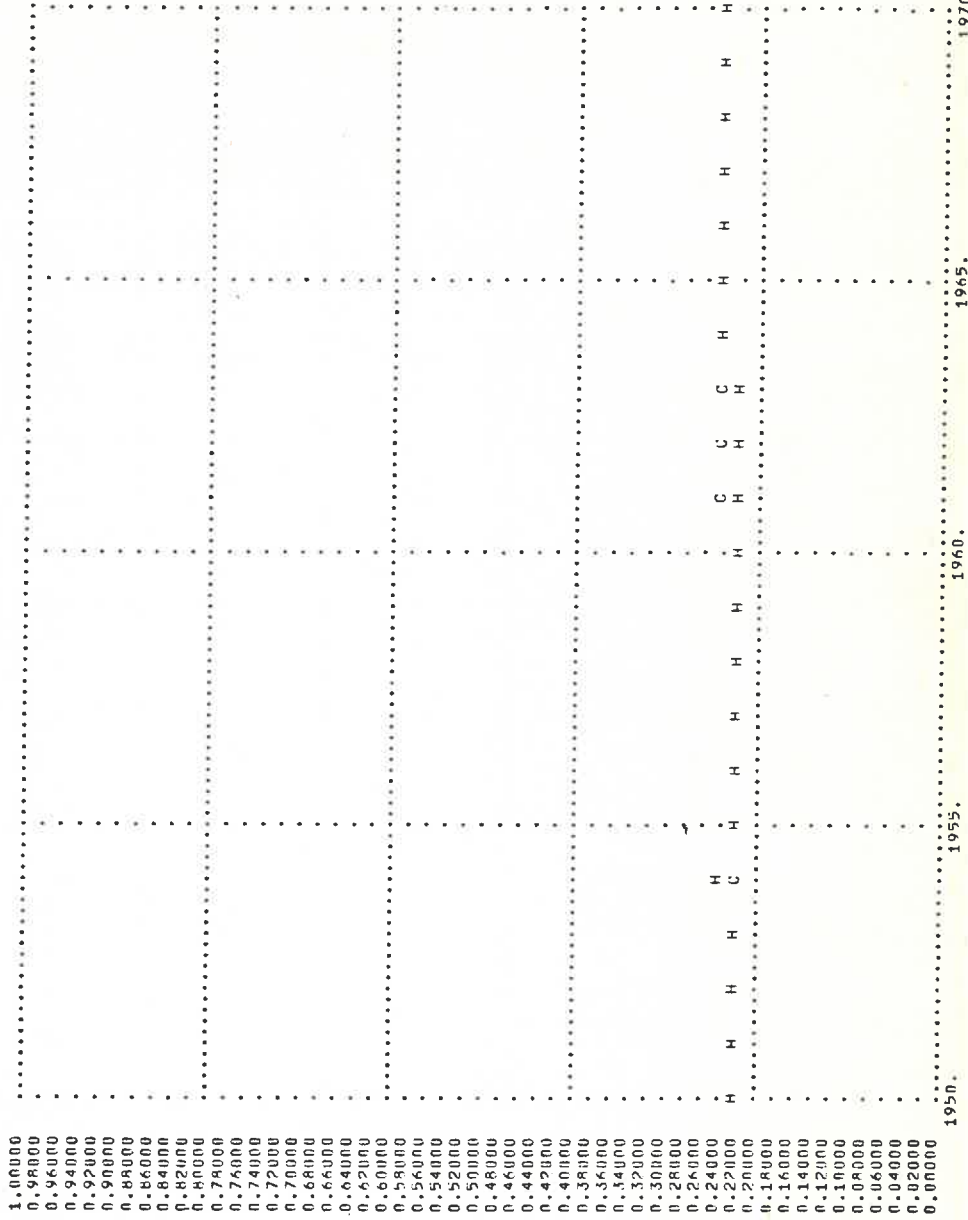
REST OF WORLD
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.6750 | 0.6814 | 0.2230 | 0.2228 | 0.1110 | 0.1091 |
| 1951. | 0.6820 | 0.6780 | 0.2260 | 0.2242 | 0.1150 | 0.1101 |
| 1952. | 0.6670 | 0.6746 | 0.2290 | 0.2257 | 0.1150 | 0.1111 |
| 1953. | 0.6600 | 0.6712 | 0.2320 | 0.2271 | 0.1200 | 0.1121 |
| 1954. | 0.6700 | 0.6678 | 0.2350 | 0.2285 | 0.1160 | 0.1132 |
| 1955. | 0.6600 | 0.6644 | 0.2277 | 0.2300 | 0.1140 | 0.1142 |
| 1956. | 0.6650 | 0.6610 | 0.2280 | 0.2314 | 0.1150 | 0.1152 |
| 1957. | 0.6640 | 0.6576 | 0.2300 | 0.2329 | 0.1140 | 0.1162 |
| 1958. | 0.6554 | 0.6542 | 0.2270 | 0.2343 | 0.1140 | 0.1172 |
| 1959. | 0.6620 | 0.6506 | 0.2290 | 0.2357 | 0.1110 | 0.1182 |
| 1960. | 0.6540 | 0.6474 | 0.2350 | 0.2372 | 0.1130 | 0.1182 |
| 1961. | 0.6430 | 0.6440 | 0.2290 | 0.2386 | 0.1140 | 0.1192 |
| 1962. | 0.6360 | 0.6406 | 0.2220 | 0.2400 | 0.1140 | 0.1202 |
| 1963. | 0.6350 | 0.6372 | 0.2360 | 0.2415 | 0.1150 | 0.1212 |
| 1964. | 0.6410 | 0.6338 | 0.2500 | 0.2429 | 0.1140 | 0.1222 |
| 1965. | 0.6200 | 0.6304 | 0.2560 | 0.2443 | 0.1170 | 0.1232 |
| 1966. | 0.6240 | 0.6270 | 0.2580 | 0.2458 | 0.1220 | 0.1242 |
| 1967. | 0.6180 | 0.6236 | 0.2440 | 0.2472 | 0.1280 | 0.1252 |
| 1968. | 0.6200 | 0.6202 | 0.2490 | 0.2487 | 0.1330 | 0.1262 |
| 1969. | 0.6140 | 0.6168 | 0.2510 | 0.2501 | 0.1310 | 0.1282 |
| 1970. | 0.6190 | 0.6134 | 0.2570 | 0.2515 | 0.1380 | 0.1292 |

| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0039 | 0.0037 | 0.1970 | 0.1921 | 3.4489 | 3.5241 |
| 1951. | 0.0037 | 0.0037 | 0.2090 | 0.1959 | 3.5059 | 3.5048 |
| 1952. | 0.0038 | 0.0034 | 0.2010 | 0.1937 | 3.4921 | 3.4934 |
| 1953. | 0.0037 | 0.0038 | 0.1960 | 0.1975 | 3.5377 | 3.4781 |
| 1954. | 0.0038 | 0.0038 | 0.1933 | 0.1933 | 3.4224 | 3.4628 |
| 1955. | 0.0039 | 0.0039 | 0.2160 | 0.2011 | 3.4269 | 3.4474 |
| 1956. | 0.0040 | 0.0039 | 0.1920 | 0.2029 | 3.4349 | 3.4321 |
| 1957. | 0.0037 | 0.0040 | 0.1970 | 0.2047 | 3.5076 | 3.4167 |
| 1958. | 0.0040 | 0.0040 | 0.1900 | 0.2084 | 3.4238 | 3.4014 |
| 1959. | 0.0041 | 0.0041 | 0.1970 | 0.2042 | 3.3671 | 3.3861 |
| 1960. | 0.0042 | 0.0041 | 0.2120 | 0.2100 | 3.4020 | 3.3707 |
| 1961. | 0.0045 | 0.0041 | 0.1990 | 0.2118 | 3.4955 | 3.3554 |
| 1962. | 0.0042 | 0.0042 | 0.1920 | 0.2136 | 3.4032 | 3.3400 |
| 1963. | 0.0045 | 0.0042 | 0.2090 | 0.2154 | 3.3029 | 3.3249 |
| 1964. | 0.0043 | 0.0043 | 0.2310 | 0.2172 | 3.2281 | 3.3094 |
| 1965. | 0.0040 | 0.0043 | 0.2300 | 0.2189 | 3.2579 | 3.2940 |
| 1966. | 0.0042 | 0.0044 | 0.2140 | 0.2207 | 3.2786 | 3.2787 |
| 1967. | 0.0039 | 0.0044 | 0.2265 | 0.2225 | 3.2988 | 3.2633 |
| 1968. | 0.0046 | 0.0045 | 0.2090 | 0.2243 | 3.2456 | 3.2480 |
| 1969. | 0.0048 | 0.0045 | 0.2370 | 0.2261 | 3.1865 | 3.2327 |
| 1970. | 0.0048 | 0.0045 | 0.2520 | 0.2279 | 3.1978 | 3.2173 |

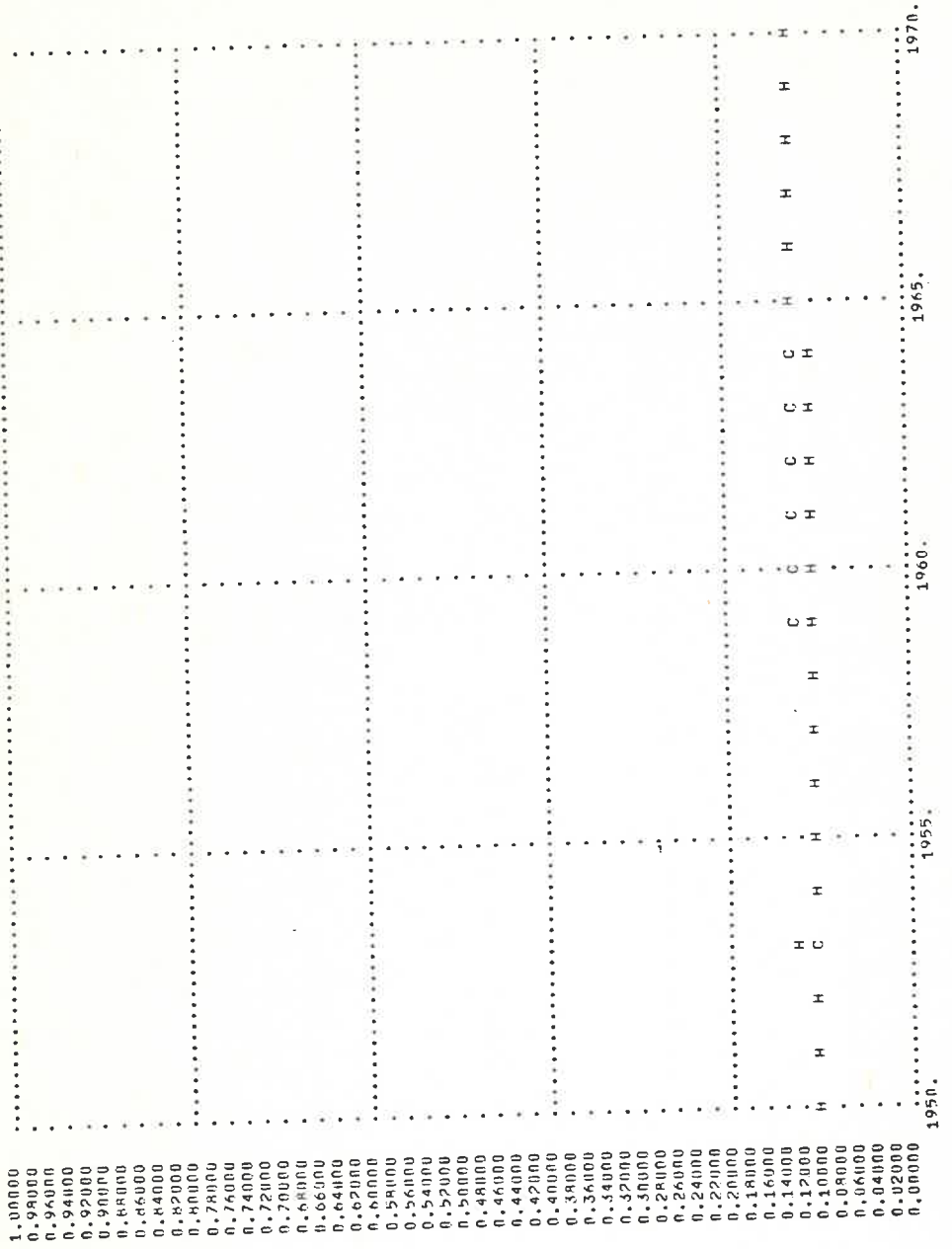


REST OF WORLD
PLOT OF INVESTMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

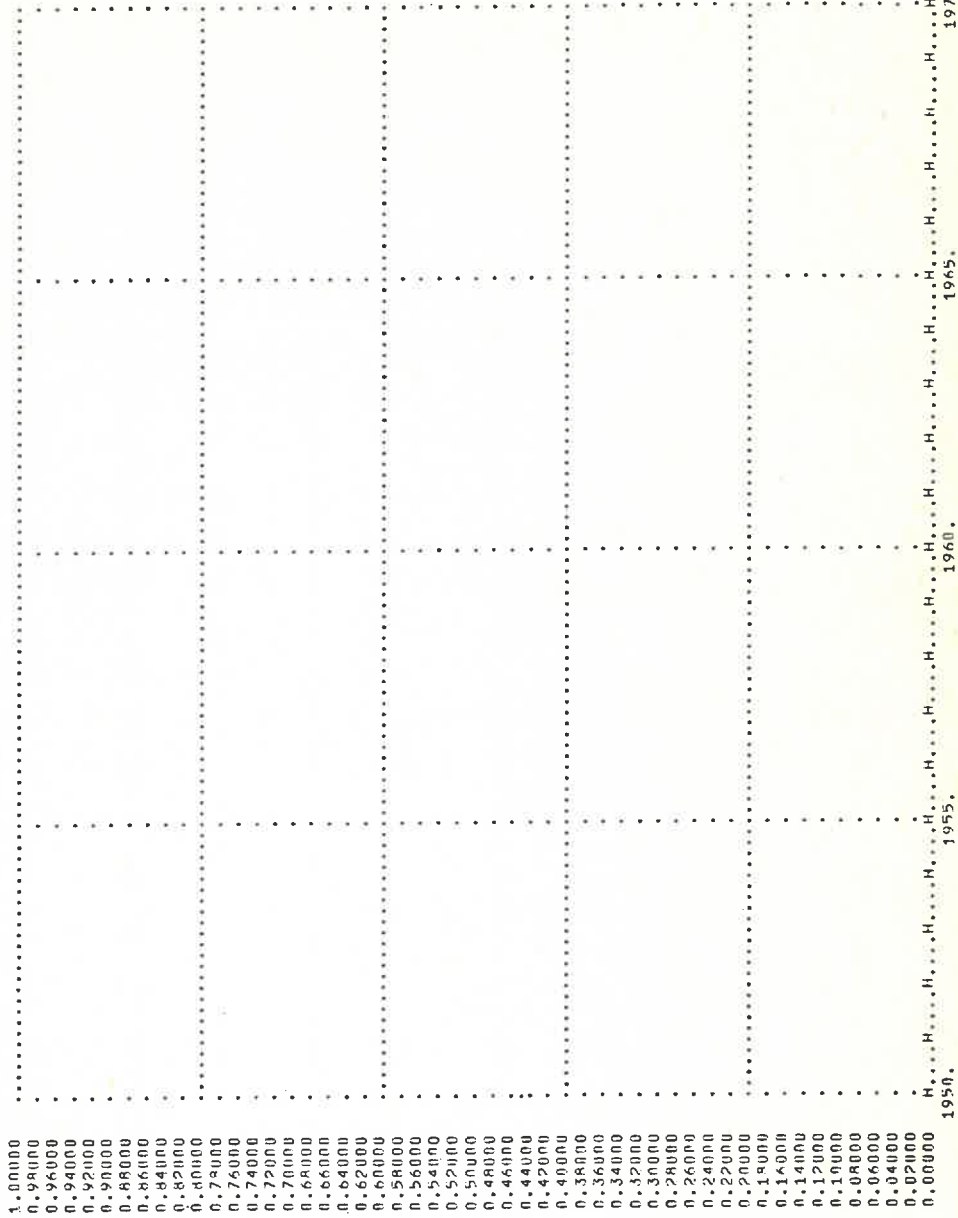


PLOT OF GOVERNMENT RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

REST OF WORLD

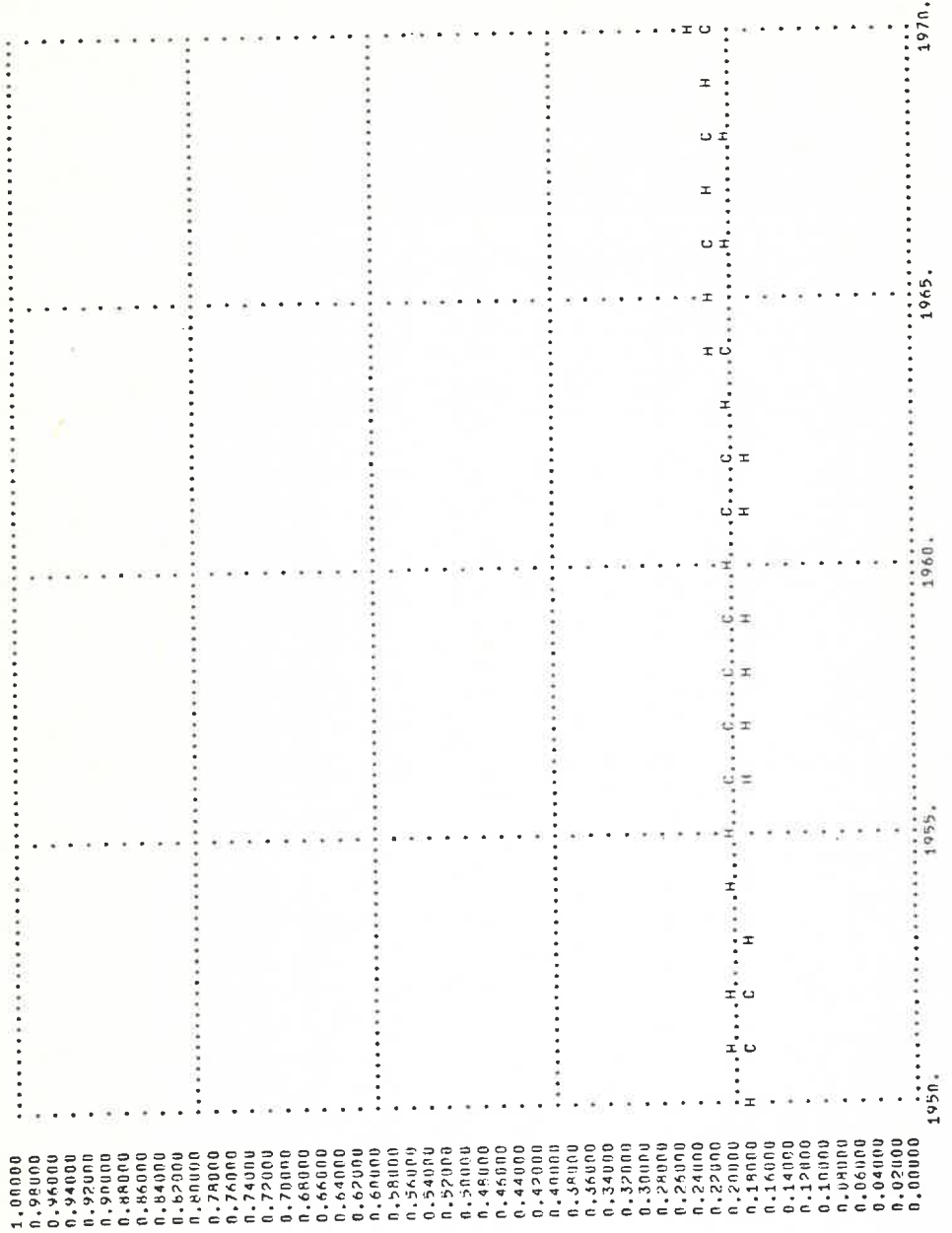


REST OF WORLD
PLOT OF EXPORTS RATIO VS. TIME
H-HISTORICAL
C-CALCULATED



PLOT OF IMPURTS RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

REST OF WORLD



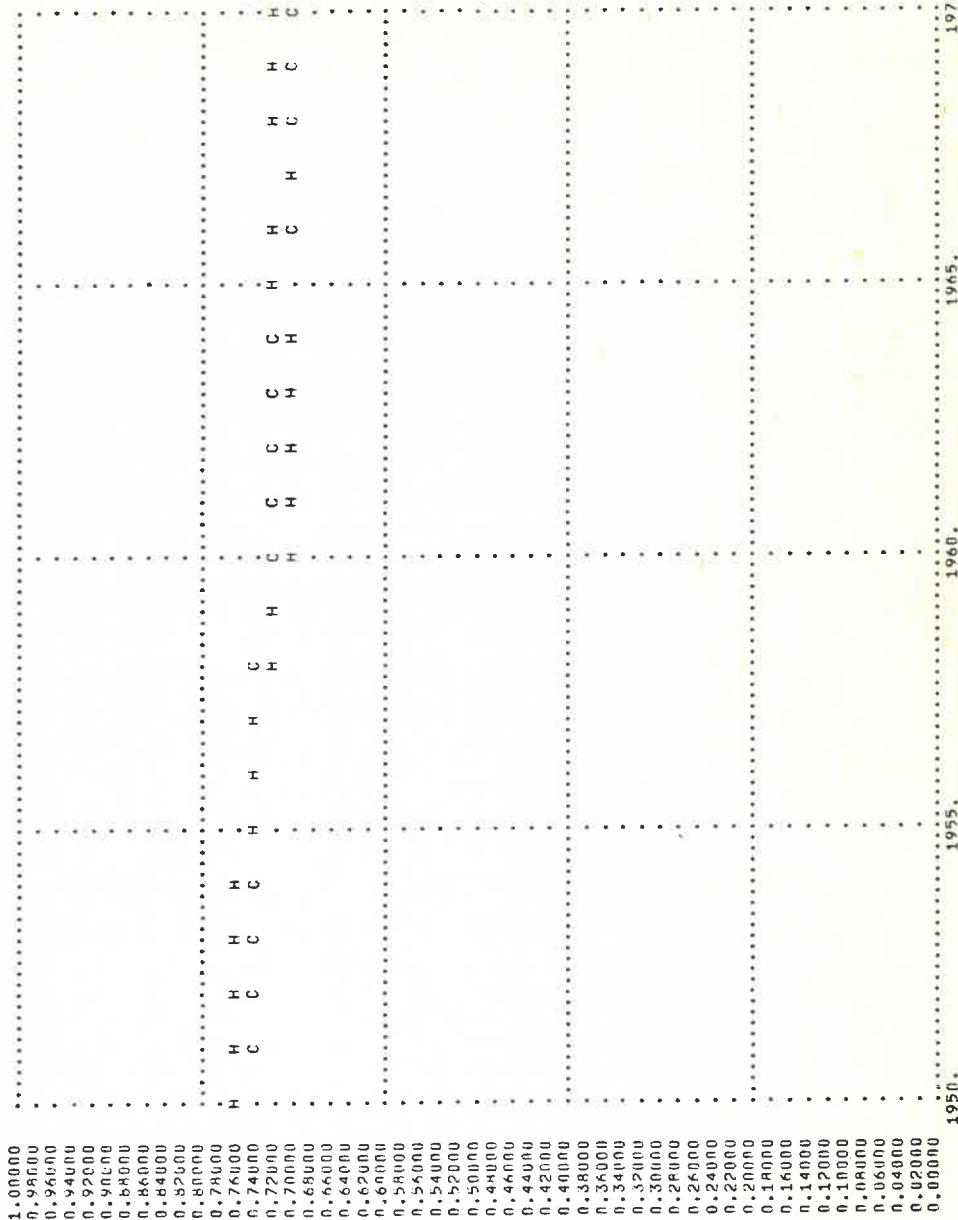
CENTRAL PLANNED
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.7620 | 0.7605 | 0.1430 | 0.1527 | 0.0880 | 0.0807 |
| 1951. | 0.7620 | 0.7577 | 0.1430 | 0.1541 | 0.0880 | 0.0815 |
| 1952. | 0.7620 | 0.7549 | 0.1430 | 0.1555 | 0.0880 | 0.0823 |
| 1953. | 0.7620 | 0.7521 | 0.1430 | 0.1569 | 0.0880 | 0.0831 |
| 1954. | 0.7600 | 0.7493 | 0.1480 | 0.1592 | 0.0840 | 0.0839 |
| 1955. | 0.7570 | 0.7465 | 0.1520 | 0.1596 | 0.0800 | 0.0847 |
| 1956. | 0.7440 | 0.7436 | 0.1670 | 0.1610 | 0.0855 | 0.0855 |
| 1957. | 0.7440 | 0.7408 | 0.1670 | 0.1624 | 0.0780 | 0.0863 |
| 1958. | 0.7310 | 0.7352 | 0.1830 | 0.1638 | 0.0770 | 0.0871 |
| 1959. | 0.7310 | 0.7380 | 0.1860 | 0.1651 | 0.0810 | 0.0879 |
| 1960. | 0.7210 | 0.7352 | 0.1900 | 0.1665 | 0.0840 | 0.0887 |
| 1961. | 0.7140 | 0.7296 | 0.1850 | 0.1679 | 0.0880 | 0.0895 |
| 1962. | 0.7080 | 0.7267 | 0.1900 | 0.1693 | 0.0890 | 0.0903 |
| 1963. | 0.7120 | 0.7239 | 0.1800 | 0.1707 | 0.0940 | 0.0911 |
| 1964. | 0.7140 | 0.7239 | 0.1790 | 0.1721 | 0.0970 | 0.0927 |
| 1965. | 0.7230 | 0.7183 | 0.1670 | 0.1734 | 0.0950 | 0.0935 |
| 1966. | 0.7190 | 0.7155 | 0.1880 | 0.1748 | 0.0970 | 0.0942 |
| 1967. | 0.7160 | 0.7127 | 0.1880 | 0.1762 | 0.0970 | 0.0950 |
| 1968. | 0.7190 | 0.7099 | 0.1650 | 0.1776 | 0.0970 | 0.0950 |
| 1969. | 0.7190 | 0.7070 | 0.1650 | 0.1790 | 0.0970 | 0.0958 |
| 1970. | 0.7190 | 0.7042 | 0.1650 | 0.1803 | 0.0970 | 0.0966 |

| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0050 | 0.0051 | 0.0383 | 0.0390 | 1.8559 | 1.3923 |
| 1951. | 0.0049 | 0.0054 | 0.0358 | 0.0392 | 1.4691 | 1.4051 |
| 1952. | 0.0055 | 0.0057 | 0.0396 | 0.0393 | 1.4788 | 1.4178 |
| 1953. | 0.0061 | 0.0060 | 0.0442 | 0.0395 | 1.4766 | 1.4306 |
| 1954. | 0.0066 | 0.0063 | 0.0418 | 0.0396 | 1.4227 | 1.4454 |
| 1955. | 0.0065 | 0.0067 | 0.0373 | 0.0398 | 1.3689 | 1.4561 |
| 1956. | 0.0065 | 0.0070 | 0.0365 | 0.0399 | 1.3685 | 1.4689 |
| 1957. | 0.0070 | 0.0073 | 0.0372 | 0.0401 | 1.3766 | 1.4816 |
| 1958. | 0.0074 | 0.0076 | 0.0381 | 0.0403 | 1.3807 | 1.4944 |
| 1959. | 0.0085 | 0.0079 | 0.0410 | 0.0404 | 1.3507 | 1.5071 |
| 1960. | 0.0086 | 0.0082 | 0.0394 | 0.0406 | 1.4298 | 1.5199 |
| 1961. | 0.0090 | 0.0086 | 0.0407 | 0.0407 | 1.4762 | 1.5327 |
| 1962. | 0.0096 | 0.0089 | 0.0456 | 0.0409 | 1.5514 | 1.5454 |
| 1963. | 0.0099 | 0.0095 | 0.0466 | 0.0410 | 1.6293 | 1.5582 |
| 1964. | 0.0099 | 0.0095 | 0.0493 | 0.0412 | 1.6173 | 1.5709 |
| 1965. | 0.0099 | 0.0096 | 0.0424 | 0.0413 | 1.6590 | 1.5837 |
| 1966. | 0.0107 | 0.0101 | 0.0400 | 0.0415 | 1.6361 | 1.5965 |
| 1967. | 0.0101 | 0.0105 | 0.0385 | 0.0416 | 1.6272 | 1.6092 |
| 1968. | 0.0106 | 0.0108 | 0.0393 | 0.0418 | 1.6396 | 1.6220 |
| 1969. | 0.0108 | 0.0111 | 0.0409 | 0.0419 | 1.6347 | 1.6347 |
| 1970. | 0.0109 | 0.0114 | 0.0390 | 0.0421 | 1.6511 | 1.6475 |

PLOT OF CONSUMPTION RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

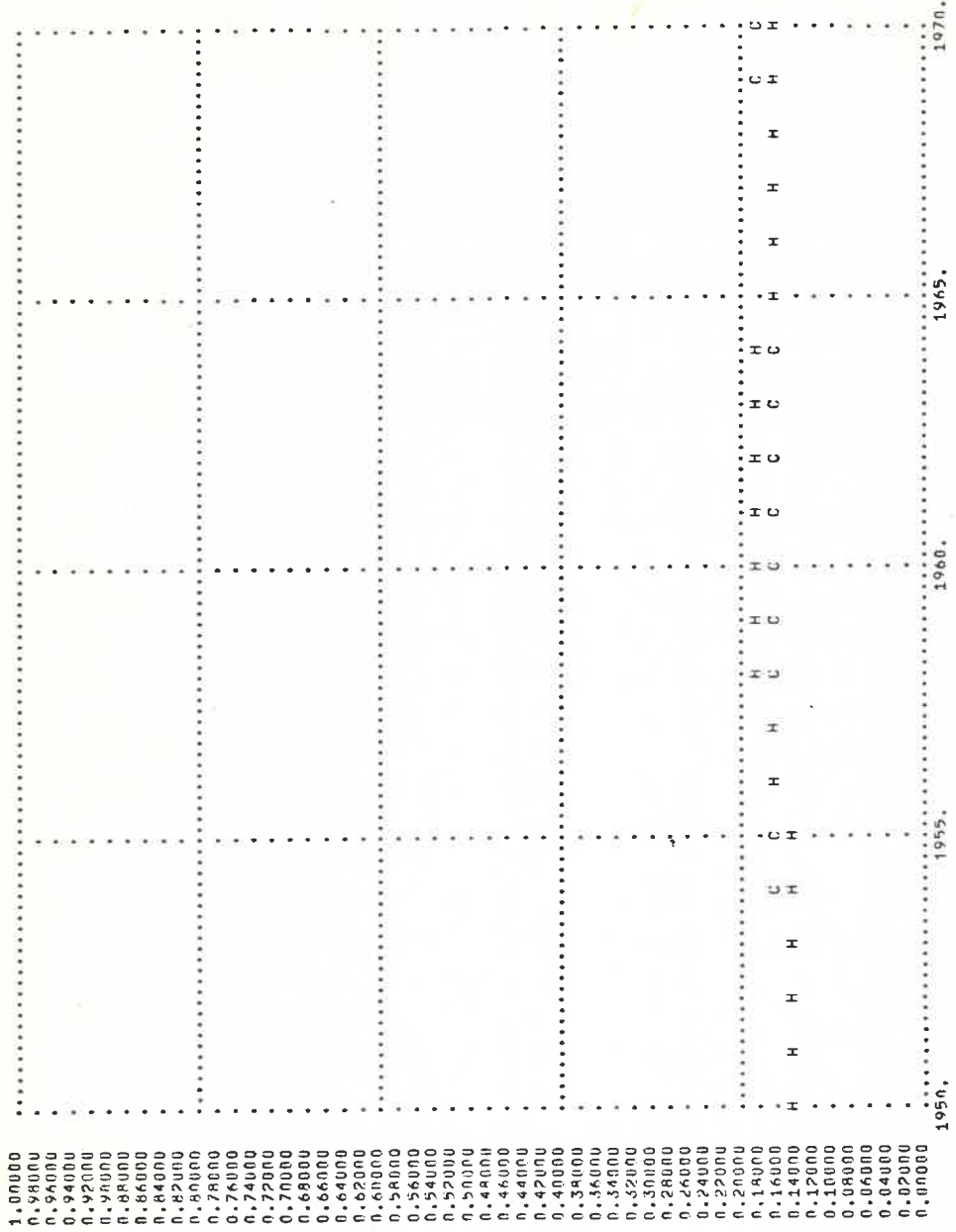
CENTRAL PLANNED



1950. 1955. 1960. 1965. 1970.

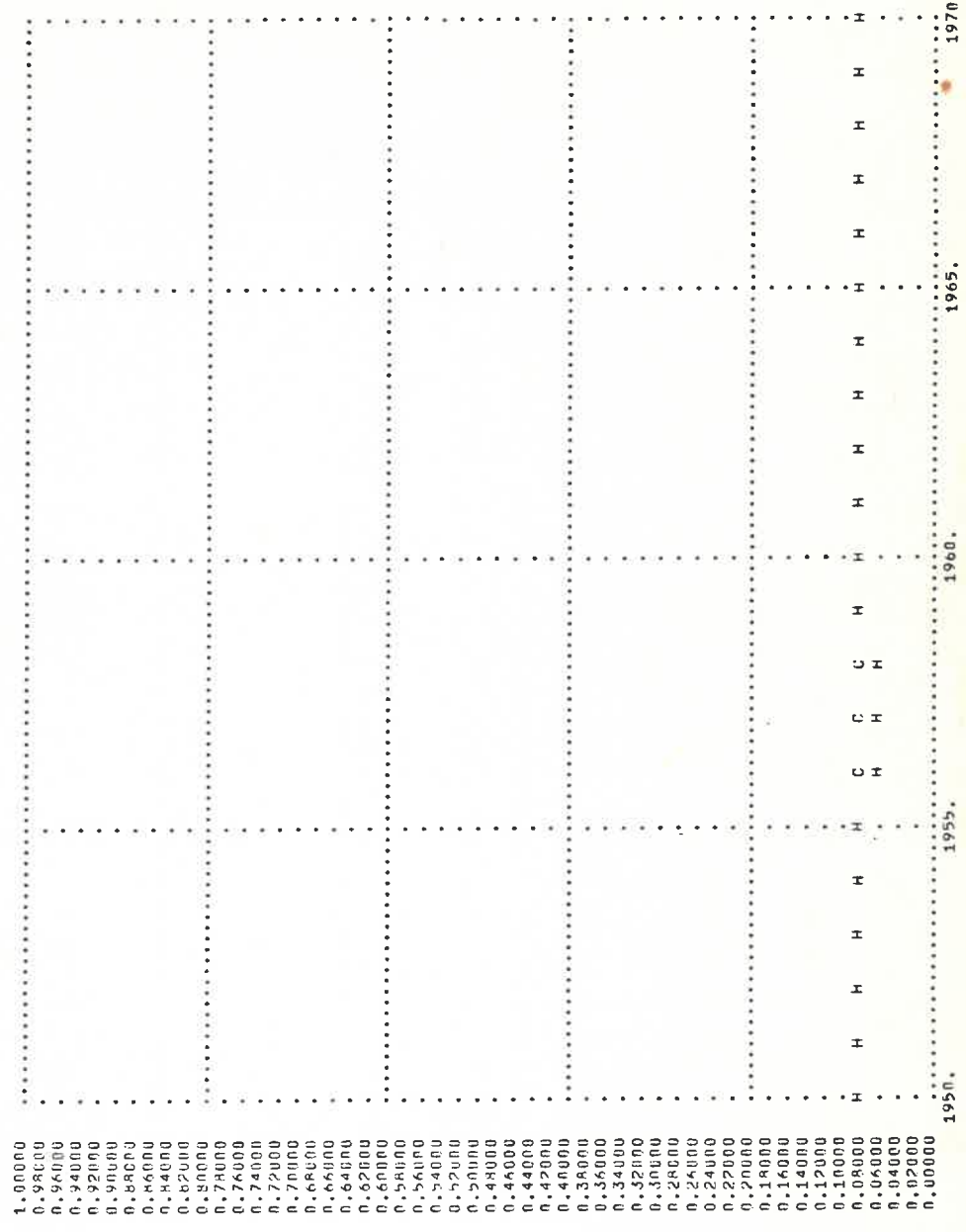
PLOT OF INVESTMENT RATIO VS. TIME
 H--HISTORICAL
 C--CALCULATED

CENTRAL PLANNED



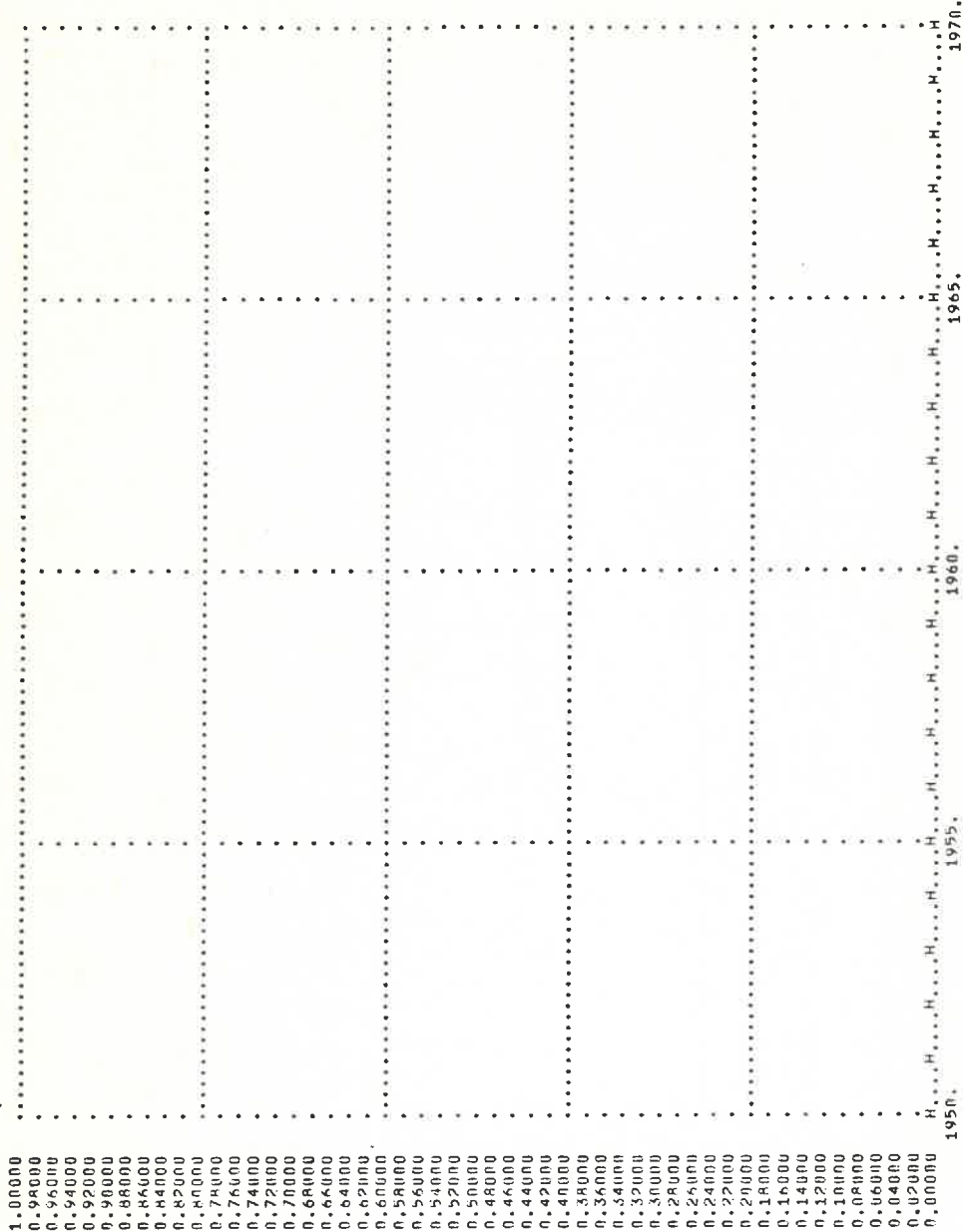
PLOT OF GOVERNMENT RATIO VS. TIME
H--HISTORICAL
C--CALCULATED

CENTRAL PLANNED



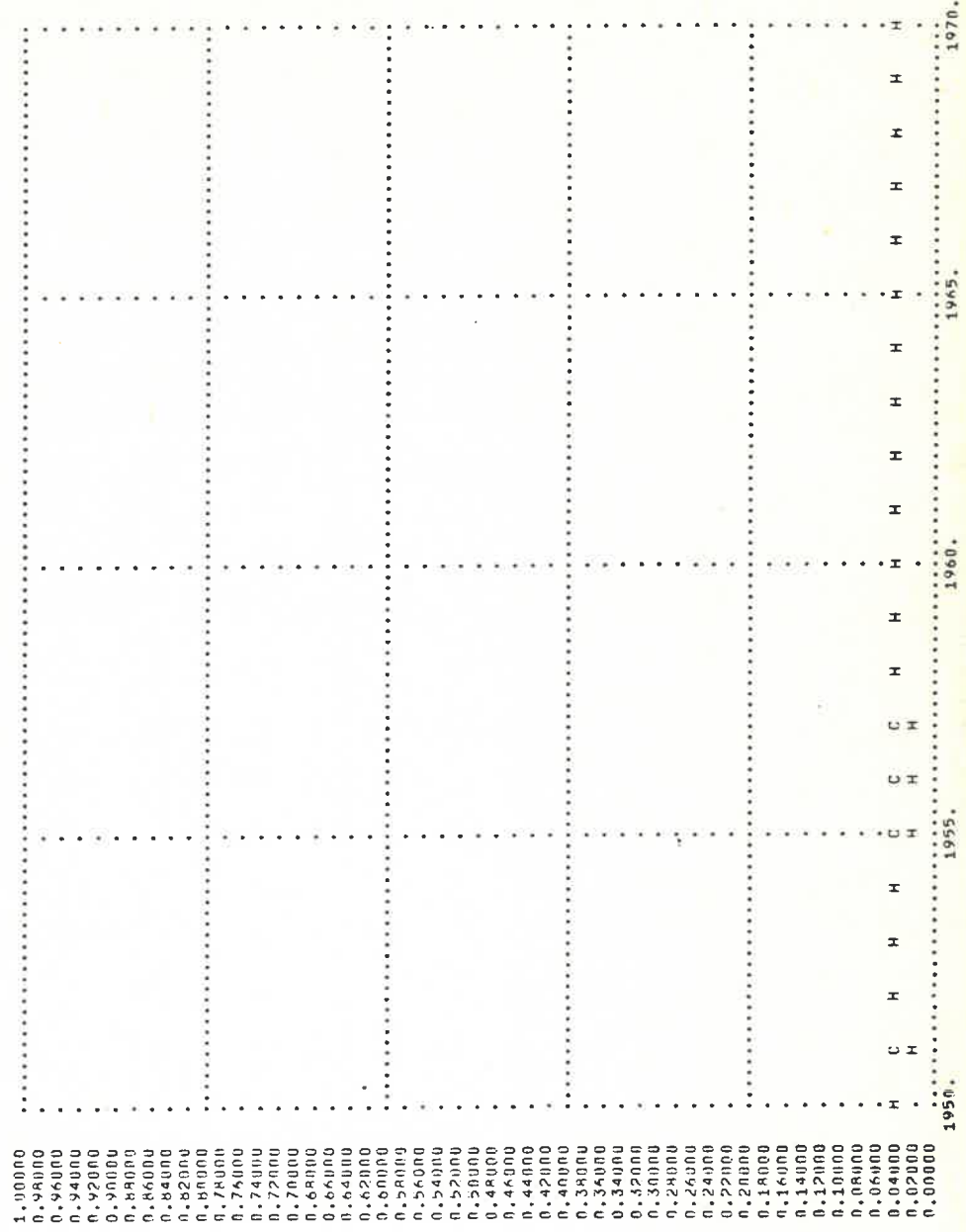
PLOT OF EXPORTS RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

CENTRAL PLANNED



PLOT OF IMPORTS RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

CENTRAL PLANNED



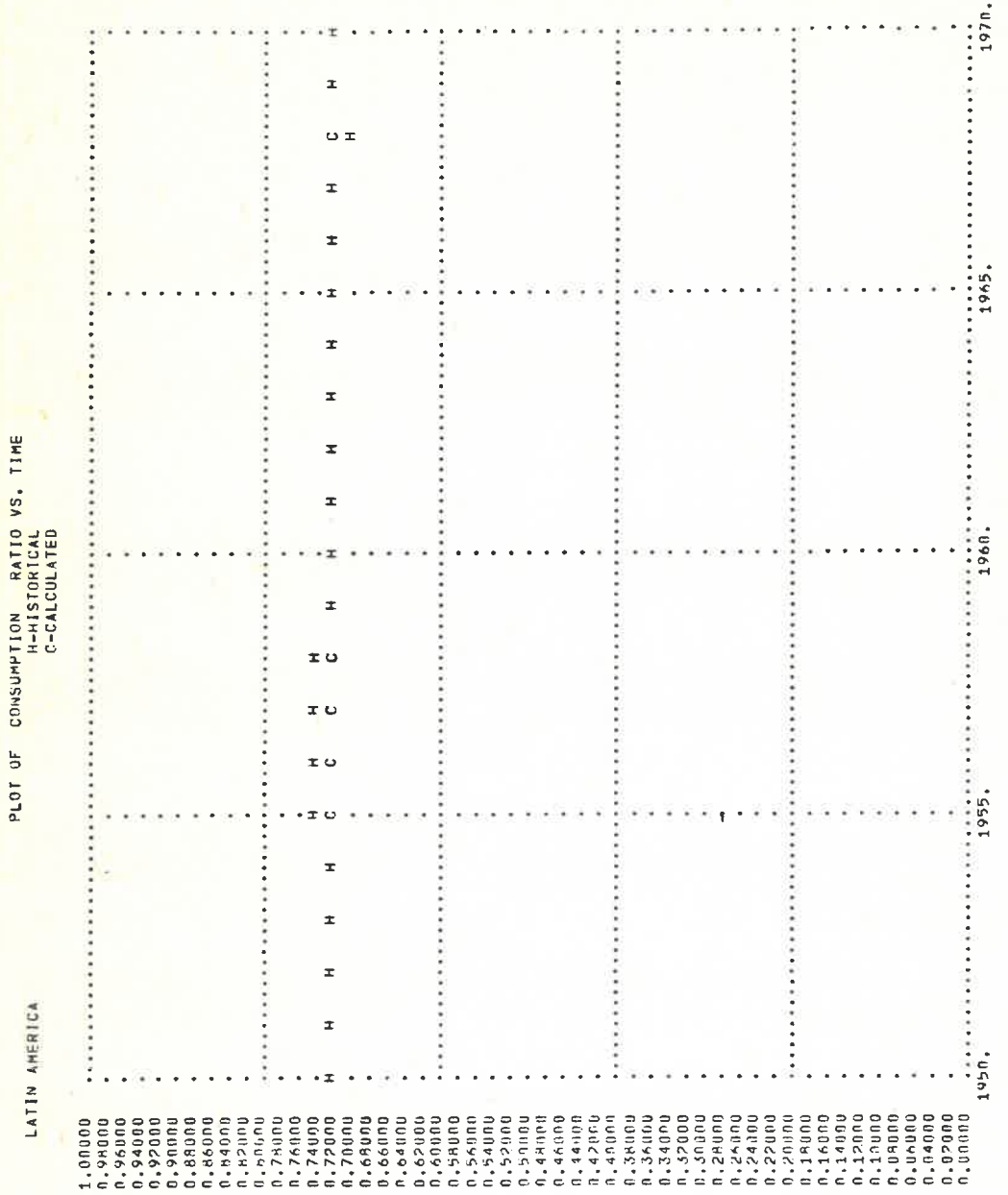
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 0.50000
 0.40000
 0.30000
 0.20000
 0.10000
 0.00000

1950. 1955. 1960. 1965. 1970.

LATIN AMERICA
TABLE OF SECTOR-OUTPUT RATIOS

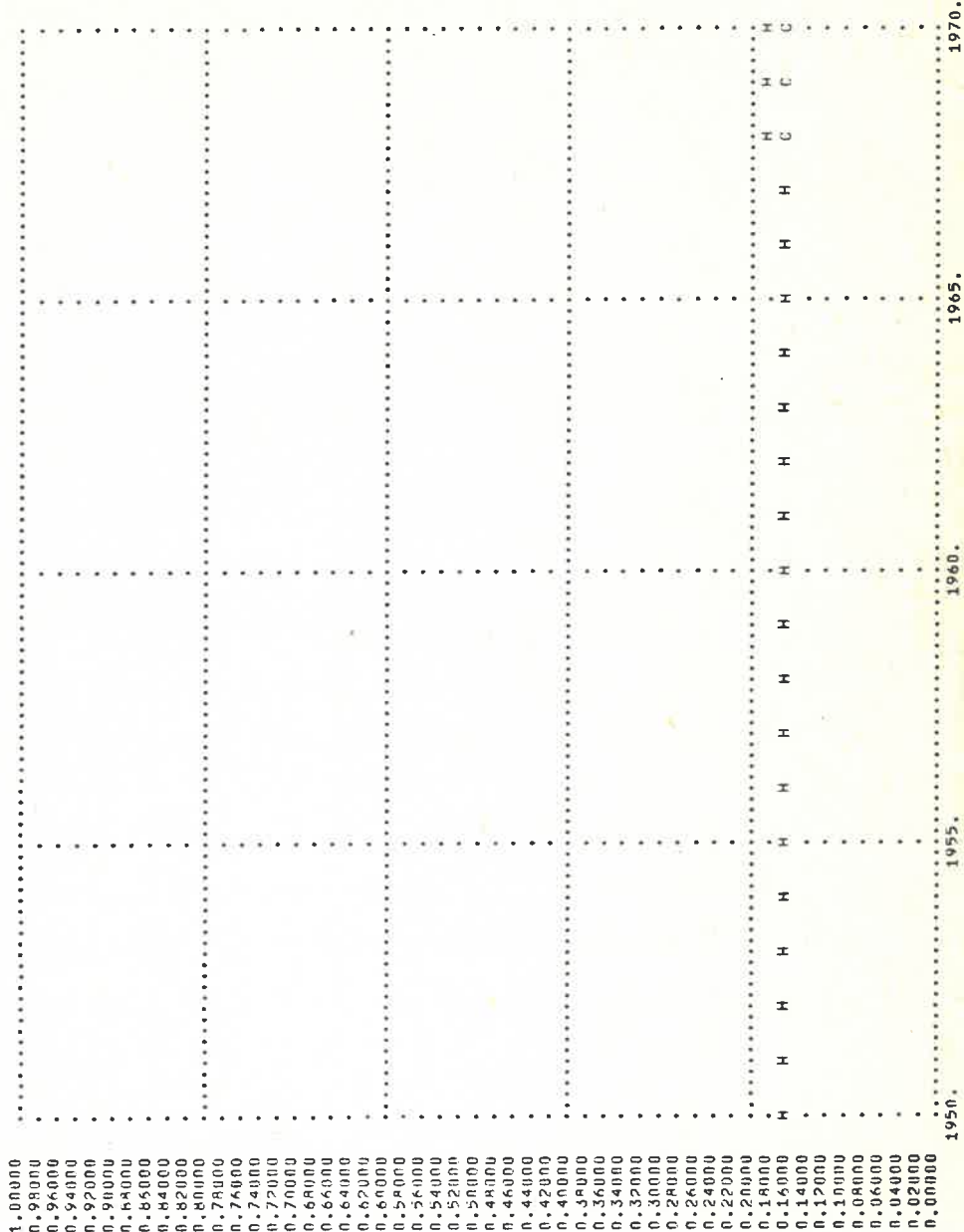
| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.7222 | 0.7347 | 0.1695 | 0.1651 | 0.1074 | 0.1113 |
| 1951. | 0.7222 | 0.7340 | 0.1695 | 0.1655 | 0.1074 | 0.1103 |
| 1952. | 0.7222 | 0.7333 | 0.1695 | 0.1659 | 0.1074 | 0.1093 |
| 1953. | 0.7222 | 0.7327 | 0.1695 | 0.1662 | 0.1074 | 0.1082 |
| 1954. | 0.7351 | 0.7320 | 0.1695 | 0.1666 | 0.1084 | 0.1072 |
| 1955. | 0.7453 | 0.7314 | 0.1691 | 0.1670 | 0.1093 | 0.1062 |
| 1956. | 0.7470 | 0.7307 | 0.1637 | 0.1673 | 0.1056 | 0.1052 |
| 1957. | 0.7475 | 0.7361 | 0.1636 | 0.1677 | 0.1065 | 0.1042 |
| 1958. | 0.7445 | 0.7294 | 0.1586 | 0.1681 | 0.1024 | 0.1032 |
| 1959. | 0.7368 | 0.7288 | 0.1642 | 0.1685 | 0.1056 | 0.1022 |
| 1960. | 0.7260 | 0.7281 | 0.1720 | 0.1698 | 0.1013 | 0.1012 |
| 1961. | 0.7235 | 0.7275 | 0.1744 | 0.1692 | 0.1003 | 0.1001 |
| 1962. | 0.7208 | 0.7268 | 0.1698 | 0.1696 | 0.0990 | 0.0991 |
| 1963. | 0.7193 | 0.7262 | 0.1591 | 0.1700 | 0.1019 | 0.0941 |
| 1964. | 0.7255 | 0.7255 | 0.1658 | 0.1703 | 0.1005 | 0.0971 |
| 1965. | 0.7243 | 0.7249 | 0.1585 | 0.1707 | 0.0958 | 0.0961 |
| 1966. | 0.7233 | 0.7242 | 0.1637 | 0.1711 | 0.0976 | 0.0951 |
| 1967. | 0.7248 | 0.7235 | 0.1666 | 0.1714 | 0.0954 | 0.0941 |
| 1968. | 0.7153 | 0.7229 | 0.1533 | 0.1718 | 0.0902 | 0.0930 |
| 1969. | 0.7196 | 0.7222 | 0.1818 | 0.1722 | 0.0872 | 0.0920 |
| 1970. | 0.7201 | 0.7216 | 0.1841 | 0.1726 | 0.0876 | 0.0910 |

| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0051 | 0.0044 | 0.1112 | 0.1104 | 2.7738 | 2.7084 |
| 1951. | 0.0050 | 0.0045 | 0.1122 | 0.1122 | 2.7078 | 2.6786 |
| 1952. | 0.0049 | 0.0047 | 0.1112 | 0.1141 | 2.7016 | 2.6487 |
| 1953. | 0.0049 | 0.0049 | 0.1112 | 0.1160 | 2.6990 | 2.6189 |
| 1954. | 0.0049 | 0.0050 | 0.1179 | 0.1179 | 2.5732 | 2.5891 |
| 1955. | 0.0047 | 0.0052 | 0.1327 | 0.1198 | 2.5123 | 2.5592 |
| 1956. | 0.0046 | 0.0054 | 0.1205 | 0.1217 | 2.4995 | 2.5294 |
| 1957. | 0.0046 | 0.0055 | 0.1205 | 0.1235 | 2.4895 | 2.4895 |
| 1958. | 0.0047 | 0.0057 | 0.1206 | 0.1294 | 2.3883 | 2.4697 |
| 1959. | 0.0048 | 0.0058 | 0.1124 | 0.1273 | 2.4188 | 2.4399 |
| 1960. | 0.0069 | 0.0058 | 0.1473 | 0.1292 | 2.3695 | 2.4100 |
| 1961. | 0.0069 | 0.0062 | 0.1441 | 0.1311 | 2.3142 | 2.3802 |
| 1962. | 0.0071 | 0.0063 | 0.1410 | 0.1330 | 2.3226 | 2.3503 |
| 1963. | 0.0071 | 0.0065 | 0.1345 | 0.1349 | 2.3533 | 2.3205 |
| 1964. | 0.0067 | 0.0067 | 0.1366 | 0.1367 | 2.2642 | 2.2907 |
| 1965. | 0.0072 | 0.0068 | 0.1366 | 0.1366 | 2.2410 | 2.2608 |
| 1966. | 0.0070 | 0.0070 | 0.1345 | 0.1366 | 2.2310 | 2.2310 |
| 1967. | 0.0069 | 0.0072 | 0.1348 | 0.1405 | 2.2376 | 2.2012 |
| 1968. | 0.0074 | 0.0072 | 0.1377 | 0.1424 | 2.2428 | 2.2012 |
| 1969. | 0.0074 | 0.0073 | 0.1493 | 0.1443 | 2.1713 | 2.1713 |
| 1970. | 0.0074 | 0.0075 | 0.1464 | 0.1462 | 2.1757 | 2.1415 |
| 1970. | 0.0074 | 0.0077 | 0.1473 | 0.1480 | 2.1577 | 2.1116 |



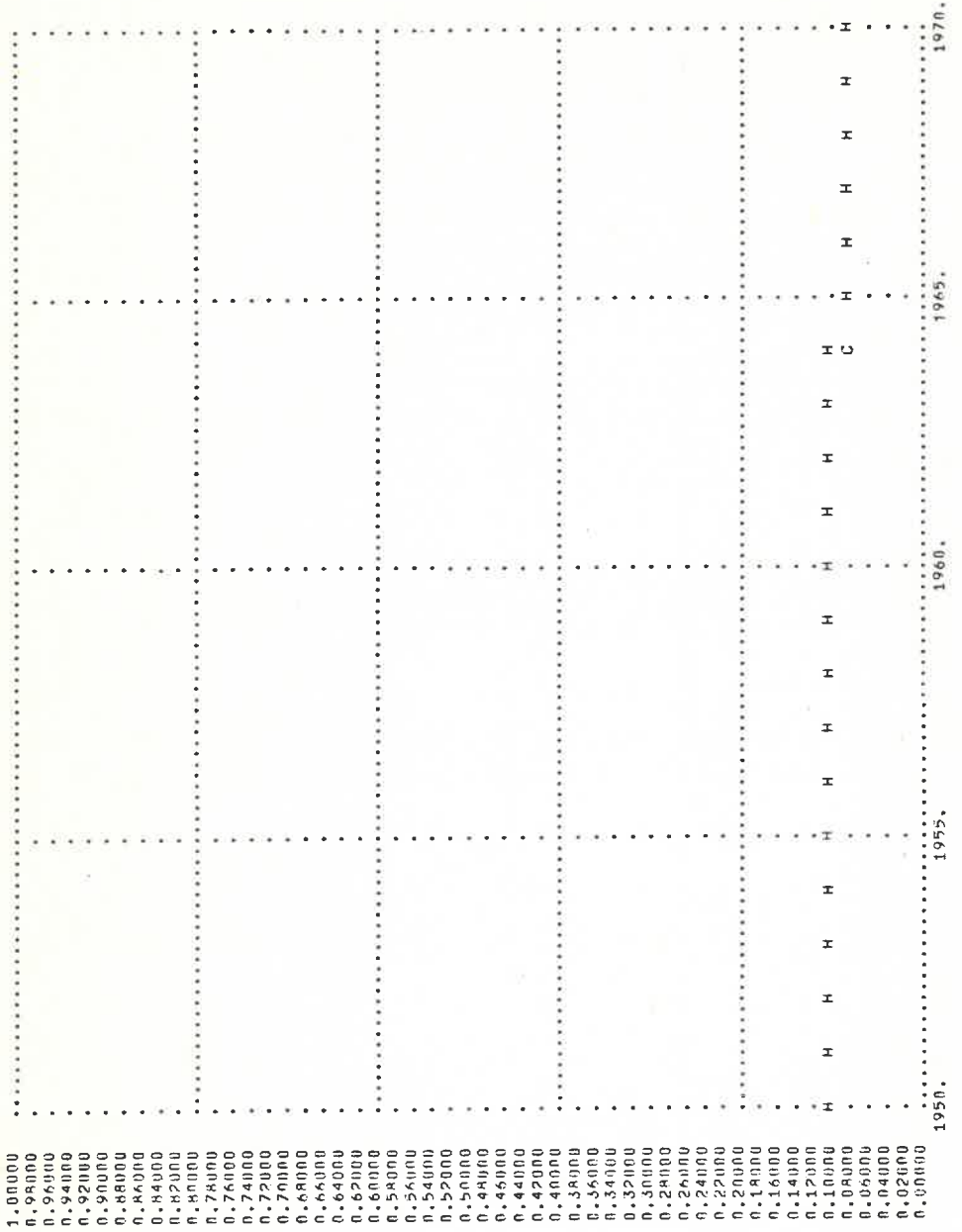
PLOT OF INVESTMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

LATIN AMERICA



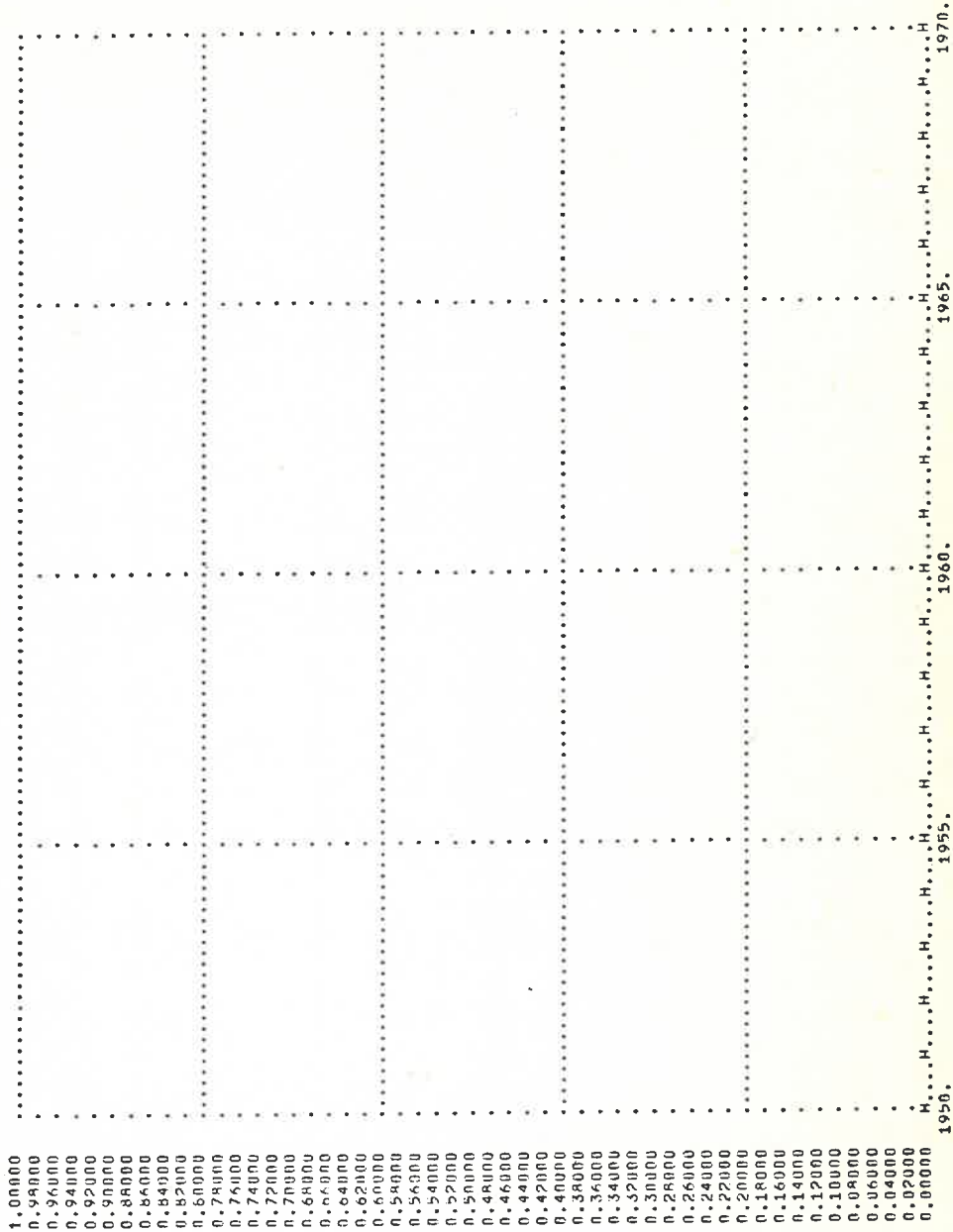
PLLOT OF GOVERNMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

LATIN AMERICA



PLLOT OF EXPORTS RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

LATIN AMERICA



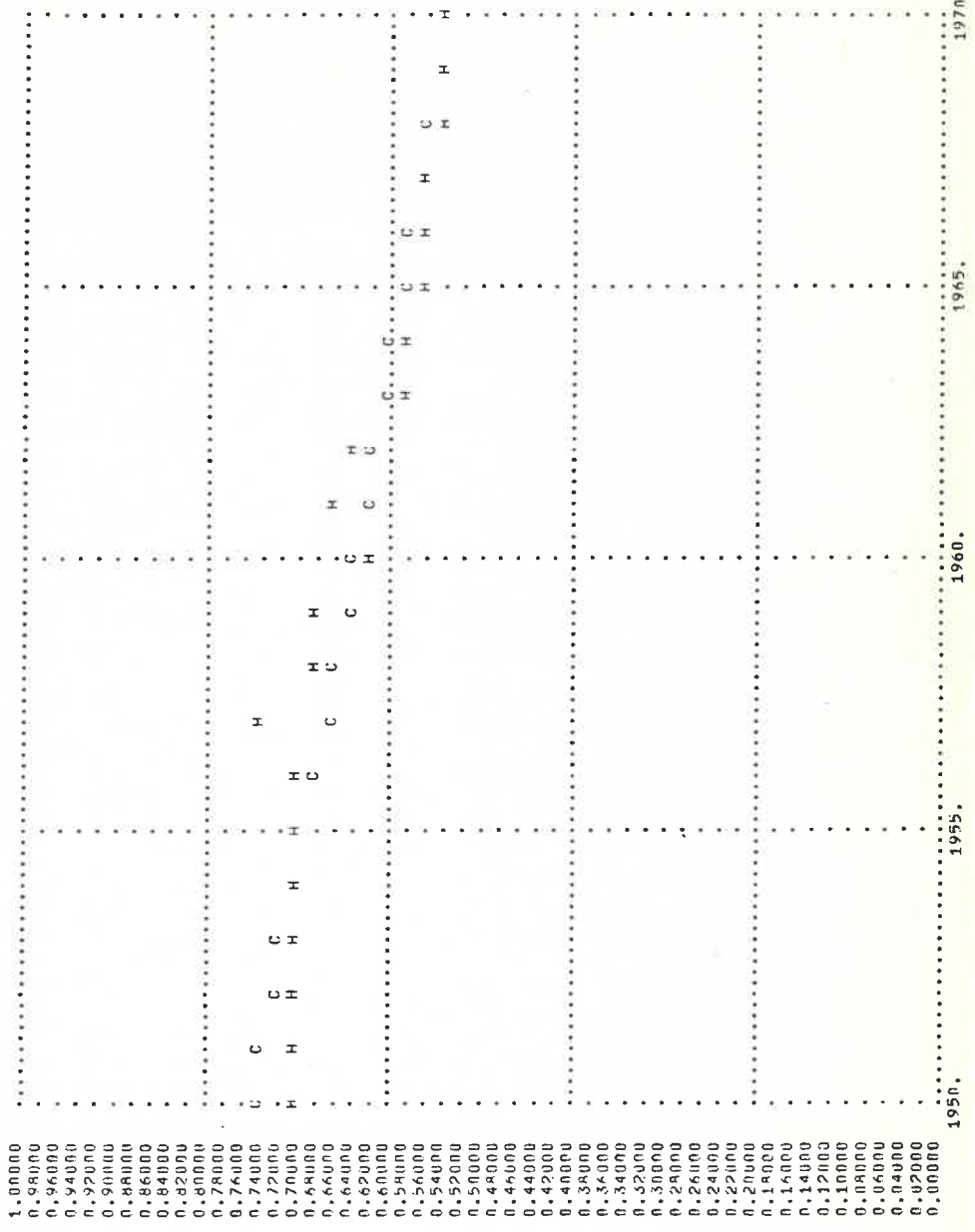
MIDDLE EAST
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.7120 | 0.7507 | 0.1430 | 0.1325 | 0.1080 | 0.0943 |
| 1951. | 0.7120 | 0.7402 | 0.1430 | 0.1361 | 0.1080 | 0.0988 |
| 1952. | 0.7120 | 0.7297 | 0.1430 | 0.1356 | 0.1080 | 0.1053 |
| 1953. | 0.7120 | 0.7192 | 0.1430 | 0.1372 | 0.1080 | 0.1078 |
| 1954. | 0.7120 | 0.7087 | 0.1430 | 0.1308 | 0.1080 | 0.1124 |
| 1955. | 0.7120 | 0.6982 | 0.1430 | 0.1404 | 0.1090 | 0.1169 |
| 1956. | 0.7060 | 0.6876 | 0.1420 | 0.1420 | 0.1200 | 0.1214 |
| 1957. | 0.7430 | 0.6771 | 0.1039 | 0.1436 | 0.1290 | 0.1259 |
| 1958. | 0.6870 | 0.6666 | 0.1350 | 0.1452 | 0.1320 | 0.1304 |
| 1959. | 0.6830 | 0.6561 | 0.1260 | 0.1468 | 0.1360 | 0.1350 |
| 1960. | 0.6370 | 0.6456 | 0.1460 | 0.1484 | 0.1320 | 0.1395 |
| 1961. | 0.6640 | 0.6351 | 0.1480 | 0.1500 | 0.1440 | 0.1440 |
| 1962. | 0.6460 | 0.6246 | 0.1440 | 0.1516 | 0.1340 | 0.1445 |
| 1963. | 0.5900 | 0.6141 | 0.1610 | 0.1531 | 0.1470 | 0.1530 |
| 1964. | 0.5790 | 0.6036 | 0.1560 | 0.1547 | 0.1510 | 0.1576 |
| 1965. | 0.5710 | 0.5931 | 0.1610 | 0.1563 | 0.1580 | 0.1621 |
| 1966. | 0.5680 | 0.5826 | 0.1630 | 0.1579 | 0.1630 | 0.1666 |
| 1967. | 0.5740 | 0.5721 | 0.1690 | 0.1595 | 0.1770 | 0.1711 |
| 1968. | 0.5490 | 0.5616 | 0.1680 | 0.1611 | 0.1860 | 0.1756 |
| 1969. | 0.5450 | 0.5511 | 0.1620 | 0.1627 | 0.1910 | 0.1802 |
| 1970. | 0.5440 | 0.5406 | 0.1650 | 0.1643 | 0.1950 | 0.1847 |

| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0048 | 0.0043 | 0.2700 | 0.2740 | 1.1593 | 1.1940 |
| 1951. | 0.0047 | 0.0044 | 0.2700 | 0.2717 | 1.1760 | 1.2090 |
| 1952. | 0.0047 | 0.0045 | 0.2700 | 0.2695 | 1.1928 | 1.2239 |
| 1953. | 0.0047 | 0.0045 | 0.2700 | 0.2673 | 1.2152 | 1.2388 |
| 1954. | 0.0047 | 0.0046 | 0.2700 | 0.2650 | 1.2401 | 1.2537 |
| 1955. | 0.0046 | 0.0047 | 0.2700 | 0.2628 | 1.2602 | 1.2686 |
| 1956. | 0.0046 | 0.0048 | 0.2720 | 0.2606 | 1.2830 | 1.2835 |
| 1957. | 0.0038 | 0.0048 | 0.2720 | 0.2583 | 1.3430 | 1.2984 |
| 1958. | 0.0050 | 0.0049 | 0.2520 | 0.2561 | 1.3726 | 1.3133 |
| 1959. | 0.0048 | 0.0050 | 0.2240 | 0.2539 | 1.3739 | 1.3282 |
| 1960. | 0.0049 | 0.0050 | 0.2400 | 0.2516 | 1.3739 | 1.3431 |
| 1961. | 0.0047 | 0.0051 | 0.2540 | 0.2494 | 1.3990 | 1.3580 |
| 1962. | 0.0050 | 0.0052 | 0.2480 | 0.2472 | 1.3729 | 1.3789 |
| 1963. | 0.0053 | 0.0052 | 0.2380 | 0.2449 | 1.4164 | 1.3878 |
| 1964. | 0.0054 | 0.0053 | 0.2270 | 0.2427 | 1.4013 | 1.4027 |
| 1965. | 0.0056 | 0.0054 | 0.2240 | 0.2404 | 1.3837 | 1.4176 |
| 1966. | 0.0055 | 0.0055 | 0.2382 | 0.2382 | 1.4334 | 1.4325 |
| 1967. | 0.0052 | 0.0055 | 0.2390 | 0.2382 | 1.4713 | 1.4474 |
| 1968. | 0.0056 | 0.0056 | 0.2337 | 0.2337 | 1.4623 | 1.4623 |
| 1969. | 0.0060 | 0.0057 | 0.2340 | 0.2315 | 1.4338 | 1.4772 |
| 1970. | 0.0062 | 0.0057 | 0.2460 | 0.2293 | 1.4488 | 1.4921 |

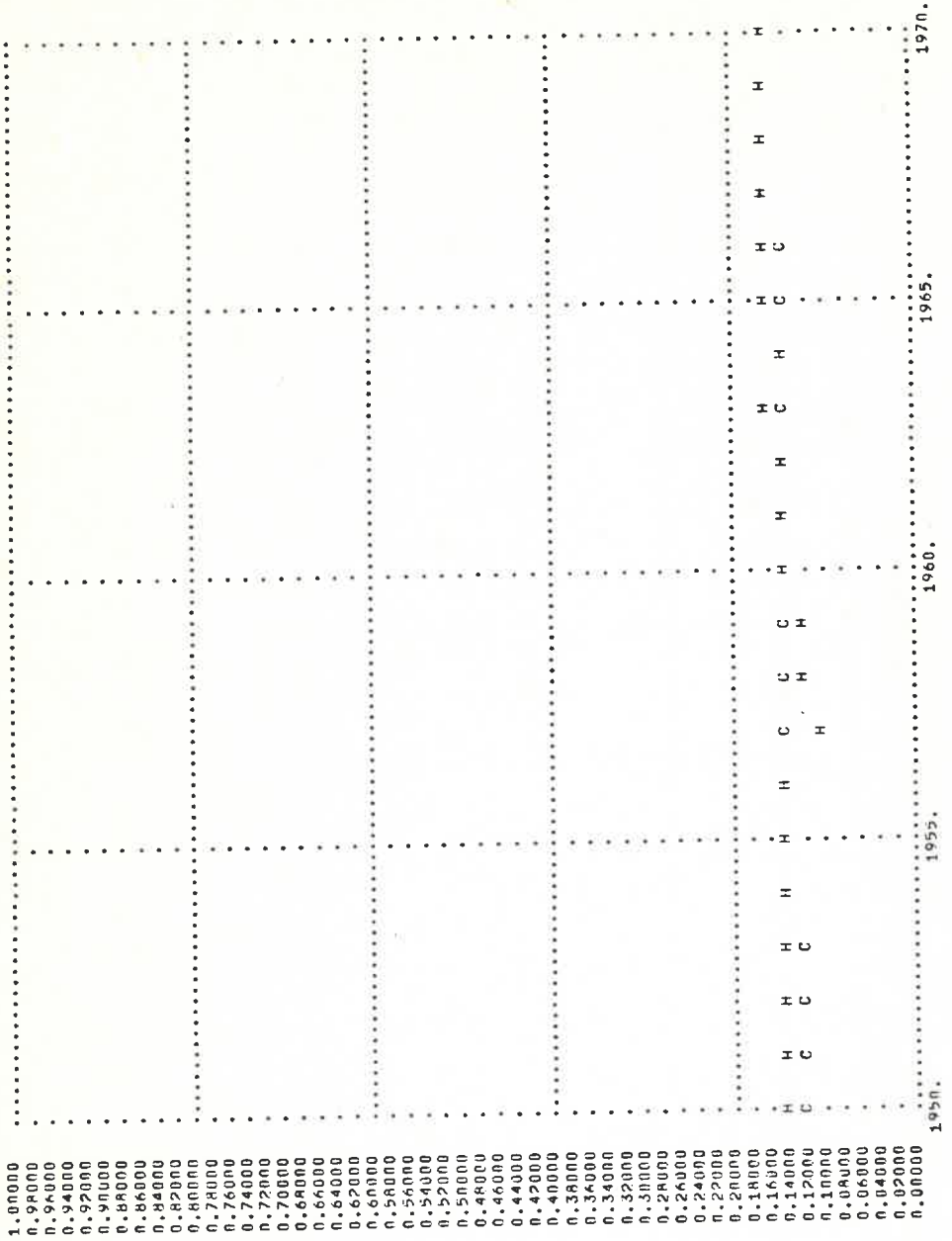
PLOT OF CONSUMPTION RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

MIDDLE EAST



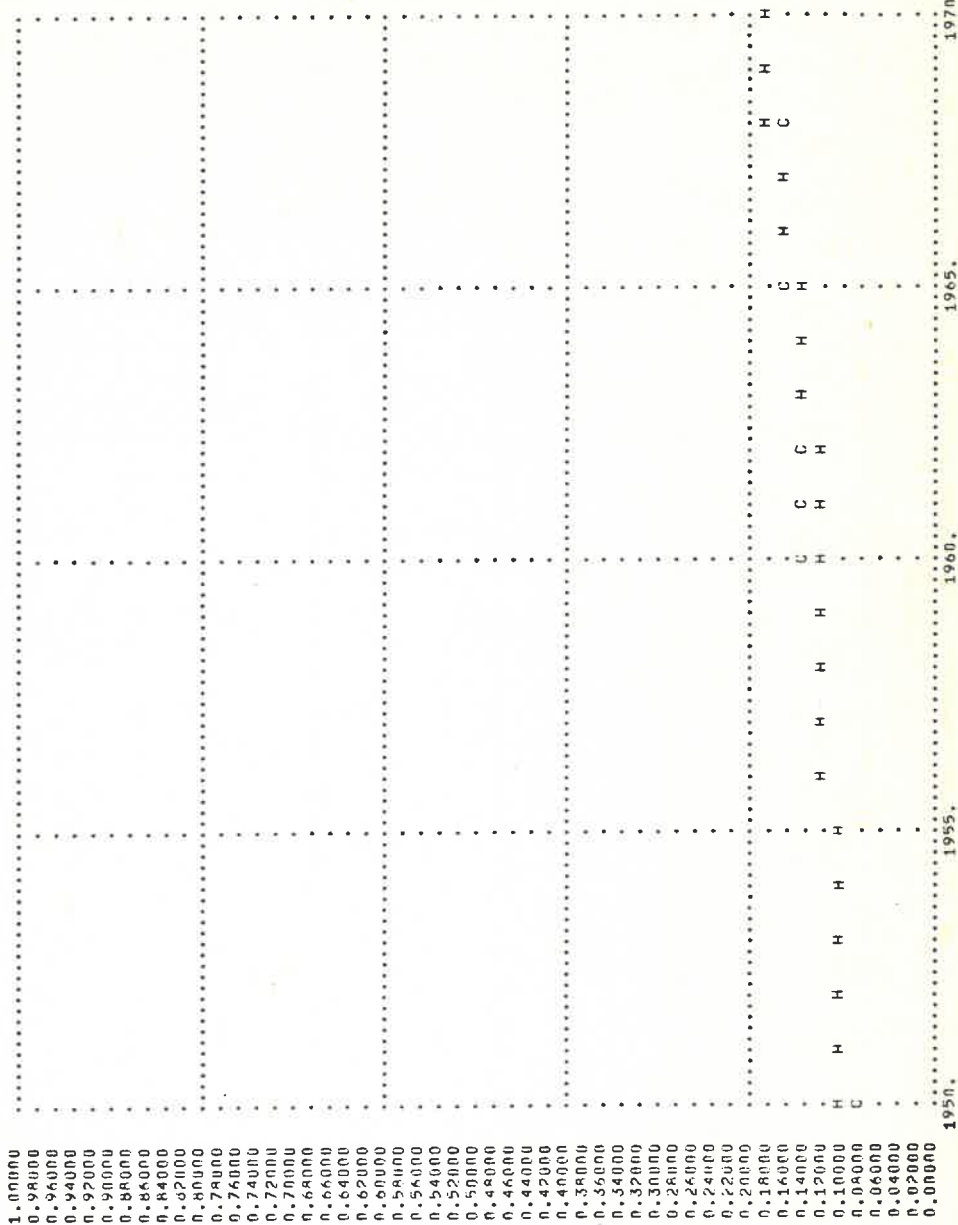
PLOT OF INVESTMENT RATIO VS. TIME
 H--HISTORICAL
 C--CALCULATED

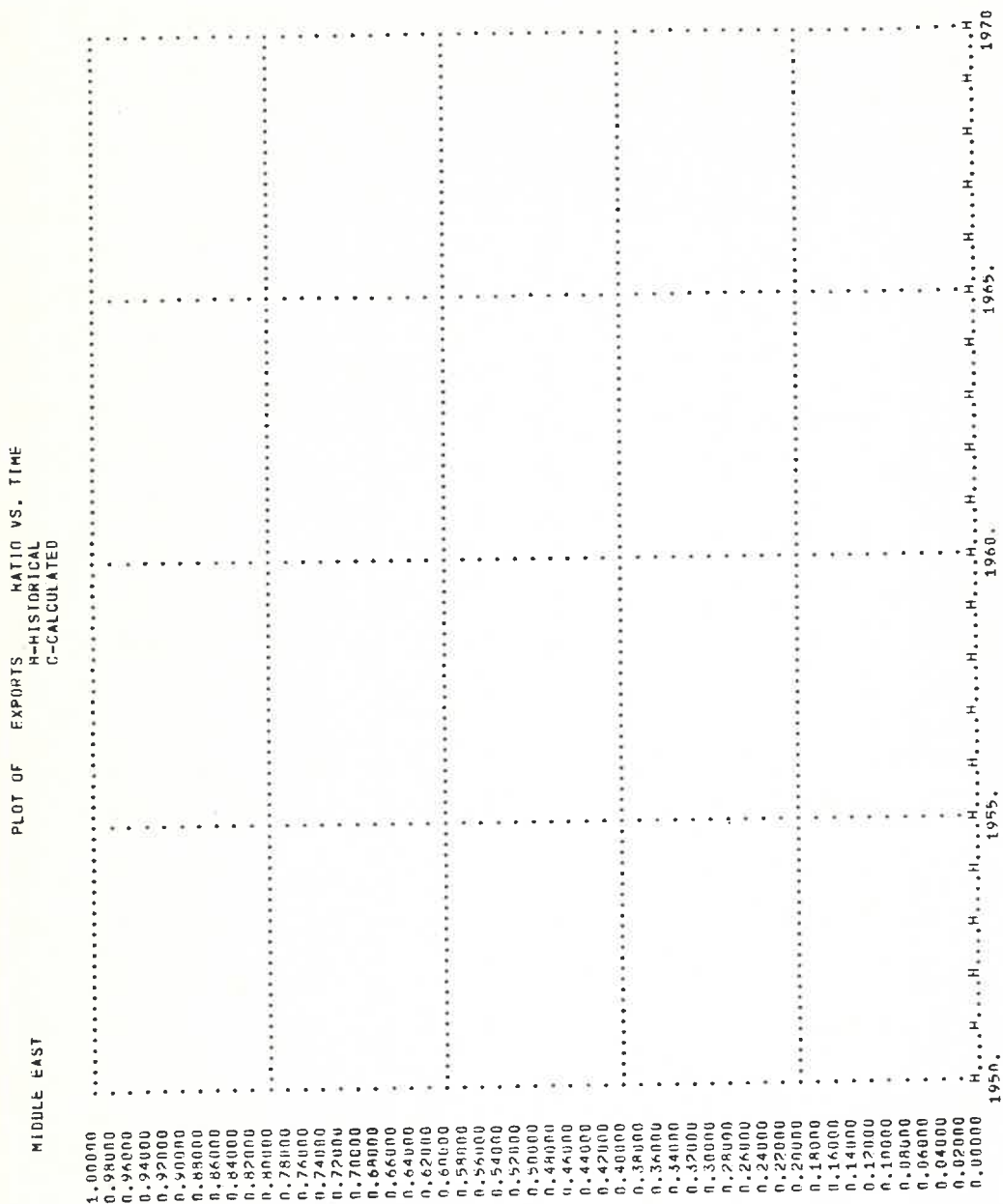
MIDDLE EAST



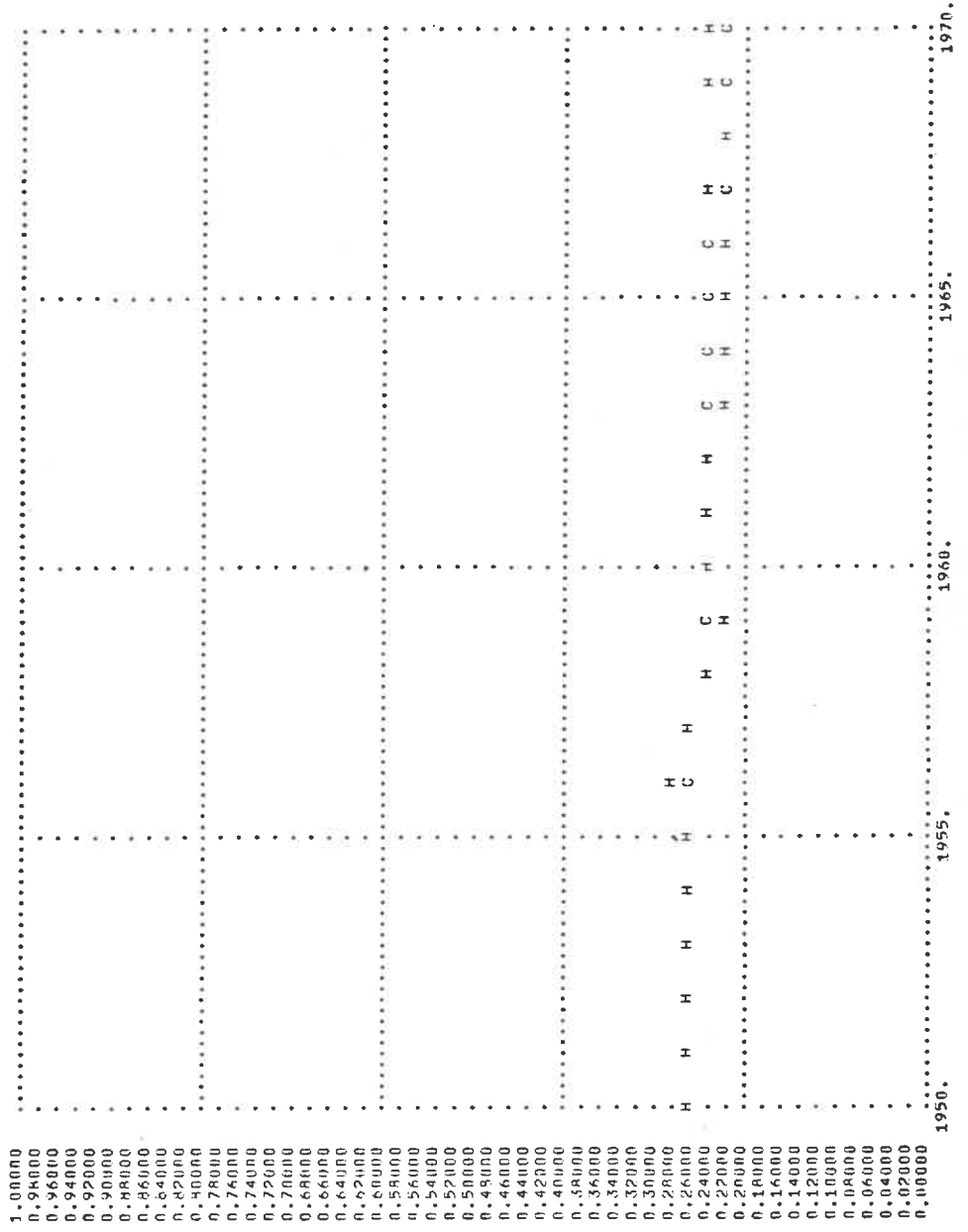
PLOT OF GOVERNMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

MIDDLE EAST

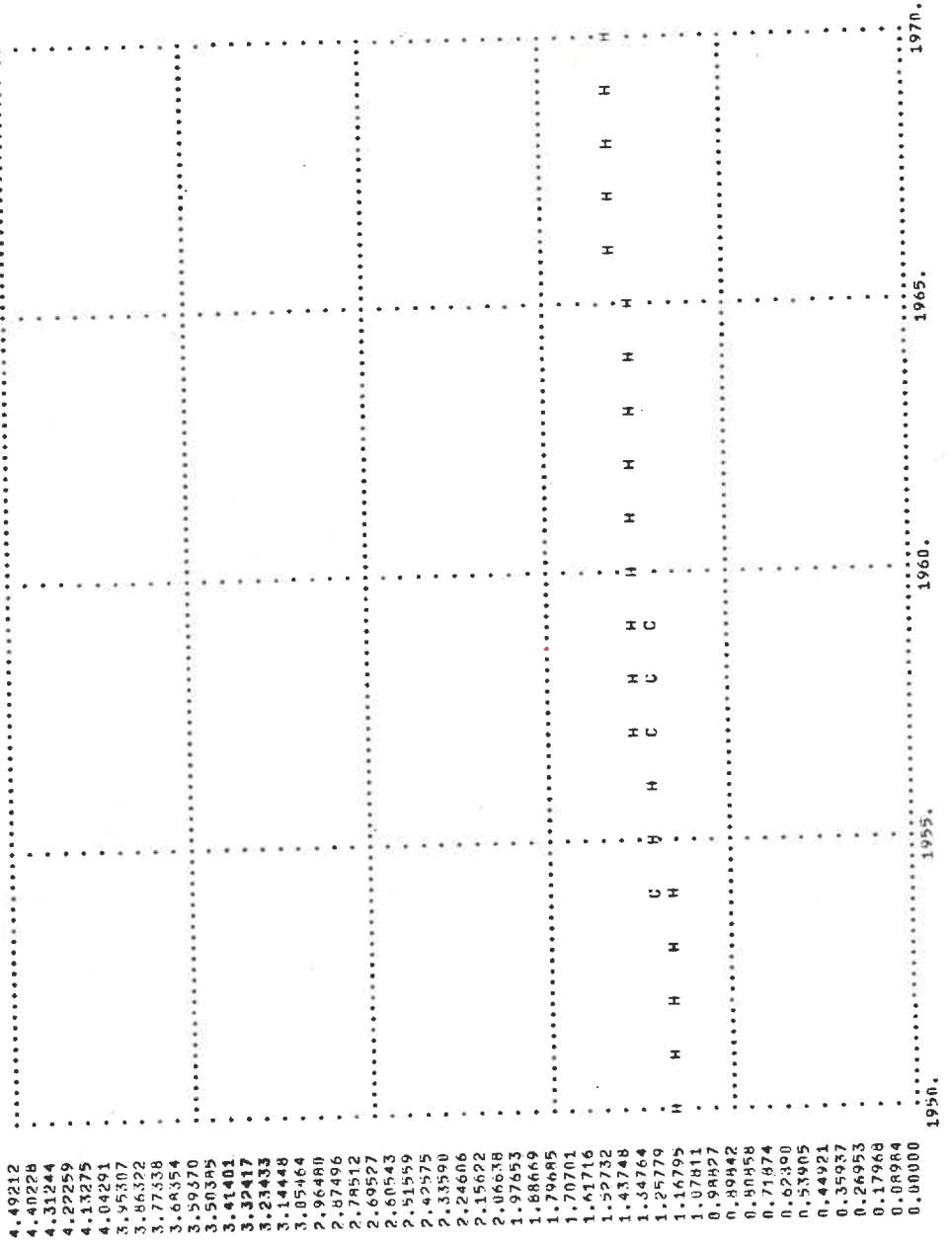




MIDDLE EAST
 PLOT OF IMPORTS RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED



MIDDLE EAST
 PLOT OF CAPITAL STOCK RATIO VS. TIME
 H--HISTORICAL
 C--CALCULATED

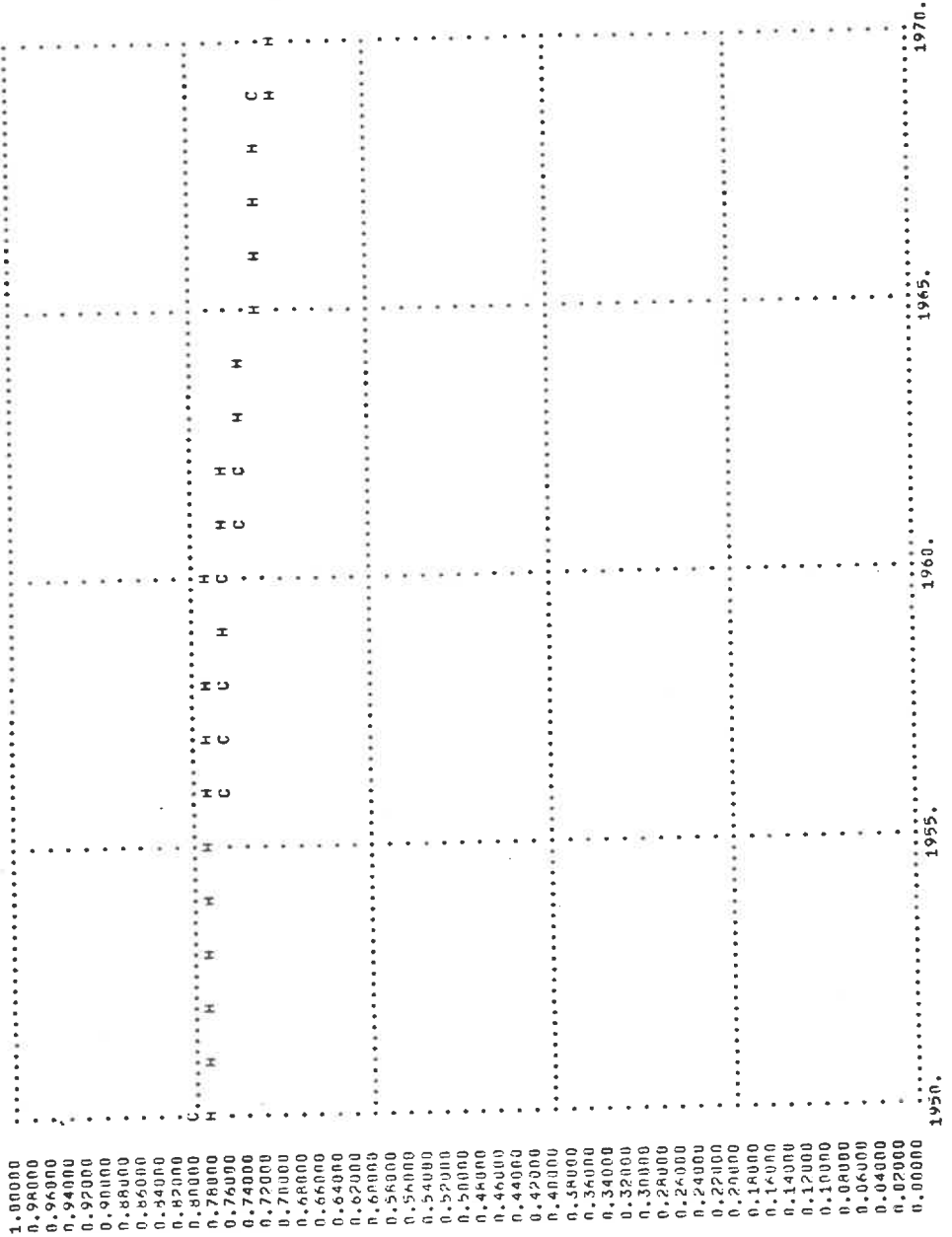


MAIN AFRICA
TABLE OF SECTOR-OUTPUT RATIOS

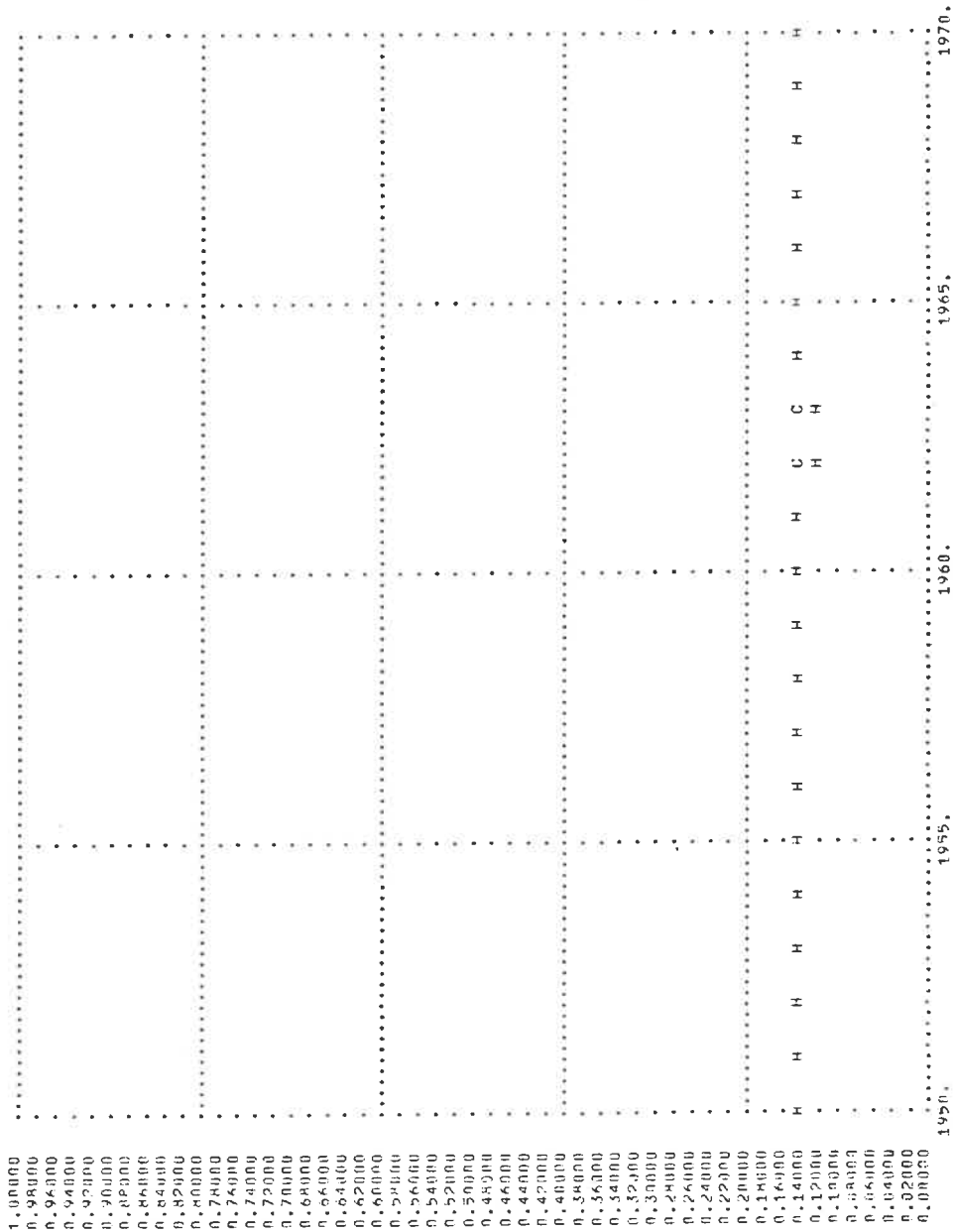
| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.7840 | 0.8014 | 0.1450 | 0.1426 | 0.0860 | 0.0770 |
| 1951. | 0.7840 | 0.7972 | 0.1450 | 0.1429 | 0.0860 | 0.0791 |
| 1952. | 0.7840 | 0.7929 | 0.1450 | 0.1432 | 0.0860 | 0.0813 |
| 1953. | 0.7840 | 0.7887 | 0.1450 | 0.1435 | 0.0860 | 0.0834 |
| 1954. | 0.7840 | 0.7844 | 0.1450 | 0.1438 | 0.0860 | 0.0855 |
| 1955. | 0.7840 | 0.7802 | 0.1450 | 0.1441 | 0.0860 | 0.0876 |
| 1956. | 0.7840 | 0.7760 | 0.1450 | 0.1444 | 0.0860 | 0.0898 |
| 1957. | 0.7840 | 0.7717 | 0.1450 | 0.1447 | 0.0860 | 0.0919 |
| 1958. | 0.7840 | 0.7675 | 0.1450 | 0.1450 | 0.0860 | 0.0940 |
| 1959. | 0.7850 | 0.7632 | 0.1500 | 0.1454 | 0.0910 | 0.0961 |
| 1960. | 0.7790 | 0.7590 | 0.1450 | 0.1457 | 0.0980 | 0.0983 |
| 1961. | 0.7690 | 0.7548 | 0.1440 | 0.1460 | 0.0960 | 0.1004 |
| 1962. | 0.7590 | 0.7505 | 0.1290 | 0.1463 | 0.0950 | 0.1025 |
| 1963. | 0.7430 | 0.7463 | 0.1320 | 0.1466 | 0.1010 | 0.1046 |
| 1964. | 0.7480 | 0.7420 | 0.1390 | 0.1469 | 0.1070 | 0.1068 |
| 1965. | 0.7390 | 0.7378 | 0.1520 | 0.1472 | 0.1150 | 0.1089 |
| 1966. | 0.7270 | 0.7335 | 0.1510 | 0.1475 | 0.1110 | 0.1110 |
| 1967. | 0.7270 | 0.7293 | 0.1540 | 0.1478 | 0.1130 | 0.1132 |
| 1968. | 0.7220 | 0.7251 | 0.1550 | 0.1482 | 0.1120 | 0.1153 |
| 1969. | 0.7100 | 0.7208 | 0.1480 | 0.1485 | 0.1200 | 0.1174 |
| 1970. | 0.7100 | 0.7166 | 0.1550 | 0.1488 | 0.1230 | 0.1195 |

| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0023 | 0.0021 | 0.2140 | 0.2087 | 2.0000 | 1.9161 |
| 1951. | 0.0022 | 0.0021 | 0.2140 | 0.2101 | 1.9579 | 1.9059 |
| 1952. | 0.0022 | 0.0022 | 0.2140 | 0.2115 | 1.9216 | 1.8958 |
| 1953. | 0.0022 | 0.0022 | 0.2140 | 0.2128 | 1.8911 | 1.8856 |
| 1954. | 0.0023 | 0.0023 | 0.2140 | 0.2142 | 1.8660 | 1.8755 |
| 1955. | 0.0022 | 0.0023 | 0.2140 | 0.2156 | 1.8454 | 1.8654 |
| 1956. | 0.0023 | 0.0024 | 0.2140 | 0.2170 | 1.8290 | 1.8552 |
| 1957. | 0.0023 | 0.0024 | 0.2140 | 0.2183 | 1.8173 | 1.8451 |
| 1958. | 0.0024 | 0.0025 | 0.2140 | 0.2197 | 1.8099 | 1.8349 |
| 1959. | 0.0026 | 0.0025 | 0.2260 | 0.2211 | 1.7796 | 1.8248 |
| 1960. | 0.0026 | 0.0026 | 0.2225 | 0.2225 | 1.7112 | 1.8146 |
| 1961. | 0.0025 | 0.0027 | 0.2180 | 0.2239 | 1.7665 | 1.8045 |
| 1962. | 0.0025 | 0.0027 | 0.1920 | 0.2252 | 1.7888 | 1.7944 |
| 1963. | 0.0027 | 0.0028 | 0.2030 | 0.2266 | 1.7803 | 1.7842 |
| 1964. | 0.0031 | 0.0028 | 0.2500 | 0.2280 | 1.7651 | 1.7741 |
| 1965. | 0.0032 | 0.0029 | 0.2620 | 0.2294 | 1.7652 | 1.7639 |
| 1966. | 0.0050 | 0.0029 | 0.2430 | 0.2307 | 1.7795 | 1.7538 |
| 1967. | 0.0030 | 0.0030 | 0.2360 | 0.2321 | 1.7762 | 1.7436 |
| 1968. | 0.0029 | 0.0030 | 0.2380 | 0.2335 | 1.7736 | 1.7335 |
| 1969. | 0.0030 | 0.0031 | 0.2220 | 0.2349 | 1.7484 | 1.7234 |
| 1970. | 0.0030 | 0.0031 | 0.2310 | 0.2363 | 1.7547 | 1.7132 |

MAIN AFRICA
 PLOT OF CONSUMPTION RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

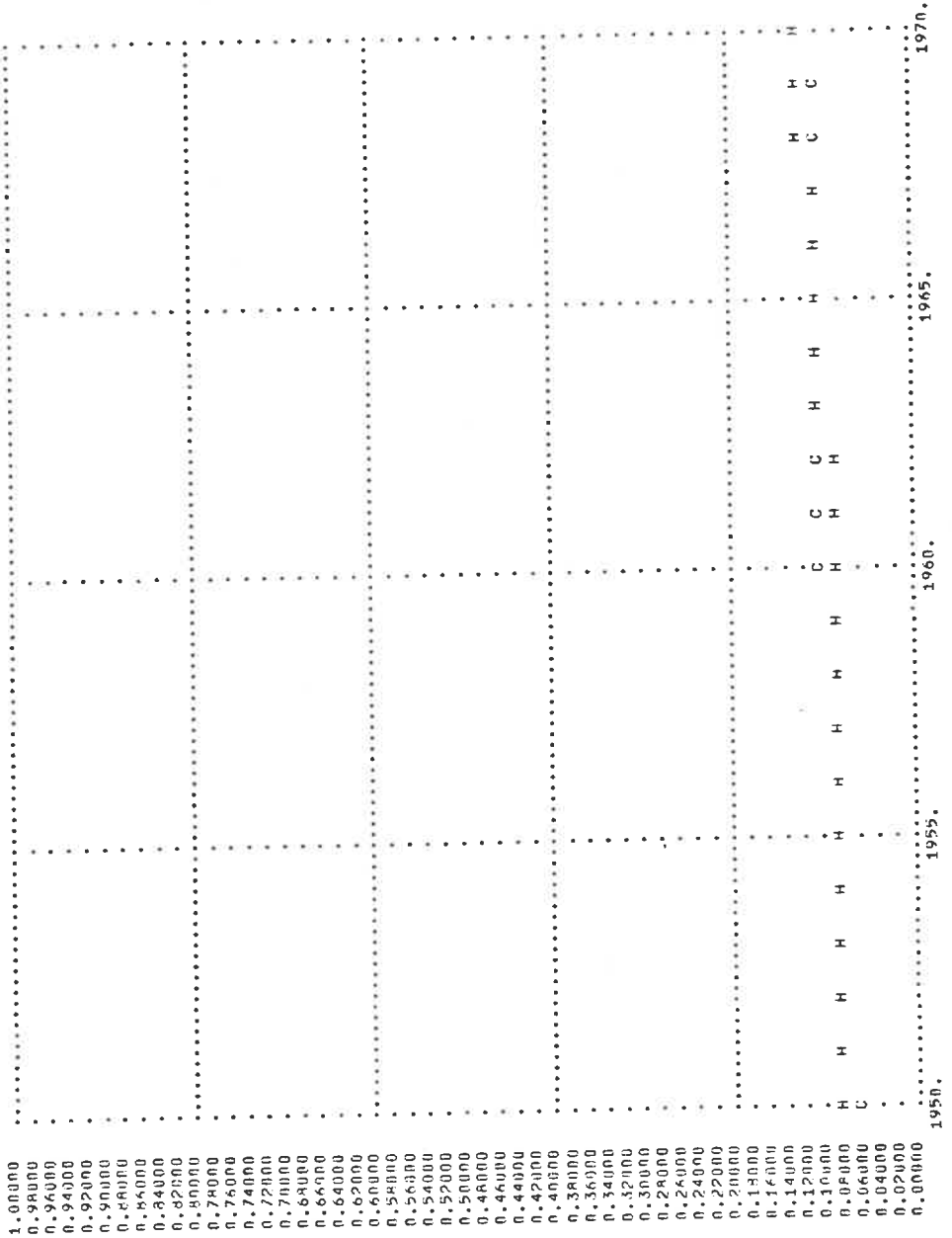


MAIN AFRICA
 PLOT OF INVESTMENT RATIO VS. TIME
 H--HISTORICAL
 C--CALCULATED

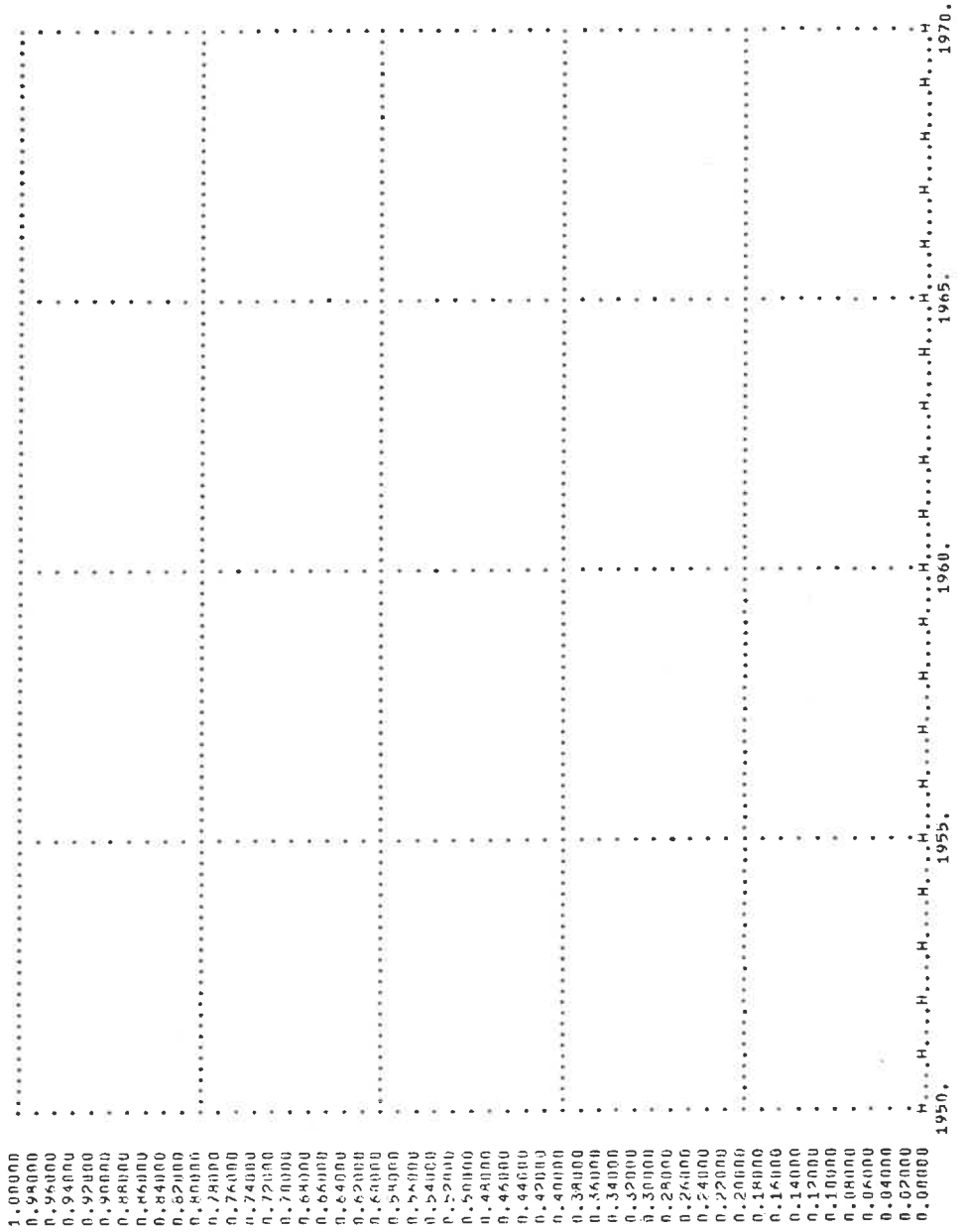


PLOT OF GOVERNMENT RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

MAIN AFRICA

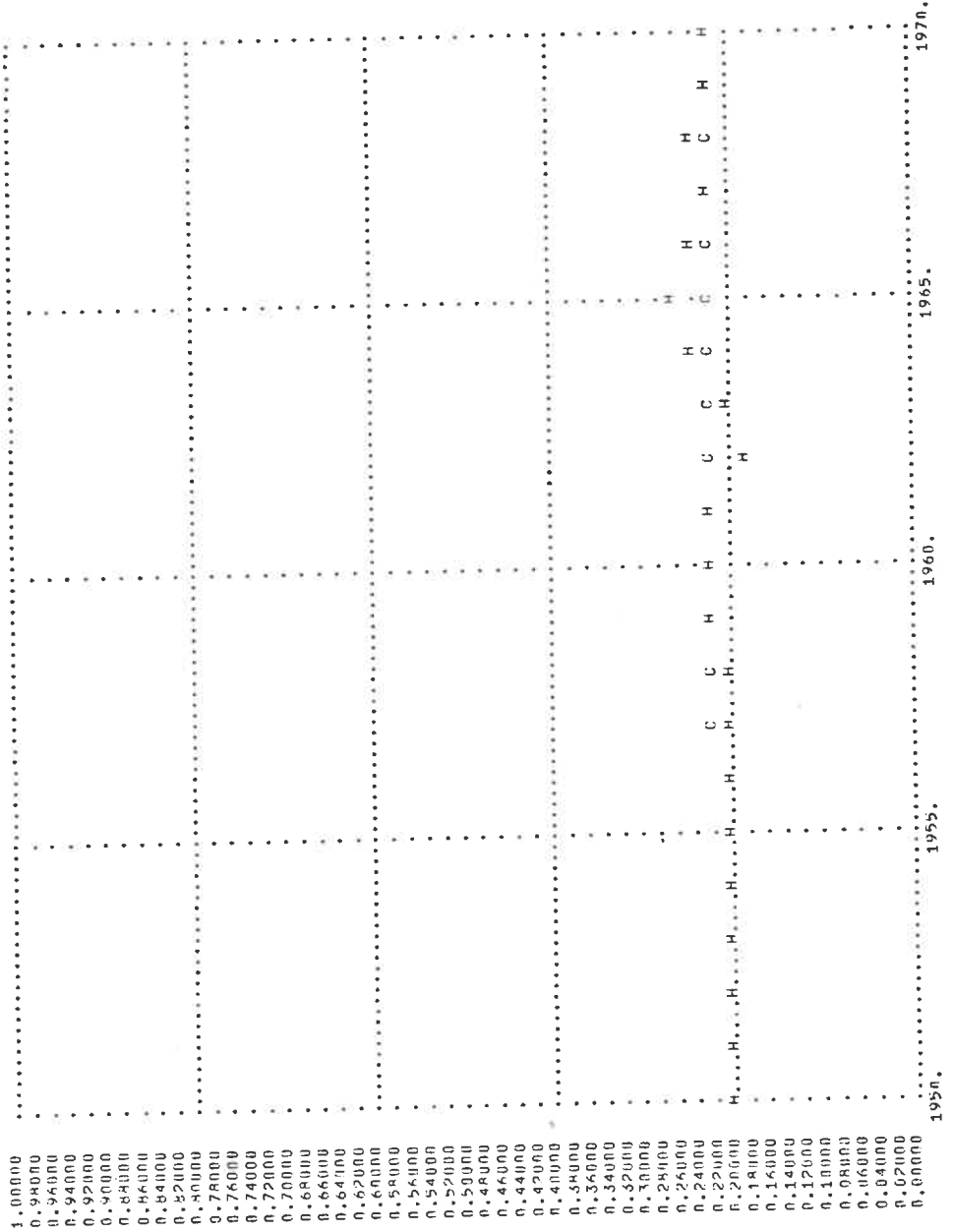


MAIN AFRICA
PLOT OF EXPORTS RATIO VS. TIME
H--HISTORICAL
C--CALCULATED

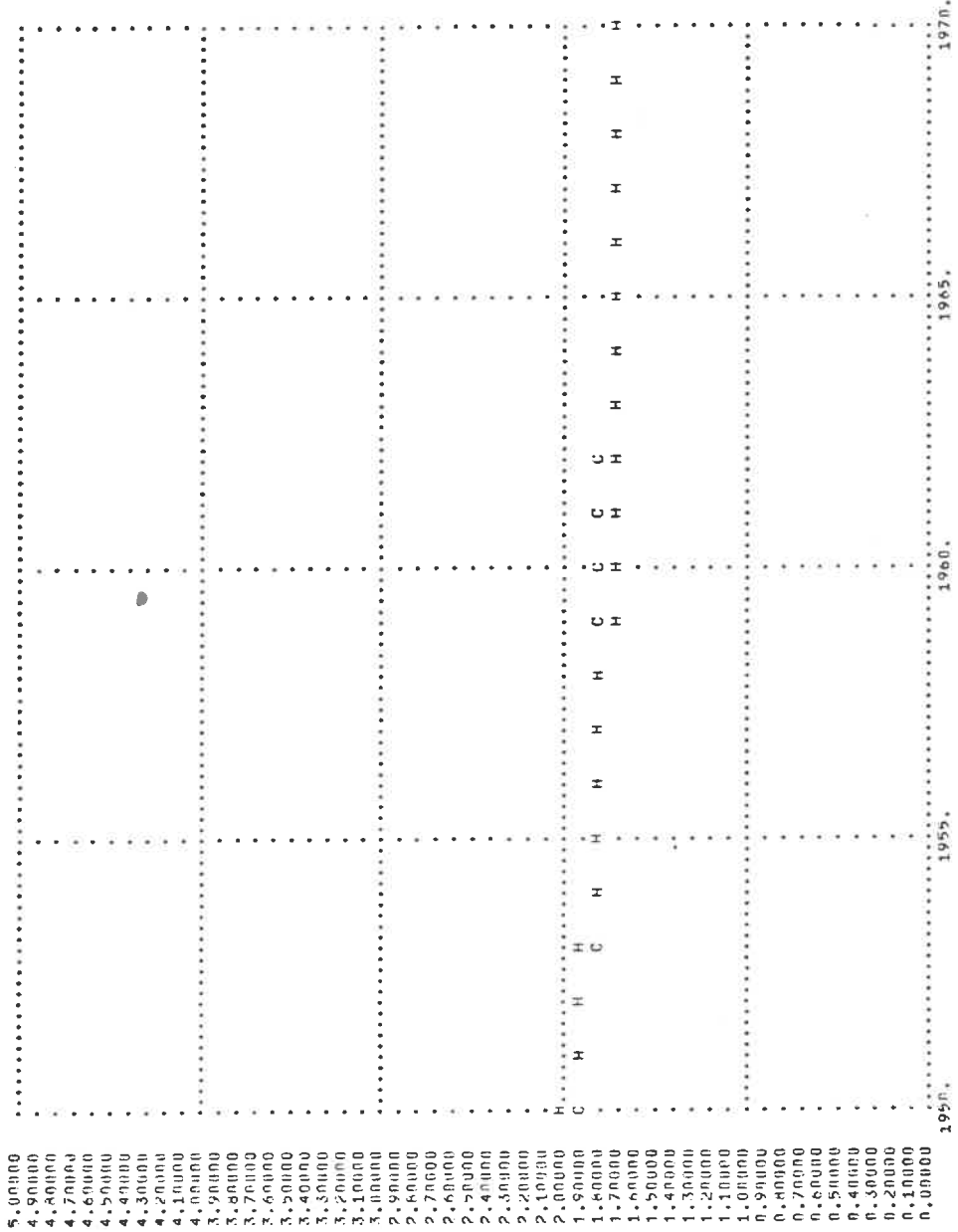


PLOT OF IMPORTS RATIO VS. TIME
 H--HISTORICAL
 C--CALCULATED

MAIN AFRICA



MAIN AFRICA
 PLOT OF CAPITAL STOCK RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED



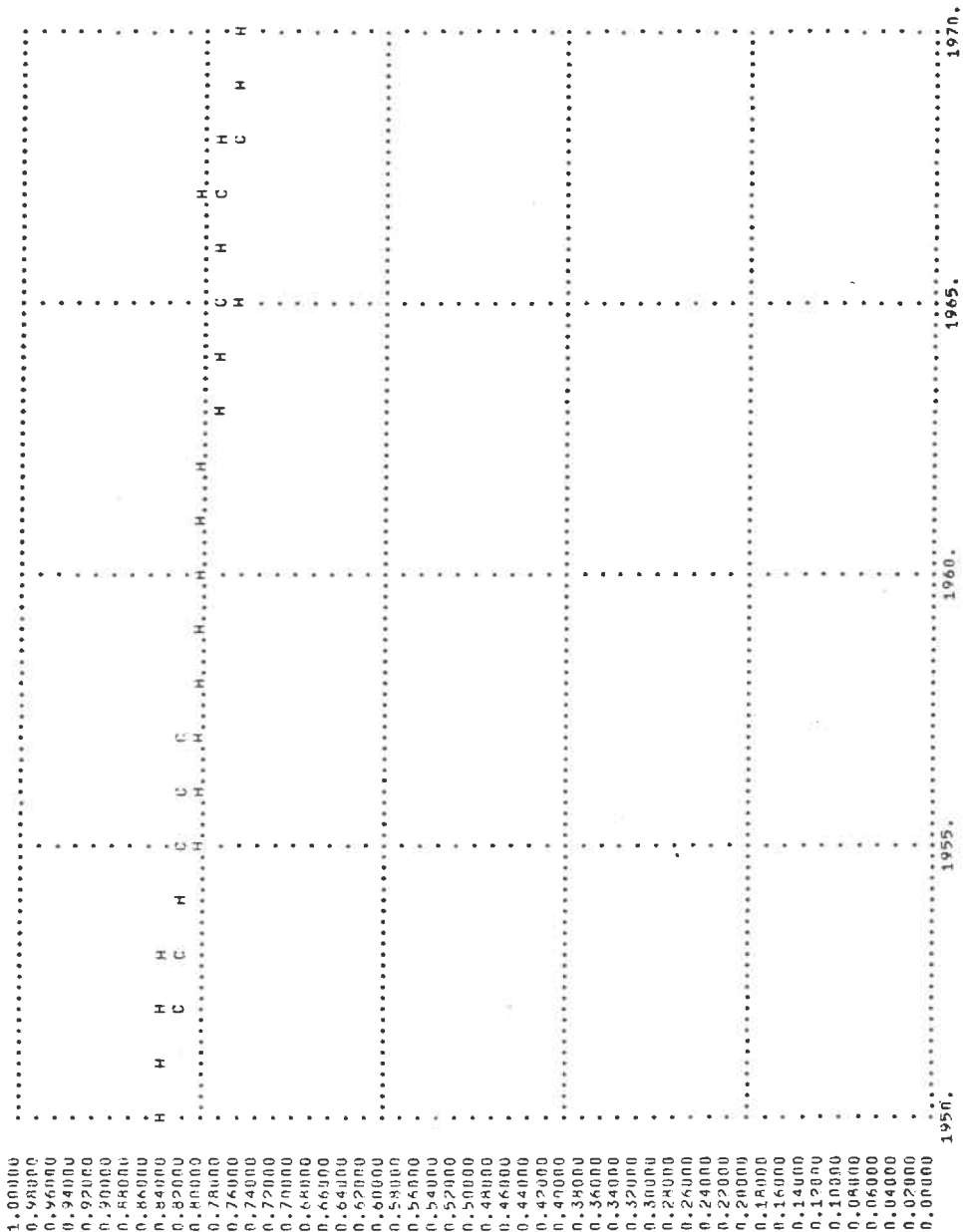
SOUTH EAST ASIA
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.6480 | 0.8449 | 0.1010 | 0.1046 | 0.0710 | 0.0688 |
| 1951. | 0.8520 | 0.8411 | 0.0980 | 0.1066 | 0.0710 | 0.0707 |
| 1952. | 0.8460 | 0.8374 | 0.1030 | 0.1096 | 0.0730 | 0.0726 |
| 1953. | 0.4500 | 0.8336 | 0.0990 | 0.1126 | 0.0730 | 0.0745 |
| 1954. | 0.8330 | 0.8299 | 0.1100 | 0.1156 | 0.0780 | 0.0764 |
| 1955. | 0.8180 | 0.8241 | 0.1230 | 0.1186 | 0.0780 | 0.0783 |
| 1956. | 0.8020 | 0.8224 | 0.1400 | 0.1216 | 0.0770 | 0.0802 |
| 1957. | 0.7990 | 0.8196 | 0.1430 | 0.1246 | 0.0770 | 0.0821 |
| 1958. | 0.8050 | 0.8149 | 0.1380 | 0.1275 | 0.0850 | 0.0841 |
| 1959. | 0.8030 | 0.8111 | 0.1370 | 0.1305 | 0.0840 | 0.0840 |
| 1960. | 0.8140 | 0.8074 | 0.1280 | 0.1335 | 0.0890 | 0.0879 |
| 1961. | 0.8010 | 0.8036 | 0.1360 | 0.1365 | 0.0920 | 0.0898 |
| 1962. | 0.8080 | 0.7999 | 0.1390 | 0.1395 | 0.0910 | 0.0917 |
| 1963. | 0.7880 | 0.7961 | 0.1450 | 0.1425 | 0.0970 | 0.0936 |
| 1964. | 0.7970 | 0.7824 | 0.1420 | 0.1425 | 0.0970 | 0.0955 |
| 1965. | 0.7780 | 0.7886 | 0.1500 | 0.1485 | 0.1010 | 0.0974 |
| 1966. | 0.7900 | 0.7849 | 0.1480 | 0.1515 | 0.1000 | 0.0993 |
| 1967. | 0.8020 | 0.7811 | 0.1470 | 0.1544 | 0.0980 | 0.1012 |
| 1968. | 0.7840 | 0.7774 | 0.1570 | 0.1574 | 0.1040 | 0.1031 |
| 1969. | 0.7700 | 0.7736 | 0.1610 | 0.1604 | 0.1050 | 0.1050 |
| 1970. | 0.7670 | 0.7699 | 0.1590 | 0.1634 | 0.1040 | 0.1069 |

| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0046 | 0.0046 | 0.1040 | 0.1025 | 1.2107 | 1.1799 |
| 1951. | 0.0094 | 0.0045 | 0.1220 | 0.1034 | 1.2551 | 1.2091 |
| 1952. | 0.0042 | 0.0045 | 0.1020 | 0.1044 | 1.2566 | 1.2382 |
| 1953. | 0.0039 | 0.0045 | 0.0950 | 0.1044 | 1.2664 | 1.2673 |
| 1954. | 0.0044 | 0.0044 | 0.1030 | 0.1063 | 1.2535 | 1.2965 |
| 1955. | 0.0043 | 0.0044 | 0.1040 | 0.1073 | 1.2908 | 1.5256 |
| 1956. | 0.0049 | 0.0043 | 0.1140 | 0.1082 | 1.3044 | 1.3547 |
| 1957. | 0.0052 | 0.0045 | 0.1190 | 0.1092 | 1.3889 | 1.3839 |
| 1958. | 0.0043 | 0.0043 | 0.1120 | 0.1102 | 1.4383 | 1.4130 |
| 1959. | 0.0042 | 0.0042 | 0.1090 | 0.1111 | 1.4760 | 1.4421 |
| 1960. | 0.0037 | 0.0042 | 0.1050 | 0.1121 | 1.4815 | 1.4713 |
| 1961. | 0.0038 | 0.0041 | 0.1060 | 0.1151 | 1.4991 | 1.5004 |
| 1962. | 0.0036 | 0.0041 | 0.1110 | 0.1140 | 1.5439 | 1.5295 |
| 1963. | 0.0037 | 0.0041 | 0.1040 | 0.1150 | 1.5987 | 1.5987 |
| 1964. | 0.0055 | 0.0040 | 0.1060 | 0.1160 | 1.5635 | 1.5878 |
| 1965. | 0.0036 | 0.0040 | 0.1040 | 0.1169 | 1.5608 | 1.6169 |
| 1966. | 0.0040 | 0.0040 | 0.1250 | 0.1179 | 1.6092 | 1.6461 |
| 1967. | 0.0041 | 0.0039 | 0.1168 | 0.1179 | 1.6767 | 1.6752 |
| 1968. | 0.0040 | 0.0039 | 0.11330 | 0.1198 | 1.7176 | 1.7043 |
| 1969. | 0.0041 | 0.0038 | 0.1290 | 0.1208 | 1.7176 | 1.7334 |
| 1970. | 0.0045 | 0.0038 | 0.1250 | 0.1217 | 1.7001 | 1.7626 |

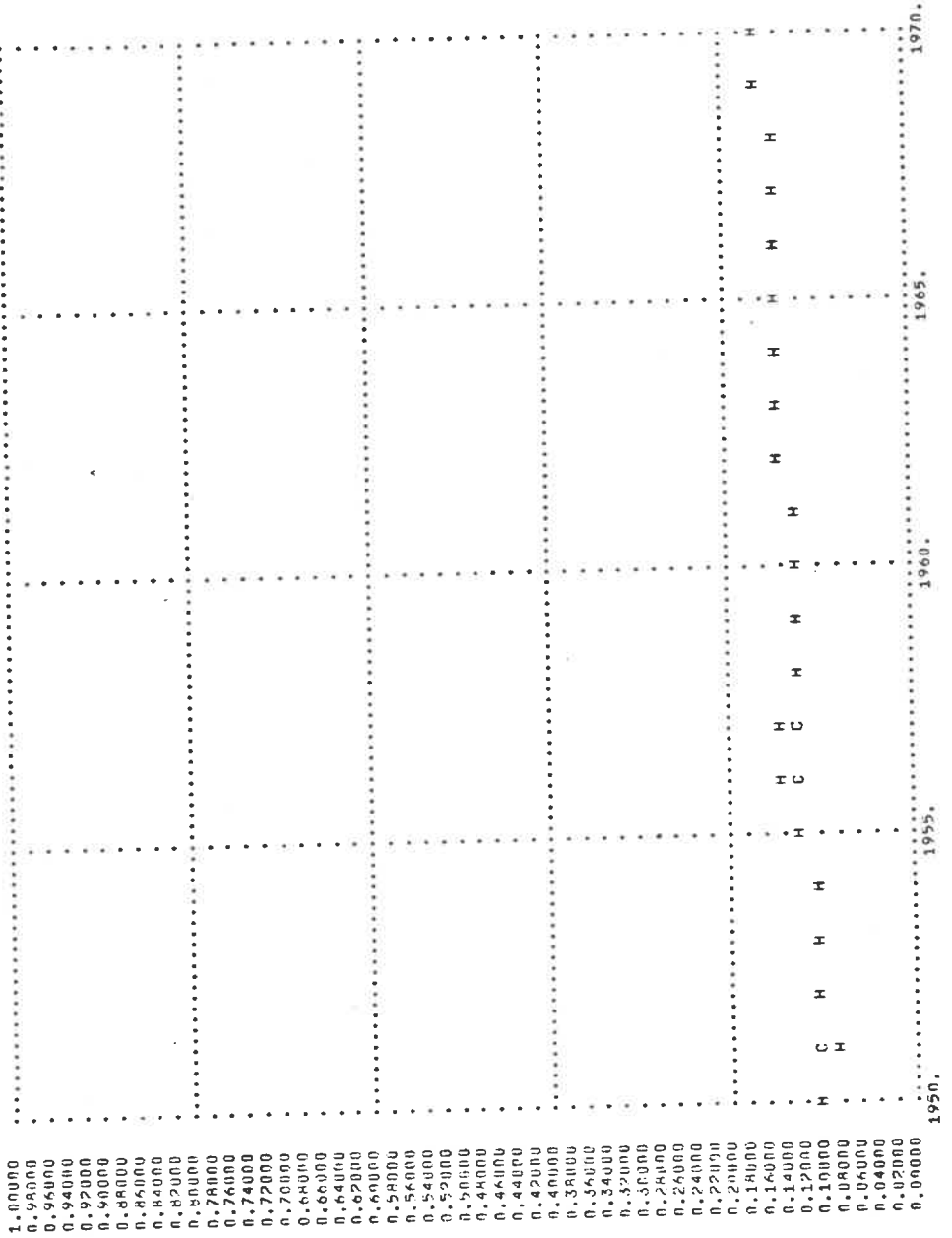
PLOT OF CONSUMPTION RATIO VS. TIME
H--HISTORICAL
C--CALCULATED

SOUTH EAST ASIA



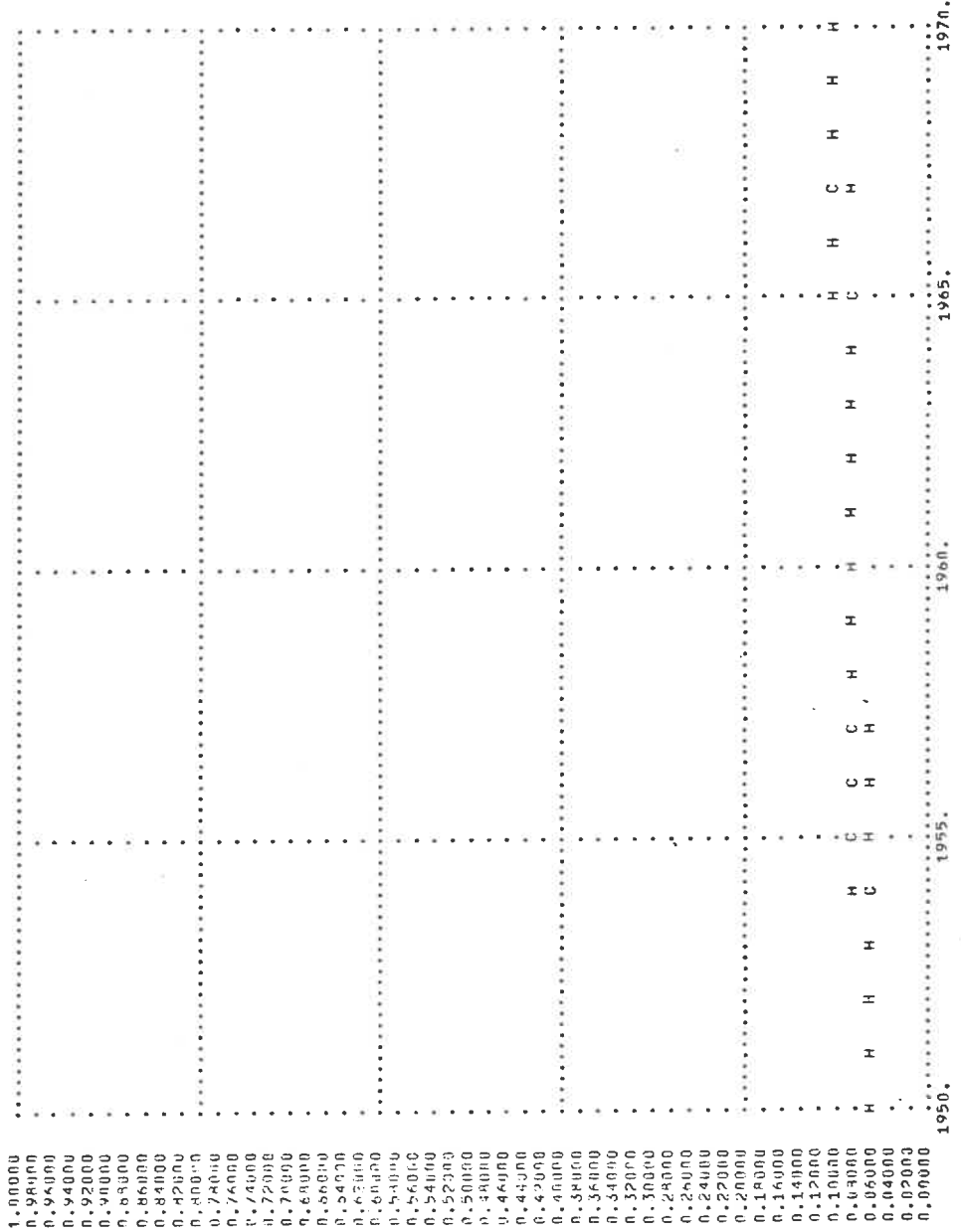
PLOT OF INVESTMENT RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

SOUTH EAST ASIA



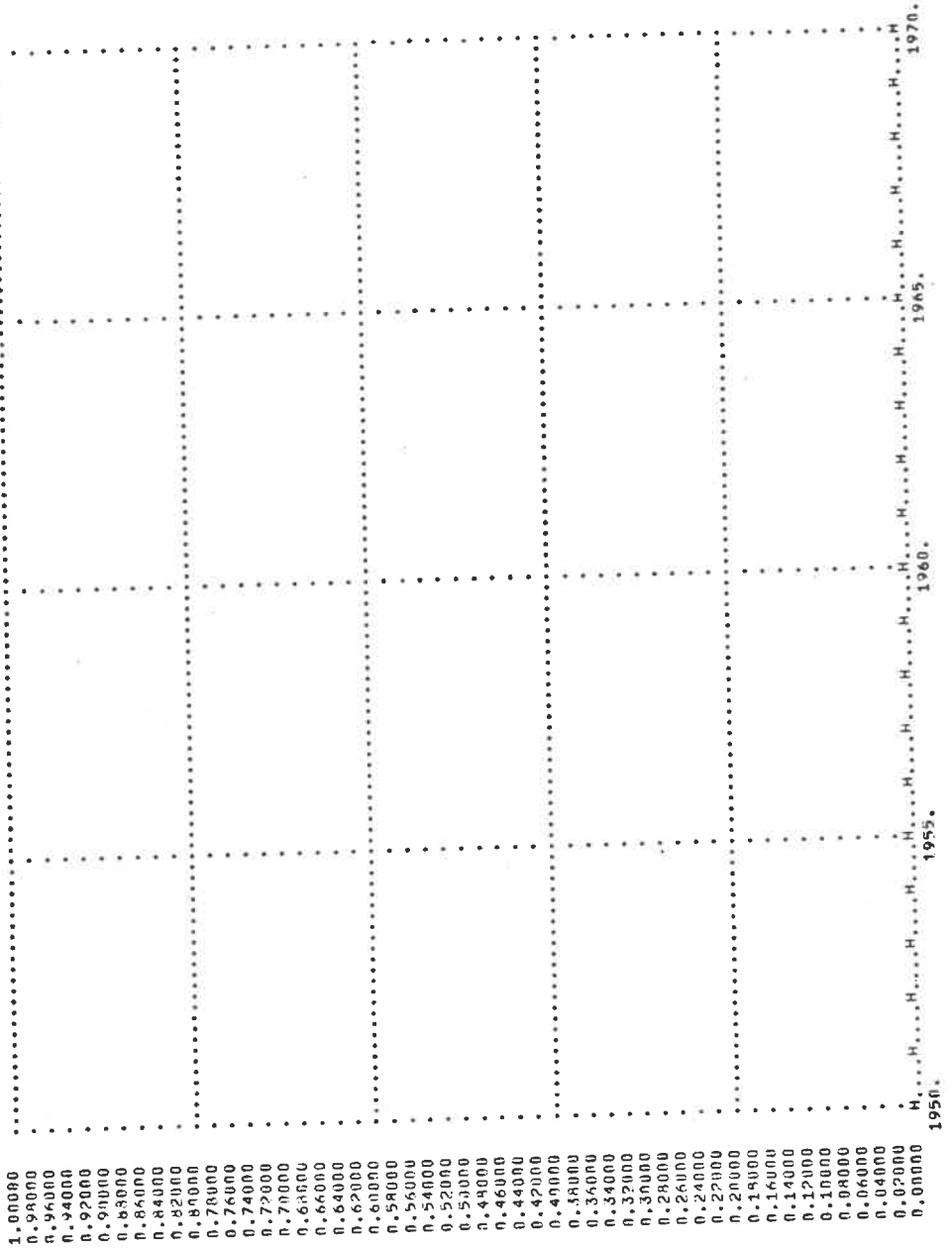
PLOT OF GOVERNMENT RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

SOUTH EAST ASIA



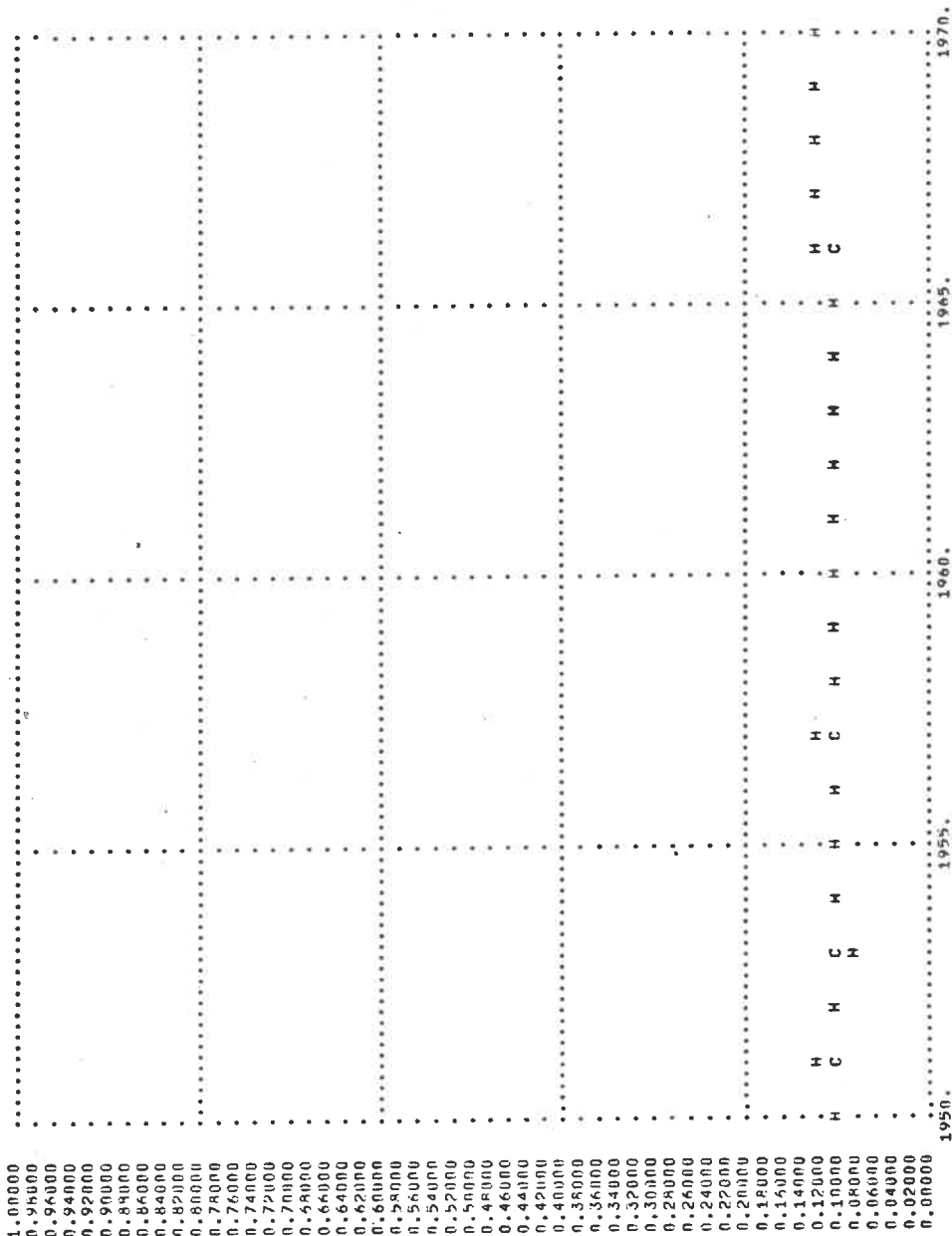
PLOT OF EXPORTS RATIO VS. TIME
H-HISTORICAL
C-CALCULATED

SOUTH EAST ASIA



PLOT OF IMPORTS RATIO VS. TIME
 H--HISTORICAL
 C--CALCATED

SOUTH EAST ASIA

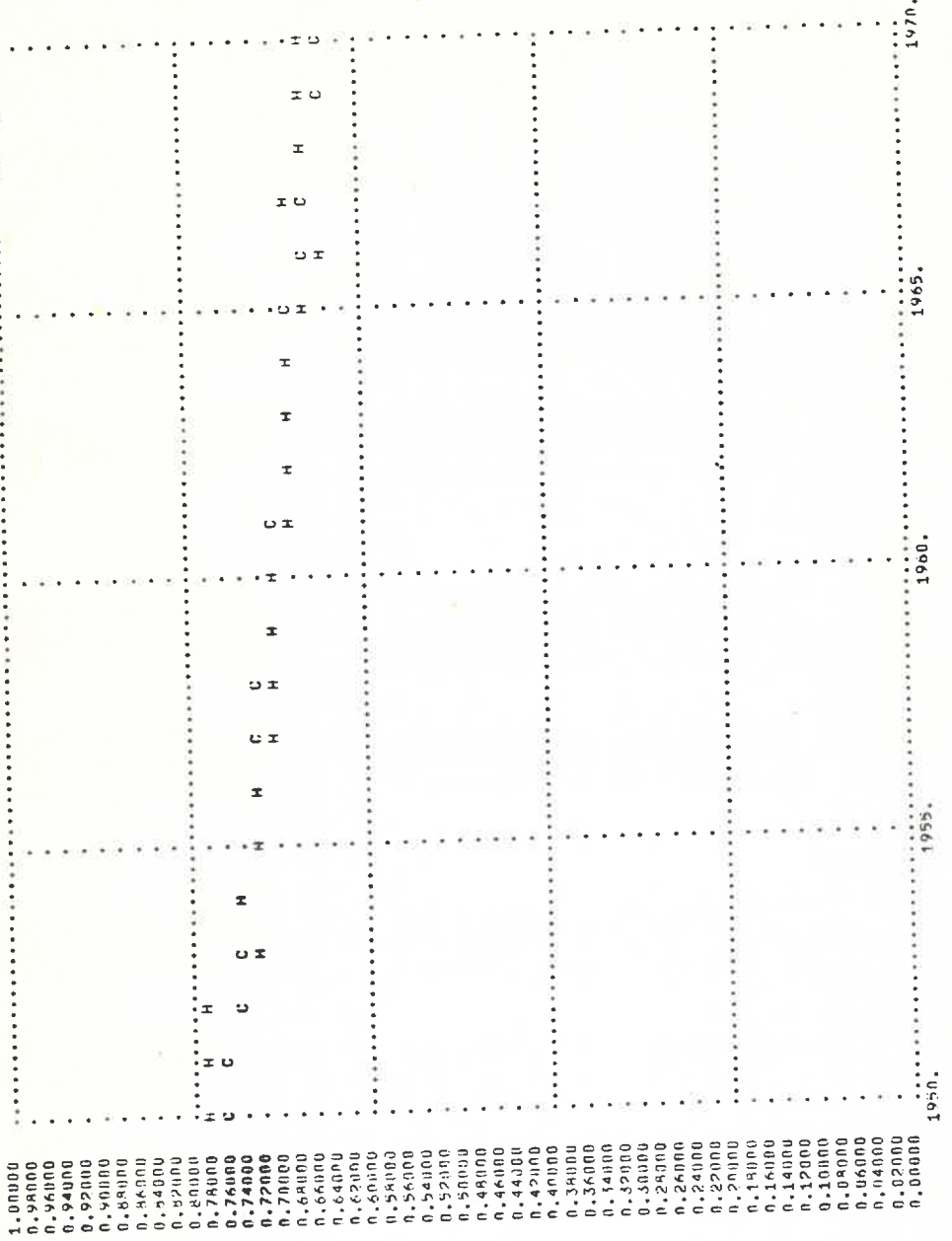


CHINA
TABLE OF SECTOR-OUTPUT RATIOS

| YEAR | CONSUMPTION | | INVESTMENT | | GOVERNMENT | |
|-------|-------------|------------|------------|------------|------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.7800 | 0.7653 | 0.1458 | 0.1637 | 0.0792 | 0.0761 |
| 1951. | 0.7800 | 0.7595 | 0.1458 | 0.1678 | 0.0792 | 0.0771 |
| 1952. | 0.7802 | 0.7537 | 0.1456 | 0.1718 | 0.0792 | 0.0781 |
| 1953. | 0.7239 | 0.7440 | 0.1865 | 0.1759 | 0.0958 | 0.0791 |
| 1954. | 0.7393 | 0.7422 | 0.1959 | 0.1800 | 0.0792 | 0.0802 |
| 1955. | 0.7282 | 0.7364 | 0.1997 | 0.1840 | 0.0812 | 0.0812 |
| 1956. | 0.7199 | 0.7306 | 0.2052 | 0.1881 | 0.0687 | 0.0822 |
| 1957. | 0.7177 | 0.7248 | 0.2027 | 0.1922 | 0.0727 | 0.0832 |
| 1958. | 0.7087 | 0.7191 | 0.2069 | 0.1962 | 0.0825 | 0.0843 |
| 1959. | 0.7087 | 0.7133 | 0.2070 | 0.2003 | 0.0825 | 0.0853 |
| 1960. | 0.7087 | 0.7075 | 0.2069 | 0.2044 | 0.0825 | 0.0863 |
| 1961. | 0.6951 | 0.7017 | 0.2099 | 0.2084 | 0.0918 | 0.0873 |
| 1962. | 0.6948 | 0.6960 | 0.2010 | 0.2125 | 0.0896 | 0.0884 |
| 1963. | 0.6827 | 0.6902 | 0.2154 | 0.2166 | 0.0885 | 0.0894 |
| 1964. | 0.6849 | 0.6844 | 0.2174 | 0.2206 | 0.0880 | 0.0904 |
| 1965. | 0.6667 | 0.6786 | 0.2364 | 0.2247 | 0.0898 | 0.0914 |
| 1966. | 0.6534 | 0.6728 | 0.2469 | 0.2268 | 0.0939 | 0.0925 |
| 1967. | 0.6827 | 0.6671 | 0.2232 | 0.2328 | 0.0933 | 0.0935 |
| 1968. | 0.6730 | 0.6613 | 0.2284 | 0.2369 | 0.0953 | 0.0945 |
| 1969. | 0.6674 | 0.6555 | 0.2276 | 0.2410 | 0.0983 | 0.0955 |
| 1970. | 0.6619 | 0.6497 | 0.2368 | 0.2450 | 0.1019 | 0.0966 |

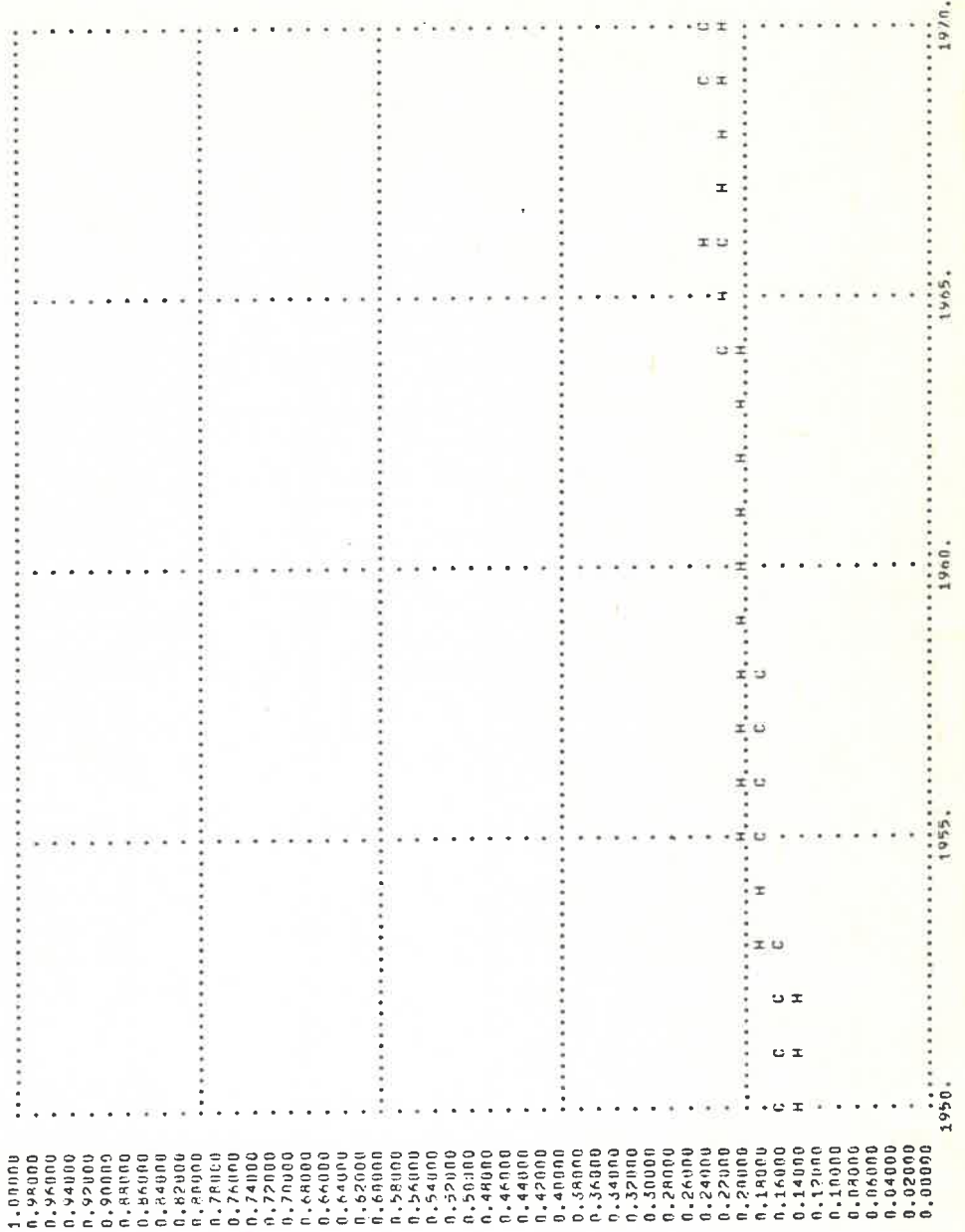
| YEAR | EXPORTS | | IMPORTS | | CAPITAL STOCK | |
|-------|------------|------------|------------|------------|---------------|------------|
| | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED | HISTORICAL | CALCULATED |
| 1950. | 0.0015 | 0.0021 | 0.0430 | 0.0486 | 1.0967 | 0.9679 |
| 1951. | 0.0016 | 0.0021 | 0.0430 | 0.0485 | 1.0614 | 1.0614 |
| 1952. | 0.0018 | 0.0021 | 0.0432 | 0.0483 | 1.0602 | 1.1548 |
| 1953. | 0.0020 | 0.0021 | 0.0500 | 0.0482 | 1.2057 | 1.2482 |
| 1954. | 0.0017 | 0.0021 | 0.0502 | 0.0480 | 1.3416 | 1.3416 |
| 1955. | 0.0024 | 0.0021 | 0.0616 | 0.0479 | 1.2985 | 1.4350 |
| 1956. | 0.0027 | 0.0021 | 0.0507 | 0.0478 | 1.3928 | 1.4350 |
| 1957. | 0.0025 | 0.0021 | 0.0456 | 0.0476 | 1.5244 | 1.5244 |
| 1958. | 0.0027 | 0.0020 | 0.0512 | 0.0475 | 1.5085 | 1.6218 |
| 1959. | 0.0025 | 0.0020 | 0.0512 | 0.0473 | 1.5072 | 1.7152 |
| 1960. | 0.0024 | 0.0020 | 0.0512 | 0.0473 | 1.7002 | 1.8086 |
| 1961. | 0.0020 | 0.0020 | 0.0512 | 0.0472 | 1.8975 | 1.9020 |
| 1962. | 0.0019 | 0.0020 | 0.0517 | 0.0470 | 2.3957 | 1.9954 |
| 1963. | 0.0019 | 0.0020 | 0.0385 | 0.0469 | 2.5056 | 2.0888 |
| 1964. | 0.0020 | 0.0020 | 0.0375 | 0.0467 | 2.4320 | 2.1822 |
| 1965. | 0.0022 | 0.0020 | 0.0422 | 0.0466 | 2.3599 | 2.2757 |
| 1966. | 0.0022 | 0.0020 | 0.0464 | 0.0465 | 2.2464 | 2.3691 |
| 1967. | 0.0019 | 0.0020 | 0.0488 | 0.0463 | 2.2680 | 2.4625 |
| 1968. | 0.0019 | 0.0020 | 0.0490 | 0.0463 | 2.5779 | 2.5559 |
| 1969. | 0.0017 | 0.0020 | 0.0451 | 0.0460 | 2.6792 | 2.6493 |
| 1970. | 0.0017 | 0.0020 | 0.0429 | 0.0459 | 2.6959 | 2.7427 |
| 1970. | 0.0017 | 0.0020 | 0.0479 | 0.0457 | 2.6415 | 2.8361 |

CHINA
 PLOT OF CONSUMPTION RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED



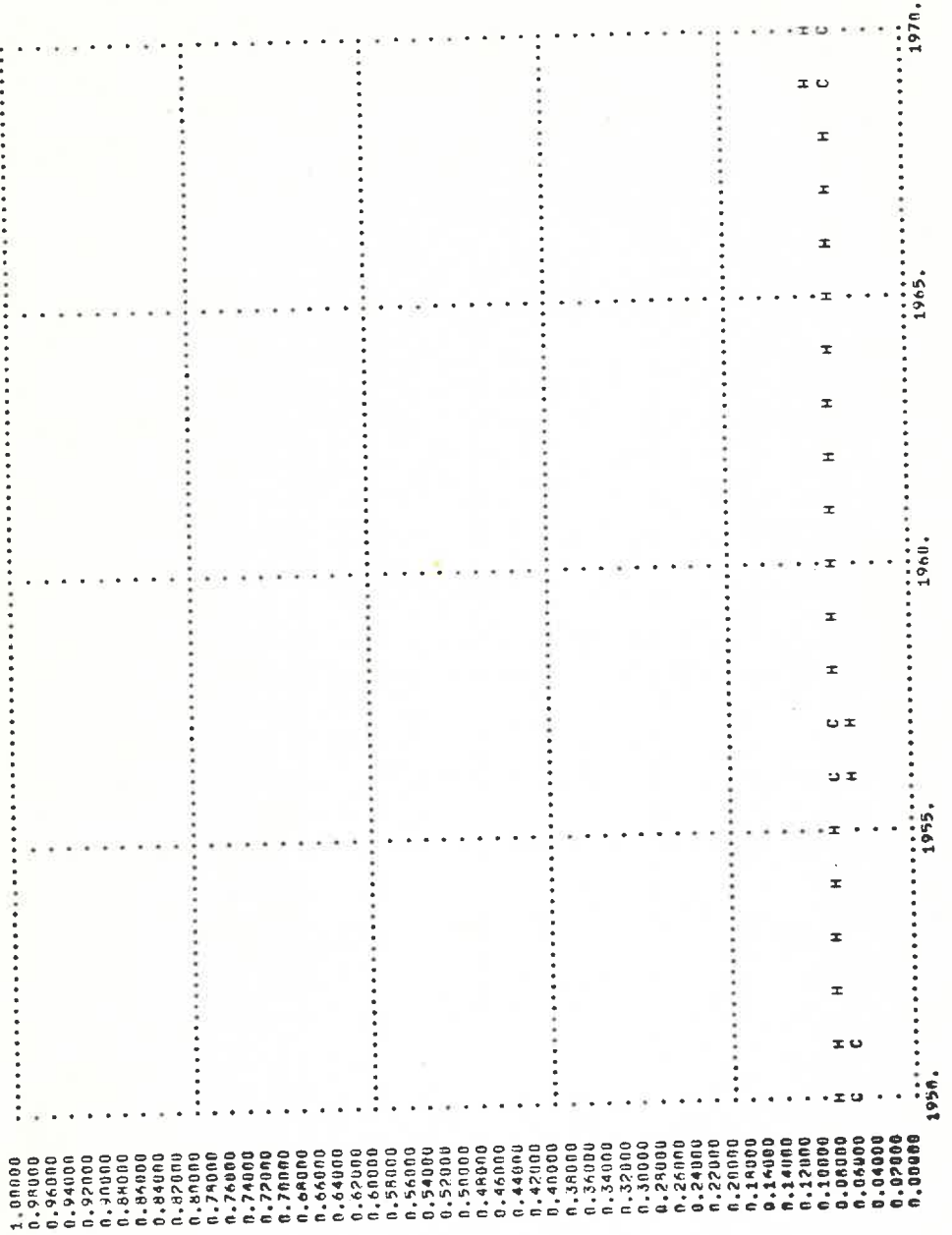
PLOT OF INVESTMENT RATIO VS. TIME
H--HISTORICAL
C--CALCULATED

CHINA

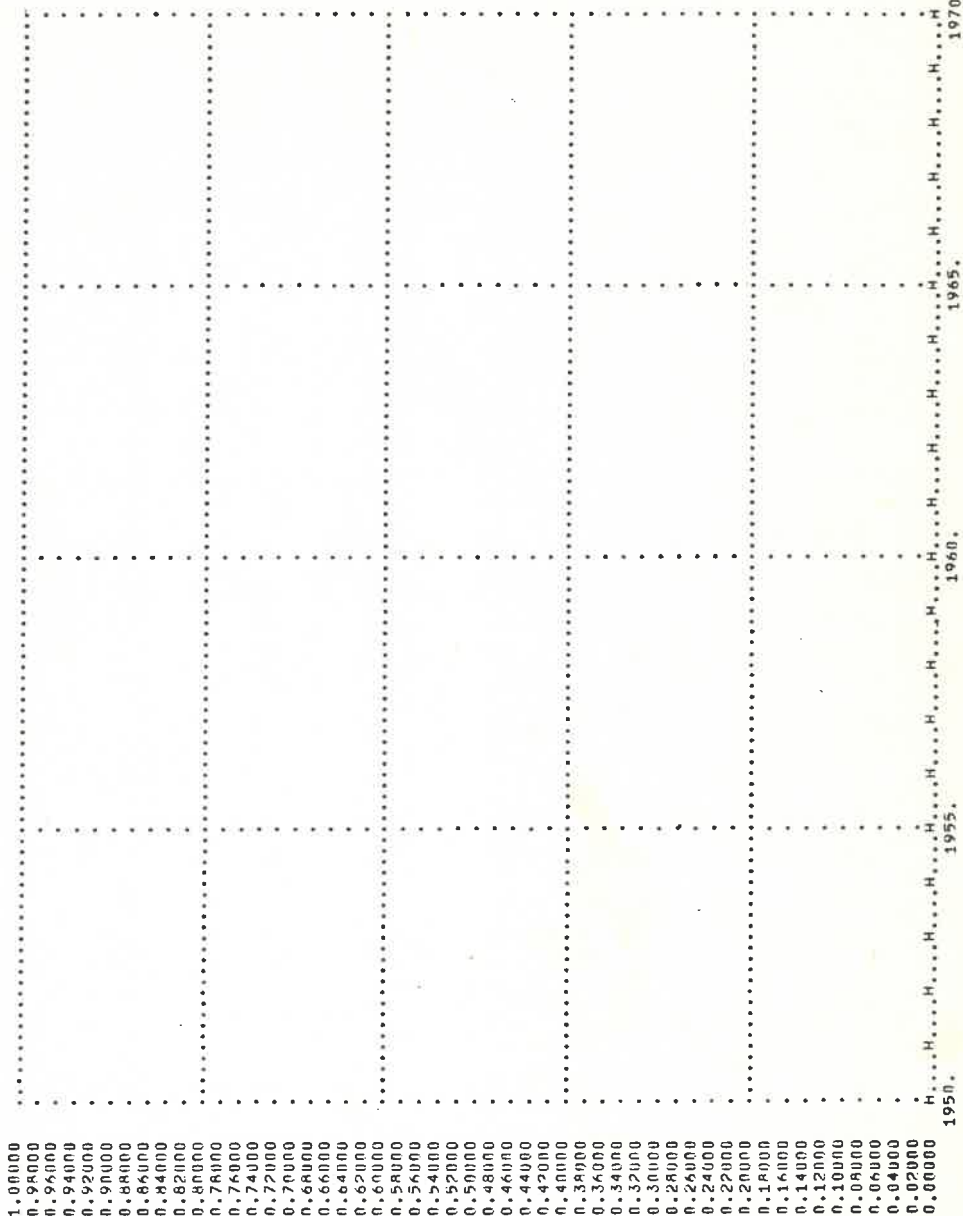


PLOT OF GOVERNMENT RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

CHINA

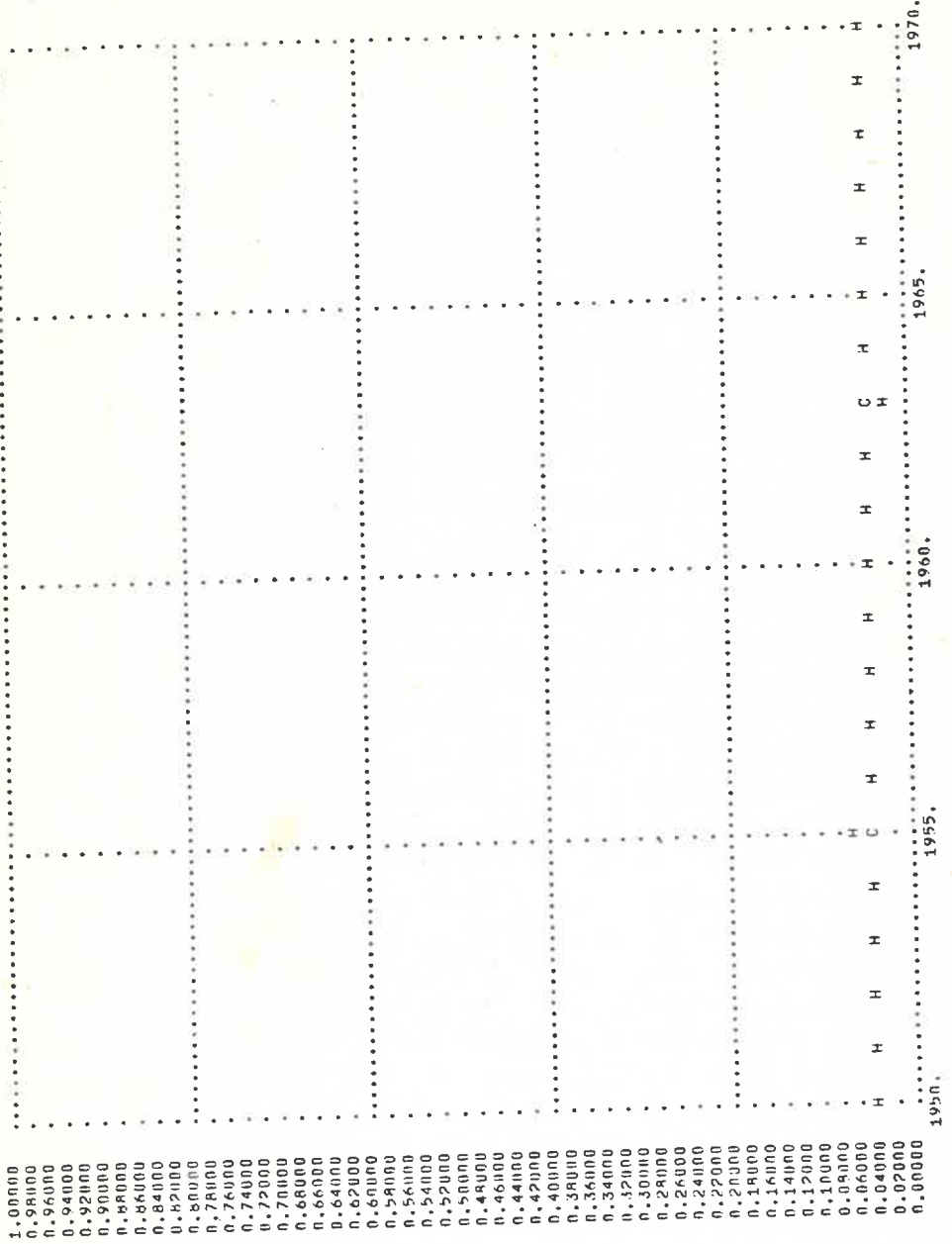


CHINA
 PLOT OF EXPUNTS RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

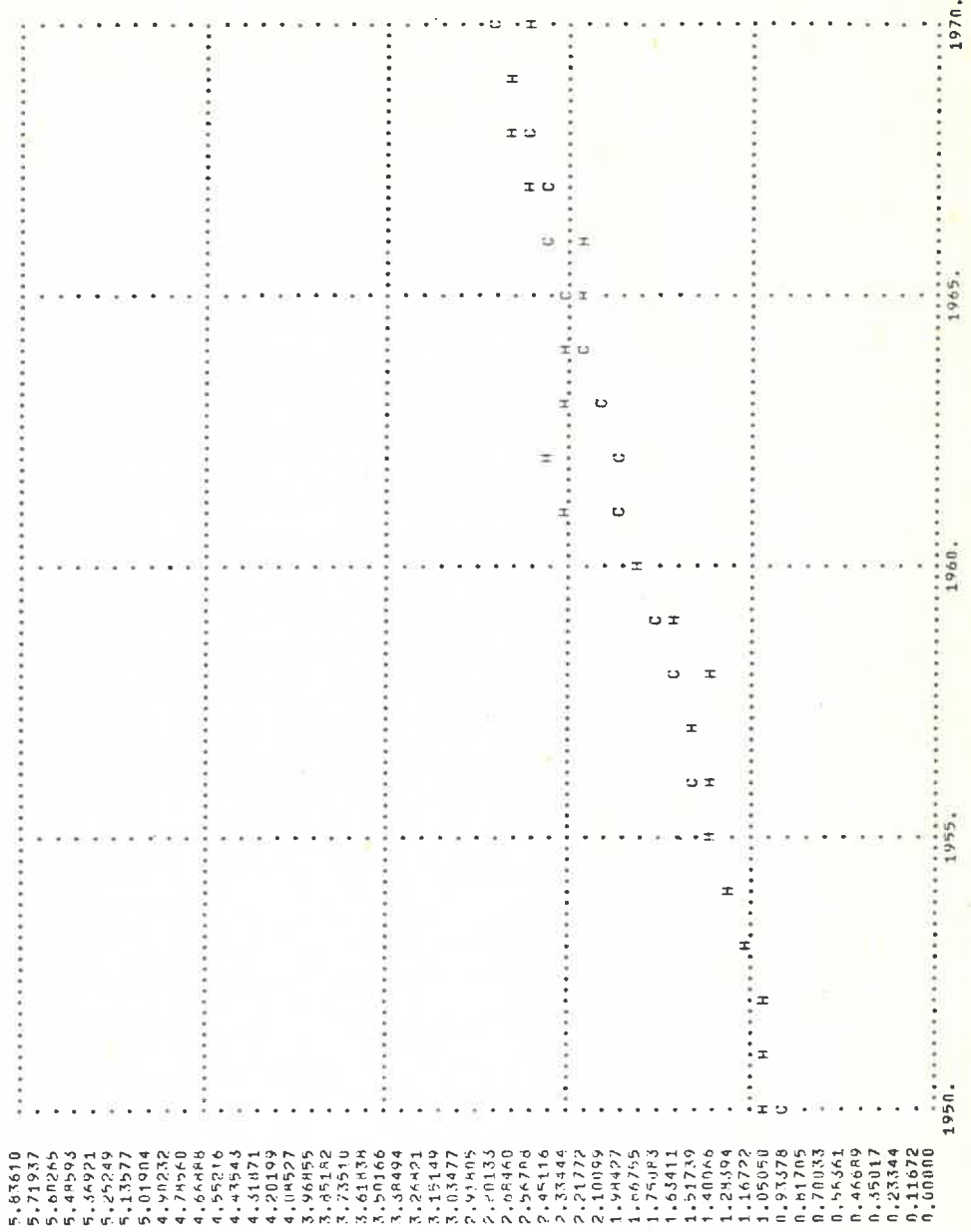


PLOT OF IMPORTS RATIO VS. TIME
 H-HISTORICAL
 C-CALCULATED

CHINA



CHINA
 PLOT OF CAPITAL STOCK RATIO VS. TIME
 H--HISTORICAL
 C--CALCULATED



B 216

B 217

4. Computer Program Listings

004959 REMOVE,PLOOUT,FORTRAN
 005001 COMPIL,PLOOUT,FORTRAN

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SUBROUTINE PLOOUT(H,KR,ITIT)
COMMON IYR,IT,GRP,GRPT,POP,POPT
DIMENSION IT(10),GRP(10,9),Y(10),POP(10,5),P(10)
EQUIVALENCE (GRP,Y),(POP,P),(GRP(71),YEX),(GRP(81),YIM)
COMMON PMUFI,TRADE
DIMENSION YEX(10),YIM(10),TRADE(10,10)
DIMENSION PMOFY(10,6)
DIMENSION CEXP(21),HEXP(21),H(21,8),YEAR(21)
DIMENSION ITIT(6,7)
DO 80 I=1,21
  YEAR(I)=FLOATF(I+1949)
DO 10 J=1,6
  PRINT 100,((ITIT(I,J),J=1,7)
  CALL OKLY(0)
AMA=0.
GO TO(11,11,11,14,14,12),I
  KKK=1+2
GO TO 13
  KKK=1
GO TO 13
  KKK=1+4
CONTINUE
DO 30 J=1,21
  IYR=J+1949
  CALL CGXM(1970)
  CEXP(J)=G+P(KR,KKK)
  CALL OKLY(1970)
  HEXP(J)=H(J,I)
  AMAEMAXIF(AMA,CEXP(J),HEXP(J))
  AMA=AMA
  AMIN=0.
DO 20 IYR=1,8
  CALL PLOTQYEAR,CEXP,21,IAUU,1,2,AMIN,AMAX,1950,,1970.)
  CALL PLOTQYEAR,HEXP,21,IBUU,2,2,AMIN,AMAX,1950,,1970.)
CONTINUE
RETURN
FORMAT(IH1,10X,$H - HISTORICAL , C - COMPUTED OR MODELS$,
110X,7(A4))
DEFINE IAUU(*)
CON A,1,C
DEFINE IRUU(*)
CON A,1,H
END
    80
    11
    12
    14
    13
    30
    20
    10
    100
    *
    *PROGRAM END, 0 FORTRAN ERRORS
    END
    *00000000 *00000000
    000314 23202020 23202020
    000315 30202020 30202020
    *
    *PROGRAM END, 0 FORTRAN ERRORS
    END
    0 ASSEMBLY ERRORS
    000466 PROGRAM OCTAL SIZE
    
```

7PLOOUT 2
 7PLOOUT 17
 7PLOOUT 18
 7PLOOUT 19
 7PLOOUT 20
 7PLOOUT 21
 7PLOOUT 22
 7PLOOUT 23
 7PLOOUT 24
 7PLOOUT 25
 7PLOOUT 29
 7PLOOUT 42
 7PLOOUT 46
 7PLOOUT 76
 7PLOOUT 79
 7PLOOUT A2
 7PLOOUT 92
 7PLOOUT 96
 7PLOOUT 98
 7PLOOUT 101
 7PLOOUT 103
 7PLOOUT 107
 7PLOOUT 109
 7PLOOUT 113
 7PLOOUT 117
 7PLOOUT 120
 7PLOOUT 134
 7PLOOUT 137
 7PLOOUT 152
 7PLOOUT 171
 7PLOOUT 174
 7PLOOUT 177
 7PLOOUT 181
 7PLOOUT 193
 7PLOOUT 212
 7PLOOUT 220
 7PLOOUT 227
 7PLOOUT 228
 7PLOOUT 249
 6PLOOUT 251
 7PLOOUT 252
 6PLOOUT 254
 7PLOOUT 255
 1PLOOUT 304
 1PLOOUT 305
 1PLOOUT 306

000000 FOL TABLE OCTAL SIZE

005044 REMOVE,QKIY,FORTRAN
005045 COMPIL,QKIY,FORTRAN

```

SUBROUTINE QKIY(ISTAT)
DIMENSION IT(10),GRP(10,9),POP(10,9),Y(10),POP(10,5),P(10)
COMMON IYR,IT,GRP,GRPT,POP,POPT
EQUIVALENCE (GRP,Y),(POP,P),(GRP(7),YEX),(GRP(8),YIM)
DIMENSION YEX(10),YIM(10),TRADE(10,10)
COMMON PMOFY,TRADE
DIMENSION PMOFY(10,6)
DIMENSION AQ(10,2),AI(10,2),AICK(10)
DIMENSION DEL(10)
      INCREMENTS QKIY
C      ISTAT      CONTROLS FUNCTION PERFORMED
C <0      HEAD IN AND PRINT OUT PARAMETERS
C =0      RE-INITIALIZE TO 1950
C >0      ADVANCE TO NEXT YEAR
C      NOT USED      IF IYR>ISTAT THEN DON'T INCREMENT
C GRP(I,1)=Y(I)      GROSS REGIONAL PRODUCT
C (I,2)              GROWTH RATE
C (I,3)              C(T)
C (I,4)              I(T)
C (I,5)              G(T)
C (I,6)              K(T)
C (I,7)              O(T)
C (I,8)=YEX(I)      EXPORTS
C (I,9)=YIM(I)      IMPORTS
      IF (ISTAT)1,2,3
1 CONTINUE
PRINT 107
DO 10 I=1,10
  READ 100,(AQ(I,J),J=1,2),IT
  PRINT 101,(AQ(I,J),J=1,2),IT
PRINT 103
DO 11 I=1,10
  READ 100,(AI(I,J),J=1,2),IT
  PRINT 101,(AI(I,J),J=1,2),IT
PRINT 104
DO 12 I=1,10
  READ 105,AICK(I),IT
  PRINT 106,AICK(I),IT
DO 15 I=1,10
  READ 105,DEL(I),IT
  PRINT 106,DEL(I),IT
DEL(I)=1.-I./DEL(I)
RETURN
GRPT=0.
DO 13 I=1,10
  GRP(I,2)=0.
  GRP(I,6)=AICK(I)
  GRP(I,7)=AQ(I,1)
  Y(I)=AICK(I)/GRP(I,7)
  GRPT=GRPT+Y(I)
2

```

70K1Y 2
70K1Y 17
70K1Y 18
70K1Y 19
70K1Y 20
70K1Y 21
70K1Y 22
70K1Y 23
70K1Y 24
70K1Y 25
70K1Y 26
70K1Y 27
70K1Y 28
70K1Y 29
70K1Y 30
70K1Y 31
70K1Y 32
70K1Y 33
70K1Y 34
70K1Y 35
70K1Y 36
70K1Y 37
70K1Y 38
70K1Y 39
70K1Y 40
70K1Y 48
70K1Y 50
70K1Y 55
70K1Y 59
70K1Y 97
70K1Y 142
70K1Y 147
70K1Y 151
70K1Y 189
70K1Y 234
70K1Y 239
70K1Y 243
70K1Y 266
70K1Y 296
70K1Y 301
70K1Y 305
70K1Y 328
70K1Y 351
70K1Y 367
70K1Y 374
70K1Y 377
70K1Y 381
70K1Y 385
70K1Y 388
70K1Y 391
70K1Y 395

```

GJ=AI(1,1)
PMOFY(1,2)=GI
13 GRP(1,4)=GI*Y(1)
GO TO 4
[3]
GRPT=0.
IF(IYR-ISTAT)40,45,45
40 AIYR=FLOATF(IYR-1949)
45 DO I4 I=1,I0
YL=Y(1)
GRP(1,6)=BEL(1)*GRP(1,6)+GRP(1,4)
GRP(1,7)=AD(1,1)*AO(1,2)*AIYR
Y(1)=GRP(1,6)/GRP(1,7)
GRP(1,2)=(Y(1)-YL)/YL
GRPT=GRPT+Y(1)
GI=AI(1,1)*AI(1,2)*AIYR
PMOFY(1,2)=GI
14 GRP(1,4)=GI*Y(1)
GO TO 4
100 FORMAT(2F10.0,20X,10(A4))
101 FORMAT(5X,2F10.5,5X,10(A4))
102 FORMAT(//20X,$CAPITAL OUTPUT RATIO%)
103 FORMAT(//20X,$INVESTMENTS)
104 FORMAT(//20X,$INITIAL CONDITION FOR CAPITAL (1950 HISTORICAL)$)
105 FORMAT(F10.0,30X,10(A4))
106 FORMAT(5X,F10.3,15X,10(A4))
107 FORMAT(//20X,$LIFE OF CAPITAL$)
END

```

70KLY 399
70KLY 402
70KLY 405
70KLY 417
70KLY 419
70KLY 422
70KLY 431
70KLY 436
70KLY 440
70KLY 444
70KLY 449
70KLY 454
70KLY 458
70KLY 463
70KLY 467
70KLY 472
70KLY 475
70KLY 487
70KLY 489
70KLY 497
70KLY 505
70KLY 516
70KLY 525
70KLY 543
70KLY 550
70KLY 558
70KLY 568
10KLY 604
10KLY 605
10KLY 606

*00000000 *00000000

*PROGRAM END, 0 FORTAN ERRORS
END

0 ASSEMBLY ERRORS

001070 PROGRAM OCTAL SIZE

000000 FUL TABLE OCTAL SIZE

005156 REMOVE,CGXM,FORTAN
005157 COMPILE,CGXM,FORTAN

```

SUBROUTINE CGXMI(ISTAT)
DIMENSION I(10),GRP(10,9),Y(10),POP(10,5),P(10)
COMMON IYR,I,GRP,GRPT,POP,POPT
EQUIVALENCE (GRP,Y),(POP,P),(GRP(7),YEX),(GRP(8),YIM)
DIMENSION YEX(10),YIM(10),TRADE(10,10)
DIMENSION AC(10,2),AG(10,2),AX(10,2)
DIMENSION PMOFY(10,6)
COMMON PMOFY,TRADE
IF(ISTAT)1,2,3
PRINT 102
DO I0 I=1,10
READ 100,(AC(I,J),J=1,2),IT
PRINT 101,(AG(I,J),J=1,2),IT
PRINT 103

```

7CGXM 2
7CGXM 17
7CGXM 18
7CGXM 19
7CGXM 20
7CGXM 21
7CGXM 22
7CGXM 23
7CGXM 24
7CGXM 32
7CGXM 37
7CGXM 41
7CGXM 79
7CGXM 124

```

20 DO 20 I=1,10
   READ 100,(AG(I,J),J=1,2),IT
   PRINT 101,(AG(I,J),J=1,2),IT
   PRINT 104
DO 30 I=1,10
   READ 100,(AX(I,J),J=1,2),IT
   PRINT 101,(AX(I,J),J=1,2),IT
   RETURN
30 IF (LYN-ISTAT)45,45,46
45 A1Y=FLUATF(IYR-1950)
46 YIMT=0.
DO 40 I=1,10
   GG=AG(I,1)+AG(I,2)*A1YR
   GB=AG(I,1)+AG(I,2)*A1YR
   GX=AX(I,1)+AX(I,2)*A1YR
   PMDFY(I,1)=GG
   PMDFY(I,3)=GG
   PMDFY(I,4)=GG
   GRP(I,3)=GG*Y(I)
   GRP(I,5)=GG*Y(I)
   YEX(I)=GX*GRPT
   YEX(I)=GG*Y(I)
C   IMPORTS ARE THE RESIDUE
   YIM(I)=GRP(I,3)+GRP(I,4)+GRP(I,5)+YEX(I)-Y(I)
   YIMT=YIMT+YIM(I)
   YEXT=YEXT+YEX(I)
C   BALANCE IMPORTS AND EXPORTS TOTAL WORLD CHANGE IMPORTS
   A2=(YEXT-YIMT)*.5
   A1=A1*.1
   YIMT=0.
DO 15 J=1,10
   YIM(I)=YIM(I)+A2+A1
   YIMT=YIMT+YIM(I)
15 BALANCE Y-1-E+M=C+G REGIONAL
C DO 25 I=1,10
   ECG=GRP(I,3)+GRP(I,5)
   EYIEM=Y(I)-GRP(I,4)-YEX(I)+YIM(I)
   ECG=1.+(EYIEM-FCG)/ECG
   GRP(I,5)=GRP(I,5)*ECG
   GRP(I,3)=GRP(I,3)*ECG
25 GO TO 2
100 FORMAT(2F10.0,20X,10(A4))
101 FORMAT(5X,2F10.6, 5X,10(A4))
102 FORMAT(//20X,$CONSUMPTION$)
103 FORMAT(//20X,$GOVERNMENT$)
104 FORMAT(//20X,$EXPORTS$)
   END
*
*PROGRAM END. 0 FORTRAN ERRORS
END
*00000000 *00000000
1CGXM 566
1CGXM 567
1CGXM 568
0 ASSEMBLY ERRORS

```


005300 REMOVE,KKKKK,PERMAN
 005301 COMPIL,KKKKK,PERMAN

001044 PROGRAM OCTAL SIZE
 000000 EQL TABLE OCTAL SIZE

```

DIMENSION IT(10),GRP(10,9),Y(10),POP(10,5),P(10)
COMMON IYR,IT,GRP,GRPT,POP,POPT
EQUIVALENCE (GRP,Y),(POP,P),(GRP(71),YEX),(GRP(81),YIM)
COMMON PMOY,TRADE
DIMENSION YEX(10),YIM(10),TRADE(10,10)
DIMENSION PROPY(10,6)
DIMENSION TITLE(7),H(21,8),ER(3)
INTEGER TITLE
DIMENSION THPX(21),TWHM(21),TMCX(21),TMCX(21)
DIMENSION RATIO(3)
DIMENSION ITIT(6,7)
DO 7577 I=1,6
7577 READ 101,(IT(I,J),J=1,7)
DEL=34./39.
MAXIYR=2025
MAXIYR=1970
PRINT 111
CALL QK1Y(-1)
CALL CGXM(-1)
PRINT 111
CALL TMBAL(-1,ITER,AERROR)
DO 1 I=1,21
THPX(I)=0.
TWHM(I)=0.
TMCX(I)=0.
TMCX(I)=0.
DO 50 I=1,10
READ 101,TITLE
DO 52 J=1,8
READ 100,(H(K,J),K=1,21)
PRINT 110
DO 53 J=1,3
ER(J)=0.
CALL QK1Y(0)
PRINT 102,TITLE
DO 10 IYR=1950,MAXIYR
J=IYR-1949
CALL CGXM(1970)
IF(IYR-1970).EQ.50,31
CONTINUE
DO 75 K=1,3
RATIO(K)=H(J,K)/H(J,6)
75 ER(1)=ER(1)+(GRP(1,3)-H(J,1))**2
ER(2)=ER(2)+(GRP(1,4)-H(J,2))**2
ER(3)=ER(3)+(GRP(1,5)-H(J,3))**2
PRINT 103,IYR,GRP(1,3),H(J,1),GRP(1,4),H(J,2),GRP(1,5),H(J,3)
GO TO 10
    
```

7KKKKK 2
 7KKKKK 3
 7KKKKK 4
 7KKKKK 5
 7KKKKK 6
 7KKKKK 7
 7KKKKK 8
 7KKKKK 9
 7KKKKK 10
 7KKKKK 11
 7KKKKK 12
 7KKKKK 13
 7KKKKK 17
 7KKKKK 49
 7KKKKK 53
 7KKKKK 56
 7KKKKK 59
 7KKKKK 64
 7KKKKK 70
 7KKKKK 75
 7KKKKK 81
 7KKKKK 86
 7KKKKK 94
 7KKKKK 98
 7KKKKK 102
 7KKKKK 105
 7KKKKK 108
 7KKKKK 119
 7KKKKK 123
 7KKKKK 141
 7KKKKK 145
 7KKKKK 177
 7KKKKK 184
 7KKKKK 189
 7KKKKK 193
 7KKKKK 204
 7KKKKK 207
 7KKKKK 225
 7KKKKK 229
 7KKKKK 233
 7KKKKK 236
 7KKKKK 244
 7KKKKK 246
 7KKKKK 250
 7KKKKK 270
 7KKKKK 282
 7KKKKK 292
 7KKKKK 302
 7KKKKK 333

```

31 PRINT 109, IYR, GRP(1,3), GRP(1,4), GRP(1,5)
   ID CALL OKLY(1970)
   DO 51 J=1,3
51 ER(J)=SORTF(ER(J)/Z1.)
   PRINT 104, ER
   DO 55 J=1,3
55 ER(J)=0.
   CALL OKLY(0)
   PRINT 105
   AK=H(1,7)
   DO 20 IYR=1950, MAXIYR
   J=IYR-1949
   CALL CGXM(1970)
   IF (IYR-1970) 32, 32, 33
32 CONTINUE
   RATIO(1)=H(J,4)/H(J,6)
   RATIO(2)=AK/H(J,6)
   AK=DEL*AK+H(J,2)
   K=J-1
   RATIO(3)=(H(J,4)-H(K,6))/H(K,6)
   X PRINT 103, IYR, GRP(1,1), H(J,6), GRP(1,8), H(J,4), GRP(1,9), H(J,5)
   TMMX(J)=TMMX(J)+H(J,4)
   TMM(J)=TMM(J)+H(J,5)
   TMCX(J)=TMCX(J)+YIM(1)
   TMCX(J)=TMCX(J)+YEX(1)
   ER(1)=ER(1)+(GRP(1,1)-H(J,6))**2
   ER(2)=ER(2)+(GRP(1,8)-H(J,4))**2
   ER(3)=ER(3)+(GRP(1,9)-H(J,5))**2
   GO TO 20
33 PRINT 109, IYR, Y(1), YEX(1), YIM(1)
   ID CALL OKLY(1970)
   DO 59 J=1,3
59 ER(J)=SORTF(ER(J)/Z1.)
   PRINT 104, ER
   CALL PLOUT(H, I, ITIT)
   IF (SENSE SWITCH 23) 7777, 7778
7778 CONTINUE
50 CONTINUE
   PRINT 110
   DO 2 IYR=1950, 1970
   J=IYR-1949
   DIFF=TMMX(J)-TMM(J)
   DIFF=TMCX(J)-TMCX(J)
   PRINT 103, IYR, TMMX(J), TMM(J), DIFF, TMCX(J), TMCX(J), DIFF
   CALL OKLY(0)
   CALL CGXM(0)
   CALL TMBAL(0, ITER, AERROR)
   PRINT 110
   DO 200 IYR=1950, 1970
   PRINT 203
   CALL CGXM(1970)
   CALL TMBAL(1970, ITER, AERROR)
   PRINT 204, IYR, ITER, AERROR
   PRINT 201, IYR, (GRP(1,1), I=1, 10)

```

```

7KWKKKK 335
7KWKKKK 355
7KWKKKK 365
7KWKKKK 369
7KWKKKK 382
7KWKKKK 400
7KWKKKK 404
7KWKKKK 415
7KWKKKK 418
7KWKKKK 423
7KWKKKK 426
7KWKKKK 430
7KWKKKK 434
7KWKKKK 437
7KWKKKK 445
7KWKKKK 447
7KWKKKK 452
7KWKKKK 456
7KWKKKK 461
7KWKKKK 465
7KWKKKK 472
7KWKKKK 472
7KWKKKK 504
7KWKKKK 508
7KWKKKK 512
7KWKKKK 516
7KWKKKK 520
7KWKKKK 530
7KWKKKK 540
7KWKKKK 550
7KWKKKK 552
7KWKKKK 572
7KWKKKK 582
7KWKKKK 586
7KWKKKK 599
7KWKKKK 617
7KWKKKK 622
7KWKKKK 627
7KWKKKK 629
7KWKKKK 637
7KWKKKK 642
7KWKKKK 646
7KWKKKK 650
7KWKKKK 655
7KWKKKK 659
7KWKKKK 694
7KWKKKK 697
7KWKKKK 700
7KWKKKK 705
7KWKKKK 710
7KWKKKK 714
7KWKKKK 719
7KWKKKK 722
7KWKKKK 727
7KWKKKK 738

```

PAGE 007 12/22/73 MACRO ECON MODEL QKIY AND CSGM SUPPLY MODEL

```

202 PRINT 201, IYR, YEX
200 PRINT 201, IYR, YIM
7777 PRINT 205
      DO 202 I=1,10
200 PRINT 201,I,(TRADE(I,J),J=1,10)
      CALL QKIY(1970)
      CONTINUE
      STOP
100 FORMAT(4F10.0,4F10.0)
101 FORMAT(7A4)
102 FORMAT(23X,7(A4)/15X,$CCS,7X,$HCS,7X,$CIS,7X,$SIS
      1,7X,$UGS,7X,$HGS)
103 FORMAT(4X,15,6F9.3)
104 FORMAT(4X,$ FHHORS,3X,2(F9.5,9X),F9.5)
105 FORMAT(15X,$CYS,7X,$HSY,7X,$CXS,7X,$HYS,7X,$CMS,7X,$HMS)
109 FORMAT(4X,15,2(F9.3,9X),F9.3)
110 FORMAT(1H1//29X,3X,$TABLES)
111 FORMAT(1H1,10X,$PARAMETERS FOR MODELS)
201 FORMAT(//)
203 FORMAT(//)
204 FORMAT(20X,2110,F20.10)
205 FORMAT(1X,5(4H**))
      END

```

```

7KKKKK 759
7KKKKK 779
7KKKKK 799
7KKKKK 804
7KKKKK 808
7KKKKK 842
7KKKKK 852
7KKKKK 854
7KKKKK 857
7KKKKK 862
7KKKKK 867
7KKKKK 868
7KKKKK 894
7KKKKK 899
7KKKKK 911
7KKKKK 932
7KKKKK 941
7KKKKK 953
7KKKKK 964
7KKKKK 969
7KKKKK 974
7KKKKK 979
7KKKKK 986
1KKKKK1055
1KKKKK1056
1KKKKK1057

```

```

*00000000 *00000000
*PROGRAM END, 0 FORTRAN ERRORS
      END
0 ASSEMBLY ERRORS
011145 PROGRAM OCTAL SIZE
000457 EQL TABLE OCTAL SIZE

```

005507 FIN

II.5. COMPUTER IMPLEMENTATION OF
MICRO ECONOMIC WORLD MODEL

T.Shook, W.Strobele

APRIL 1974

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| 3. Results of Validation Test | B 239 |
| 4. Gross Outputs, Intermediate Demands and Inputs
Computation | B 269 |
| 5. Sectorial Final Demands | B 287 |

1. Basic Assumptions and Overview of the Report

Construction of a dynamic model of the world economy in which various production sectors are explicitly represented can be approached in the following two ways:

(i) Use the macro model to provide basic dynamics of the economic development, disaggregate the macro variables into the desired production sectors and then use the input-output matrix and the final demand coefficients to determine intermediate demands, components of the final demands and other micro variables.

(ii) Develop dynamic models on the micro level as such.

In this report we shall present the results of the effort following the first direction. The model on the micro level as implemented is given by the set of vector-matrix equations:

$$\bar{C}^t = \bar{P}_c c^t$$

$$\bar{G}^t = \bar{P}_g g^t$$

$$\bar{M}^t = \bar{P}_m m^t$$

$$\bar{E}^t = \bar{P}_e e^t$$

$$\bar{I}_d^t = \bar{P}_i i^t$$

$$\bar{I}_o^t = \bar{B} I_d^t$$

$$\bar{Y}^t = \bar{C}^t + \bar{G}^t + \bar{I}_o^t + \bar{X}^t - \bar{M}^t$$

$$\bar{Z}^t = \bar{A} \bar{Z}^t + \bar{Y}^t$$

$$\bar{V}^t = \bar{F} \bar{Z}^t$$

where:

$\bar{P}_c, \bar{P}_g, \bar{P}_m, \bar{P}_e, \bar{P}_i$ - are vectors of the distribution coefficients obtained from the input-output and trade data

- \bar{B} - the matrix of investment flow coefficients
 \bar{A} - the input-output matrix
 F - the matrix of transformation coefficients from gross outputs
to value added
 \bar{V} - vector of value-added
 I_o - investment vector by origin
 I_d - investment vector by destination
 \bar{G} - vector of government expenditures
 \bar{C} - vector of consumption by sectors
 X - vector of exports
 M - vector of imports

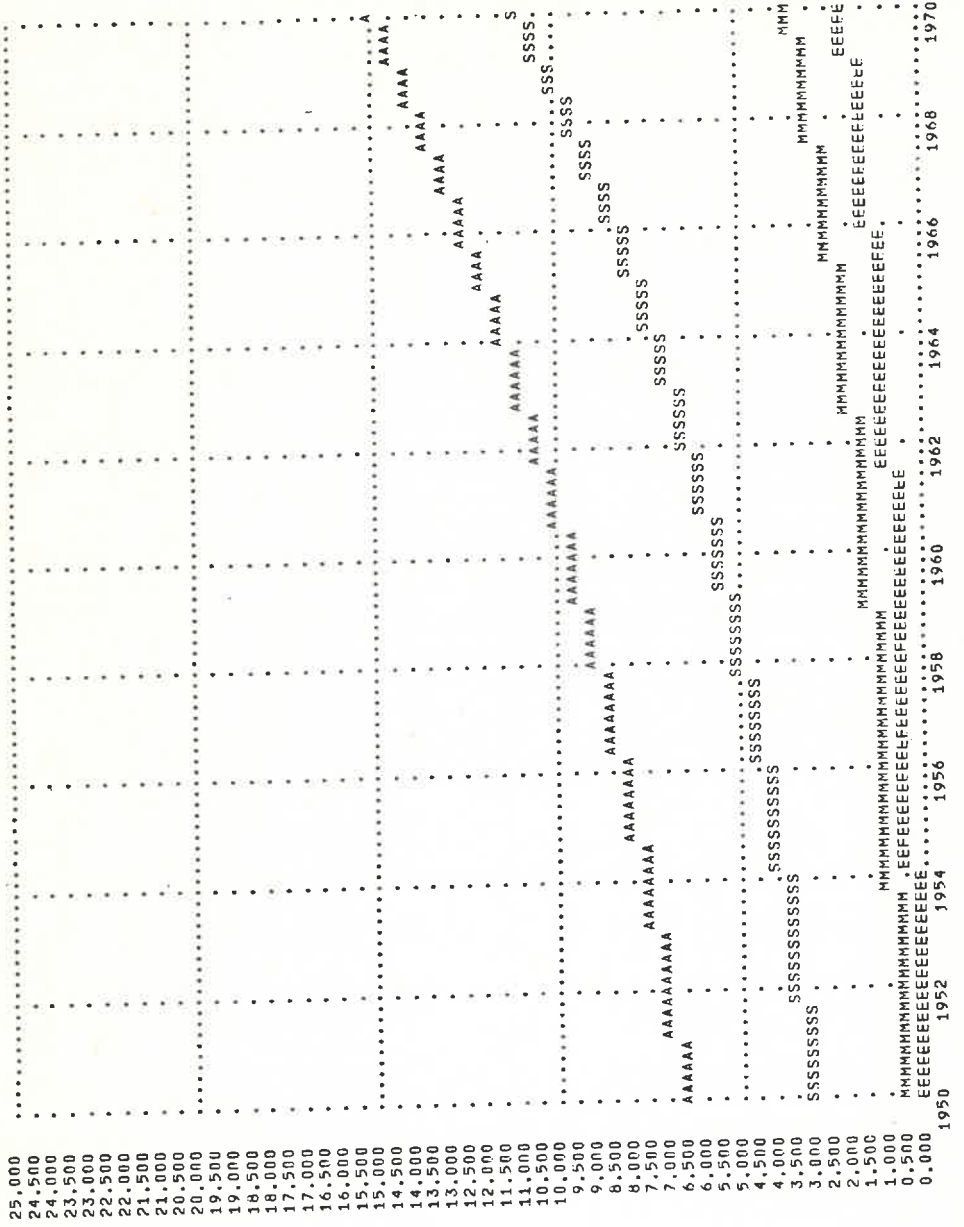
Section 2 contains the output of the four sectors model. Section 3 gives the results of the validation test in which the value added of a nine sector model is compared with the historical data. The results are presented in both table and graph forms. Section 4 contains some representative results of gross outputs, Z , intermediate demands, U , and inputs, W , which are derived by using input-output matrices aggregated to nine, four and two sectors as indicated. Section 5 gives the final demands by sectors computed by means of distribution coefficients for nine, four and two sectors.

B 229

2. Value Added of Four Sector Model

HICRO - ECONOMIC MODEL FOR MAIN AFRICA

A=AGRICULTURE E=MINING&ENERGY M=MANUFACTURING S=SERVICES



B 238

3. Results of Validation Test

(The result of the test will be presented in table form for all regions, in order to save space the graphical comparison will be given only for one region)

MICRO ECONOMIC MODEL FOR NORTH AMERICA

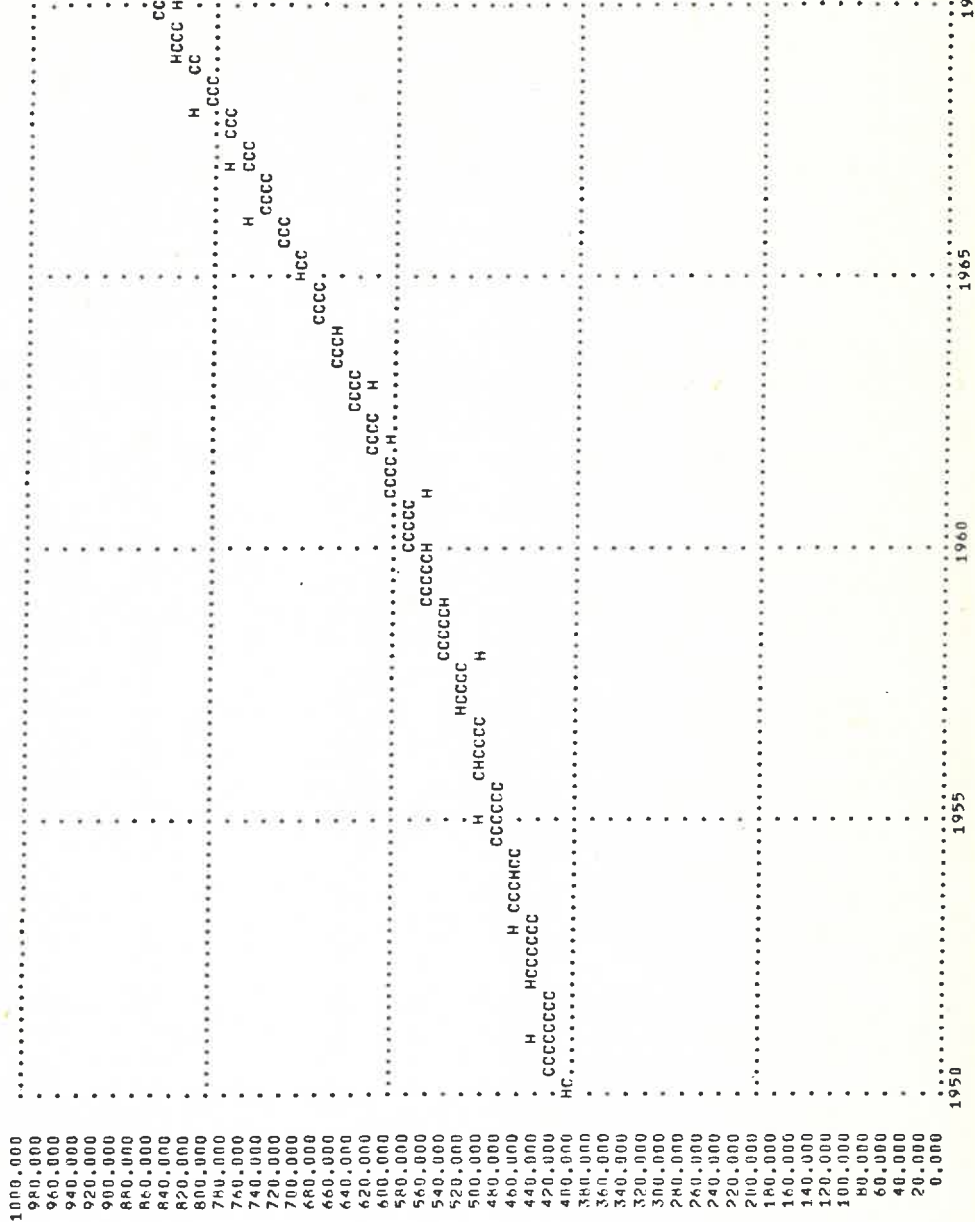
| YEAR | GROSS. REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|-------------------|---------|-------------|--------|--------|-------|--------|--------|--------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 401.438 | 413.391 | 19.395 | 19.679 | 2.168 | 2.603 | 14.255 | 15.422 | 13.372 | 14.894 |
| 1951 | 439.668 | 426.547 | 19.655 | 19.961 | 2.506 | 2.693 | 16.401 | 16.039 | 15.390 | 15.243 |
| 1952 | 452.410 | 440.355 | 20.768 | 20.257 | 2.579 | 2.788 | 16.786 | 16.888 | 15.746 | 15.607 |
| 1953 | 471.527 | 454.852 | 21.362 | 20.551 | 2.782 | 2.887 | 18.156 | 18.092 | 17.024 | 15.986 |
| 1954 | 465.156 | 470.082 | 21.166 | 20.860 | 2.605 | 2.992 | 16.980 | 18.092 | 15.956 | 16.386 |
| 1955 | 503.787 | 486.102 | 22.199 | 21.178 | 3.574 | 3.102 | 20.035 | 18.852 | 17.468 | 16.802 |
| 1956 | 509.762 | 502.957 | 21.924 | 21.506 | 3.569 | 3.219 | 20.038 | 19.654 | 17.437 | 17.237 |
| 1957 | 522.508 | 520.703 | 21.167 | 21.845 | 3.436 | 3.341 | 20.436 | 20.501 | 17.823 | 17.693 |
| 1958 | 516.133 | 539.398 | 21.733 | 22.193 | 3.768 | 3.470 | 21.321 | 21.596 | 18.275 | 18.170 |
| 1959 | 547.992 | 559.117 | 22.141 | 22.553 | 4.165 | 3.607 | 22.456 | 22.344 | 20.113 | 18.670 |
| 1960 | 560.734 | 579.922 | 22.548 | 22.924 | 4.151 | 3.751 | 23.445 | 23.347 | 18.959 | 19.195 |
| 1961 | 573.477 | 601.891 | 22.944 | 23.307 | 3.900 | 3.903 | 23.517 | 24.409 | 19.502 | 19.747 |
| 1962 | 611.711 | 625.125 | 23.245 | 23.702 | 4.037 | 4.064 | 25.508 | 25.536 | 20.431 | 20.326 |
| 1963 | 637.203 | 649.688 | 24.218 | 24.108 | 4.143 | 4.235 | 26.704 | 26.731 | 20.841 | 20.934 |
| 1964 | 689.062 | 675.703 | 23.555 | 24.528 | 4.484 | 4.416 | 27.905 | 28.000 | 21.347 | 21.575 |
| 1965 | 713.664 | 703.266 | 25.055 | 24.960 | 4.711 | 4.608 | 28.980 | 29.350 | 21.842 | 22.249 |
| 1966 | 784.641 | 752.492 | 24.518 | 25.406 | 4.894 | 4.812 | 31.200 | 30.786 | 23.018 | 22.959 |
| 1967 | 783.758 | 763.531 | 25.242 | 25.867 | 4.860 | 5.029 | 32.610 | 32.316 | 23.674 | 23.708 |
| 1968 | 821.984 | 796.508 | 27.377 | 26.340 | 5.179 | 5.260 | 33.780 | 33.947 | 24.500 | 24.499 |
| 1969 | 847.477 | 831.594 | 28.311 | 26.829 | 5.001 | 5.506 | 35.177 | 35.688 | 24.835 | 25.335 |
| 1970 | 841.102 | 868.945 | 27.759 | 27.333 | 5.131 | 5.768 | 37.349 | 37.543 | 25.740 | 26.219 |

| YEAR | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|---------|--------------|---------|------------|---------|------------|---------|-----------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 95.449 | 99.873 | 19.4515 | 22.1599 | 125.095 | 127.230 | 86.383 | 87.596 | 23.812 | 23.391 |
| 1951 | 109.795 | 103.433 | 22.733 | 22.989 | 133.433 | 130.643 | 94.317 | 90.967 | 25.415 | 24.574 |
| 1952 | 112.438 | 107.068 | 23.211 | 23.393 | 137.500 | 134.215 | 97.188 | 94.515 | 26.197 | 25.824 |
| 1953 | 121.383 | 110.891 | 23.626 | 23.812 | 140.813 | 137.955 | 99.550 | 94.248 | 26.832 | 27.143 |
| 1954 | 113.694 | 114.910 | 24.237 | 24.246 | 142.542 | 141.873 | 100.762 | 102.162 | 27.168 | 28.536 |
| 1955 | 125.955 | 119.144 | 26.276 | 24.697 | 146.332 | 145.982 | 109.939 | 106.329 | 30.203 | 30.009 |
| 1956 | 127.313 | 123.604 | 27.329 | 25.165 | 149.238 | 150.295 | 112.118 | 110.704 | 30.796 | 31.568 |
| 1957 | 130.037 | 128.305 | 26.760 | 25.651 | 154.604 | 154.820 | 116.135 | 115.322 | 31.802 | 31.214 |
| 1958 | 116.927 | 133.264 | 26.586 | 26.155 | 155.645 | 159.574 | 116.617 | 120.201 | 35.258 | 34.967 |
| 1959 | 128.625 | 138.500 | 27.896 | 26.680 | 162.770 | 164.574 | 121.939 | 125.359 | 36.883 | 36.820 |
| 1960 | 133.385 | 144.033 | 27.877 | 27.225 | 165.521 | 169.832 | 126.145 | 130.818 | 38.703 | 38.780 |
| 1961 | 134.332 | 149.881 | 27.762 | 27.791 | 170.760 | 175.367 | 130.492 | 136.598 | 40.266 | 40.878 |
| 1962 | 148.094 | 156.078 | 28.384 | 28.581 | 179.844 | 181.203 | 138.857 | 142.727 | 43.310 | 43.100 |
| 1963 | 156.846 | 162.629 | 28.679 | 29.995 | 185.652 | 187.355 | 144.037 | 149.223 | 46.079 | 45.463 |
| 1964 | 167.770 | 169.586 | 30.448 | 29.634 | 193.531 | 193.848 | 151.307 | 156.125 | 48.718 | 47.979 |
| 1965 | 185.371 | 176.961 | 30.836 | 30.299 | 204.574 | 200.707 | 160.174 | 163.455 | 52.107 | 50.662 |
| 1966 | 202.805 | 184.973 | 32.805 | 30.993 | 219.032 | 207.957 | 171.066 | 171.250 | 54.601 | 53.521 |
| 1967 | 202.564 | 193.125 | 30.808 | 31.717 | 216.594 | 215.629 | 188.766 | 179.551 | 58.637 | 56.577 |
| 1968 | 213.674 | 201.988 | 31.570 | 32.472 | 228.969 | 223.754 | 198.219 | 188.396 | 58.701 | 59.841 |
| 1969 | 220.557 | 211.426 | 31.872 | 33.259 | 235.051 | 232.371 | 202.840 | 197.834 | 63.828 | 63.334 |
| 1970 | 210.465 | 221.492 | 30.367 | 34.083 | 230.234 | 241.512 | 210.041 | 207.910 | 64.014 | 67.074 |

MICRO ECONOMIC MODEL FOR NORTH AMERICA GROSS REG. PROD.

H=HISTORICAL C=COMPUTED

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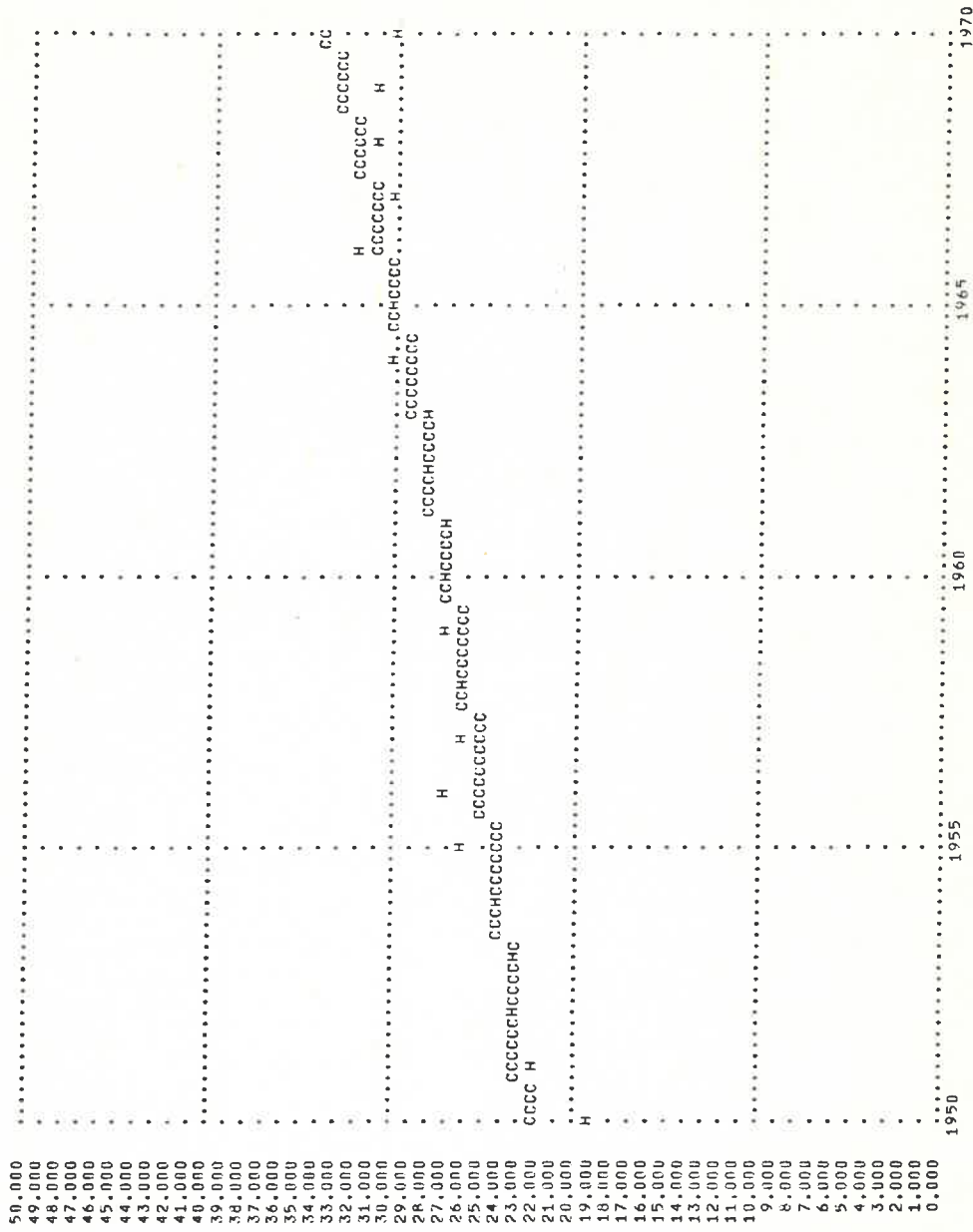


1950 1955 1960 1965 1970

MICRO ECONOMIC MODEL FOR NORTH AMERICA MANUFACTURING
H=HISTORICAL C=COMPUTED

| | 1950 | 1955 | 1960 | 1965 | 1970 |
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MICRO ECONOMIC MODEL FOR NORTH AMERICA CONSTRUCTION
H=HISTORICAL C=COMPUTED



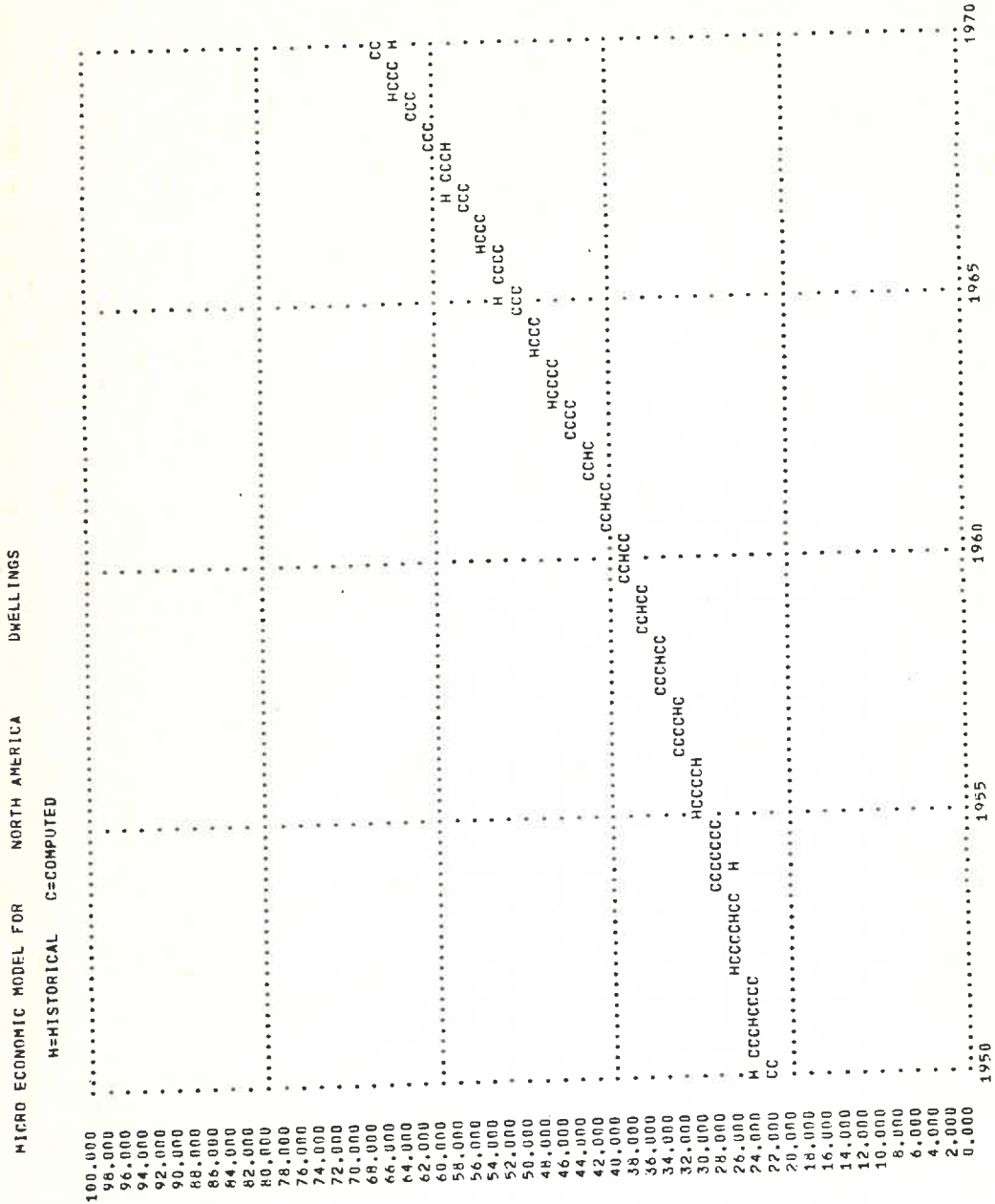
MICRO ECONOMIC MODEL FOR NORTH AMERICA SERVICES 1
H=HISTORICAL C=COMPUTED

| | 1950 | 1955 | 1960 | 1965 | 1970 |
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MICRO ECONOMIC MODEL FOR NORTH AMERICA SERVICES 2

H=HISTORICAL C=COMPUTED

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MICRO ECONOMIC MODEL FOR NORTH AMERICA

| | GROSS REG. PROD. | | AGRICUL+FOOD | | MINING+ENERGY | | MANUFAC+CONSTRUC | | SERVICES | |
|------|------------------|---------|--------------|--------|---------------|--------|------------------|---------|----------|---------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 401,438 | 413,591 | 32,767 | 34,573 | 16,423 | 18,025 | 114,964 | 122,572 | 237,277 | 238,215 |
| 1951 | 439,668 | 426,547 | 35,045 | 35,204 | 18,907 | 18,732 | 132,527 | 126,422 | 253,184 | 246,184 |
| 1952 | 452,410 | 440,355 | 36,514 | 35,859 | 19,365 | 19,476 | 135,648 | 130,463 | 260,883 | 254,551 |
| 1953 | 471,527 | 454,852 | 38,386 | 36,539 | 20,938 | 20,259 | 145,008 | 134,703 | 267,191 | 263,344 |
| 1954 | 465,156 | 470,082 | 37,122 | 37,246 | 19,585 | 21,084 | 157,930 | 139,158 | 270,512 | 272,590 |
| 1955 | 503,337 | 486,102 | 39,667 | 37,979 | 23,609 | 21,954 | 153,631 | 143,442 | 286,469 | 282,320 |
| 1956 | 509,762 | 502,957 | 39,361 | 38,743 | 23,607 | 22,873 | 154,643 | 148,770 | 292,148 | 292,566 |
| 1957 | 522,508 | 520,703 | 38,990 | 39,537 | 24,095 | 23,842 | 156,797 | 153,957 | 302,617 | 303,359 |
| 1958 | 516,133 | 539,398 | 40,008 | 40,363 | 25,089 | 24,867 | 143,512 | 159,422 | 307,520 | 314,742 |
| 1959 | 547,992 | 559,117 | 42,254 | 41,224 | 27,621 | 25,951 | 156,520 | 165,184 | 321,520 | 326,758 |
| 1960 | 560,734 | 579,922 | 41,507 | 42,119 | 27,596 | 27,097 | 161,262 | 171,258 | 330,367 | 339,438 |
| 1961 | 573,477 | 601,891 | 42,446 | 43,053 | 27,417 | 28,312 | 162,094 | 177,676 | 341,516 | 352,844 |
| 1962 | 611,711 | 625,125 | 43,676 | 44,027 | 29,545 | 29,600 | 176,477 | 184,457 | 362,008 | 367,031 |
| 1963 | 637,203 | 649,688 | 45,059 | 45,042 | 30,847 | 30,966 | 185,523 | 191,629 | 375,766 | 382,030 |
| 1964 | 689,062 | 675,703 | 44,902 | 46,103 | 32,369 | 32,417 | 198,217 | 199,223 | 393,551 | 397,953 |
| 1965 | 713,664 | 703,266 | 46,897 | 47,209 | 33,691 | 33,599 | 216,207 | 207,266 | 416,852 | 414,820 |
| 1966 | 764,641 | 737,492 | 47,336 | 48,365 | 36,094 | 35,599 | 235,609 | 215,793 | 445,594 | 432,727 |
| 1967 | 783,798 | 763,531 | 48,916 | 49,575 | 37,470 | 37,346 | 233,371 | 224,844 | 463,996 | 451,258 |
| 1968 | 821,984 | 796,508 | 51,877 | 50,840 | 38,968 | 39,208 | 245,242 | 234,461 | 485,887 | 471,892 |
| 1969 | 847,477 | 831,594 | 53,146 | 52,164 | 40,178 | 41,194 | 252,428 | 244,688 | 501,719 | 493,531 |
| 1970 | 841,102 | 866,945 | 53,499 | 53,551 | 42,480 | 43,316 | 240,830 | 255,578 | 504,285 | 516,492 |

MICRO ECONOMIC MODEL FOR W-EUROPE

| | GROSS REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|---------|-------------|--------|--------|-------|--------|--------|--------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 229,926 | 239,191 | 26,683 | 27,694 | 1,058 | 1,281 | 8,488 | 9,084 | 10,742 | 11,123 |
| 1951 | 238,504 | 248,436 | 28,144 | 28,144 | 1,122 | 1,344 | 8,999 | 9,402 | 11,346 | 11,501 |
| 1952 | 251,291 | 258,285 | 28,614 | 28,614 | 1,181 | 1,412 | 9,474 | 9,740 | 11,957 | 12,330 |
| 1953 | 268,059 | 268,777 | 29,104 | 29,104 | 1,241 | 1,484 | 10,010 | 10,100 | 12,677 | 12,844 |
| 1954 | 276,836 | 279,961 | 29,990 | 29,615 | 1,329 | 1,562 | 10,717 | 10,889 | 13,465 | 13,267 |
| 1955 | 293,871 | 291,867 | 29,839 | 30,145 | 1,911 | 1,645 | 11,319 | 11,322 | 13,247 | 13,780 |
| 1956 | 310,906 | 314,547 | 29,977 | 30,693 | 2,021 | 1,733 | 11,946 | 11,781 | 14,018 | 14,323 |
| 1957 | 323,684 | 319,043 | 31,500 | 31,258 | 2,137 | 1,828 | 12,336 | 12,269 | 14,204 | 14,901 |
| 1958 | 327,941 | 332,410 | 32,776 | 31,839 | 2,198 | 1,929 | 13,076 | 12,786 | 15,161 | 15,513 |
| 1959 | 344,980 | 347,699 | 33,121 | 32,435 | 2,346 | 2,037 | 13,858 | 13,336 | 16,044 | 16,164 |
| 1960 | 370,531 | 363,977 | 33,088 | 33,662 | 2,557 | 2,153 | 13,920 | 13,920 | 16,731 | 16,853 |
| 1961 | 391,828 | 381,301 | 34,088 | 34,291 | 2,617 | 2,409 | 14,966 | 14,539 | 17,910 | 17,584 |
| 1962 | 408,863 | 399,738 | 34,347 | 34,926 | 2,594 | 2,581 | 15,216 | 15,197 | 18,526 | 18,360 |
| 1963 | 425,898 | 419,367 | 34,923 | 35,566 | 2,709 | 2,703 | 16,344 | 15,896 | 19,550 | 19,183 |
| 1964 | 451,453 | 440,266 | 35,533 | 35,566 | 2,790 | 2,785 | 16,975 | 16,637 | 20,569 | 20,055 |
| 1965 | 472,750 | 462,504 | 36,005 | 36,207 | 2,790 | 2,865 | 17,438 | 17,424 | 21,601 | 20,980 |
| 1966 | 489,785 | 486,199 | 36,002 | 36,846 | 2,792 | 3,039 | 17,641 | 18,268 | 22,254 | 21,982 |
| 1967 | 506,820 | 511,430 | 38,720 | 37,479 | 2,889 | 3,226 | 18,690 | 19,147 | 23,056 | 23,003 |
| 1968 | 532,375 | 538,305 | 38,287 | 38,103 | 3,248 | 3,426 | 20,450 | 20,489 | 24,246 | 24,108 |
| 1969 | 566,445 | 566,930 | 39,088 | 38,712 | 3,342 | 3,639 | 20,450 | 20,489 | 25,757 | 25,280 |
| 1970 | 592,000 | 597,445 | 39,731 | 39,302 | 3,671 | 3,869 | 20,546 | 21,091 | 25,757 | 25,280 |

| | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DRELLINGS | |
|------|---------------|---------|--------------|--------|------------|---------|------------|--------|-----------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 54,702 | 56,425 | 15,642 | 16,537 | 66,524 | 69,371 | 37,472 | 38,845 | 8,672 | 8,827 |
| 1951 | 58,027 | 59,791 | 16,231 | 17,304 | 68,801 | 71,583 | 38,525 | 40,125 | 8,927 | 9,209 |
| 1952 | 61,093 | 63,394 | 17,089 | 18,124 | 72,225 | 73,932 | 40,686 | 41,548 | 9,424 | 9,616 |
| 1953 | 64,547 | 67,250 | 18,673 | 18,999 | 75,164 | 76,476 | 42,336 | 43,028 | 9,798 | 10,051 |
| 1954 | 69,173 | 71,385 | 19,938 | 19,934 | 78,008 | 79,076 | 43,947 | 44,603 | 10,163 | 10,514 |
| 1955 | 78,582 | 75,813 | 21,696 | 20,933 | 81,345 | 81,887 | 46,686 | 46,274 | 10,701 | 11,009 |
| 1956 | 85,525 | 80,561 | 23,012 | 22,000 | 86,667 | 84,869 | 49,723 | 48,050 | 11,413 | 11,537 |
| 1957 | 86,862 | 85,646 | 23,342 | 23,139 | 90,229 | 88,027 | 51,605 | 49,934 | 12,044 | 12,100 |
| 1958 | 97,127 | 91,102 | 24,143 | 24,355 | 91,326 | 91,375 | 51,731 | 51,934 | 12,597 | 12,701 |
| 1959 | 93,118 | 96,951 | 25,738 | 25,655 | 99,229 | 94,920 | 53,960 | 54,055 | 13,145 | 13,342 |
| 1960 | 108,305 | 103,227 | 27,083 | 27,044 | 99,413 | 98,676 | 58,580 | 58,669 | 14,599 | 14,756 |
| 1961 | 115,002 | 119,920 | 29,585 | 28,528 | 105,050 | 102,650 | 58,892 | 58,892 | 15,595 | 15,534 |
| 1962 | 120,912 | 117,184 | 30,749 | 30,115 | 109,052 | 106,857 | 62,193 | 61,220 | 16,111 | 15,534 |
| 1963 | 120,912 | 124,939 | 31,943 | 31,810 | 113,204 | 111,313 | 65,035 | 63,902 | 16,823 | 16,566 |
| 1964 | 138,203 | 133,264 | 35,897 | 33,623 | 118,156 | 116,075 | 67,726 | 66,747 | 17,434 | 17,253 |
| 1965 | 146,582 | 147,203 | 37,024 | 35,560 | 123,602 | 121,012 | 70,927 | 69,763 | 18,677 | 18,200 |
| 1966 | 153,709 | 151,809 | 39,040 | 39,633 | 127,456 | 126,291 | 72,352 | 72,961 | 19,593 | 19,212 |
| 1967 | 167,451 | 162,125 | 40,300 | 39,850 | 132,104 | 131,877 | 74,816 | 76,353 | 21,037 | 20,292 |
| 1968 | 159,328 | 173,211 | 41,427 | 42,222 | 137,539 | 137,789 | 77,476 | 79,949 | 21,311 | 21,446 |
| 1969 | 185,299 | 185,129 | 43,507 | 44,760 | 142,191 | 144,043 | 87,014 | 83,764 | 22,301 | 22,679 |
| 1970 | 196,164 | 197,945 | 45,000 | 47,478 | 148,621 | 150,664 | 90,119 | 87,813 | 22,382 | 23,997 |

MICRO ECONOMIC MODEL FOR W-EUROPE

| | GROSS REG. PROD. | | AGRICUL+FOOD | | MINING+ENERGY | | MANUFAC+CONSTRUC | | SERVICES | |
|------|------------------|---------|--------------|--------|---------------|--------|------------------|---------|----------|---------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 229,986 | 239,191 | 37,425 | 38,817 | 9,546 | 10,365 | 70,344 | 72,963 | 112,668 | 117,043 |
| 1951 | 234,504 | 248,436 | 38,072 | 39,645 | 10,121 | 10,746 | 74,258 | 77,097 | 116,052 | 120,944 |
| 1952 | 251,281 | 258,285 | 40,109 | 41,517 | 10,655 | 11,152 | 78,182 | 81,518 | 122,334 | 125,094 |
| 1953 | 264,050 | 268,777 | 42,283 | 41,435 | 11,231 | 11,584 | 83,228 | 86,250 | 127,298 | 129,504 |
| 1954 | 276,836 | 279,861 | 43,559 | 42,399 | 12,046 | 12,044 | 89,110 | 91,320 | 132,115 | 134,193 |
| 1955 | 283,871 | 291,867 | 42,304 | 43,412 | 12,553 | 12,534 | 100,277 | 96,746 | 138,729 | 139,172 |
| 1956 | 310,906 | 304,547 | 43,224 | 44,473 | 13,340 | 13,055 | 106,537 | 102,561 | 147,801 | 144,455 |
| 1957 | 323,684 | 318,043 | 45,518 | 45,582 | 14,083 | 13,609 | 110,204 | 108,787 | 153,875 | 150,063 |
| 1958 | 327,941 | 332,410 | 46,580 | 46,740 | 14,434 | 14,198 | 111,270 | 115,459 | 155,652 | 156,010 |
| 1959 | 344,980 | 347,699 | 48,302 | 47,948 | 15,422 | 14,823 | 118,855 | 122,607 | 162,316 | 162,316 |
| 1960 | 370,531 | 363,977 | 49,132 | 49,207 | 16,415 | 15,489 | 135,389 | 130,271 | 169,590 | 169,006 |
| 1961 | 391,828 | 381,101 | 50,819 | 50,516 | 16,884 | 16,197 | 144,584 | 138,490 | 179,535 | 174,096 |
| 1962 | 408,863 | 399,739 | 52,257 | 51,875 | 17,583 | 16,949 | 151,660 | 147,299 | 187,354 | 183,611 |
| 1963 | 425,898 | 419,367 | 53,449 | 53,287 | 18,314 | 17,748 | 159,072 | 156,750 | 194,061 | 191,580 |
| 1964 | 451,453 | 440,266 | 55,083 | 54,749 | 19,053 | 18,599 | 173,600 | 166,809 | 203,715 | 200,025 |
| 1965 | 472,750 | 462,508 | 56,174 | 56,262 | 19,765 | 19,502 | 183,605 | 177,766 | 213,703 | 208,975 |
| 1966 | 489,785 | 486,199 | 57,603 | 57,827 | 20,230 | 20,464 | 192,748 | 189,441 | 219,199 | 218,463 |
| 1967 | 506,820 | 511,430 | 60,983 | 59,442 | 20,530 | 21,486 | 197,750 | 201,977 | 227,557 | 228,521 |
| 1968 | 532,375 | 538,305 | 62,353 | 61,106 | 21,838 | 22,573 | 210,754 | 215,438 | 237,324 | 239,184 |
| 1969 | 566,445 | 566,930 | 63,334 | 62,820 | 23,792 | 23,729 | 228,805 | 229,891 | 250,506 | 250,484 |
| 1970 | 592,000 | 597,445 | 65,487 | 64,583 | 24,217 | 24,959 | 241,164 | 245,422 | 261,121 | 262,473 |

MICRO ECONOMIC MODEL FOR

JAPAN

| | GROSS REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|---------|-------------|-------|--------|-------|--------|-------|-------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 24.046 | 22.961 | 5.129 | 5.469 | 0.115 | 0.115 | 1.009 | 1.009 | 0.515 | 0.474 |
| 1951 | 25.279 | 24.327 | 5.194 | 5.577 | 0.121 | 0.120 | 1.084 | 1.084 | 0.544 | 0.515 |
| 1952 | 26.575 | 25.909 | 5.672 | 5.708 | 0.128 | 0.127 | 1.136 | 1.088 | 0.576 | 0.562 |
| 1953 | 27.937 | 27.728 | 5.964 | 5.860 | 0.134 | 0.134 | 1.190 | 1.137 | 0.609 | 0.615 |
| 1954 | 29.982 | 29.807 | 6.658 | 6.033 | 0.144 | 0.143 | 1.189 | 1.193 | 0.657 | 0.677 |
| 1955 | 32.707 | 32.175 | 7.543 | 6.224 | 0.157 | 0.152 | 1.200 | 1.252 | 0.720 | 0.747 |
| 1956 | 35.833 | 34.865 | 7.547 | 6.433 | 0.169 | 0.163 | 1.305 | 1.328 | 0.783 | 0.827 |
| 1957 | 38.158 | 37.916 | 7.456 | 6.656 | 0.181 | 0.175 | 1.411 | 1.407 | 0.847 | 0.919 |
| 1958 | 40.203 | 41.373 | 7.147 | 6.893 | 0.189 | 0.189 | 1.491 | 1.407 | 0.896 | 1.024 |
| 1959 | 43.610 | 45.287 | 7.140 | 7.140 | 0.211 | 0.204 | 1.561 | 1.592 | 1.108 | 1.144 |
| 1960 | 49.742 | 49.718 | 7.393 | 7.393 | 0.249 | 0.221 | 1.716 | 1.699 | 1.417 | 1.281 |
| 1961 | 57.919 | 54.736 | 7.649 | 7.649 | 0.272 | 0.241 | 1.946 | 1.817 | 1.598 | 1.439 |
| 1962 | 61.326 | 60.417 | 7.069 | 7.903 | 0.270 | 0.267 | 2.054 | 1.947 | 1.784 | 1.619 |
| 1963 | 68.140 | 66.854 | 6.922 | 8.146 | 0.266 | 0.287 | 2.132 | 2.080 | 2.119 | 1.825 |
| 1964 | 77.680 | 74.148 | 7.480 | 8.372 | 0.287 | 0.314 | 2.353 | 2.244 | 2.276 | 2.063 |
| 1965 | 81.087 | 82.422 | 7.775 | 8.568 | 0.324 | 0.344 | 2.624 | 2.414 | 2.400 | 2.335 |
| 1966 | 89.263 | 91.811 | 8.580 | 8.722 | 0.348 | 0.379 | 2.680 | 2.599 | 2.534 | 2.648 |
| 1967 | 101.529 | 102.475 | 9.513 | 8.818 | 0.376 | 0.417 | 2.801 | 2.801 | 2.985 | 3.008 |
| 1968 | 115.839 | 114.594 | 9.810 | 8.836 | 0.452 | 0.460 | 3.020 | 3.020 | 3.243 | 3.422 |
| 1969 | 130.146 | 128.377 | 10.175 | 8.750 | 0.566 | 0.508 | 3.266 | 3.258 | 3.747 | 3.900 |
| 1970 | 143.094 | 144.066 | 9.673 | 8.530 | 0.572 | 0.582 | 3.406 | 3.515 | 4.164 | 4.450 |

| | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|--------|--------------|--------|------------|--------|------------|--------|-----------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 5.050 | 4.504 | 0.962 | 0.839 | 5.831 | 5.461 | 4.569 | 4.312 | 0.842 | 0.778 |
| 1951 | 5.309 | 4.933 | 1.011 | 0.932 | 6.129 | 5.765 | 4.794 | 4.594 | 0.893 | 0.845 |
| 1952 | 5.581 | 5.427 | 1.063 | 1.039 | 6.443 | 6.118 | 5.030 | 4.921 | 0.948 | 0.921 |
| 1953 | 5.867 | 5.992 | 1.117 | 1.161 | 6.772 | 6.524 | 5.277 | 5.286 | 1.006 | 1.008 |
| 1954 | 6.184 | 6.640 | 1.237 | 1.301 | 7.139 | 6.988 | 5.680 | 5.725 | 1.094 | 1.109 |
| 1955 | 6.624 | 7.381 | 1.390 | 1.461 | 7.648 | 7.516 | 6.215 | 6.214 | 1.210 | 1.223 |
| 1956 | 7.567 | 8.230 | 1.583 | 1.645 | 8.209 | 8.115 | 6.935 | 6.771 | 1.355 | 1.354 |
| 1957 | 8.571 | 9.202 | 1.787 | 1.856 | 8.758 | 8.793 | 7.685 | 7.403 | 1.463 | 1.504 |
| 1958 | 9.475 | 10.317 | 1.970 | 2.098 | 9.141 | 9.560 | 8.325 | 8.123 | 1.568 | 1.675 |
| 1959 | 11.784 | 11.594 | 2.300 | 2.377 | 9.619 | 10.426 | 8.568 | 8.939 | 1.766 | 1.871 |
| 1960 | 15.158 | 13.059 | 2.810 | 2.698 | 10.632 | 11.404 | 9.245 | 9.857 | 2.089 | 2.095 |
| 1961 | 17.963 | 14.741 | 3.555 | 3.067 | 12.403 | 12.509 | 10.591 | 10.927 | 2.806 | 2.352 |
| 1962 | 18.277 | 16.673 | 3.691 | 3.492 | 13.353 | 13.756 | 12.059 | 12.120 | 2.820 | 2.646 |
| 1963 | 20.349 | 18.894 | 4.122 | 3.983 | 15.172 | 15.165 | 13.489 | 13.489 | 2.968 | 2.968 |
| 1964 | 23.037 | 21.448 | 4.816 | 4.548 | 17.531 | 16.757 | 16.288 | 15.033 | 3.612 | 3.369 |
| 1965 | 23.162 | 24.390 | 5.099 | 5.202 | 19.092 | 18.557 | 16.952 | 16.798 | 3.168 | 3.813 |
| 1966 | 25.318 | 27.778 | 5.792 | 5.957 | 20.954 | 20.593 | 19.072 | 18.810 | 4.239 | 4.323 |
| 1967 | 29.768 | 31.687 | 6.691 | 6.830 | 23.057 | 22.898 | 21.585 | 21.104 | 4.873 | 4.910 |
| 1968 | 34.319 | 36.196 | 7.992 | 7.841 | 25.285 | 25.509 | 26.281 | 23.723 | 5.560 | 5.585 |
| 1969 | 42.561 | 41.403 | 8.848 | 9.011 | 29.433 | 28.469 | 25.217 | 26.713 | 6.311 | 6.363 |
| 1970 | 47.206 | 47.421 | 10.203 | 10.368 | 32.954 | 31.826 | 27.903 | 30.137 | 7.012 | 7.259 |

MICRO ECONOMIC MODEL FOR JAPAN

| | GROSS REG. PROD. | | AGRICUL+FOOD | | MINING+ENERGY | | MANUFAC.+CONSTRUC | | SERVICES | |
|------|------------------|---------|--------------|--------|---------------|-------|-------------------|--------|----------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 24.046 | 22.961 | 5.644 | 5.943 | 1.149 | 1.124 | 6.012 | 5.343 | 11.242 | 10.551 |
| 1951 | 25.279 | 24.327 | 5.938 | 6.092 | 1.205 | 1.166 | 6.320 | 5.866 | 11.816 | 11.204 |
| 1952 | 26.575 | 25.900 | 6.248 | 6.269 | 1.264 | 1.215 | 6.644 | 6.466 | 12.421 | 11.960 |
| 1953 | 27.937 | 27.728 | 6.573 | 6.476 | 1.324 | 1.271 | 6.984 | 7.153 | 13.055 | 12.828 |
| 1954 | 29.982 | 29.807 | 7.315 | 6.710 | 1.383 | 1.336 | 7.421 | 7.940 | 13.913 | 13.821 |
| 1955 | 32.707 | 32.175 | 8.268 | 6.971 | 1.357 | 1.409 | 8.014 | 8.842 | 15.073 | 14.953 |
| 1956 | 35.483 | 34.865 | 8.330 | 7.260 | 1.474 | 1.491 | 9.150 | 9.875 | 16.479 | 16.240 |
| 1957 | 38.158 | 37.916 | 8.303 | 7.575 | 1.592 | 1.582 | 10.358 | 11.058 | 17.906 | 17.700 |
| 1958 | 40.203 | 41.373 | 8.043 | 7.917 | 1.680 | 1.684 | 11.445 | 12.415 | 19.034 | 19.358 |
| 1959 | 43.610 | 45.287 | 7.801 | 8.283 | 1.772 | 1.796 | 14.084 | 13.971 | 19.953 | 21.236 |
| 1960 | 49.742 | 49.718 | 7.842 | 8.674 | 1.965 | 1.920 | 17.068 | 15.756 | 21.866 | 23.366 |
| 1961 | 57.919 | 54.736 | 8.582 | 9.088 | 2.058 | 2.058 | 17.518 | 17.808 | 21.966 | 25.782 |
| 1962 | 61.326 | 60.417 | 8.853 | 9.522 | 2.324 | 2.324 | 21.918 | 20.165 | 28.232 | 28.521 |
| 1963 | 68.140 | 66.854 | 9.041 | 9.972 | 2.398 | 2.375 | 24.471 | 22.876 | 32.231 | 31.629 |
| 1964 | 77.880 | 74.148 | 9.756 | 10.434 | 2.640 | 2.558 | 27.853 | 25.997 | 37.431 | 35.159 |
| 1965 | 81.087 | 82.422 | 10.175 | 10.903 | 2.797 | 2.758 | 28.261 | 29.591 | 39.854 | 39.168 |
| 1966 | 89.263 | 91.811 | 10.914 | 11.370 | 2.972 | 2.978 | 31.110 | 33.735 | 44.265 | 43.726 |
| 1967 | 101.529 | 102.475 | 12.498 | 11.827 | 3.056 | 3.218 | 36.459 | 38.517 | 49.514 | 48.912 |
| 1968 | 115.838 | 114.594 | 13.053 | 12.258 | 3.348 | 3.480 | 42.311 | 44.037 | 57.125 | 54.816 |
| 1969 | 130.146 | 128.377 | 13.922 | 12.649 | 3.552 | 3.766 | 51.409 | 50.415 | 60.860 | 61.544 |
| 1970 | 143.094 | 144.066 | 13.637 | 12.980 | 3.978 | 4.078 | 57.409 | 57.789 | 67.868 | 69.216 |

MICRO ECONOMIC MODEL FOR REST OF DEVELOPED

| | GROSS REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|--------|-------------|-------|--------|-------|--------|-------|-------|-------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 21.688 | 20.937 | 4.144 | 4.053 | 0.685 | 0.659 | 0.844 | 0.806 | 0.846 | 0.858 |
| 1951 | 22.049 | 21.754 | 4.198 | 4.125 | 0.698 | 0.692 | 0.859 | 0.849 | 0.861 | 0.859 |
| 1952 | 23.134 | 22.620 | 4.389 | 4.199 | 0.734 | 0.727 | 0.903 | 0.894 | 0.905 | 0.922 |
| 1953 | 23.751 | 23.538 | 4.414 | 4.276 | 0.743 | 0.745 | 0.913 | 0.943 | 0.915 | 0.956 |
| 1954 | 24.941 | 24.511 | 4.503 | 4.355 | 0.813 | 0.805 | 1.000 | 0.994 | 1.003 | 0.992 |
| 1955 | 25.845 | 25.543 | 4.448 | 4.436 | 0.863 | 0.863 | 1.002 | 1.040 | 1.065 | 1.031 |
| 1956 | 26.748 | 26.639 | 4.504 | 4.521 | 0.896 | 0.893 | 1.104 | 1.108 | 1.106 | 1.072 |
| 1957 | 27.110 | 27.802 | 4.463 | 4.607 | 0.911 | 0.941 | 1.123 | 1.171 | 1.124 | 1.115 |
| 1958 | 28.773 | 28.039 | 4.629 | 4.697 | 0.970 | 0.993 | 1.197 | 1.238 | 1.197 | 1.161 |
| 1959 | 30.363 | 30.354 | 4.666 | 4.789 | 1.049 | 1.049 | 1.299 | 1.309 | 1.242 | 1.210 |
| 1960 | 31.231 | 31.754 | 4.576 | 4.883 | 1.141 | 1.108 | 1.373 | 1.373 | 1.255 | 1.261 |
| 1961 | 32.026 | 33.244 | 4.786 | 4.980 | 1.160 | 1.171 | 1.509 | 1.469 | 1.323 | 1.316 |
| 1962 | 33.761 | 34.833 | 4.956 | 5.079 | 1.199 | 1.239 | 1.553 | 1.553 | 1.455 | 1.437 |
| 1963 | 36.147 | 36.526 | 5.136 | 5.161 | 1.309 | 1.312 | 1.770 | 1.759 | 1.511 | 1.503 |
| 1964 | 36.441 | 38.333 | 5.182 | 5.284 | 1.391 | 1.390 | 1.941 | 1.861 | 1.574 | 1.574 |
| 1965 | 40.340 | 40.262 | 5.039 | 5.390 | 1.464 | 1.473 | 2.022 | 1.978 | 1.713 | 1.649 |
| 1966 | 42.291 | 42.324 | 5.608 | 5.497 | 1.582 | 1.563 | 2.120 | 2.104 | 1.710 | 1.729 |
| 1967 | 44.171 | 44.529 | 5.646 | 5.606 | 1.612 | 1.660 | 2.212 | 2.240 | 1.737 | 1.815 |
| 1968 | 47.063 | 46.888 | 6.072 | 5.717 | 1.770 | 1.764 | 2.345 | 2.366 | 1.807 | 1.906 |
| 1969 | 50.316 | 49.414 | 6.119 | 5.828 | 1.902 | 1.876 | 2.460 | 2.366 | 1.906 | 2.004 |
| 1970 | 52.774 | 52.122 | 6.012 | 5.940 | 1.995 | 1.996 | 2.460 | 2.544 | 1.900 | 2.004 |

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| | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|--------|--------------|-------|------------|--------|------------|-------|-----------|-------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 3.977 | 3.833 | 1.438 | 1.275 | 5.105 | 4.931 | 3.821 | 3.753 | 0.828 | 0.768 |
| 1951 | 4.052 | 4.024 | 1.415 | 1.333 | 5.215 | 5.138 | 3.904 | 3.893 | 0.846 | 0.810 |
| 1952 | 4.261 | 4.228 | 1.435 | 1.394 | 5.498 | 5.358 | 4.116 | 4.042 | 0.891 | 0.854 |
| 1953 | 4.111 | 4.444 | 1.399 | 1.459 | 5.577 | 5.592 | 4.176 | 4.200 | 0.904 | 0.904 |
| 1954 | 4.719 | 4.675 | 1.520 | 1.528 | 5.956 | 5.840 | 4.460 | 4.366 | 0.965 | 0.955 |
| 1955 | 5.009 | 4.921 | 1.603 | 1.602 | 6.172 | 6.103 | 4.621 | 4.543 | 1.000 | 1.000 |
| 1956 | 5.204 | 5.183 | 1.660 | 1.600 | 6.425 | 6.383 | 4.809 | 4.731 | 1.041 | 1.068 |
| 1957 | 5.295 | 5.462 | 1.684 | 1.680 | 6.546 | 6.681 | 4.901 | 4.929 | 1.062 | 1.131 |
| 1958 | 5.642 | 5.761 | 1.789 | 1.852 | 6.985 | 6.998 | 5.230 | 5.141 | 1.134 | 1.198 |
| 1959 | 6.196 | 6.080 | 1.900 | 1.947 | 7.321 | 7.336 | 5.444 | 5.365 | 1.219 | 1.269 |
| 1960 | 6.619 | 6.422 | 1.966 | 2.048 | 7.479 | 7.696 | 5.544 | 5.603 | 1.277 | 1.344 |
| 1961 | 6.599 | 6.786 | 1.983 | 2.126 | 7.672 | 8.080 | 5.609 | 5.857 | 1.387 | 1.428 |
| 1962 | 6.951 | 7.178 | 2.097 | 2.272 | 8.133 | 8.490 | 5.888 | 6.127 | 1.529 | 1.516 |
| 1963 | 7.519 | 7.596 | 2.321 | 2.395 | 8.798 | 8.927 | 6.286 | 6.415 | 1.674 | 1.611 |
| 1964 | 8.234 | 8.046 | 2.604 | 2.528 | 9.440 | 9.195 | 6.735 | 6.722 | 1.774 | 1.713 |
| 1965 | 8.811 | 8.528 | 2.840 | 2.669 | 9.925 | 9.896 | 7.049 | 7.049 | 1.860 | 1.822 |
| 1966 | 8.941 | 9.046 | 2.885 | 2.821 | 10.447 | 10.432 | 7.148 | 7.398 | 1.946 | 1.939 |
| 1967 | 9.546 | 9.602 | 3.022 | 2.984 | 10.964 | 11.005 | 7.549 | 7.771 | 2.001 | 2.066 |
| 1968 | 10.012 | 10.201 | 3.196 | 3.160 | 11.825 | 11.621 | 8.082 | 8.169 | 2.156 | 2.202 |
| 1969 | 10.919 | 10.845 | 3.422 | 3.348 | 12.439 | 12.280 | 8.952 | 8.956 | 2.410 | 2.349 |
| 1970 | 11.459 | 11.539 | 3.626 | 3.550 | 13.733 | 12.989 | 9.522 | 9.052 | 2.565 | 2.507 |

MICRO ECONOMIC MODEL FOR REST OF DEVELOPED

| | GROSS REG. PROD. | | AGRICUL+FOOD | | MINING+ENERGY | | MANUFAC+CONSTRUC | | SERVICES | | COMP |
|------|------------------|--------|--------------|-------|---------------|-------|------------------|--------|----------|--------|------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | |
| 1950 | 21.688 | 20.937 | 4.911 | 4.911 | 1.529 | 1.465 | 5.415 | 5.108 | 9.754 | 9.452 | |
| 1951 | 22.040 | 21.754 | 5.059 | 5.014 | 1.557 | 1.541 | 5.467 | 5.357 | 9.965 | 9.842 | |
| 1952 | 25.184 | 22.620 | 5.294 | 5.120 | 1.637 | 1.621 | 5.696 | 5.621 | 10.505 | 10.254 | |
| 1953 | 25.351 | 23.538 | 5.329 | 5.231 | 1.656 | 1.707 | 5.710 | 5.903 | 10.657 | 10.695 | |
| 1954 | 28.041 | 24.511 | 5.506 | 5.347 | 1.813 | 1.799 | 6.239 | 6.203 | 11.381 | 11.161 | |
| 1955 | 25.845 | 25.543 | 5.513 | 5.467 | 1.925 | 1.897 | 6.612 | 6.522 | 11.783 | 11.856 | |
| 1956 | 26.748 | 26.639 | 5.610 | 5.592 | 2.000 | 2.001 | 6.864 | 6.863 | 12.273 | 12.182 | |
| 1957 | 27.110 | 27.802 | 5.587 | 5.722 | 2.034 | 2.112 | 6.979 | 7.226 | 12.509 | 12.741 | |
| 1958 | 28.773 | 29.030 | 5.826 | 5.858 | 2.167 | 2.231 | 7.431 | 7.613 | 13.349 | 13.337 | |
| 1959 | 30.363 | 30.354 | 5.908 | 5.998 | 2.365 | 2.358 | 8.096 | 8.027 | 13.994 | 13.970 | |
| 1960 | 31.231 | 31.754 | 5.831 | 6.144 | 2.514 | 2.494 | 8.585 | 8.470 | 14.300 | 14.646 | |
| 1961 | 32.026 | 33.244 | 6.109 | 6.296 | 2.669 | 2.639 | 8.943 | 8.943 | 14.668 | 15.365 | |
| 1962 | 33.761 | 34.833 | 6.411 | 6.454 | 2.752 | 2.795 | 9.048 | 9.449 | 15.550 | 16.314 | |
| 1963 | 36.147 | 36.526 | 6.600 | 6.617 | 2.950 | 2.962 | 9.840 | 9.992 | 16.758 | 16.953 | |
| 1964 | 38.641 | 38.333 | 6.693 | 6.787 | 3.161 | 3.142 | 10.838 | 10.573 | 17.949 | 17.830 | |
| 1965 | 40.340 | 40.262 | 6.604 | 6.964 | 3.405 | 3.334 | 11.651 | 11.197 | 18.680 | 18.766 | |
| 1966 | 42.291 | 42.324 | 7.521 | 7.146 | 3.604 | 3.542 | 11.826 | 11.867 | 19.541 | 19.769 | |
| 1967 | 44.171 | 44.529 | 7.356 | 7.336 | 3.732 | 3.764 | 12.568 | 12.587 | 20.514 | 20.842 | |
| 1968 | 47.063 | 46.888 | 7.809 | 7.531 | 3.982 | 4.004 | 13.208 | 13.360 | 22.063 | 21.992 | |
| 1969 | 50.316 | 49.414 | 7.926 | 7.734 | 4.247 | 4.262 | 14.341 | 14.193 | 23.801 | 23.225 | |
| 1970 | 52.774 | 52.122 | 7.912 | 7.944 | 4.455 | 4.540 | 15.085 | 15.089 | 25.320 | 24.549 | |

MICRO ECONOMIC MODEL FOR E-EUR & USSR

| | GROSS REC. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|---------|-------------|--------|--------|-------|--------|--------|--------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 103.860 | 116.067 | 41.544 | 42.367 | 2.181 | 2.158 | 5.297 | 5.348 | 7.997 | 9.089 |
| 1951 | 115.400 | 124.342 | 42.771 | 44.068 | 2.306 | 2.312 | 5.764 | 5.765 | 8.992 | 9.702 |
| 1952 | 134.055 | 133.215 | 42.178 | 45.800 | 2.357 | 2.477 | 6.079 | 6.214 | 9.800 | 10.357 |
| 1953 | 132.711 | 142.732 | 42.600 | 47.558 | 2.521 | 2.653 | 6.104 | 6.698 | 10.617 | 11.057 |
| 1954 | 147.135 | 152.939 | 44.773 | 49.336 | 2.798 | 2.842 | 6.462 | 7.220 | 11.488 | 11.804 |
| 1955 | 164.445 | 163.891 | 51.142 | 51.130 | 2.960 | 3.046 | 7.071 | 7.783 | 12.383 | 12.605 |
| 1956 | 175.984 | 175.633 | 52.267 | 52.931 | 2.992 | 3.263 | 7.919 | 8.390 | 13.199 | 13.450 |
| 1957 | 193.295 | 188.232 | 55.668 | 54.730 | 3.286 | 3.497 | 8.698 | 9.046 | 14.497 | 14.373 |
| 1958 | 210.605 | 201.746 | 58.070 | 56.520 | 3.572 | 3.748 | 9.678 | 9.752 | 15.990 | 15.348 |
| 1959 | 230.801 | 216.244 | 59.547 | 58.287 | 3.924 | 4.016 | 10.617 | 10.514 | 17.310 | 16.391 |
| 1960 | 248.109 | 231.801 | 63.516 | 60.021 | 4.218 | 4.305 | 11.909 | 11.335 | 18.608 | 17.505 |
| 1961 | 265.422 | 248.490 | 65.028 | 61.706 | 4.778 | 4.614 | 13.271 | 12.222 | 19.641 | 18.697 |
| 1962 | 276.961 | 266.398 | 63.979 | 63.327 | 5.262 | 4.946 | 13.848 | 13.177 | 21.049 | 19.970 |
| 1963 | 288.500 | 285.617 | 60.295 | 64.865 | 5.481 | 5.302 | 15.002 | 14.209 | 22.215 | 21.331 |
| 1964 | 314.465 | 306.234 | 69.810 | 66.299 | 6.660 | 5.684 | 16.352 | 15.521 | 23.585 | 22.765 |
| 1965 | 331.773 | 328.363 | 67.850 | 67.606 | 6.304 | 6.094 | 17.252 | 16.521 | 25.546 | 24.840 |
| 1966 | 360.625 | 352.105 | 73.927 | 68.760 | 6.852 | 6.534 | 18.752 | 17.814 | 27.047 | 26.002 |
| 1967 | 389.477 | 377.582 | 74.390 | 69.729 | 7.789 | 7.005 | 19.863 | 19.210 | 28.821 | 27.778 |
| 1968 | 415.441 | 404.930 | 75.193 | 70.483 | 7.893 | 7.512 | 21.187 | 20.716 | 29.911 | 29.677 |
| 1969 | 435.637 | 434.285 | 72.314 | 70.986 | 8.277 | 8.055 | 22.653 | 22.340 | 31.365 | 31.708 |
| 1970 | 473.141 | 465.789 | 77.122 | 71.194 | 8.990 | 8.639 | 24.130 | 24.092 | 33.593 | 33.878 |

| | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|---------|--------------|--------|------------|--------|------------|-------|-----------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 24.927 | 29.649 | 7.062 | 8.816 | 14.852 | 18.639 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1951 | 29.744 | 33.120 | 8.531 | 9.556 | 17.293 | 19.817 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1952 | 34.611 | 36.937 | 9.676 | 10.358 | 19.352 | 21.071 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1953 | 39.150 | 41.134 | 10.484 | 11.226 | 21.234 | 22.404 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1954 | 45.657 | 45.745 | 11.930 | 12.167 | 23.859 | 23.821 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1955 | 51.964 | 50.810 | 12.498 | 13.185 | 26.476 | 25.330 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1956 | 56.490 | 56.367 | 14.254 | 14.288 | 28.861 | 26.832 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1957 | 63.398 | 62.466 | 16.043 | 15.482 | 31.699 | 28.637 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1958 | 71.112 | 69.152 | 18.304 | 16.775 | 33.874 | 30.449 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1959 | 80.317 | 76.481 | 20.542 | 18.175 | 38.583 | 32.377 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1960 | 91.056 | 84.515 | 23.818 | 19.691 | 34.983 | 34.426 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1961 | 100.592 | 93.312 | 24.418 | 21.332 | 37.690 | 36.605 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1962 | 109.677 | 102.943 | 24.649 | 23.108 | 38.498 | 38.921 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1963 | 119.727 | 113.488 | 25.388 | 25.033 | 40.390 | 41.395 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1964 | 128.290 | 125.023 | 27.858 | 27.115 | 43.396 | 44.082 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1965 | 140.006 | 137.643 | 29.196 | 29.370 | 46.116 | 46.785 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1966 | 153.986 | 151.438 | 31.374 | 31.810 | 48.684 | 48.783 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1967 | 170.199 | 166.516 | 34.663 | 34.451 | 53.747 | 52.687 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1968 | 185.699 | 182.996 | 37.389 | 37.310 | 58.161 | 56.229 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1969 | 200.391 | 201.004 | 39.207 | 40.405 | 61.424 | 59.781 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1970 | 220.484 | 220.668 | 43.528 | 43.755 | 65.293 | 63.556 | 0.000 | 0.000 | 0.000 | 0.000 |

MICRO ECONOMIC MODEL FOR E-EUR & USSR

| | GROSS REG. PROD. | | AGRICUL+FOOD | | MINING+ENERGY | | MANUFAC+CONSTRUC | | SERVICES | |
|------|------------------|---------|--------------|---------|---------------|--------|------------------|---------|----------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 103.860 | 116.067 | 49.541 | 51.456 | 7.878 | 7.507 | 31.989 | 38.465 | 14.852 | 18.639 |
| 1951 | 115.400 | 124.342 | 51.763 | 53.771 | 8.070 | 8.070 | 38.275 | 42.676 | 17.293 | 19.817 |
| 1952 | 124.055 | 133.215 | 51.978 | 56.157 | 8.436 | 8.690 | 44.287 | 47.295 | 19.352 | 21.071 |
| 1953 | 132.711 | 142.732 | 53.217 | 58.615 | 8.825 | 9.351 | 49.634 | 52.360 | 21.234 | 22.404 |
| 1954 | 147.135 | 152.939 | 56.261 | 61.143 | 9.426 | 10.062 | 57.587 | 57.911 | 23.859 | 23.821 |
| 1955 | 164.445 | 163.891 | 63.475 | 63.736 | 10.031 | 10.829 | 64.462 | 63.934 | 26.476 | 25.330 |
| 1956 | 175.984 | 175.633 | 65.466 | 66.391 | 10.811 | 11.654 | 70.744 | 70.654 | 28.861 | 26.932 |
| 1957 | 183.295 | 188.232 | 70.164 | 69.104 | 11.984 | 12.542 | 79.440 | 77.947 | 31.699 | 28.637 |
| 1958 | 210.605 | 201.746 | 74.060 | 71.868 | 13.295 | 13.499 | 89.416 | 85.927 | 33.874 | 30.449 |
| 1959 | 230.801 | 216.244 | 76.856 | 74.679 | 14.541 | 14.530 | 100.859 | 94.656 | 38.543 | 32.377 |
| 1960 | 248.109 | 231.801 | 82.124 | 77.527 | 16.127 | 15.640 | 114.873 | 104.205 | 34.983 | 34.426 |
| 1961 | 265.422 | 248.490 | 84.669 | 80.403 | 18.049 | 16.835 | 125.010 | 114.644 | 37.690 | 36.605 |
| 1962 | 276.961 | 266.398 | 85.027 | 83.247 | 19.110 | 18.123 | 134.324 | 126.053 | 38.498 | 38.921 |
| 1963 | 288.500 | 285.617 | 82.510 | 86.195 | 20.483 | 19.510 | 142.113 | 138.921 | 40.390 | 41.385 |
| 1964 | 314.465 | 306.234 | 93.395 | 89.084 | 22.012 | 21.004 | 155.656 | 152.139 | 43.396 | 44.002 |
| 1965 | 331.773 | 328.363 | 92.896 | 91.947 | 23.556 | 22.614 | 169.201 | 167.012 | 46.116 | 46.785 |
| 1966 | 360.625 | 352.105 | 100.974 | 94.762 | 25.604 | 24.348 | 185.359 | 183.246 | 48.684 | 49.743 |
| 1967 | 389.477 | 377.582 | 103.210 | 97.508 | 27.652 | 26.215 | 204.861 | 200.965 | 53.747 | 52.887 |
| 1968 | 415.441 | 404.930 | 105.104 | 100.161 | 29.080 | 28.227 | 223.088 | 220.305 | 58.161 | 56.229 |
| 1969 | 435.637 | 434.285 | 103.679 | 102.694 | 30.930 | 30.395 | 238.598 | 241.406 | 61.424 | 59.781 |
| 1970 | 473.141 | 465.789 | 110.715 | 105.071 | 33.120 | 32.730 | 264.812 | 264.426 | 65.293 | 63.556 |

MILKRU ECONOMIC MODEL FOR LATIN AMERICA

| YEAR | GROSS REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|---------|-------------|--------|--------|-------|--------|-------|-------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 41.964 | 42.974 | 9.666 | 9.898 | 0.856 | 0.945 | 2.069 | 2.131 | 2.346 | 2.418 |
| 1951 | 44.385 | 44.861 | 9.953 | 10.156 | 0.914 | 0.967 | 2.207 | 2.270 | 2.490 | 2.541 |
| 1952 | 45.999 | 46.874 | 9.989 | 10.427 | 0.981 | 0.991 | 2.288 | 2.329 | 2.572 | 2.674 |
| 1953 | 47.613 | 49.023 | 10.584 | 10.711 | 0.981 | 1.015 | 2.362 | 2.439 | 2.676 | 2.816 |
| 1954 | 51.448 | 51.320 | 11.220 | 11.011 | 1.059 | 1.041 | 2.552 | 2.552 | 2.968 | 2.968 |
| 1955 | 54.876 | 53.778 | 11.921 | 11.326 | 1.120 | 1.067 | 2.706 | 2.681 | 3.145 | 3.131 |
| 1956 | 57.297 | 56.409 | 11.698 | 11.657 | 1.204 | 1.095 | 2.912 | 2.815 | 3.387 | 3.306 |
| 1957 | 60.525 | 59.231 | 12.145 | 12.007 | 1.277 | 1.125 | 3.100 | 2.958 | 3.602 | 3.495 |
| 1958 | 64.560 | 62.259 | 12.900 | 12.375 | 1.317 | 1.155 | 3.400 | 3.113 | 3.880 | 3.698 |
| 1959 | 66.174 | 65.512 | 13.285 | 12.763 | 1.344 | 1.188 | 3.396 | 3.279 | 3.917 | 3.917 |
| 1960 | 70.209 | 69.010 | 13.046 | 13.172 | 1.187 | 1.221 | 3.370 | 3.458 | 4.104 | 4.153 |
| 1961 | 75.051 | 72.778 | 13.683 | 13.604 | 1.231 | 1.257 | 3.633 | 3.650 | 4.408 | 4.466 |
| 1962 | 78.279 | 76.840 | 14.236 | 14.061 | 1.245 | 1.204 | 3.868 | 3.858 | 4.808 | 4.884 |
| 1963 | 80.700 | 81.225 | 14.445 | 14.542 | 1.178 | 1.333 | 4.108 | 4.082 | 5.003 | 4.984 |
| 1964 | 87.156 | 85.963 | 15.072 | 15.051 | 1.334 | 1.374 | 4.325 | 4.325 | 5.370 | 5.308 |
| 1965 | 91.998 | 91.093 | 16.138 | 15.590 | 1.362 | 1.416 | 4.545 | 4.588 | 5.668 | 5.668 |
| 1966 | 96.033 | 96.649 | 16.071 | 16.160 | 1.460 | 1.461 | 4.669 | 4.872 | 6.090 | 6.043 |
| 1967 | 100.068 | 102.682 | 16.406 | 16.763 | 1.460 | 1.460 | 5.109 | 4.872 | 6.329 | 6.461 |
| 1968 | 106.524 | 109.235 | 16.894 | 17.402 | 1.450 | 1.508 | 5.109 | 5.182 | 6.640 | 6.916 |
| 1969 | 113.787 | 116.369 | 17.516 | 18.079 | 1.639 | 1.609 | 5.839 | 5.485 | 7.068 | 7.413 |
| 1970 | 121.050 | 124.142 | 18.320 | 18.797 | 1.707 | 1.644 | 6.224 | 6.284 | 7.495 | 7.957 |

| YEAR | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|--------|--------------|-------|------------|--------|------------|--------|-----------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 4.978 | 4.744 | 1.456 | 1.493 | 6.764 | 9.009 | 9.074 | 9.428 | 2.753 | 2.906 |
| 1951 | 5.101 | 5.106 | 1.580 | 1.561 | 9.336 | 9.463 | 9.664 | 9.834 | 2.934 | 3.004 |
| 1952 | 5.462 | 5.495 | 1.638 | 1.633 | 9.842 | 9.949 | 10.192 | 10.267 | 3.104 | 3.104 |
| 1953 | 5.675 | 5.915 | 1.690 | 1.710 | 10.065 | 10.469 | 10.417 | 10.729 | 3.161 | 3.217 |
| 1954 | 6.132 | 6.367 | 1.746 | 1.793 | 11.086 | 11.027 | 11.478 | 11.233 | 3.487 | 3.334 |
| 1955 | 6.680 | 6.856 | 1.861 | 1.881 | 11.767 | 11.625 | 12.119 | 11.751 | 3.557 | 3.454 |
| 1956 | 7.199 | 7.384 | 2.029 | 1.976 | 12.380 | 12.268 | 12.747 | 12.517 | 3.743 | 3.580 |
| 1957 | 7.653 | 7.956 | 2.180 | 2.078 | 13.107 | 12.959 | 13.495 | 12.922 | 3.966 | 3.730 |
| 1958 | 8.594 | 8.575 | 2.311 | 2.187 | 13.703 | 13.703 | 14.314 | 13.572 | 4.235 | 3.879 |
| 1959 | 9.360 | 9.247 | 2.431 | 2.305 | 14.391 | 14.505 | 14.059 | 14.270 | 4.018 | 4.038 |
| 1960 | 10.530 | 9.976 | 2.584 | 2.431 | 16.894 | 15.369 | 14.303 | 15.020 | 3.876 | 4.207 |
| 1961 | 11.439 | 10.770 | 2.710 | 2.568 | 16.970 | 16.308 | 16.317 | 15.837 | 4.421 | 4.389 |
| 1962 | 12.036 | 11.633 | 2.702 | 2.715 | 17.314 | 17.114 | 17.032 | 16.637 | 4.550 | 4.582 |
| 1963 | 12.307 | 12.575 | 2.744 | 2.874 | 18.666 | 18.408 | 17.633 | 17.636 | 4.616 | 4.790 |
| 1964 | 14.078 | 13.602 | 3.025 | 3.046 | 20.146 | 19.595 | 18.821 | 18.650 | 4.917 | 5.012 |
| 1965 | 15.043 | 14.725 | 3.009 | 3.252 | 21.272 | 20.883 | 19.735 | 19.747 | 5.226 | 5.250 |
| 1966 | 16.081 | 15.953 | 3.295 | 3.434 | 22.229 | 22.284 | 20.721 | 20.934 | 5.418 | 5.506 |
| 1967 | 16.456 | 17.300 | 3.589 | 3.654 | 23.375 | 23.809 | 21.495 | 22.223 | 5.649 | 5.781 |
| 1968 | 18.333 | 18.777 | 3.922 | 3.892 | 24.750 | 25.471 | 23.087 | 23.622 | 6.065 | 6.077 |
| 1969 | 20.121 | 20.401 | 4.200 | 4.152 | 26.096 | 27.287 | 24.868 | 25.145 | 6.432 | 6.397 |
| 1970 | 21.565 | 22.188 | 4.516 | 4.436 | 27.752 | 29.272 | 26.639 | 26.803 | 6.826 | 6.741 |

MICRO ECONOMIC MODEL FOR LATIN AMERICA

| YEAR | GROSS REG. PROD. | | AGRICUL+FOOD | | MINING+ENERGY | | MANUFAC+CONSTRUCTIVE | | SERVICES | |
|------|------------------|---------|--------------|--------|---------------|-------|----------------------|--------|----------|--------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 41.864 | 42.974 | 12.012 | 12.316 | 2.925 | 3.076 | 6.434 | 6.237 | 20.591 | 21.343 |
| 1951 | 44.485 | 44.861 | 12.452 | 12.698 | 3.116 | 3.194 | 6.881 | 6.666 | 21.944 | 22.301 |
| 1952 | 45.999 | 46.874 | 12.561 | 13.101 | 3.211 | 3.320 | 7.100 | 7.128 | 23.126 | 23.324 |
| 1953 | 47.613 | 49.023 | 13.260 | 13.527 | 3.343 | 3.454 | 7.365 | 7.625 | 23.843 | 24.416 |
| 1954 | 51.648 | 51.320 | 14.108 | 13.979 | 3.611 | 3.596 | 7.478 | 8.160 | 26.051 | 25.644 |
| 1955 | 54.876 | 53.778 | 15.106 | 14.457 | 3.826 | 3.748 | 8.541 | 8.737 | 27.443 | 26.835 |
| 1956 | 57.297 | 56.409 | 15.085 | 14.964 | 4.116 | 3.910 | 9.228 | 9.360 | 28.670 | 28.174 |
| 1957 | 60.825 | 59.231 | 15.747 | 15.502 | 4.377 | 4.083 | 9.833 | 10.034 | 30.568 | 29.611 |
| 1958 | 64.360 | 62.259 | 16.780 | 16.073 | 4.726 | 4.268 | 10.905 | 10.763 | 32.146 | 31.153 |
| 1959 | 66.174 | 65.512 | 17.389 | 16.680 | 4.740 | 4.467 | 11.578 | 11.552 | 32.468 | 32.412 |
| 1960 | 70.209 | 69.010 | 17.455 | 17.325 | 4.557 | 4.679 | 13.123 | 12.408 | 35.073 | 34.596 |
| 1961 | 75.051 | 72.778 | 18.329 | 18.013 | 4.864 | 4.907 | 14.149 | 13.334 | 37.708 | 36.520 |
| 1962 | 74.270 | 76.840 | 19.130 | 18.745 | 5.113 | 5.152 | 14.738 | 14.348 | 39.296 | 38.593 |
| 1963 | 80.700 | 81.225 | 19.448 | 19.526 | 5.286 | 5.415 | 15.051 | 15.449 | 40.915 | 40.834 |
| 1964 | 87.156 | 85.963 | 20.442 | 20.360 | 5.727 | 5.698 | 17.103 | 16.648 | 43.884 | 43.256 |
| 1965 | 91.998 | 91.093 | 21.806 | 21.251 | 5.907 | 6.004 | 18.052 | 17.957 | 46.232 | 45.880 |
| 1966 | 96.033 | 96.649 | 22.161 | 22.204 | 6.129 | 6.334 | 19.376 | 19.388 | 48.368 | 48.723 |
| 1967 | 100.068 | 102.682 | 22.935 | 23.225 | 6.569 | 6.890 | 20.045 | 20.954 | 50.319 | 51.813 |
| 1968 | 106.524 | 109.235 | 23.534 | 24.318 | 7.076 | 7.690 | 22.255 | 22.670 | 53.802 | 55.171 |
| 1969 | 113.787 | 116.369 | 24.584 | 25.493 | 7.478 | 7.948 | 24.321 | 24.554 | 57.406 | 58.828 |
| 1970 | 121.050 | 124.142 | 25.815 | 26.755 | 7.931 | 7.948 | 26.081 | 26.624 | 61.219 | 62.814 |

MICRO ECONOMIC MODEL FOR MIDDLE EAST

| YEAR | GROSS REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|--------|-------------|-------|--------|--------|--------|-------|-------|-------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 14.750 | 13.245 | 3.711 | 1.695 | 1.444 | 1.695 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1951 | 15.400 | 14.058 | 4.231 | 3.865 | 2.077 | 1.926 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1952 | 16.100 | 14.919 | 4.339 | 4.025 | 2.331 | 2.178 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1953 | 16.800 | 15.831 | 4.440 | 4.188 | 2.598 | 2.453 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1954 | 17.500 | 16.796 | 4.533 | 4.356 | 2.879 | 2.754 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1955 | 18.323 | 17.818 | 4.650 | 4.529 | 3.195 | 3.081 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1956 | 19.050 | 18.900 | 4.735 | 4.706 | 3.510 | 3.438 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1957 | 19.400 | 20.045 | 4.720 | 4.887 | 3.766 | 3.627 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1958 | 20.802 | 21.257 | 4.971 | 5.072 | 4.260 | 4.249 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1959 | 21.610 | 22.940 | 5.031 | 5.261 | 4.622 | 4.708 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1960 | 22.742 | 23.897 | 5.176 | 5.453 | 5.089 | 5.206 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1961 | 23.900 | 25.333 | 5.200 | 5.649 | 5.458 | 5.747 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1962 | 25.571 | 26.853 | 5.758 | 5.849 | 5.788 | 6.333 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1963 | 26.945 | 28.460 | 5.781 | 6.051 | 6.417 | 6.968 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1964 | 29.197 | 30.161 | 6.331 | 6.256 | 7.371 | 7.655 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1965 | 32.065 | 31.961 | 6.428 | 6.463 | 8.356 | 8.369 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1966 | 33.493 | 33.864 | 6.350 | 6.672 | 9.248 | 9.203 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1967 | 35.244 | 35.877 | 6.749 | 6.882 | 9.600 | 10.073 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1968 | 39.043 | 38.007 | 7.093 | 7.093 | 11.390 | 11.012 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1969 | 42.384 | 40.259 | 7.537 | 7.537 | 12.949 | 12.027 | 0.000 | 0.000 | 0.000 | 0.000 |
| 1970 | 0.000 | 42.641 | 0.000 | 7.515 | 0.000 | 13.121 | 0.000 | 0.000 | 0.000 | 0.000 |

| YEAR | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|-------|--------------|-------|------------|--------|------------|-------|-----------|-------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 1.622 | 1.472 | 0.693 | 0.542 | 3.540 | 3.169 | 2.006 | 1.776 | 0.914 | 0.830 |
| 1951 | 1.693 | 1.560 | 0.716 | 0.630 | 3.693 | 3.363 | 2.049 | 1.847 | 0.940 | 0.866 |
| 1952 | 1.770 | 1.653 | 0.741 | 0.670 | 3.857 | 3.569 | 2.095 | 1.921 | 0.968 | 0.903 |
| 1953 | 1.846 | 1.751 | 0.765 | 0.713 | 4.021 | 3.787 | 2.136 | 1.997 | 0.995 | 0.941 |
| 1954 | 1.922 | 1.855 | 0.788 | 0.758 | 4.184 | 4.018 | 2.173 | 2.074 | 1.020 | 0.981 |
| 1955 | 2.012 | 1.965 | 0.816 | 0.807 | 4.377 | 4.262 | 2.222 | 2.153 | 1.051 | 1.021 |
| 1956 | 2.091 | 2.081 | 0.839 | 0.858 | 4.547 | 4.521 | 2.253 | 2.234 | 1.075 | 1.063 |
| 1957 | 2.128 | 2.203 | 0.845 | 0.912 | 4.626 | 4.794 | 2.238 | 2.316 | 1.076 | 1.106 |
| 1958 | 2.290 | 2.333 | 0.900 | 0.970 | 4.974 | 5.084 | 2.347 | 2.400 | 1.139 | 1.150 |
| 1959 | 2.369 | 2.469 | 0.920 | 1.031 | 5.183 | 5.391 | 2.365 | 2.485 | 1.198 | 1.195 |
| 1960 | 2.492 | 2.614 | 0.957 | 1.096 | 5.407 | 5.715 | 2.422 | 2.571 | 1.241 | 1.241 |
| 1961 | 2.704 | 2.927 | 1.144 | 1.165 | 5.666 | 6.058 | 2.472 | 2.659 | 1.292 | 1.289 |
| 1962 | 2.990 | 3.097 | 1.190 | 1.238 | 6.018 | 6.421 | 2.546 | 2.747 | 1.337 | 1.387 |
| 1963 | 3.036 | 3.277 | 1.309 | 1.316 | 6.503 | 6.805 | 2.557 | 2.836 | 1.342 | 1.437 |
| 1964 | 3.201 | 3.277 | 1.334 | 1.308 | 7.124 | 7.212 | 2.666 | 2.926 | 1.370 | 1.437 |
| 1965 | 3.351 | 3.467 | 1.558 | 1.485 | 7.827 | 7.642 | 2.905 | 3.016 | 1.440 | 1.489 |
| 1966 | 3.520 | 3.667 | 1.589 | 1.578 | 8.731 | 8.056 | 3.058 | 3.106 | 1.496 | 1.541 |
| 1967 | 3.905 | 3.879 | 1.741 | 1.676 | 8.494 | 8.577 | 3.161 | 3.196 | 1.593 | 1.594 |
| 1968 | 4.076 | 4.102 | 1.865 | 1.780 | 9.086 | 9.086 | 3.688 | 3.285 | 1.683 | 1.648 |
| 1969 | 4.443 | 4.338 | 1.891 | 1.890 | 9.984 | 9.624 | 3.815 | 3.373 | 1.764 | 1.703 |
| 1970 | 0.000 | 4.587 | 0.000 | 2.007 | 0.000 | 10.193 | 0.000 | 0.000 | 0.000 | 1.758 |

MICRO ECONOMIC MODEL FOR MIDDLE EAST

| | GROSS REG. PROD. | | AGRICUL+FOOD | | MINING+ENERGY | | MANUFAC+CONSTRUC | | SERVICES | |
|------|------------------|--------|--------------|-------|---------------|--------|------------------|-------|----------|--------|
| | DATA | COMP. | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 14.750 | 13.245 | 4.130 | 3.711 | 1.844 | 1.695 | 2.315 | 2.064 | 6.460 | 5.775 |
| 1951 | 15.400 | 14.058 | 4.231 | 3.865 | 2.077 | 1.926 | 2.409 | 2.190 | 6.682 | 6.077 |
| 1952 | 16.100 | 14.919 | 4.339 | 4.025 | 2.331 | 2.178 | 2.511 | 2.323 | 6.920 | 6.393 |
| 1953 | 16.800 | 15.831 | 4.440 | 4.188 | 2.598 | 2.453 | 2.611 | 2.464 | 7.152 | 6.725 |
| 1954 | 17.500 | 16.796 | 4.533 | 4.356 | 2.879 | 2.754 | 2.710 | 2.613 | 7.377 | 7.072 |
| 1955 | 18.323 | 17.818 | 4.650 | 4.529 | 3.195 | 3.081 | 2.828 | 2.771 | 7.650 | 7.436 |
| 1956 | 19.050 | 18.900 | 4.735 | 4.706 | 3.510 | 3.438 | 2.930 | 2.930 | 7.875 | 7.817 |
| 1957 | 19.400 | 20.045 | 4.720 | 4.887 | 3.766 | 3.827 | 2.973 | 3.115 | 7.940 | 8.216 |
| 1958 | 20.882 | 21.257 | 4.971 | 5.072 | 4.260 | 4.249 | 3.190 | 3.303 | 8.460 | 8.633 |
| 1959 | 21.610 | 22.540 | 5.031 | 5.261 | 4.822 | 4.708 | 3.289 | 3.500 | 8.867 | 9.070 |
| 1960 | 22.742 | 23.897 | 5.176 | 5.453 | 5.069 | 5.206 | 3.449 | 3.710 | 9.027 | 9.527 |
| 1961 | 23.900 | 25.333 | 5.200 | 5.649 | 5.458 | 5.747 | 3.848 | 3.931 | 9.392 | 10.005 |
| 1962 | 25.371 | 26.853 | 5.758 | 5.849 | 5.768 | 6.333 | 4.189 | 4.165 | 9.856 | 10.506 |
| 1963 | 26.945 | 28.460 | 5.781 | 6.051 | 6.417 | 6.968 | 4.345 | 4.413 | 10.402 | 11.028 |
| 1964 | 29.397 | 30.161 | 6.331 | 6.256 | 7.371 | 7.655 | 4.535 | 4.675 | 11.160 | 11.575 |
| 1965 | 32.065 | 31.961 | 6.628 | 6.463 | 8.356 | 8.399 | 4.909 | 4.952 | 12.172 | 12.144 |
| 1966 | 33.493 | 33.864 | 6.350 | 6.672 | 9.248 | 9.203 | 5.109 | 5.265 | 12.785 | 12.743 |
| 1967 | 35.244 | 35.877 | 6.749 | 6.882 | 9.600 | 10.073 | 5.166 | 5.554 | 13.248 | 13.367 |
| 1968 | 39.043 | 38.007 | 7.255 | 7.093 | 11.390 | 11.012 | 5.941 | 5.882 | 14.457 | 14.019 |
| 1969 | 42.584 | 40.250 | 7.537 | 7.304 | 12.949 | 12.027 | 6.334 | 6.228 | 15.563 | 14.699 |
| 1970 | 0.000 | 42.641 | 25.815 | 7.515 | 7.831 | 13.121 | 26.081 | 6.594 | 61.219 | 15.410 |

MICRO ECONOMIC MODEL IR MAIN AFRICA

| | GROSS REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|--------|-------------|--------|--------|-------|--------|-------|-------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 10.600 | 10.735 | 6.360 | 6.500 | 0.318 | 0.278 | 0.000 | 0.000 | 0.159 | 0.157 |
| 1951 | 11.172 | 11.267 | 6.620 | 6.728 | 0.349 | 0.314 | 0.000 | 0.000 | 0.178 | 0.176 |
| 1952 | 11.776 | 11.832 | 6.891 | 6.967 | 0.382 | 0.354 | 0.000 | 0.000 | 0.19A | 0.197 |
| 1953 | 12.412 | 12.433 | 7.171 | 7.216 | 0.417 | 0.397 | 0.000 | 0.000 | 0.220 | 0.219 |
| 1954 | 13.082 | 13.072 | 7.461 | 7.478 | 0.455 | 0.444 | 0.000 | 0.000 | 0.244 | 0.243 |
| 1955 | 13.788 | 13.752 | 7.761 | 7.751 | 0.496 | 0.495 | 0.000 | 0.000 | 0.270 | 0.269 |
| 1956 | 14.533 | 14.476 | 8.073 | 8.038 | 0.541 | 0.550 | 0.000 | 0.000 | 0.29A | 0.297 |
| 1957 | 15.318 | 15.247 | 8.395 | 8.334 | 0.588 | 0.610 | 0.000 | 0.000 | 0.32A | 0.32A |
| 1958 | 16.134 | 16.070 | 8.723 | 8.654 | 0.639 | 0.675 | 0.000 | 0.000 | 0.361 | 0.362 |
| 1959 | 17.044 | 16.947 | 9.195 | 8.984 | 0.704 | 0.746 | 0.000 | 0.000 | 0.401 | 0.39A |
| 1960 | 18.058 | 17.884 | 9.741 | 9.694 | 0.792 | 0.824 | 0.000 | 0.000 | 0.456 | 0.43A |
| 1961 | 19.172 | 18.884 | 10.361 | 10.342 | 0.845 | 0.908 | 0.000 | 0.000 | 0.485 | 0.481 |
| 1962 | 19.884 | 19.953 | 10.973 | 10.976 | 0.879 | 1.000 | 0.000 | 0.000 | 0.529 | 0.527 |
| 1963 | 20.853 | 21.097 | 10.686 | 10.477 | 0.942 | 1.100 | 0.000 | 0.000 | 0.549 | 0.57A |
| 1964 | 22.336 | 22.321 | 11.19A | 10.89A | 1.033 | 1.208 | 0.000 | 0.000 | 0.619 | 0.634 |
| 1965 | 23.572 | 23.632 | 11.331 | 11.339 | 1.359 | 1.327 | 0.000 | 0.000 | 0.68A | 0.694 |
| 1966 | 24.766 | 25.036 | 11.630 | 11.803 | 1.724 | 1.457 | 0.000 | 0.000 | 0.728 | 0.760 |
| 1967 | 26.483 | 26.542 | 12.213 | 12.291 | 1.560 | 1.598 | 0.000 | 0.000 | 0.865 | 0.832 |
| 1968 | 27.658 | 28.159 | 12.337 | 12.804 | 1.712 | 1.752 | 0.000 | 0.000 | 0.932 | 0.910 |
| 1969 | 29.690 | 29.495 | 12.679 | 13.342 | 2.174 | 1.920 | 0.000 | 0.000 | 0.989 | 0.895 |
| 1970 | 0.000 | 31.760 | 0.000 | 13.909 | 0.000 | 2.104 | 0.000 | 0.000 | 0.000 | 1.089 |

| | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|-------|--------------|-------|------------|-------|------------|-------|-----------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 0.159 | 0.163 | 0.519 | 0.531 | 1.738 | 1.741 | 1.060 | 1.071 | 0.28A | 0.293 |
| 1951 | 0.196 | 0.199 | 0.548 | 0.557 | 1.845 | 1.844 | 1.135 | 1.141 | 0.302 | 0.307 |
| 1952 | 0.236 | 0.23A | 0.579 | 0.585 | 1.957 | 1.953 | 1.214 | 1.217 | 0.31A | 0.322 |
| 1953 | 0.281 | 0.281 | 0.612 | 0.614 | 2.077 | 2.070 | 1.299 | 1.298 | 0.335 | 0.337 |
| 1954 | 0.329 | 0.328 | 0.646 | 0.645 | 2.204 | 2.195 | 1.390 | 1.386 | 0.353 | 0.354 |
| 1955 | 0.382 | 0.379 | 0.682 | 0.678 | 2.338 | 2.328 | 1.486 | 1.479 | 0.372 | 0.372 |
| 1956 | 0.439 | 0.435 | 0.720 | 0.713 | 2.480 | 2.472 | 1.589 | 1.580 | 0.392 | 0.391 |
| 1957 | 0.502 | 0.496 | 0.760 | 0.751 | 2.631 | 2.625 | 1.699 | 1.688 | 0.414 | 0.411 |
| 1958 | 0.570 | 0.563 | 0.802 | 0.791 | 2.789 | 2.789 | 1.815 | 1.804 | 0.436 | 0.432 |
| 1959 | 0.653 | 0.635 | 0.859 | 0.834 | 3.000 | 2.966 | 1.967 | 1.966 | 0.466 | 0.455 |
| 1960 | 0.762 | 0.715 | 0.941 | 0.929 | 3.302 | 3.155 | 2.180 | 2.064 | 0.479 | 0.479 |
| 1961 | 0.824 | 0.802 | 0.926 | 0.92A | 3.401 | 3.358 | 2.239 | 2.209 | 0.510 | 0.505 |
| 1962 | 0.901 | 0.896 | 0.970 | 0.980 | 3.567 | 3.576 | 2.334 | 2.365 | 0.531 | 0.532 |
| 1963 | 0.943 | 1.000 | 1.05A | 1.035 | 3.713 | 3.812 | 2.495 | 2.534 | 0.576 | 0.562 |
| 1964 | 1.063 | 1.114 | 1.041 | 1.095 | 3.945 | 4.064 | 2.656 | 2.715 | 0.641 | 0.593 |
| 1965 | 1.242 | 1.238 | 1.181 | 1.158 | 4.337 | 4.260 | 2.909 | 2.912 | 0.822 | 0.627 |
| 1966 | 1.342 | 1.373 | 1.233 | 1.226 | 4.443 | 4.630 | 3.026 | 3.124 | 0.839 | 0.662 |
| 1967 | 1.536 | 1.521 | 1.285 | 1.299 | 4.946 | 4.946 | 3.316 | 3.354 | 0.685 | 0.701 |
| 1968 | 1.707 | 1.684 | 1.377 | 1.377 | 5.330 | 5.287 | 3.601 | 3.602 | 0.714 | 0.742 |
| 1969 | 1.826 | 1.862 | 1.455 | 1.461 | 5.856 | 5.856 | 3.952 | 3.871 | 0.760 | 0.786 |
| 1970 | 0.000 | 2.057 | 0.000 | 1.552 | 0.000 | 6.053 | 0.000 | 4.162 | 0.000 | 0.834 |

MICRO ECONOMIC MODEL FOR MAIN AFRICA

| | GROSS REG. PROD. | | AGRICUL*FOOD | | MINING*ENERGY | | MANUFAC*CONSTRUC | | SERVICES | |
|------|------------------|--------|--------------|--------|---------------|-------|------------------|-------|----------|--------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 10.600 | 10.735 | 6.519 | 6.658 | 0.318 | 0.278 | 0.678 | 0.694 | 3.084 | 3.195 |
| 1951 | 11.172 | 11.267 | 6.798 | 6.905 | 0.349 | 0.314 | 0.744 | 0.756 | 3.282 | 3.292 |
| 1952 | 11.776 | 11.852 | 7.089 | 7.163 | 0.382 | 0.354 | 0.815 | 0.823 | 3.489 | 3.492 |
| 1953 | 12.412 | 12.433 | 7.391 | 7.435 | 0.417 | 0.397 | 0.893 | 0.895 | 3.711 | 3.706 |
| 1954 | 13.082 | 13.072 | 7.705 | 7.720 | 0.455 | 0.444 | 0.975 | 0.973 | 3.947 | 3.935 |
| 1955 | 13.788 | 13.752 | 8.031 | 8.020 | 0.496 | 0.495 | 1.064 | 1.057 | 4.196 | 4.179 |
| 1956 | 14.533 | 14.476 | 8.371 | 8.335 | 0.541 | 0.550 | 1.159 | 1.148 | 4.461 | 4.442 |
| 1957 | 15.318 | 15.247 | 8.723 | 8.667 | 0.588 | 0.610 | 1.262 | 1.247 | 4.744 | 4.723 |
| 1958 | 16.134 | 16.070 | 9.084 | 9.015 | 0.639 | 0.675 | 1.372 | 1.354 | 5.040 | 5.025 |
| 1959 | 17.248 | 16.947 | 9.596 | 9.362 | 0.704 | 0.746 | 1.512 | 1.469 | 5.433 | 5.349 |
| 1960 | 18.658 | 17.884 | 10.371 | 9.768 | 0.792 | 0.824 | 1.703 | 1.594 | 5.991 | 5.697 |
| 1961 | 19.172 | 18.884 | 10.426 | 10.175 | 0.845 | 0.908 | 1.750 | 1.729 | 6.150 | 6.071 |
| 1962 | 19.884 | 19.853 | 10.702 | 10.603 | 0.879 | 1.000 | 1.871 | 1.876 | 6.432 | 6.474 |
| 1963 | 20.953 | 21.097 | 11.255 | 11.055 | 0.932 | 1.100 | 2.001 | 2.055 | 6.744 | 6.907 |
| 1964 | 22.336 | 22.321 | 11.817 | 11.531 | 1.153 | 1.308 | 2.124 | 2.208 | 7.242 | 7.373 |
| 1965 | 23.572 | 23.632 | 12.019 | 12.034 | 1.339 | 1.527 | 2.423 | 2.396 | 7.791 | 7.875 |
| 1966 | 24.766 | 25.036 | 12.358 | 12.563 | 1.724 | 1.457 | 2.575 | 2.599 | 8.108 | 8.416 |
| 1967 | 26.443 | 26.542 | 13.078 | 13.123 | 1.560 | 1.598 | 2.821 | 2.821 | 8.983 | 9.000 |
| 1968 | 27.658 | 28.159 | 13.269 | 13.714 | 1.712 | 1.752 | 3.032 | 3.061 | 9.645 | 9.631 |
| 1969 | 29.690 | 29.895 | 13.668 | 14.338 | 2.174 | 1.920 | 3.281 | 3.323 | 10.567 | 10.513 |
| 1970 | 0.000 | 31.760 | 25.815 | 14.997 | 7.931 | 2.104 | 26.081 | 3.608 | 63.219 | 11.049 |

MICRO ECONOMIC MODEL FOR SOUTH EAST ASIA

| | GROSS REG. PROD. | | AGRICULTURE | | MINING | | ENERGY | | FOOD | |
|------|------------------|---------|-------------|--------|--------|-------|--------|-------|-------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 51.625 | 52.966 | 26.695 | 27.683 | 0.118 | 0.119 | 0.516 | 0.499 | 1.324 | 1.324 |
| 1951 | 53.375 | 54.753 | 26.891 | 28.274 | 0.145 | 0.130 | 0.561 | 0.536 | 1.372 | 1.395 |
| 1952 | 55.125 | 56.652 | 27.800 | 28.899 | 0.160 | 0.143 | 0.584 | 0.576 | 1.423 | 1.470 |
| 1953 | 59.500 | 58.667 | 30.322 | 29.559 | 0.173 | 0.158 | 0.625 | 0.618 | 1.523 | 1.551 |
| 1954 | 61.250 | 60.806 | 30.938 | 30.254 | 0.184 | 0.173 | 0.662 | 0.664 | 1.611 | 1.636 |
| 1955 | 63.000 | 63.072 | 30.486 | 30.986 | 0.176 | 0.189 | 0.712 | 0.712 | 1.745 | 1.728 |
| 1956 | 66.500 | 68.473 | 32.278 | 31.754 | 0.200 | 0.206 | 0.778 | 0.764 | 1.916 | 1.925 |
| 1957 | 67.375 | 68.014 | 31.676 | 32.560 | 0.209 | 0.225 | 0.829 | 0.819 | 2.028 | 1.928 |
| 1958 | 70.000 | 70.704 | 33.827 | 33.404 | 0.210 | 0.245 | 0.889 | 0.878 | 2.150 | 2.038 |
| 1959 | 72.625 | 73.549 | 34.286 | 34.267 | 0.218 | 0.240 | 0.908 | 0.940 | 2.172 | 2.155 |
| 1960 | 77.000 | 76.558 | 36.621 | 35.208 | 0.223 | 0.289 | 0.924 | 1.007 | 2.172 | 2.260 |
| 1961 | 80.500 | 79.739 | 37.573 | 36.171 | 0.250 | 0.313 | 0.998 | 1.079 | 2.375 | 2.413 |
| 1962 | 83.125 | 83.102 | 37.297 | 37.175 | 0.424 | 0.339 | 1.006 | 1.156 | 2.528 | 2.554 |
| 1963 | 87.500 | 86.655 | 38.369 | 38.221 | 0.315 | 0.367 | 1.199 | 1.238 | 2.625 | 2.705 |
| 1964 | 92.750 | 90.409 | 40.776 | 39.309 | 0.334 | 0.397 | 1.290 | 1.325 | 2.830 | 2.865 |
| 1965 | 92.750 | 94.376 | 38.392 | 40.441 | 0.399 | 0.429 | 1.447 | 1.447 | 3.043 | 3.036 |
| 1966 | 96.250 | 98.568 | 39.309 | 41.619 | 0.462 | 0.464 | 1.569 | 1.518 | 3.205 | 3.218 |
| 1967 | 103.250 | 102.997 | 43.033 | 42.843 | 0.558 | 0.501 | 1.683 | 1.625 | 3.491 | 3.412 |
| 1968 | 106.750 | 107.676 | 43.217 | 44.113 | 0.598 | 0.540 | 1.794 | 1.739 | 3.566 | 3.619 |
| 1969 | 114.625 | 112.628 | 46.302 | 45.835 | 0.653 | 0.582 | 1.949 | 1.861 | 3.898 | 3.839 |
| 1970 | 120.750 | 117.840 | 48.254 | 46.797 | 0.688 | 0.628 | 2.090 | 1.991 | 4.167 | 4.073 |

| | MANUFACTURING | | CONSTRUCTION | | SERVICES 1 | | SERVICES 2 | | DWELLINGS | |
|------|---------------|--------|--------------|-------|------------|--------|------------|--------|-----------|-------|
| | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. | DATA | COMP. |
| 1950 | 4.130 | 4.186 | 1.564 | 1.518 | 8.647 | 8.692 | 6.117 | 6.227 | 2.555 | 2.718 |
| 1951 | 4.500 | 4.460 | 1.623 | 1.616 | 9.124 | 9.066 | 6.454 | 6.489 | 2.696 | 2.787 |
| 1952 | 4.670 | 4.752 | 1.643 | 1.720 | 9.406 | 9.464 | 6.661 | 6.768 | 2.779 | 2.859 |
| 1953 | 5.017 | 5.063 | 1.827 | 1.832 | 9.992 | 9.887 | 7.870 | 7.064 | 2.952 | 2.936 |
| 1954 | 5.293 | 5.395 | 1.856 | 1.950 | 10.341 | 10.338 | 7.515 | 7.379 | 3.051 | 3.017 |
| 1955 | 5.696 | 5.749 | 2.092 | 2.077 | 10.887 | 10.816 | 7.706 | 7.713 | 3.102 | 3.102 |
| 1956 | 6.252 | 6.127 | 2.315 | 2.212 | 11.420 | 11.324 | 8.088 | 8.446 | 3.252 | 3.287 |
| 1957 | 6.469 | 6.530 | 2.439 | 2.356 | 11.980 | 11.864 | 8.497 | 8.846 | 3.340 | 3.386 |
| 1958 | 6.575 | 6.959 | 2.767 | 2.509 | 12.481 | 12.438 | 8.781 | 9.271 | 3.479 | 3.491 |
| 1959 | 7.146 | 7.417 | 2.608 | 2.673 | 12.806 | 13.047 | 9.000 | 9.723 | 3.766 | 3.601 |
| 1960 | 7.702 | 7.906 | 2.803 | 2.848 | 13.355 | 13.694 | 9.434 | 10.202 | 3.897 | 3.717 |
| 1961 | 8.447 | 8.985 | 3.076 | 3.233 | 14.592 | 15.110 | 10.900 | 10.711 | 3.982 | 3.838 |
| 1962 | 9.320 | 9.424 | 3.076 | 3.372 | 15.033 | 15.110 | 10.900 | 10.711 | 4.025 | 3.965 |
| 1963 | 10.115 | 9.579 | 3.491 | 3.446 | 16.774 | 16.706 | 12.024 | 11.428 | 4.119 | 4.098 |
| 1964 | 10.818 | 10.214 | 3.915 | 3.672 | 17.488 | 17.578 | 12.558 | 12.431 | 4.240 | 4.238 |
| 1965 | 11.068 | 10.890 | 4.206 | 4.172 | 18.672 | 18.505 | 13.766 | 13.076 | 4.274 | 4.384 |
| 1966 | 11.656 | 11.613 | 4.585 | 4.447 | 19.632 | 19.488 | 14.878 | 14.487 | 4.410 | 4.536 |
| 1967 | 12.093 | 12.384 | 4.836 | 4.741 | 20.786 | 20.533 | 15.487 | 14.487 | 4.537 | 4.696 |
| 1968 | 12.929 | 13.208 | 4.836 | 4.741 | 22.182 | 21.643 | 16.439 | 15.464 | 4.838 | 4.864 |
| 1969 | 14.112 | 14.088 | 5.227 | 5.055 | 23.590 | 22.819 | 16.439 | 16.077 | 5.146 | 5.039 |
| 1970 | 15.110 | 15.026 | 5.266 | 5.390 | | | | | | |

MICRO ECONOMIC MODEL OR SOUTH EAST ASIA

| | GROSS REG. PROD. | | AGRICUL*FOOD | | MINING*ENERGY | | MANUFAC*CONSTRUC | | SERVICES | |
|------|------------------|---------|--------------|--------|---------------|-------|------------------|--------|----------|--------|
| | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP | DATA | COMP |
| 1950 | 51.625 | 52.966 | 27.949 | 29.007 | 0.661 | 0.616 | 5.694 | 5.704 | 17.319 | 17.637 |
| 1951 | 53.175 | 54.753 | 28.263 | 29.668 | 0.716 | 0.666 | 6.123 | 6.076 | 18.274 | 18.342 |
| 1952 | 55.125 | 56.652 | 29.223 | 30.369 | 0.744 | 0.719 | 6.313 | 6.473 | 18.846 | 19.090 |
| 1953 | 59.500 | 58.667 | 31.845 | 31.109 | 0.798 | 0.776 | 6.844 | 6.895 | 20.014 | 19.886 |
| 1954 | 61.250 | 60.806 | 32.549 | 31.891 | 0.846 | 0.836 | 7.149 | 7.346 | 20.707 | 20.732 |
| 1955 | 63.000 | 63.072 | 32.631 | 32.713 | 0.888 | 0.901 | 7.788 | 7.826 | 21.693 | 21.631 |
| 1956 | 66.500 | 65.473 | 34.193 | 33.578 | 0.978 | 0.970 | 8.567 | 8.339 | 22.760 | 22.584 |
| 1957 | 67.375 | 68.014 | 33.704 | 34.487 | 1.038 | 1.044 | 8.808 | 8.865 | 23.725 | 23.596 |
| 1958 | 70.000 | 70.704 | 35.977 | 35.441 | 1.099 | 1.122 | 8.942 | 9.469 | 23.982 | 24.670 |
| 1959 | 72.625 | 73.540 | 36.458 | 36.441 | 1.126 | 1.206 | 9.756 | 10.091 | 25.285 | 25.810 |
| 1960 | 77.000 | 76.558 | 38.793 | 37.488 | 1.147 | 1.296 | 10.505 | 11.754 | 26.555 | 27.014 |
| 1961 | 80.500 | 79.739 | 39.848 | 38.564 | 1.248 | 1.392 | 11.410 | 11.463 | 27.893 | 28.300 |
| 1962 | 83.125 | 83.102 | 39.825 | 39.729 | 1.430 | 1.495 | 12.396 | 12.218 | 29.474 | 29.659 |
| 1963 | 87.500 | 86.655 | 40.994 | 40.925 | 1.514 | 1.605 | 13.606 | 13.025 | 31.386 | 31.100 |
| 1964 | 92.750 | 90.409 | 43.605 | 42.173 | 1.624 | 1.722 | 14.603 | 13.865 | 32.917 | 32.627 |
| 1965 | 92.750 | 94.376 | 41.435 | 43.477 | 1.846 | 1.848 | 14.983 | 14.804 | 34.486 | 34.246 |
| 1966 | 96.250 | 98.568 | 42.514 | 44.836 | 2.031 | 1.982 | 15.862 | 15.785 | 35.844 | 35.964 |
| 1967 | 103.250 | 102.997 | 46.524 | 46.254 | 2.241 | 2.126 | 16.678 | 16.832 | 37.808 | 37.785 |
| 1968 | 106.750 | 107.676 | 46.783 | 47.730 | 2.392 | 2.279 | 17.765 | 17.949 | 39.810 | 39.716 |
| 1969 | 114.625 | 112.628 | 50.200 | 49.273 | 2.602 | 2.444 | 19.339 | 19.144 | 42.843 | 41.767 |
| 1970 | 120.750 | 117.840 | 52.421 | 50.870 | 2.778 | 2.619 | 20.376 | 20.416 | 45.175 | 43.935 |

B 268

4. Gross Outputs , Intermediate Demands
and Inputs Computation

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

Z MATRIX=

56.345 9.547
27.289 438.633
Z VECTOR= 128.674 1052.828

A MATRIX=

0.43789 0.00907
0.21208 0.41662
COL SUM= 0.64996 0.42569

(1-A)⁻¹=

1.78944 0.02781
0.65050 1.72421

AGRICULTURE

$$V = (-0.000807 * T + 0.0476046) * YM$$

| | V | Z | U | H | YV | U/Y | M/Y | YM | YVT | ERRX |
|------|--------|--------|--------|--------|--------|----------|-----------|---------|---------|-------|
| 1950 | 19.679 | 46.726 | 33.729 | 27.048 | 12.997 | 0.081592 | 0.065428 | 413.391 | 413.375 | 0.004 |
| 1951 | 19.961 | 47.366 | 34.440 | 27.435 | 12.956 | 0.080741 | 0.0644318 | 426.547 | 426.527 | 0.005 |
| 1952 | 20.252 | 48.085 | 35.180 | 27.834 | 12.905 | 0.079890 | 0.063209 | 440.355 | 440.340 | 0.004 |
| 1953 | 20.551 | 48.796 | 35.921 | 28.246 | 12.846 | 0.079038 | 0.062099 | 454.852 | 454.840 | 0.003 |
| 1954 | 20.860 | 49.429 | 36.754 | 28.670 | 12.775 | 0.078186 | 0.060988 | 470.082 | 470.063 | 0.004 |
| 1955 | 21.178 | 50.286 | 37.592 | 29.108 | 12.695 | 0.077333 | 0.059880 | 486.102 | 486.086 | 0.003 |
| 1956 | 21.506 | 51.064 | 38.467 | 29.559 | 12.597 | 0.076482 | 0.058770 | 502.958 | 502.938 | 0.004 |
| 1957 | 21.845 | 51.868 | 39.382 | 30.024 | 12.486 | 0.075631 | 0.057660 | 520.703 | 520.688 | 0.003 |
| 1958 | 22.193 | 52.696 | 40.333 | 30.503 | 12.360 | 0.074779 | 0.056550 | 539.394 | 539.375 | 0.004 |
| 1959 | 22.553 | 53.550 | 41.333 | 30.998 | 12.217 | 0.073926 | 0.055440 | 559.117 | 559.086 | 0.004 |
| 1960 | 22.924 | 54.432 | 42.378 | 31.508 | 12.054 | 0.073074 | 0.054332 | 579.922 | 579.898 | 0.004 |
| 1961 | 23.307 | 55.339 | 43.471 | 32.033 | 11.869 | 0.072223 | 0.053220 | 601.891 | 601.867 | 0.004 |
| 1962 | 23.702 | 56.277 | 44.616 | 32.577 | 11.661 | 0.071371 | 0.052112 | 625.125 | 625.102 | 0.004 |
| 1963 | 24.108 | 57.242 | 45.815 | 33.134 | 11.426 | 0.070518 | 0.051000 | 649.688 | 649.648 | 0.006 |
| 1964 | 24.528 | 58.239 | 47.075 | 33.711 | 11.164 | 0.069667 | 0.049891 | 675.703 | 675.680 | 0.003 |
| 1965 | 24.960 | 59.266 | 48.395 | 34.307 | 10.871 | 0.068814 | 0.048782 | 703.266 | 703.227 | 0.006 |
| 1966 | 25.406 | 60.325 | 49.783 | 34.919 | 10.542 | 0.067964 | 0.047671 | 732.492 | 732.453 | 0.005 |
| 1967 | 25.867 | 61.418 | 51.243 | 35.552 | 10.175 | 0.067112 | 0.046562 | 763.531 | 763.500 | 0.004 |
| 1968 | 26.340 | 62.542 | 52.777 | 36.203 | 9.765 | 0.066260 | 0.045452 | 796.508 | 796.477 | 0.004 |
| 1969 | 26.829 | 63.703 | 54.393 | 36.875 | 9.310 | 0.065408 | 0.044342 | 831.594 | 831.562 | 0.014 |
| 1970 | 27.333 | 64.899 | 56.096 | 37.567 | 8.804 | 0.064556 | 0.043232 | 868.945 | 868.922 | 0.03 |

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

MINING

$$V = (0.000017 * T + 0.0062971) * YH$$

| | V | Z | U | W | YV | UYV | W/YV | YM | YVT | ERRZ |
|------|-------|--------|-------|-------|-------|----------|----------|---------|---------|-------|
| 1950 | 2.603 | 4.552 | 3.476 | 1.944 | 1.075 | 0.008409 | 0.004713 | 413.391 | 413.375 | 0.004 |
| 1951 | 2.693 | 4.709 | 3.586 | 2.016 | 1.123 | 0.008407 | 0.004726 | 426.547 | 426.527 | 0.005 |
| 1952 | 2.788 | 4.875 | 3.701 | 2.087 | 1.173 | 0.008405 | 0.004739 | 440.355 | 440.340 | 0.004 |
| 1953 | 2.887 | 5.049 | 3.822 | 2.161 | 1.226 | 0.008403 | 0.004751 | 454.852 | 454.840 | 0.003 |
| 1954 | 2.992 | 5.232 | 3.949 | 2.240 | 1.282 | 0.008402 | 0.004764 | 470.082 | 470.063 | 0.004 |
| 1955 | 3.102 | 5.424 | 4.083 | 2.322 | 1.341 | 0.008400 | 0.004777 | 486.102 | 486.086 | 0.003 |
| 1956 | 3.219 | 5.628 | 4.224 | 2.409 | 1.404 | 0.008398 | 0.004790 | 502.957 | 502.938 | 0.004 |
| 1957 | 3.341 | 5.842 | 4.372 | 2.501 | 1.470 | 0.008396 | 0.004802 | 520.703 | 520.688 | 0.003 |
| 1958 | 3.470 | 6.067 | 4.528 | 2.597 | 1.539 | 0.008395 | 0.004815 | 539.375 | 539.375 | 0.004 |
| 1959 | 3.607 | 6.306 | 4.693 | 2.689 | 1.613 | 0.008393 | 0.004828 | 559.117 | 559.086 | 0.006 |
| 1960 | 3.751 | 6.558 | 4.866 | 2.807 | 1.692 | 0.008391 | 0.004841 | 579.822 | 579.898 | 0.004 |
| 1961 | 3.903 | 6.824 | 5.049 | 2.921 | 1.775 | 0.008389 | 0.004853 | 601.891 | 601.867 | 0.004 |
| 1962 | 4.064 | 7.106 | 5.243 | 3.042 | 1.863 | 0.008388 | 0.004866 | 625.125 | 625.102 | 0.004 |
| 1963 | 4.235 | 7.405 | 5.448 | 3.170 | 1.957 | 0.008386 | 0.004879 | 649.688 | 649.648 | 0.006 |
| 1964 | 4.416 | 7.721 | 5.665 | 3.305 | 2.056 | 0.008384 | 0.004892 | 675.703 | 675.680 | 0.003 |
| 1965 | 4.608 | 8.057 | 5.895 | 3.449 | 2.162 | 0.008382 | 0.004904 | 703.227 | 703.227 | 0.004 |
| 1966 | 4.812 | 8.414 | 6.139 | 3.602 | 2.275 | 0.008381 | 0.004917 | 732.492 | 732.453 | 0.005 |
| 1967 | 5.029 | 8.793 | 6.398 | 3.764 | 2.396 | 0.008379 | 0.004930 | 763.531 | 763.500 | 0.004 |
| 1968 | 5.260 | 9.197 | 6.673 | 3.937 | 2.524 | 0.008377 | 0.004943 | 796.508 | 796.477 | 0.004 |
| 1969 | 5.506 | 9.627 | 6.965 | 4.121 | 2.662 | 0.008375 | 0.004955 | 831.594 | 831.562 | 0.004 |
| 1970 | 5.768 | 10.085 | 7.276 | 4.317 | 2.809 | 0.008374 | 0.004968 | 868.945 | 868.922 | 0.003 |

ENERGY

$$V = (0.000295 * T + 0.0373063) * YH$$

| | V | Z | U | W | YV | UYV | W/YV | YM | YVT | ERRZ |
|------|--------|--------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 15.422 | 27.435 | 21.499 | 12.413 | 6.336 | 0.052006 | 0.030027 | 413.391 | 413.375 | 0.004 |
| 1951 | 16.039 | 28.948 | 22.251 | 12.910 | 6.697 | 0.052166 | 0.030265 | 426.547 | 426.527 | 0.005 |
| 1952 | 16.688 | 30.120 | 23.042 | 13.432 | 7.078 | 0.052326 | 0.030503 | 440.355 | 440.340 | 0.004 |
| 1953 | 17.372 | 31.354 | 33.873 | 13.982 | 7.481 | 0.052485 | 0.030740 | 454.852 | 454.840 | 0.003 |
| 1954 | 18.092 | 32.654 | 24.748 | 14.562 | 7.906 | 0.052646 | 0.030977 | 470.082 | 470.063 | 0.004 |
| 1955 | 18.852 | 34.025 | 25.669 | 15.174 | 8.356 | 0.052806 | 0.031215 | 486.102 | 486.086 | 0.003 |
| 1956 | 19.654 | 35.474 | 26.640 | 15.820 | 8.834 | 0.052966 | 0.031453 | 502.957 | 502.938 | 0.004 |
| 1957 | 20.501 | 37.003 | 27.663 | 16.501 | 9.340 | 0.053125 | 0.031691 | 520.703 | 520.688 | 0.003 |
| 1958 | 21.396 | 38.618 | 28.742 | 17.222 | 9.876 | 0.053286 | 0.031928 | 539.398 | 539.375 | 0.004 |
| 1959 | 22.344 | 40.328 | 29.882 | 17.984 | 10.446 | 0.053445 | 0.032165 | 559.117 | 559.086 | 0.004 |
| 1960 | 23.347 | 42.138 | 31.067 | 18.792 | 11.051 | 0.053606 | 0.032403 | 579.822 | 579.898 | 0.004 |
| 1961 | 24.409 | 44.055 | 32.361 | 19.646 | 11.694 | 0.053765 | 0.032641 | 601.891 | 601.867 | 0.004 |
| 1962 | 25.536 | 46.089 | 33.710 | 20.553 | 12.378 | 0.053926 | 0.032878 | 625.125 | 625.102 | 0.004 |
| 1963 | 26.731 | 48.247 | 35.139 | 21.516 | 13.108 | 0.054085 | 0.033117 | 649.688 | 649.648 | 0.006 |
| 1964 | 28.000 | 50.538 | 36.654 | 22.537 | 13.894 | 0.054245 | 0.033354 | 675.703 | 675.680 | 0.003 |
| 1965 | 29.350 | 52.974 | 38.261 | 23.624 | 14.713 | 0.054404 | 0.033591 | 703.227 | 703.227 | 0.006 |
| 1966 | 30.786 | 55.566 | 39.969 | 24.780 | 15.597 | 0.054565 | 0.033829 | 732.492 | 732.453 | 0.005 |
| 1967 | 32.316 | 58.328 | 41.785 | 26.011 | 16.543 | 0.054725 | 0.034067 | 763.531 | 763.500 | 0.004 |
| 1968 | 33.947 | 61.271 | 43.716 | 27.324 | 17.555 | 0.054885 | 0.034305 | 796.508 | 796.477 | 0.004 |
| 1969 | 35.688 | 64.414 | 45.776 | 28.726 | 18.639 | 0.055046 | 0.034543 | 831.594 | 831.562 | 0.004 |
| 1970 | 37.548 | 67.770 | 47.970 | 30.222 | 19.800 | 0.055205 | 0.034780 | 868.945 | 868.922 | 0.003 |

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

$$V = (-0.000293 * T + 0.0360284) * YM$$

F00D

| | V | Z | U | W | YV | UYV | M/Y | YM | YVT | ERRZ |
|------|--------|--------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 14.894 | 50.820 | 14.364 | 35.928 | 36.456 | 0.033748 | 0.086909 | 413.391 | 413.375 | 0.004 |
| 1951 | 15.243 | 52.012 | 14.695 | 37.770 | 37.316 | 0.034451 | 0.086203 | 426.547 | 426.527 | 0.005 |
| 1952 | 15.607 | 53.256 | 15.041 | 37.649 | 38.216 | 0.034156 | 0.085497 | 440.355 | 440.340 | 0.004 |
| 1953 | 15.988 | 54.555 | 15.402 | 38.567 | 39.154 | 0.033861 | 0.084791 | 454.852 | 454.840 | 0.003 |
| 1954 | 16.386 | 55.912 | 15.778 | 39.527 | 40.134 | 0.033565 | 0.084085 | 470.063 | 470.063 | 0.004 |
| 1955 | 16.802 | 57.332 | 16.172 | 40.531 | 41.160 | 0.033269 | 0.083380 | 486.102 | 486.086 | 0.003 |
| 1956 | 17.237 | 58.817 | 16.584 | 41.581 | 42.233 | 0.032973 | 0.082672 | 502.957 | 502.938 | 0.004 |
| 1957 | 17.693 | 60.373 | 17.015 | 42.680 | 43.357 | 0.032678 | 0.081966 | 520.688 | 520.688 | 0.003 |
| 1958 | 18.170 | 62.000 | 17.466 | 43.831 | 44.535 | 0.032381 | 0.081259 | 539.375 | 539.375 | 0.004 |
| 1959 | 18.670 | 63.708 | 17.939 | 45.039 | 45.769 | 0.032084 | 0.080552 | 559.117 | 559.086 | 0.004 |
| 1960 | 19.195 | 65.499 | 18.435 | 46.305 | 47.064 | 0.031789 | 0.079846 | 579.922 | 579.894 | 0.004 |
| 1961 | 19.747 | 67.380 | 18.956 | 47.634 | 48.425 | 0.031493 | 0.079141 | 601.691 | 601.667 | 0.004 |
| 1962 | 20.326 | 69.356 | 19.502 | 49.031 | 49.854 | 0.031197 | 0.078434 | 625.125 | 625.102 | 0.004 |
| 1963 | 20.934 | 71.433 | 20.077 | 50.499 | 51.356 | 0.030902 | 0.077727 | 649.688 | 649.648 | 0.006 |
| 1964 | 21.575 | 73.618 | 20.681 | 52.044 | 52.938 | 0.030606 | 0.077022 | 675.703 | 675.680 | 0.003 |
| 1965 | 22.249 | 75.917 | 21.316 | 53.669 | 54.601 | 0.030310 | 0.076314 | 703.266 | 703.227 | 0.006 |
| 1966 | 22.959 | 78.342 | 21.986 | 55.384 | 56.356 | 0.030015 | 0.075610 | 732.492 | 732.453 | 0.005 |
| 1967 | 23.708 | 80.899 | 22.692 | 57.192 | 58.208 | 0.029719 | 0.074904 | 763.500 | 763.500 | 0.004 |
| 1968 | 24.499 | 83.598 | 23.436 | 59.100 | 60.162 | 0.029423 | 0.074198 | 796.508 | 796.477 | 0.004 |
| 1969 | 25.335 | 86.449 | 24.222 | 61.116 | 62.228 | 0.029128 | 0.073492 | 831.594 | 831.562 | 0.004 |
| 1970 | 26.219 | 89.464 | 25.053 | 63.247 | 64.411 | 0.028832 | 0.072785 | 868.945 | 868.922 | 0.003 |

MANUFACTURING

$$V = (0.000653 * T + 0.2418365) * YM$$

| | V | Z | U | W | YV | UYV | M/Y | YM | YVT | ERRZ |
|------|---------|---------|---------|---------|---------|----------|----------|---------|---------|-------|
| 1950 | 99.973 | 243.951 | 158.102 | 143.979 | 85.950 | 0.382450 | 0.348286 | 413.391 | 413.375 | 0.004 |
| 1951 | 103.433 | 252.395 | 162.969 | 148.963 | 89.426 | 0.382065 | 0.349228 | 426.547 | 426.527 | 0.005 |
| 1952 | 107.068 | 261.266 | 168.074 | 154.197 | 93.191 | 0.381676 | 0.350163 | 440.355 | 440.340 | 0.004 |
| 1953 | 110.891 | 270.590 | 173.432 | 159.703 | 97.160 | 0.381290 | 0.351109 | 454.852 | 454.840 | 0.003 |
| 1954 | 114.910 | 280.398 | 179.061 | 165.494 | 101.340 | 0.380913 | 0.352051 | 470.063 | 470.063 | 0.004 |
| 1955 | 119.144 | 290.730 | 184.973 | 171.590 | 105.798 | 0.380520 | 0.352999 | 486.102 | 486.086 | 0.003 |
| 1956 | 123.604 | 301.613 | 191.195 | 178.012 | 110.418 | 0.380142 | 0.353928 | 502.957 | 502.938 | 0.004 |
| 1957 | 128.305 | 313.086 | 197.740 | 184.783 | 115.248 | 0.379753 | 0.354870 | 520.688 | 520.688 | 0.003 |
| 1958 | 133.264 | 325.138 | 204.633 | 191.924 | 120.255 | 0.379372 | 0.355820 | 539.375 | 539.375 | 0.004 |
| 1959 | 138.500 | 337.965 | 211.900 | 199.467 | 125.456 | 0.378990 | 0.356770 | 559.117 | 559.086 | 0.006 |
| 1960 | 144.033 | 351.465 | 219.561 | 207.436 | 131.906 | 0.378611 | 0.357720 | 579.922 | 579.894 | 0.004 |
| 1961 | 149.891 | 365.734 | 227.645 | 215.890 | 138.090 | 0.378231 | 0.358635 | 601.691 | 601.667 | 0.004 |
| 1962 | 156.076 | 380.852 | 236.193 | 224.781 | 144.660 | 0.377831 | 0.359577 | 625.125 | 625.102 | 0.006 |
| 1963 | 162.629 | 396.844 | 245.221 | 234.219 | 151.625 | 0.377441 | 0.360508 | 649.688 | 649.648 | 0.006 |
| 1964 | 169.586 | 413.820 | 254.783 | 243.238 | 159.039 | 0.377064 | 0.361458 | 675.703 | 675.680 | 0.003 |
| 1965 | 176.961 | 431.816 | 264.906 | 252.859 | 166.910 | 0.376678 | 0.362392 | 703.266 | 703.227 | 0.006 |
| 1966 | 184.793 | 450.926 | 275.633 | 262.137 | 175.293 | 0.376293 | 0.363327 | 732.492 | 732.453 | 0.005 |
| 1967 | 193.125 | 471.258 | 287.020 | 274.141 | 184.238 | 0.375908 | 0.364261 | 763.500 | 763.500 | 0.004 |
| 1968 | 201.988 | 492.687 | 299.113 | 290.902 | 193.773 | 0.375530 | 0.365194 | 796.508 | 796.477 | 0.004 |
| 1969 | 211.426 | 515.914 | 311.961 | 304.496 | 203.953 | 0.375134 | 0.366158 | 831.594 | 831.562 | 0.004 |
| 1970 | 221.497 | 540.477 | 325.641 | 318.984 | 214.436 | 0.374752 | 0.367092 | 868.945 | 868.922 | 0.003 |

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

CONSTRUCTION

$$V = (-0.000777 * T + 0.0546679) * YM$$

| Year | V | Z | U | W | YV | UY | M/Y | YM | YVT | ERHX |
|------|--------|--------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 22.590 | 56.715 | 8.187 | 34.115 | 48.128 | 0.020298 | 0.022525 | 413.391 | 413.375 | 0.004 |
| 1951 | 22.989 | 57.693 | 8.693 | 34.704 | 48.000 | 0.020380 | 0.041359 | 426.547 | 426.527 | 0.005 |
| 1952 | 23.393 | 58.707 | 9.015 | 35.313 | 46.692 | 0.020473 | 0.080193 | 440.355 | 440.340 | 0.004 |
| 1953 | 23.812 | 59.759 | 9.354 | 35.947 | 50.405 | 0.020565 | 0.079029 | 454.852 | 454.840 | 0.003 |
| 1954 | 24.246 | 60.849 | 9.711 | 36.602 | 51.138 | 0.020657 | 0.077963 | 470.082 | 470.063 | 0.004 |
| 1955 | 24.697 | 61.980 | 10.087 | 37.283 | 51.894 | 0.020750 | 0.076697 | 486.102 | 486.086 | 0.003 |
| 1956 | 25.165 | 63.154 | 10.483 | 37.989 | 52.672 | 0.020842 | 0.075530 | 502.957 | 502.938 | 0.004 |
| 1957 | 25.651 | 64.373 | 10.901 | 38.722 | 53.473 | 0.020934 | 0.074364 | 520.703 | 520.680 | 0.003 |
| 1958 | 26.155 | 65.633 | 11.342 | 39.487 | 54.297 | 0.021027 | 0.073198 | 539.499 | 539.475 | 0.004 |
| 1959 | 26.680 | 66.935 | 11.808 | 40.275 | 55.147 | 0.021119 | 0.072033 | 559.117 | 559.086 | 0.003 |
| 1960 | 27.225 | 68.282 | 12.301 | 41.097 | 56.021 | 0.021212 | 0.070867 | 579.422 | 579.388 | 0.004 |
| 1961 | 27.791 | 69.674 | 12.823 | 41.953 | 56.922 | 0.021304 | 0.069701 | 601.391 | 601.367 | 0.004 |
| 1962 | 28.381 | 71.126 | 13.375 | 42.844 | 57.851 | 0.021396 | 0.068536 | 625.125 | 625.102 | 0.004 |
| 1963 | 28.995 | 72.665 | 13.961 | 43.770 | 58.807 | 0.021488 | 0.067369 | 649.688 | 649.648 | 0.006 |
| 1964 | 29.634 | 74.269 | 14.582 | 44.735 | 59.797 | 0.021581 | 0.066204 | 675.703 | 675.680 | 0.003 |
| 1965 | 30.299 | 76.039 | 15.242 | 45.739 | 60.828 | 0.021673 | 0.065038 | 703.266 | 703.227 | 0.006 |
| 1966 | 30.993 | 77.890 | 15.943 | 46.787 | 61.904 | 0.021765 | 0.063872 | 732.492 | 732.453 | 0.005 |
| 1967 | 31.717 | 79.827 | 16.689 | 47.879 | 63.028 | 0.021858 | 0.062707 | 763.531 | 763.500 | 0.004 |
| 1968 | 32.472 | 81.851 | 17.483 | 49.011 | 64.202 | 0.021950 | 0.061542 | 796.584 | 796.577 | 0.004 |
| 1969 | 33.259 | 83.964 | 18.320 | 50.184 | 65.434 | 0.022042 | 0.060376 | 831.594 | 831.562 | 0.004 |
| 1970 | 34.083 | 86.163 | 19.204 | 51.451 | 66.720 | 0.022135 | 0.059210 | 868.945 | 868.922 | 0.003 |

SERVICES. 1

$$V = (-0.001492 * T + 0.3077736) * YM$$

| Year | V | Z | U | W | YV | UY | M/Y | YM | YVT | ERHX |
|------|---------|---------|---------|--------|---------|----------|----------|---------|---------|-------|
| 1950 | 127.230 | 175.873 | 54.353 | 48.246 | 121.121 | 0.131479 | 0.116707 | 413.391 | 413.375 | 0.004 |
| 1951 | 130.643 | 180.180 | 56.039 | 49.539 | 121.141 | 0.131378 | 0.116139 | 426.547 | 426.527 | 0.005 |
| 1952 | 134.215 | 185.105 | 57.810 | 50.894 | 127.297 | 0.131279 | 0.115575 | 440.340 | 440.340 | 0.004 |
| 1953 | 137.955 | 190.264 | 59.667 | 52.312 | 130.594 | 0.131178 | 0.115008 | 454.840 | 454.840 | 0.003 |
| 1954 | 141.873 | 195.668 | 61.618 | 53.799 | 134.051 | 0.131079 | 0.114443 | 470.082 | 470.063 | 0.004 |
| 1955 | 145.982 | 201.336 | 63.669 | 55.356 | 137.688 | 0.130980 | 0.113878 | 486.102 | 486.086 | 0.003 |
| 1956 | 150.295 | 207.293 | 65.826 | 56.992 | 141.457 | 0.130877 | 0.113313 | 502.957 | 502.938 | 0.004 |
| 1957 | 154.820 | 213.525 | 68.097 | 58.708 | 145.300 | 0.130777 | 0.112746 | 520.703 | 520.680 | 0.004 |
| 1958 | 159.574 | 220.050 | 70.487 | 60.510 | 149.294 | 0.130676 | 0.112181 | 539.399 | 539.375 | 0.004 |
| 1959 | 164.574 | 226.977 | 73.009 | 62.407 | 153.469 | 0.130577 | 0.111616 | 559.117 | 559.086 | 0.006 |
| 1960 | 169.832 | 234.229 | 75.668 | 64.400 | 157.861 | 0.130478 | 0.111050 | 579.499 | 579.499 | 0.004 |
| 1961 | 175.367 | 241.893 | 78.473 | 66.499 | 163.391 | 0.130377 | 0.110483 | 601.391 | 601.367 | 0.004 |
| 1962 | 181.203 | 249.912 | 81.440 | 68.713 | 169.023 | 0.130278 | 0.109919 | 625.125 | 625.102 | 0.004 |
| 1963 | 187.395 | 258.395 | 84.575 | 71.044 | 174.857 | 0.130177 | 0.109350 | 649.688 | 649.648 | 0.006 |
| 1964 | 193.848 | 267.348 | 87.894 | 73.507 | 180.892 | 0.130075 | 0.108786 | 675.703 | 675.640 | 0.003 |
| 1965 | 200.707 | 276.809 | 91.408 | 76.107 | 187.127 | 0.129976 | 0.108219 | 703.266 | 703.227 | 0.004 |
| 1966 | 207.957 | 286.809 | 95.135 | 78.856 | 193.562 | 0.129877 | 0.107655 | 732.492 | 732.453 | 0.005 |
| 1967 | 215.629 | 297.391 | 99.091 | 81.766 | 199.391 | 0.129778 | 0.107088 | 763.531 | 763.500 | 0.004 |
| 1968 | 223.754 | 308.594 | 103.289 | 84.844 | 205.705 | 0.129677 | 0.106521 | 796.584 | 796.477 | 0.004 |
| 1969 | 232.331 | 320.434 | 107.667 | 88.111 | 212.504 | 0.129578 | 0.105954 | 831.594 | 831.562 | 0.004 |
| 1970 | 241.361 | 332.911 | 112.344 | 91.564 | 219.794 | 0.129478 | 0.105387 | 868.945 | 868.922 | 0.004 |

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

$$V = (0.001369 * T + 0.2118969) * YM$$

SERVICES ?

| | V | Z | U | W | YV | U/Y | W/Y | YM | YVT | ERRZ |
|------|---------|---------|--------|--------|---------|----------|----------|---------|---------|-------|
| 1950 | 87.596 | 121.734 | 32.635 | 34.140 | 89.100 | 0.078943 | 0.082585 | 413.391 | 413.375 | 0.004 |
| 1951 | 90.967 | 126.420 | 33.628 | 35.454 | 92.792 | 0.078837 | 0.083118 | 426.547 | 426.527 | 0.005 |
| 1952 | 94.515 | 131.350 | 34.670 | 36.937 | 96.660 | 0.078732 | 0.083652 | 440.355 | 440.340 | 0.004 |
| 1953 | 98.248 | 136.539 | 35.763 | 38.292 | 100.777 | 0.078626 | 0.084186 | 454.852 | 454.840 | 0.003 |
| 1954 | 102.182 | 142.006 | 36.912 | 39.825 | 105.096 | 0.078521 | 0.084720 | 470.082 | 470.066 | 0.003 |
| 1955 | 106.329 | 147.770 | 38.118 | 41.441 | 109.652 | 0.078416 | 0.085252 | 486.086 | 486.066 | 0.004 |
| 1956 | 110.704 | 153.850 | 39.387 | 43.147 | 114.463 | 0.078310 | 0.085786 | 502.957 | 502.938 | 0.003 |
| 1957 | 115.322 | 160.268 | 40.782 | 44.847 | 119.547 | 0.078205 | 0.086319 | 520.703 | 520.688 | 0.003 |
| 1958 | 120.201 | 167.047 | 42.127 | 46.848 | 124.920 | 0.078099 | 0.086852 | 539.594 | 539.575 | 0.004 |
| 1959 | 125.350 | 174.217 | 43.607 | 48.859 | 130.609 | 0.077988 | 0.087395 | 559.117 | 559.086 | 0.006 |
| 1960 | 130.818 | 181.803 | 45.169 | 50.987 | 136.635 | 0.077874 | 0.088452 | 579.899 | 579.899 | 0.004 |
| 1961 | 136.598 | 189.834 | 46.817 | 53.239 | 143.018 | 0.077761 | 0.088985 | 601.941 | 601.967 | 0.004 |
| 1962 | 142.727 | 198.352 | 48.558 | 55.627 | 149.745 | 0.077647 | 0.089519 | 625.125 | 625.102 | 0.004 |
| 1963 | 149.223 | 207.379 | 50.397 | 58.160 | 156.882 | 0.077531 | 0.090054 | 649.648 | 649.648 | 0.006 |
| 1964 | 156.125 | 216.973 | 52.345 | 60.850 | 164.429 | 0.077416 | 0.090587 | 675.703 | 675.680 | 0.003 |
| 1965 | 163.455 | 227.160 | 54.405 | 63.707 | 172.356 | 0.077296 | 0.091119 | 703.227 | 703.227 | 0.005 |
| 1966 | 171.250 | 237.992 | 56.590 | 66.744 | 180.621 | 0.077171 | 0.091652 | 732.453 | 732.453 | 0.005 |
| 1967 | 179.551 | 249.527 | 58.908 | 69.379 | 196.621 | 0.077045 | 0.092187 | 763.531 | 763.500 | 0.004 |
| 1968 | 188.396 | 261.820 | 61.368 | 73.428 | 200.453 | 0.076919 | 0.092720 | 796.508 | 796.477 | 0.004 |
| 1969 | 197.834 | 274.958 | 63.983 | 77.105 | 210.957 | 0.076794 | 0.093253 | 831.594 | 831.562 | 0.004 |
| 1970 | 207.910 | 288.938 | 66.766 | 81.032 | 222.172 | 0.076675 | 0.093785 | 868.945 | 868.922 | 0.003 |

$$V = (0.001030 * T + 0.0565829) * YM$$

DWELLINGS

| | V | Z | U | W | YV | U/Y | W/Y | YM | YVT | ERRZ |
|------|--------|--------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 23.391 | 31.807 | 19.690 | 8.417 | 12.117 | 0.047680 | 0.020360 | 413.391 | 413.375 | 0.004 |
| 1951 | 24.574 | 33.417 | 20.332 | 8.843 | 13.085 | 0.047665 | 0.020751 | 426.547 | 426.527 | 0.005 |
| 1952 | 25.824 | 35.116 | 21.005 | 9.292 | 14.111 | 0.047659 | 0.021102 | 440.355 | 440.340 | 0.004 |
| 1953 | 27.143 | 36.909 | 21.712 | 9.767 | 15.197 | 0.047653 | 0.021473 | 454.852 | 454.840 | 0.003 |
| 1954 | 28.536 | 38.804 | 22.456 | 10.268 | 16.348 | 0.047647 | 0.021843 | 470.082 | 470.066 | 0.003 |
| 1955 | 30.009 | 40.808 | 23.238 | 10.799 | 17.570 | 0.047640 | 0.022215 | 486.086 | 486.086 | 0.004 |
| 1956 | 31.568 | 42.927 | 24.061 | 11.359 | 18.866 | 0.047633 | 0.022585 | 502.957 | 502.938 | 0.003 |
| 1957 | 33.218 | 45.170 | 24.928 | 11.953 | 20.242 | 0.047627 | 0.022955 | 520.703 | 520.688 | 0.004 |
| 1958 | 34.967 | 47.549 | 25.842 | 12.582 | 21.708 | 0.047620 | 0.023327 | 539.594 | 539.575 | 0.006 |
| 1959 | 36.920 | 50.069 | 26.806 | 13.249 | 23.264 | 0.047613 | 0.023697 | 559.117 | 559.086 | 0.004 |
| 1960 | 38.789 | 52.747 | 27.823 | 13.958 | 24.923 | 0.047607 | 0.024068 | 579.899 | 579.899 | 0.004 |
| 1961 | 40.878 | 55.587 | 28.898 | 14.700 | 26.649 | 0.048012 | 0.024439 | 601.941 | 601.967 | 0.004 |
| 1962 | 43.100 | 58.608 | 30.035 | 15.509 | 28.533 | 0.048047 | 0.024809 | 625.125 | 625.102 | 0.006 |
| 1963 | 45.463 | 61.822 | 31.238 | 16.359 | 30.584 | 0.048081 | 0.025180 | 649.648 | 649.648 | 0.003 |
| 1964 | 47.979 | 65.244 | 32.517 | 17.265 | 32.737 | 0.048116 | 0.025551 | 675.703 | 675.680 | 0.006 |
| 1965 | 50.662 | 68.882 | 33.863 | 18.230 | 35.029 | 0.048151 | 0.025922 | 703.227 | 703.227 | 0.006 |
| 1966 | 53.521 | 72.780 | 35.295 | 19.259 | 37.445 | 0.048185 | 0.026292 | 732.453 | 732.453 | 0.005 |
| 1967 | 56.577 | 76.936 | 36.818 | 20.359 | 40.118 | 0.048220 | 0.026664 | 763.531 | 763.500 | 0.004 |
| 1968 | 59.841 | 81.373 | 38.435 | 21.533 | 42.938 | 0.048254 | 0.027034 | 796.508 | 796.477 | 0.004 |
| 1969 | 63.334 | 86.123 | 40.158 | 22.790 | 45.266 | 0.048290 | 0.027405 | 831.594 | 831.562 | 0.004 |
| 1970 | 67.074 | 91.210 | 41.992 | 24.136 | 48.171 | 0.048325 | 0.027776 | 868.945 | 868.922 | 0.003 |

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

AGRICUL*FOOD $V = (-0.001100 * T + 0.0836325) * YM$

| Year | V | Z | U | W | YV | UYV | M/YV | YM | YVT | ERRV |
|------|--------|---------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 34.573 | 98.765 | 49.272 | 64.192 | 40.492 | 0.119190 | 0.155291 | 413.391 | 413.383 | 0.002 |
| 1951 | 35.204 | 100.567 | 50.258 | 65.364 | 50.310 | 0.117825 | 0.153240 | 426.547 | 426.539 | 0.002 |
| 1952 | 35.859 | 102.438 | 51.283 | 66.540 | 51.155 | 0.116458 | 0.151196 | 440.355 | 440.344 | 0.003 |
| 1953 | 36.539 | 104.380 | 52.349 | 67.843 | 52.031 | 0.115090 | 0.149153 | 454.852 | 454.840 | 0.003 |
| 1954 | 37.246 | 106.399 | 53.460 | 69.154 | 52.839 | 0.113725 | 0.147110 | 470.062 | 470.074 | 0.002 |
| 1955 | 37.979 | 108.496 | 54.616 | 70.518 | 53.880 | 0.112355 | 0.145067 | 486.102 | 486.094 | 0.002 |
| 1956 | 38.743 | 110.678 | 55.823 | 71.936 | 54.855 | 0.110984 | 0.143024 | 502.949 | 502.949 | 0.002 |
| 1957 | 39.537 | 112.946 | 57.081 | 73.410 | 55.866 | 0.109622 | 0.141082 | 520.703 | 520.703 | 0.002 |
| 1958 | 40.363 | 115.306 | 58.392 | 74.943 | 56.914 | 0.108253 | 0.139237 | 539.391 | 539.391 | 0.001 |
| 1959 | 41.224 | 117.764 | 59.763 | 76.541 | 58.001 | 0.106887 | 0.136696 | 559.109 | 559.109 | 0.001 |
| 1960 | 42.119 | 120.322 | 61.193 | 78.204 | 59.130 | 0.105518 | 0.134851 | 579.922 | 579.906 | 0.003 |
| 1961 | 43.053 | 122.989 | 62.689 | 79.938 | 60.300 | 0.104154 | 0.132811 | 601.891 | 601.875 | 0.003 |
| 1962 | 44.027 | 125.773 | 64.255 | 81.747 | 61.519 | 0.102787 | 0.130768 | 625.125 | 625.109 | 0.002 |
| 1963 | 45.042 | 128.672 | 65.891 | 83.631 | 62.781 | 0.101418 | 0.128723 | 649.684 | 649.664 | 0.004 |
| 1964 | 46.103 | 131.701 | 67.605 | 85.600 | 64.096 | 0.100052 | 0.126680 | 675.703 | 675.695 | 0.004 |
| 1965 | 47.209 | 134.861 | 69.400 | 87.653 | 65.461 | 0.098682 | 0.124637 | 703.242 | 703.242 | 0.003 |
| 1966 | 48.365 | 138.154 | 71.283 | 89.801 | 66.831 | 0.097316 | 0.122596 | 732.492 | 732.477 | 0.002 |
| 1967 | 49.575 | 141.621 | 73.261 | 92.047 | 68.201 | 0.095949 | 0.120554 | 763.531 | 763.531 | 0.000 |
| 1968 | 50.840 | 145.234 | 75.336 | 94.395 | 69.638 | 0.094583 | 0.118510 | 796.508 | 796.492 | 0.002 |
| 1969 | 52.164 | 149.018 | 77.518 | 96.854 | 71.150 | 0.093215 | 0.116466 | 831.594 | 831.578 | 0.002 |
| 1970 | 53.551 | 152.979 | 79.812 | 99.430 | 73.168 | 0.091848 | 0.114426 | 868.945 | 868.937 | 0.001 |

MINING*ENERGY $V = (0.000312 * T + 0.0436034) * YM$

| Year | V | Z | U | W | YV | UYV | M/YV | YM | YVT | ERRV |
|------|--------|--------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 18.025 | 32.394 | 25.352 | 14.369 | 7.042 | 0.061327 | 0.034759 | 413.391 | 413.383 | 0.002 |
| 1951 | 18.732 | 33.664 | 26.196 | 14.932 | 7.468 | 0.061414 | 0.035007 | 426.547 | 426.539 | 0.002 |
| 1952 | 19.476 | 35.001 | 27.083 | 15.526 | 7.918 | 0.061502 | 0.035256 | 440.355 | 440.344 | 0.003 |
| 1953 | 20.259 | 36.409 | 28.015 | 16.150 | 8.394 | 0.061591 | 0.035505 | 454.852 | 454.840 | 0.003 |
| 1954 | 21.084 | 37.892 | 28.994 | 16.808 | 8.898 | 0.061679 | 0.035754 | 470.062 | 470.074 | 0.002 |
| 1955 | 21.954 | 39.456 | 30.025 | 17.501 | 9.430 | 0.061768 | 0.036003 | 486.102 | 486.094 | 0.002 |
| 1956 | 22.873 | 41.106 | 31.111 | 18.233 | 9.996 | 0.061855 | 0.036252 | 502.957 | 502.949 | 0.002 |
| 1957 | 23.842 | 42.849 | 32.254 | 19.006 | 10.595 | 0.061943 | 0.036501 | 520.703 | 520.695 | 0.002 |
| 1958 | 24.867 | 44.690 | 33.460 | 19.823 | 11.230 | 0.062032 | 0.036750 | 539.391 | 539.391 | 0.001 |
| 1959 | 25.951 | 46.638 | 34.732 | 20.687 | 11.905 | 0.062120 | 0.036999 | 559.117 | 559.109 | 0.001 |
| 1960 | 27.097 | 48.698 | 36.075 | 21.601 | 12.623 | 0.062207 | 0.037248 | 579.922 | 579.906 | 0.003 |
| 1961 | 28.312 | 50.881 | 37.496 | 22.569 | 13.386 | 0.062296 | 0.037497 | 601.891 | 601.875 | 0.003 |
| 1962 | 29.600 | 53.196 | 38.998 | 23.596 | 14.198 | 0.062384 | 0.037746 | 625.125 | 625.109 | 0.002 |
| 1963 | 30.966 | 55.651 | 40.587 | 24.685 | 15.064 | 0.062471 | 0.037995 | 649.688 | 649.664 | 0.004 |
| 1964 | 32.417 | 58.258 | 42.271 | 25.842 | 15.987 | 0.062559 | 0.038244 | 675.703 | 675.695 | 0.001 |
| 1965 | 33.956 | 61.029 | 44.058 | 27.071 | 16.971 | 0.062648 | 0.038493 | 703.266 | 703.242 | 0.003 |
| 1966 | 35.599 | 63.977 | 45.954 | 28.378 | 18.023 | 0.062736 | 0.038742 | 732.492 | 732.477 | 0.002 |
| 1967 | 37.346 | 67.116 | 47.967 | 29.771 | 19.149 | 0.062822 | 0.038990 | 763.531 | 763.531 | 0.000 |
| 1968 | 39.208 | 70.463 | 50.110 | 31.255 | 20.354 | 0.062911 | 0.039240 | 796.508 | 796.492 | 0.002 |
| 1969 | 41.194 | 74.033 | 52.390 | 32.839 | 21.644 | 0.062999 | 0.039489 | 831.594 | 831.578 | 0.002 |
| 1970 | 43.316 | 77.846 | 54.821 | 34.530 | 23.025 | 0.063086 | 0.039737 | 868.945 | 868.937 | 0.001 |

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

V=(-0.000119*T+0.2965050)*YM

MANUFAC*CONSTRUC

| Y | V | Z | U | W | YV | UY | M/Y | YM | YVT | ERR% |
|------|---------|---------|---------|---------|---------|----------|----------|---------|---------|-------|
| 1950 | 122.572 | 300.383 | 166.320 | 177.813 | 134.063 | 0.402328 | 0.430130 | 413.391 | 413.383 | 0.002 |
| 1951 | 126.422 | 309.816 | 171.502 | 183.398 | 138.176 | 0.402069 | 0.429058 | 426.547 | 426.539 | 0.002 |
| 1952 | 130.463 | 319.179 | 176.939 | 189.298 | 142.781 | 0.401810 | 0.427973 | 440.355 | 440.344 | 0.003 |
| 1953 | 134.703 | 330.113 | 182.645 | 195.412 | 147.469 | 0.401546 | 0.426815 | 454.852 | 454.840 | 0.003 |
| 1954 | 139.158 | 341.031 | 188.641 | 201.678 | 152.191 | 0.401291 | 0.425683 | 470.074 | 470.074 | 0.002 |
| 1955 | 143.842 | 352.508 | 194.939 | 208.688 | 157.170 | 0.401034 | 0.424569 | 486.102 | 486.094 | 0.002 |
| 1956 | 148.770 | 364.686 | 201.570 | 215.419 | 162.316 | 0.400788 | 0.423474 | 502.957 | 502.940 | 0.002 |
| 1957 | 153.957 | 377.877 | 208.645 | 221.844 | 167.754 | 0.400505 | 0.422405 | 520.763 | 520.745 | 0.002 |
| 1958 | 159.422 | 392.084 | 216.443 | 228.979 | 173.463 | 0.400246 | 0.421361 | 539.398 | 539.391 | 0.001 |
| 1959 | 165.184 | 407.310 | 224.881 | 236.961 | 179.447 | 0.399971 | 0.420342 | 559.117 | 559.109 | 0.001 |
| 1960 | 171.258 | 423.568 | 233.973 | 245.802 | 185.701 | 0.399715 | 0.419349 | 579.906 | 579.906 | 0.001 |
| 1961 | 177.676 | 440.856 | 243.724 | 255.502 | 192.227 | 0.399464 | 0.418384 | 601.891 | 601.875 | 0.003 |
| 1962 | 184.457 | 459.183 | 254.148 | 266.161 | 200.048 | 0.399217 | 0.417445 | 625.109 | 625.109 | 0.004 |
| 1963 | 191.629 | 478.557 | 265.267 | 277.783 | 208.184 | 0.398983 | 0.416533 | 649.668 | 649.664 | 0.004 |
| 1964 | 199.221 | 498.977 | 277.097 | 290.568 | 216.640 | 0.398761 | 0.415647 | 675.695 | 675.695 | 0.003 |
| 1965 | 207.266 | 520.450 | 288.654 | 304.523 | 225.426 | 0.398551 | 0.414787 | 703.242 | 703.242 | 0.002 |
| 1966 | 215.793 | 543.000 | 301.994 | 319.664 | 234.561 | 0.398354 | 0.413952 | 732.477 | 732.477 | 0.002 |
| 1967 | 224.844 | 566.651 | 316.218 | 336.092 | 244.971 | 0.398170 | 0.413143 | 763.531 | 763.531 | 0.001 |
| 1968 | 234.461 | 591.440 | 332.254 | 353.829 | 256.676 | 0.398000 | 0.412359 | 796.442 | 796.442 | 0.002 |
| 1969 | 244.698 | 617.400 | 349.130 | 372.994 | 269.684 | 0.397844 | 0.411600 | 831.544 | 831.544 | 0.002 |
| 1970 | 255.578 | 644.576 | 366.884 | 393.610 | 283.999 | 0.397704 | 0.410866 | 869.945 | 869.945 | 0.001 |

SERVICES

V=(0.000007*T+0.5762558)*YM

| Y | V | Z | U | W | YV | UY | M/Y | YM | YVT | ERR% |
|------|---------|---------|---------|---------|---------|----------|----------|---------|---------|-------|
| 1950 | 238.215 | 328.977 | 106.190 | 90.761 | 222.749 | 0.256874 | 0.219551 | 413.391 | 413.383 | 0.002 |
| 1951 | 246.184 | 339.080 | 109.535 | 93.797 | 230.442 | 0.256794 | 0.219496 | 426.547 | 426.539 | 0.002 |
| 1952 | 254.551 | 351.535 | 113.046 | 96.985 | 238.492 | 0.256714 | 0.220242 | 440.355 | 440.344 | 0.003 |
| 1953 | 263.344 | 363.600 | 116.730 | 100.335 | 246.849 | 0.256634 | 0.220936 | 454.852 | 454.840 | 0.003 |
| 1954 | 272.590 | 376.449 | 120.603 | 103.858 | 255.848 | 0.256554 | 0.221637 | 470.074 | 470.074 | 0.002 |
| 1955 | 282.320 | 389.887 | 124.673 | 107.566 | 265.215 | 0.256474 | 0.221293 | 486.102 | 486.094 | 0.002 |
| 1956 | 292.566 | 404.035 | 128.955 | 111.470 | 275.032 | 0.256393 | 0.221628 | 502.949 | 502.949 | 0.002 |
| 1957 | 303.359 | 418.941 | 133.463 | 115.562 | 285.489 | 0.256310 | 0.221972 | 520.703 | 520.695 | 0.001 |
| 1958 | 314.742 | 434.660 | 138.211 | 119.919 | 296.649 | 0.256229 | 0.222310 | 549.398 | 549.391 | 0.001 |
| 1959 | 326.758 | 451.254 | 143.219 | 124.497 | 308.535 | 0.256149 | 0.222666 | 579.906 | 579.906 | 0.001 |
| 1960 | 339.418 | 468.766 | 148.500 | 129.328 | 321.256 | 0.256065 | 0.223009 | 601.891 | 601.875 | 0.003 |
| 1961 | 352.844 | 487.281 | 154.078 | 134.436 | 333.203 | 0.255989 | 0.223354 | 625.109 | 625.109 | 0.004 |
| 1962 | 367.031 | 506.875 | 159.975 | 139.842 | 346.402 | 0.255905 | 0.224041 | 649.668 | 649.664 | 0.004 |
| 1963 | 382.039 | 527.594 | 166.206 | 146.587 | 361.491 | 0.255821 | 0.224041 | 675.695 | 675.695 | 0.001 |
| 1964 | 397.993 | 549.578 | 172.809 | 151.623 | 378.773 | 0.255745 | 0.224392 | 703.242 | 703.242 | 0.003 |
| 1965 | 414.820 | 572.867 | 179.801 | 158.040 | 393.070 | 0.255669 | 0.224745 | 732.477 | 732.477 | 0.002 |
| 1966 | 432.727 | 597.474 | 197.401 | 164.171 | 410.743 | 0.255591 | 0.225080 | 763.531 | 763.531 | 0.000 |
| 1967 | 451.758 | 623.400 | 195.254 | 172.161 | 429.220 | 0.255501 | 0.225403 | 796.442 | 796.442 | 0.002 |
| 1968 | 471.999 | 650.684 | 194.000 | 179.984 | 448.497 | 0.255411 | 0.225726 | 831.544 | 831.544 | 0.002 |
| 1969 | 493.450 | 679.311 | 192.730 | 188.859 | 468.684 | 0.255321 | 0.226049 | 869.945 | 869.945 | 0.001 |
| 1970 | 516.123 | 709.300 | 191.566 | 198.847 | 490.799 | 0.255231 | 0.226372 | 912.000 | 912.000 | 0.001 |

MICRO - ECONOMIC MODEL FOR NORTH AMERICA

FOOD

$$V=(-0.001100*T+0.0836325)*YM$$

| | V | Z | U | W | YV | UY | H/Y | YM | YVT | ERR |
|------|--------|---------|--------|--------|--------|----------|----------|---------|---------|--------|
| 1950 | 34.573 | 98.769 | 49.230 | 64.195 | 49.538 | 0.119089 | 0.155289 | 413.391 | 413.395 | -0.001 |
| 1951 | 35.204 | 100.572 | 50.218 | 65.367 | 50.354 | 0.117730 | 0.153246 | 426.547 | 426.555 | -0.002 |
| 1952 | 35.859 | 102.442 | 51.245 | 66.584 | 51.197 | 0.116372 | 0.151205 | 440.355 | 440.359 | -0.001 |
| 1953 | 36.539 | 104.385 | 52.313 | 67.846 | 52.072 | 0.115010 | 0.149158 | 454.852 | 454.852 | -0.000 |
| 1954 | 37.246 | 106.404 | 53.427 | 69.158 | 52.978 | 0.113655 | 0.147118 | 470.082 | 470.086 | -0.001 |
| 1955 | 37.979 | 108.501 | 54.586 | 70.521 | 53.915 | 0.112294 | 0.145075 | 486.102 | 486.109 | -0.002 |
| 1956 | 38.743 | 110.683 | 55.786 | 71.939 | 54.897 | 0.110935 | 0.143032 | 502.957 | 502.965 | -0.002 |
| 1957 | 39.537 | 112.951 | 57.057 | 73.414 | 55.895 | 0.109576 | 0.140989 | 520.703 | 520.695 | -0.002 |
| 1958 | 40.363 | 115.312 | 58.373 | 74.948 | 56.922 | 0.108218 | 0.138947 | 539.398 | 539.406 | -0.001 |
| 1959 | 41.224 | 117.769 | 59.746 | 76.545 | 58.022 | 0.106857 | 0.136902 | 559.117 | 559.109 | -0.001 |
| 1960 | 42.119 | 120.327 | 61.181 | 78.208 | 59.146 | 0.105498 | 0.134859 | 579.822 | 579.922 | -0.000 |
| 1961 | 43.053 | 122.994 | 62.681 | 79.941 | 60.313 | 0.104140 | 0.132816 | 601.891 | 601.898 | -0.001 |
| 1962 | 44.027 | 125.778 | 64.251 | 81.751 | 61.527 | 0.102780 | 0.130774 | 625.125 | 625.133 | -0.001 |
| 1963 | 45.042 | 128.678 | 65.893 | 83.635 | 62.785 | 0.101421 | 0.128729 | 649.688 | 649.688 | -0.000 |
| 1964 | 46.103 | 131.707 | 67.613 | 85.604 | 64.094 | 0.100063 | 0.126688 | 675.703 | 675.703 | -0.000 |
| 1965 | 47.209 | 134.867 | 69.415 | 87.658 | 65.453 | 0.098703 | 0.124644 | 703.281 | 703.281 | -0.002 |
| 1966 | 48.365 | 138.172 | 71.306 | 89.807 | 66.867 | 0.097345 | 0.122603 | 732.508 | 732.508 | -0.002 |
| 1967 | 49.575 | 141.627 | 73.249 | 92.052 | 68.336 | 0.095985 | 0.120560 | 763.539 | 763.539 | -0.001 |
| 1968 | 50.840 | 145.240 | 75.372 | 94.400 | 69.869 | 0.094627 | 0.118517 | 796.508 | 796.523 | -0.002 |
| 1969 | 52.164 | 149.023 | 77.582 | 96.858 | 71.463 | 0.093268 | 0.116473 | 831.594 | 831.602 | -0.001 |
| 1970 | 53.551 | 152.984 | 79.863 | 99.434 | 73.121 | 0.091908 | 0.114429 | 868.945 | 868.961 | -0.002 |

NON-FOOD

$$V=(0.001100*T+0.9163818)*YM$$

| | V | Z | U | W | YV | UY | H/Y | YM | YVT | ERR |
|------|---------|----------|---------|---------|---------|----------|----------|---------|---------|--------|
| 1950 | 378.920 | 659.602 | 295.746 | 280.781 | 363.859 | 0.715408 | 0.679214 | 413.391 | 413.395 | -0.001 |
| 1951 | 391.348 | 681.822 | 305.223 | 290.070 | 376.203 | 0.713561 | 0.680038 | 426.547 | 426.555 | -0.002 |
| 1952 | 404.500 | 704.320 | 315.156 | 299.820 | 389.164 | 0.711563 | 0.680955 | 440.355 | 440.359 | -0.001 |
| 1953 | 418.316 | 728.375 | 325.594 | 310.059 | 402.781 | 0.710520 | 0.681664 | 454.852 | 454.852 | -0.000 |
| 1954 | 432.640 | 753.664 | 336.555 | 320.824 | 417.109 | 0.710542 | 0.682400 | 470.082 | 470.086 | -0.001 |
| 1955 | 448.125 | 780.281 | 348.090 | 332.156 | 432.195 | 0.710880 | 0.683304 | 486.102 | 486.109 | -0.002 |
| 1956 | 464.219 | 808.305 | 360.227 | 344.082 | 448.078 | 0.712617 | 0.684118 | 502.957 | 502.965 | -0.002 |
| 1957 | 481.164 | 837.805 | 373.000 | 356.641 | 464.805 | 0.716531 | 0.684914 | 520.703 | 520.695 | -0.002 |
| 1958 | 499.039 | 868.930 | 386.465 | 369.831 | 482.469 | 0.718469 | 0.685745 | 539.394 | 539.406 | -0.001 |
| 1959 | 517.891 | 901.758 | 400.664 | 383.867 | 501.094 | 0.716599 | 0.686654 | 559.117 | 559.109 | -0.001 |
| 1960 | 537.805 | 936.430 | 415.652 | 398.625 | 520.781 | 0.716736 | 0.687370 | 579.822 | 579.922 | -0.000 |
| 1961 | 559.844 | 973.062 | 431.480 | 414.219 | 541.566 | 0.716873 | 0.688194 | 601.891 | 601.898 | -0.001 |
| 1962 | 581.102 | 1011.820 | 448.215 | 430.715 | 563.499 | 0.716995 | 0.689003 | 625.125 | 625.133 | -0.001 |
| 1963 | 604.848 | 1052.813 | 465.914 | 448.172 | 586.666 | 0.717133 | 0.689819 | 649.688 | 649.688 | -0.000 |
| 1964 | 629.602 | 1096.266 | 484.656 | 464.664 | 611.809 | 0.717255 | 0.690628 | 675.703 | 675.703 | -0.000 |
| 1965 | 656.062 | 1142.344 | 504.523 | 486.270 | 637.828 | 0.717400 | 0.691452 | 703.281 | 703.281 | -0.002 |
| 1966 | 684.133 | 1191.219 | 525.578 | 507.002 | 665.441 | 0.717514 | 0.692268 | 732.508 | 732.508 | -0.002 |
| 1967 | 713.861 | 1243.156 | 547.953 | 529.188 | 695.203 | 0.717651 | 0.693077 | 763.531 | 763.539 | -0.001 |
| 1968 | 745.672 | 1298.375 | 571.727 | 552.703 | 726.656 | 0.717789 | 0.693901 | 796.523 | 796.523 | -0.002 |
| 1969 | 779.437 | 1357.156 | 597.016 | 577.719 | 760.141 | 0.717911 | 0.694710 | 831.594 | 831.602 | -0.001 |
| 1970 | 815.398 | 1419.781 | 623.945 | 604.375 | 795.844 | 0.718048 | 0.695526 | 868.945 | 868.961 | -0.002 |

MICRO - ECONOMIC MODEL FOR LATIN AMERICA

Z MATRIX=

8.301 2.581
2.905 48.756
30.731 113.036

Z VECTOR=

A MATRIX=

0.27011 0.02284
0.09453 0.43133

COL SUM=

0.36464 0.45417

(1-A)⁻¹=

1.37718 0.05530
0.22892 1.76761

AGRICULTURE

| | V | Z | U | W | YV | UY | W/Y | YH | YVI | ERMZ |
|------|--------|--------|--------|-------|-------|----------|----------|---------|---------|-------|
| 1950 | 9.898 | 11.446 | 4.102 | 1.547 | 7.344 | 0.095452 | 0.036008 | 42.974 | 42.972 | 0.005 |
| 1951 | 10.156 | 11.744 | 4.303 | 1.588 | 7.441 | 0.095972 | 0.035392 | 44.861 | 44.858 | 0.005 |
| 1952 | 10.427 | 12.057 | 4.518 | 1.630 | 7.538 | 0.096594 | 0.034795 | 46.874 | 46.872 | 0.005 |
| 1953 | 10.711 | 12.386 | 4.749 | 1.675 | 7.637 | 0.097334 | 0.034158 | 49.023 | 49.021 | 0.005 |
| 1954 | 11.011 | 12.732 | 4.995 | 1.721 | 7.737 | 0.098184 | 0.033541 | 51.320 | 51.317 | 0.005 |
| 1955 | 11.326 | 13.096 | 5.260 | 1.771 | 7.836 | 0.098775 | 0.032924 | 53.778 | 53.775 | 0.005 |
| 1956 | 11.657 | 13.480 | 5.544 | 1.822 | 7.936 | 0.098745 | 0.031691 | 56.409 | 56.407 | 0.004 |
| 1957 | 12.007 | 13.884 | 5.849 | 1.877 | 8.035 | 0.098216 | 0.031073 | 59.220 | 59.220 | 0.005 |
| 1958 | 12.375 | 14.309 | 6.177 | 1.935 | 8.132 | 0.099216 | 0.030457 | 62.259 | 62.257 | 0.004 |
| 1959 | 12.763 | 14.758 | 6.531 | 1.995 | 8.227 | 0.099686 | 0.030940 | 65.512 | 65.509 | 0.004 |
| 1960 | 13.172 | 15.231 | 6.912 | 2.059 | 8.319 | 0.100156 | 0.029923 | 69.010 | 69.007 | 0.004 |
| 1961 | 13.604 | 15.731 | 7.324 | 2.127 | 8.409 | 0.100628 | 0.028506 | 72.778 | 72.775 | 0.004 |
| 1962 | 14.061 | 16.259 | 7.768 | 2.198 | 8.490 | 0.101099 | 0.027989 | 76.840 | 76.839 | 0.004 |
| 1963 | 14.542 | 16.815 | 8.250 | 2.273 | 8.566 | 0.101568 | 0.027472 | 81.225 | 81.222 | 0.004 |
| 1964 | 15.051 | 17.404 | 8.771 | 2.353 | 8.633 | 0.102037 | 0.026955 | 85.963 | 85.961 | 0.003 |
| 1965 | 15.590 | 18.027 | 9.334 | 2.437 | 8.699 | 0.102509 | 0.026439 | 91.093 | 91.090 | 0.003 |
| 1966 | 16.150 | 18.686 | 9.953 | 2.526 | 8.733 | 0.102978 | 0.025922 | 96.640 | 96.640 | 0.002 |
| 1967 | 16.733 | 19.384 | 10.622 | 2.619 | 8.761 | 0.103449 | 0.025405 | 102.682 | 102.680 | 0.002 |
| 1968 | 17.340 | 20.122 | 11.343 | 2.716 | 8.771 | 0.103919 | 0.024888 | 109.235 | 109.232 | 0.001 |
| 1969 | 17.979 | 20.906 | 12.113 | 2.817 | 8.753 | 0.104384 | 0.024369 | 116.369 | 116.368 | 0.001 |
| 1970 | 18.757 | 21.736 | 12.937 | 2.923 | 8.718 | 0.104854 | 0.023851 | 124.138 | 124.138 | 0.003 |

$$V = (-0.005946t + 0.2303352) * YM$$

MICRO - ECONOMIC MODEL FOR LATIN AMERICA

MINING

$$V = (-0.000430 * T + 0.0219960) * YM$$

| Year | V | Z | U | W | XY | U/Y | W/Y | YM | YVT | ERXZ |
|------|-------|-------|-------|-------|-------|----------|----------|---------|---------|-------|
| 1950 | 0.945 | 1.050 | 0.402 | 0.105 | 0.648 | 0.009350 | 0.002494 | 42.974 | 42.972 | 0.005 |
| 1951 | 0.967 | 1.075 | 0.424 | 0.107 | 0.651 | 0.009457 | 0.002496 | 44.858 | 44.858 | 0.005 |
| 1952 | 0.991 | 1.101 | 0.448 | 0.110 | 0.652 | 0.009564 | 0.002348 | 46.874 | 46.872 | 0.005 |
| 1953 | 1.015 | 1.128 | 0.474 | 0.113 | 0.654 | 0.009672 | 0.002301 | 49.023 | 49.021 | 0.005 |
| 1954 | 1.041 | 1.156 | 0.502 | 0.116 | 0.654 | 0.009779 | 0.002253 | 51.320 | 51.317 | 0.005 |
| 1955 | 1.067 | 1.186 | 0.532 | 0.119 | 0.654 | 0.009887 | 0.002205 | 53.778 | 53.775 | 0.005 |
| 1956 | 1.095 | 1.217 | 0.564 | 0.122 | 0.653 | 0.009994 | 0.002157 | 56.400 | 56.400 | 0.005 |
| 1957 | 1.125 | 1.250 | 0.598 | 0.125 | 0.651 | 0.010101 | 0.002110 | 59.231 | 59.229 | 0.004 |
| 1958 | 1.155 | 1.284 | 0.636 | 0.128 | 0.648 | 0.010209 | 0.002062 | 62.259 | 62.257 | 0.004 |
| 1959 | 1.188 | 1.320 | 0.676 | 0.132 | 0.644 | 0.010316 | 0.002014 | 65.512 | 65.509 | 0.004 |
| 1960 | 1.221 | 1.357 | 0.719 | 0.136 | 0.638 | 0.010423 | 0.001966 | 69.010 | 69.007 | 0.004 |
| 1961 | 1.257 | 1.396 | 0.766 | 0.140 | 0.630 | 0.010531 | 0.001919 | 72.778 | 72.775 | 0.004 |
| 1962 | 1.294 | 1.437 | 0.817 | 0.144 | 0.620 | 0.010638 | 0.001871 | 76.840 | 76.838 | 0.003 |
| 1963 | 1.333 | 1.481 | 0.873 | 0.148 | 0.608 | 0.010746 | 0.001823 | 81.225 | 81.222 | 0.004 |
| 1964 | 1.374 | 1.526 | 0.933 | 0.153 | 0.593 | 0.010853 | 0.001775 | 85.963 | 85.961 | 0.003 |
| 1965 | 1.416 | 1.574 | 0.998 | 0.157 | 0.575 | 0.010960 | 0.001728 | 91.393 | 91.390 | 0.003 |
| 1966 | 1.461 | 1.624 | 1.070 | 0.162 | 0.554 | 0.011068 | 0.001680 | 96.640 | 96.640 | 0.002 |
| 1967 | 1.508 | 1.676 | 1.147 | 0.168 | 0.528 | 0.011175 | 0.001632 | 102.680 | 102.680 | 0.002 |
| 1968 | 1.558 | 1.731 | 1.227 | 0.174 | 0.493 | 0.011282 | 0.001584 | 109.235 | 109.232 | 0.003 |
| 1969 | 1.609 | 1.788 | 1.305 | 0.181 | 0.453 | 0.011390 | 0.001537 | 116.369 | 116.369 | 0.001 |
| 1970 | 1.664 | 1.848 | 1.382 | 0.188 | 0.421 | 0.011497 | 0.001490 | 124.142 | 124.138 | 0.003 |

ENERGY

$$V = (0.000052 * T + 0.0495872) * YM$$

| Year | V | Z | U | W | XY | U/Y | W/Y | YM | YVT | ERXZ |
|------|-------|-------|-------|-------|-------|----------|----------|---------|---------|-------|
| 1950 | 2.131 | 2.263 | 1.839 | 0.132 | 0.424 | 0.042800 | 0.003081 | 42.974 | 42.972 | 0.005 |
| 1951 | 2.227 | 2.365 | 1.928 | 0.138 | 0.437 | 0.042972 | 0.003084 | 44.861 | 44.858 | 0.005 |
| 1952 | 2.320 | 2.474 | 2.022 | 0.145 | 0.451 | 0.043145 | 0.003087 | 46.874 | 46.872 | 0.005 |
| 1953 | 2.439 | 2.590 | 2.124 | 0.152 | 0.466 | 0.043317 | 0.003091 | 49.023 | 49.021 | 0.005 |
| 1954 | 2.555 | 2.714 | 2.232 | 0.159 | 0.482 | 0.043490 | 0.003094 | 51.320 | 51.317 | 0.005 |
| 1955 | 2.681 | 2.847 | 2.348 | 0.167 | 0.499 | 0.043661 | 0.003097 | 53.778 | 53.775 | 0.005 |
| 1956 | 2.815 | 2.989 | 2.473 | 0.175 | 0.517 | 0.043834 | 0.003100 | 56.400 | 56.400 | 0.003 |
| 1957 | 2.958 | 3.142 | 2.607 | 0.184 | 0.536 | 0.044006 | 0.003103 | 59.231 | 59.229 | 0.004 |
| 1958 | 3.113 | 3.306 | 2.750 | 0.193 | 0.556 | 0.044178 | 0.003107 | 62.259 | 62.257 | 0.004 |
| 1959 | 3.279 | 3.483 | 2.905 | 0.204 | 0.577 | 0.044351 | 0.003110 | 65.500 | 65.500 | 0.004 |
| 1960 | 3.458 | 3.672 | 3.073 | 0.215 | 0.599 | 0.044523 | 0.003113 | 69.010 | 69.007 | 0.004 |
| 1961 | 3.650 | 3.877 | 3.253 | 0.227 | 0.624 | 0.044695 | 0.003116 | 72.778 | 72.775 | 0.004 |
| 1962 | 3.858 | 4.097 | 3.448 | 0.240 | 0.650 | 0.044867 | 0.003119 | 76.840 | 76.838 | 0.003 |
| 1963 | 4.082 | 4.336 | 3.658 | 0.254 | 0.677 | 0.045039 | 0.003123 | 81.225 | 81.222 | 0.004 |
| 1964 | 4.325 | 4.593 | 3.887 | 0.269 | 0.707 | 0.045212 | 0.003126 | 85.963 | 85.961 | 0.002 |
| 1965 | 4.588 | 4.873 | 4.134 | 0.285 | 0.748 | 0.045384 | 0.003129 | 91.393 | 91.390 | 0.003 |
| 1966 | 4.872 | 5.175 | 4.403 | 0.303 | 0.772 | 0.045556 | 0.003132 | 96.640 | 96.640 | 0.002 |
| 1967 | 5.182 | 5.504 | 4.695 | 0.322 | 0.808 | 0.045728 | 0.003136 | 102.680 | 102.680 | 0.002 |
| 1968 | 5.518 | 5.861 | 5.014 | 0.343 | 0.847 | 0.045900 | 0.003139 | 109.235 | 109.232 | 0.003 |
| 1969 | 5.885 | 6.250 | 5.361 | 0.364 | 0.889 | 0.046072 | 0.003142 | 116.369 | 116.368 | 0.001 |
| 1970 | 6.284 | 6.672 | 5.741 | 0.386 | 0.933 | 0.046245 | 0.003145 | 124.142 | 124.138 | 0.003 |

MICRO - ECONOMIC MODEL FOR LATIN AMERICA

FOOD

$$V = (0.000392 * I + 0.0562606) * YM$$

| | V | Z | U | M | YV | UY | W/Y | YM | YVT | ERR% |
|------|-------|--------|-------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 2.418 | 7.056 | 1.306 | 4.333 | 5.511 | 0.028849 | 0.110837 | 42.974 | 42.972 | 0.005 |
| 1951 | 2.541 | 7.096 | 1.306 | 4.595 | 5.790 | 0.029122 | 0.101536 | 44.861 | 44.858 | 0.005 |
| 1952 | 2.674 | 7.466 | 1.378 | 4.792 | 6.088 | 0.029396 | 0.102240 | 46.874 | 46.872 | 0.005 |
| 1953 | 2.816 | 7.862 | 1.454 | 5.047 | 6.408 | 0.029669 | 0.102942 | 49.023 | 49.021 | 0.005 |
| 1954 | 2.968 | 8.287 | 1.537 | 5.319 | 6.750 | 0.029943 | 0.103644 | 51.320 | 51.317 | 0.005 |
| 1955 | 3.131 | 8.743 | 1.625 | 5.612 | 7.118 | 0.030216 | 0.104347 | 53.778 | 53.775 | 0.005 |
| 1956 | 3.306 | 9.232 | 1.720 | 5.926 | 7.512 | 0.030491 | 0.105052 | 56.409 | 56.407 | 0.004 |
| 1957 | 3.495 | 9.759 | 1.822 | 6.264 | 7.937 | 0.030763 | 0.105752 | 59.229 | 59.229 | 0.004 |
| 1958 | 3.698 | 10.326 | 1.932 | 6.628 | 8.393 | 0.031037 | 0.106458 | 62.259 | 62.257 | 0.004 |
| 1959 | 3.917 | 10.937 | 2.051 | 7.020 | 8.886 | 0.031310 | 0.107159 | 65.512 | 65.509 | 0.004 |
| 1960 | 4.153 | 11.596 | 2.180 | 7.443 | 9.417 | 0.031583 | 0.107859 | 69.010 | 69.007 | 0.004 |
| 1961 | 4.404 | 12.309 | 2.319 | 7.901 | 9.991 | 0.031857 | 0.108562 | 72.778 | 72.775 | 0.004 |
| 1962 | 4.684 | 13.080 | 2.469 | 8.396 | 10.611 | 0.032130 | 0.109264 | 76.840 | 76.838 | 0.003 |
| 1963 | 4.984 | 13.916 | 2.632 | 8.932 | 11.284 | 0.032403 | 0.109968 | 81.225 | 81.222 | 0.004 |
| 1964 | 5.308 | 14.821 | 2.809 | 9.514 | 12.012 | 0.032678 | 0.110670 | 85.963 | 85.961 | 0.003 |
| 1965 | 5.660 | 15.806 | 3.002 | 10.145 | 12.804 | 0.032951 | 0.111372 | 91.093 | 91.090 | 0.003 |
| 1966 | 6.043 | 16.875 | 3.211 | 10.832 | 13.664 | 0.033224 | 0.112074 | 96.649 | 96.647 | 0.002 |
| 1967 | 6.461 | 18.041 | 3.440 | 11.580 | 14.602 | 0.033497 | 0.112776 | 102.682 | 102.680 | 0.002 |
| 1968 | 6.916 | 19.312 | 3.689 | 12.396 | 15.623 | 0.033771 | 0.113481 | 109.235 | 109.232 | 0.001 |
| 1969 | 7.413 | 20.701 | 3.962 | 13.287 | 16.739 | 0.034045 | 0.114182 | 116.369 | 116.368 | 0.001 |
| 1970 | 7.957 | 22.219 | 4.260 | 14.262 | 17.959 | 0.034318 | 0.114883 | 124.142 | 124.139 | 0.003 |

MANUFACTURING

$$V = (0.003417 * I + 0.1104012) * YM$$

| | V | Z | U | M | YV | UY | W/Y | YM | YVT | ERR% |
|------|--------|--------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 4.744 | 18.953 | 15.049 | 14.209 | 3.904 | 0.350182 | 0.330635 | 42.974 | 42.972 | 0.005 |
| 1951 | 5.106 | 20.397 | 16.069 | 15.291 | 4.328 | 0.358196 | 0.340862 | 44.861 | 44.858 | 0.005 |
| 1952 | 5.495 | 21.953 | 17.166 | 16.458 | 4.787 | 0.366215 | 0.351101 | 46.874 | 46.872 | 0.005 |
| 1953 | 5.915 | 23.628 | 18.346 | 17.713 | 5.292 | 0.374226 | 0.361328 | 49.023 | 49.021 | 0.005 |
| 1954 | 6.367 | 25.436 | 19.617 | 19.068 | 5.819 | 0.382248 | 0.371559 | 51.320 | 51.317 | 0.005 |
| 1955 | 6.856 | 27.388 | 20.988 | 20.532 | 6.400 | 0.390263 | 0.381786 | 53.778 | 53.775 | 0.005 |
| 1956 | 7.384 | 29.498 | 22.467 | 22.114 | 7.031 | 0.398277 | 0.392021 | 56.409 | 56.407 | 0.004 |
| 1957 | 7.956 | 31.781 | 24.065 | 23.826 | 7.716 | 0.406296 | 0.402248 | 59.231 | 59.229 | 0.004 |
| 1958 | 8.575 | 34.256 | 25.795 | 25.681 | 8.452 | 0.414310 | 0.412487 | 62.259 | 62.257 | 0.003 |
| 1959 | 9.247 | 36.940 | 27.667 | 27.693 | 9.272 | 0.422325 | 0.422714 | 65.512 | 65.509 | 0.004 |
| 1960 | 9.976 | 39.854 | 29.698 | 29.878 | 10.156 | 0.430344 | 0.432945 | 69.010 | 69.007 | 0.004 |
| 1961 | 10.770 | 43.024 | 31.903 | 32.204 | 11.121 | 0.438358 | 0.443180 | 72.778 | 72.775 | 0.003 |
| 1962 | 11.633 | 46.474 | 34.299 | 34.840 | 12.175 | 0.446365 | 0.453407 | 76.840 | 76.838 | 0.003 |
| 1963 | 12.575 | 50.234 | 36.908 | 37.560 | 13.326 | 0.454395 | 0.463646 | 81.225 | 81.222 | 0.004 |
| 1964 | 13.602 | 54.338 | 39.750 | 40.736 | 14.598 | 0.462406 | 0.473877 | 85.963 | 85.961 | 0.002 |
| 1965 | 14.725 | 58.824 | 42.853 | 44.099 | 15.971 | 0.470495 | 0.484104 | 91.093 | 91.090 | 0.003 |
| 1966 | 15.953 | 63.731 | 46.241 | 47.778 | 17.490 | 0.478489 | 0.494339 | 96.649 | 96.647 | 0.002 |
| 1967 | 17.300 | 69.110 | 49.950 | 51.811 | 19.160 | 0.486454 | 0.504570 | 102.682 | 102.680 | 0.002 |
| 1968 | 18.777 | 75.012 | 54.015 | 56.235 | 20.997 | 0.494476 | 0.514801 | 109.235 | 109.232 | 0.003 |
| 1969 | 20.401 | 81.500 | 58.475 | 61.098 | 23.025 | 0.502487 | 0.525032 | 116.369 | 116.368 | 0.001 |
| 1970 | 22.188 | 88.638 | 63.377 | 66.451 | 25.261 | 0.510521 | 0.535278 | 124.142 | 124.139 | 0.003 |

MICRO - ECONOMIC MODEL FOR LATIN AMERICA

CONSTRUCTION

$$V = (0.000050 * T + 0.0347362) * YM$$

| | V | Z | U | W | YV | U/Y | M/Y | YM | YVT | ERR% |
|------|-------|--------|-------|-------|--------|----------|----------|---------|---------|-------|
| 1950 | 1.493 | 4.193 | 0.392 | 2.700 | 3.891 | 0.009112 | 0.062830 | 42.974 | 42.972 | 0.005 |
| 1951 | 1.561 | 4.383 | 0.411 | 2.823 | 3.972 | 0.009163 | 0.062022 | 44.861 | 44.858 | 0.005 |
| 1952 | 1.633 | 4.586 | 0.432 | 2.954 | 4.155 | 0.009214 | 0.061010 | 46.874 | 46.872 | 0.005 |
| 1953 | 1.710 | 4.804 | 0.454 | 3.093 | 4.349 | 0.009264 | 0.06102 | 49.023 | 49.021 | 0.005 |
| 1954 | 1.793 | 5.036 | 0.478 | 3.243 | 4.558 | 0.009315 | 0.06102 | 51.320 | 51.317 | 0.005 |
| 1955 | 1.881 | 5.285 | 0.504 | 3.403 | 4.781 | 0.009366 | 0.06102 | 53.778 | 53.775 | 0.005 |
| 1956 | 1.976 | 5.551 | 0.531 | 3.575 | 5.020 | 0.009417 | 0.06102 | 56.409 | 56.407 | 0.004 |
| 1957 | 2.078 | 5.837 | 0.561 | 3.759 | 5.276 | 0.009468 | 0.06102 | 59.231 | 59.229 | 0.004 |
| 1958 | 2.187 | 6.144 | 0.593 | 3.957 | 5.551 | 0.009519 | 0.06102 | 62.257 | 62.257 | 0.003 |
| 1959 | 2.305 | 6.474 | 0.627 | 4.169 | 5.847 | 0.009570 | 0.06102 | 65.512 | 65.509 | 0.004 |
| 1960 | 2.431 | 6.830 | 0.664 | 4.398 | 6.166 | 0.009621 | 0.06102 | 69.010 | 69.007 | 0.004 |
| 1961 | 2.568 | 7.213 | 0.704 | 4.645 | 6.509 | 0.009672 | 0.06102 | 72.778 | 72.775 | 0.004 |
| 1962 | 2.715 | 7.626 | 0.747 | 4.911 | 6.879 | 0.009723 | 0.06102 | 76.840 | 76.838 | 0.003 |
| 1963 | 2.874 | 8.073 | 0.794 | 5.199 | 7.279 | 0.009774 | 0.06102 | 81.225 | 81.222 | 0.004 |
| 1964 | 3.046 | 8.555 | 0.845 | 5.510 | 7.711 | 0.009825 | 0.06102 | 85.963 | 85.961 | 0.002 |
| 1965 | 3.232 | 9.079 | 0.900 | 5.847 | 8.179 | 0.009876 | 0.06102 | 91.093 | 91.090 | 0.003 |
| 1966 | 3.434 | 9.646 | 0.959 | 6.212 | 8.687 | 0.009927 | 0.06102 | 96.649 | 96.647 | 0.002 |
| 1967 | 3.654 | 10.263 | 1.025 | 6.609 | 9.238 | 0.009978 | 0.06102 | 102.682 | 102.680 | 0.002 |
| 1968 | 3.892 | 10.933 | 1.096 | 7.041 | 9.837 | 0.010029 | 0.06102 | 109.235 | 109.232 | 0.003 |
| 1969 | 4.152 | 11.663 | 1.173 | 7.511 | 10.480 | 0.010080 | 0.06102 | 116.369 | 116.368 | 0.001 |
| 1970 | 4.436 | 12.460 | 1.258 | 8.024 | 11.202 | 0.010131 | 0.06102 | 124.142 | 124.138 | 0.003 |

SERVICES: 1

$$V = (0.001308 * T + 0.2096367) * YM$$

| | V | Z | U | W | YV | U/Y | M/Y | YM | YVT | ERR% |
|------|--------|--------|-------|-------|--------|----------|----------|---------|---------|-------|
| 1950 | 9.009 | 10.214 | 0.826 | 1.205 | 9.368 | 0.019229 | 0.025045 | 42.974 | 42.972 | 0.005 |
| 1951 | 9.463 | 10.729 | 0.871 | 1.266 | 9.838 | 0.019225 | 0.025020 | 44.861 | 44.858 | 0.005 |
| 1952 | 9.949 | 11.280 | 0.920 | 1.331 | 10.330 | 0.019221 | 0.025020 | 46.874 | 46.872 | 0.005 |
| 1953 | 10.469 | 11.870 | 0.971 | 1.401 | 10.839 | 0.019217 | 0.025020 | 49.023 | 49.021 | 0.005 |
| 1954 | 11.027 | 12.502 | 1.027 | 1.475 | 11.475 | 0.020013 | 0.028745 | 51.320 | 51.317 | 0.005 |
| 1955 | 11.625 | 13.181 | 1.087 | 1.555 | 12.094 | 0.020709 | 0.028920 | 53.778 | 53.775 | 0.005 |
| 1956 | 12.268 | 13.909 | 1.151 | 1.641 | 12.758 | 0.020405 | 0.029036 | 56.409 | 56.407 | 0.003 |
| 1957 | 12.952 | 14.693 | 1.220 | 1.734 | 13.473 | 0.020601 | 0.029270 | 59.231 | 59.229 | 0.004 |
| 1958 | 13.703 | 15.536 | 1.295 | 1.833 | 14.241 | 0.020797 | 0.029445 | 62.257 | 62.257 | 0.003 |
| 1959 | 14.505 | 16.445 | 1.375 | 1.940 | 15.070 | 0.020993 | 0.029620 | 65.512 | 65.509 | 0.004 |
| 1960 | 15.360 | 17.425 | 1.462 | 2.056 | 15.943 | 0.021188 | 0.029794 | 69.010 | 69.007 | 0.004 |
| 1961 | 16.304 | 18.485 | 1.556 | 2.181 | 16.924 | 0.021384 | 0.029969 | 72.778 | 72.775 | 0.004 |
| 1962 | 17.314 | 19.630 | 1.658 | 2.316 | 17.972 | 0.021580 | 0.030145 | 76.840 | 76.838 | 0.003 |
| 1963 | 18.404 | 20.871 | 1.769 | 2.463 | 19.102 | 0.021776 | 0.030320 | 81.225 | 81.222 | 0.004 |
| 1964 | 19.595 | 22.216 | 1.880 | 2.621 | 20.328 | 0.021973 | 0.030495 | 85.963 | 85.961 | 0.002 |
| 1965 | 20.883 | 23.677 | 2.019 | 2.794 | 21.658 | 0.022169 | 0.030670 | 91.093 | 91.090 | 0.003 |
| 1966 | 22.284 | 25.265 | 2.162 | 2.981 | 23.103 | 0.022365 | 0.030845 | 96.649 | 96.647 | 0.002 |
| 1967 | 23.809 | 26.994 | 2.317 | 3.185 | 24.677 | 0.022560 | 0.031020 | 102.682 | 102.680 | 0.002 |
| 1968 | 25.471 | 28.879 | 2.486 | 3.408 | 26.393 | 0.022756 | 0.031195 | 109.235 | 109.232 | 0.003 |
| 1969 | 27.287 | 30.937 | 2.671 | 3.651 | 28.266 | 0.022953 | 0.031370 | 116.369 | 116.368 | 0.001 |
| 1970 | 29.272 | 33.188 | 2.874 | 3.916 | 30.314 | 0.023148 | 0.031545 | 124.142 | 124.138 | 0.003 |

MICRO - ECONOMIC MODEL FOR LATIN AMERICA

SERVICES 2

$$V = (-0.000174 * T + 0.2193890) * YM$$

| | V | Z | U | W | YV | U/Y | W/Y | YM | YVT | ERR% |
|------|--------|--------|--------|-------|--------|----------|----------|---------|---------|-------|
| 1950 | 9.428 | 12.431 | 3.386 | 3.003 | 9.045 | 0.078793 | 0.069686 | 42.974 | 42.972 | 0.005 |
| 1951 | 9.834 | 12.967 | 3.588 | 3.133 | 9.378 | 0.079988 | 0.069831 | 44.861 | 44.858 | 0.005 |
| 1952 | 10.267 | 13.538 | 3.805 | 3.271 | 9.783 | 0.081184 | 0.069776 | 46.874 | 46.872 | 0.005 |
| 1953 | 10.729 | 14.147 | 4.039 | 3.418 | 10.109 | 0.082379 | 0.069720 | 49.023 | 49.021 | 0.005 |
| 1954 | 11.223 | 14.798 | 4.289 | 3.575 | 10.509 | 0.083574 | 0.069665 | 51.320 | 51.317 | 0.005 |
| 1955 | 11.751 | 15.495 | 4.559 | 3.743 | 10.936 | 0.084770 | 0.069610 | 53.778 | 53.775 | 0.005 |
| 1956 | 12.317 | 16.240 | 4.849 | 3.923 | 11.391 | 0.085966 | 0.069552 | 56.409 | 56.407 | 0.003 |
| 1957 | 12.922 | 17.039 | 5.163 | 4.116 | 11.876 | 0.087161 | 0.069497 | 59.231 | 59.229 | 0.004 |
| 1958 | 13.572 | 17.896 | 5.501 | 4.323 | 12.395 | 0.088357 | 0.069444 | 62.259 | 62.257 | 0.003 |
| 1959 | 14.270 | 18.815 | 5.867 | 4.546 | 12.942 | 0.089552 | 0.069392 | 65.512 | 65.509 | 0.004 |
| 1960 | 15.027 | 19.804 | 6.263 | 4.785 | 13.542 | 0.090748 | 0.069342 | 69.010 | 69.007 | 0.004 |
| 1961 | 15.827 | 20.869 | 6.692 | 5.042 | 14.177 | 0.091945 | 0.069292 | 72.778 | 72.775 | 0.004 |
| 1962 | 16.697 | 22.016 | 7.157 | 5.319 | 14.859 | 0.093141 | 0.069246 | 76.838 | 76.838 | 0.003 |
| 1963 | 17.636 | 23.253 | 7.662 | 5.618 | 15.591 | 0.094337 | 0.069165 | 81.225 | 81.222 | 0.004 |
| 1964 | 18.650 | 24.590 | 8.212 | 5.941 | 16.378 | 0.095531 | 0.069110 | 85.963 | 85.961 | 0.002 |
| 1965 | 19.747 | 26.037 | 8.811 | 6.290 | 17.226 | 0.096726 | 0.069054 | 91.093 | 91.090 | 0.003 |
| 1966 | 20.934 | 27.603 | 9.464 | 6.669 | 18.139 | 0.097923 | 0.068998 | 96.649 | 96.647 | 0.002 |
| 1967 | 22.223 | 29.302 | 10.178 | 7.079 | 19.125 | 0.099117 | 0.068943 | 102.680 | 102.680 | 0.002 |
| 1968 | 23.622 | 31.147 | 10.958 | 7.525 | 20.189 | 0.100313 | 0.068888 | 109.235 | 109.232 | 0.003 |
| 1969 | 25.145 | 33.154 | 11.813 | 8.010 | 21.342 | 0.101509 | 0.068831 | 116.369 | 116.368 | 0.001 |
| 1970 | 26.803 | 35.340 | 12.750 | 8.538 | 22.590 | 0.102705 | 0.068776 | 124.142 | 124.138 | 0.003 |

DWELLINGS

$$V = (-0.000666 * T + 0.0676317) * YM$$

| | V | Z | U | W | YV | U/Y | W/Y | YM | YVT | ERR% |
|------|-------|-------|-------|-------|-------|----------|----------|---------|---------|-------|
| 1950 | 2.906 | 2.906 | 0.000 | 0.000 | 2.906 | 0.000000 | 0.000000 | 42.974 | 42.972 | 0.005 |
| 1951 | 3.004 | 3.004 | 0.000 | 0.000 | 3.004 | 0.000000 | 0.000000 | 44.861 | 44.858 | 0.005 |
| 1952 | 3.108 | 3.108 | 0.000 | 0.000 | 3.108 | 0.000000 | 0.000000 | 46.874 | 46.872 | 0.005 |
| 1953 | 3.217 | 3.217 | 0.000 | 0.000 | 3.217 | 0.000000 | 0.000000 | 49.023 | 49.021 | 0.005 |
| 1954 | 3.334 | 3.334 | 0.000 | 0.000 | 3.334 | 0.000000 | 0.000000 | 51.320 | 51.317 | 0.005 |
| 1955 | 3.458 | 3.458 | 0.000 | 0.000 | 3.458 | 0.000000 | 0.000000 | 53.778 | 53.775 | 0.005 |
| 1956 | 3.589 | 3.589 | 0.000 | 0.000 | 3.589 | 0.000000 | 0.000000 | 56.409 | 56.407 | 0.003 |
| 1957 | 3.730 | 3.730 | 0.000 | 0.000 | 3.730 | 0.000000 | 0.000000 | 59.231 | 59.229 | 0.004 |
| 1958 | 3.879 | 3.879 | 0.000 | 0.000 | 3.879 | 0.000000 | 0.000000 | 62.259 | 62.257 | 0.003 |
| 1959 | 4.038 | 4.038 | 0.000 | 0.000 | 4.038 | 0.000000 | 0.000000 | 65.512 | 65.509 | 0.004 |
| 1960 | 4.207 | 4.207 | 0.000 | 0.000 | 4.207 | 0.000000 | 0.000000 | 69.010 | 69.007 | 0.004 |
| 1961 | 4.389 | 4.389 | 0.000 | 0.000 | 4.389 | 0.000000 | 0.000000 | 72.778 | 72.775 | 0.004 |
| 1962 | 4.582 | 4.582 | 0.000 | 0.000 | 4.582 | 0.000000 | 0.000000 | 76.840 | 76.838 | 0.003 |
| 1963 | 4.790 | 4.790 | 0.000 | 0.000 | 4.790 | 0.000000 | 0.000000 | 81.225 | 81.222 | 0.004 |
| 1964 | 5.012 | 5.012 | 0.000 | 0.000 | 5.012 | 0.000000 | 0.000000 | 85.963 | 85.961 | 0.002 |
| 1965 | 5.250 | 5.250 | 0.000 | 0.000 | 5.250 | 0.000000 | 0.000000 | 91.093 | 91.090 | 0.003 |
| 1966 | 5.506 | 5.506 | 0.000 | 0.000 | 5.506 | 0.000000 | 0.000000 | 96.649 | 96.647 | 0.002 |
| 1967 | 5.781 | 5.781 | 0.000 | 0.000 | 5.781 | 0.000000 | 0.000000 | 102.680 | 102.680 | 0.002 |
| 1968 | 6.077 | 6.077 | 0.000 | 0.000 | 6.077 | 0.000000 | 0.000000 | 109.235 | 109.232 | 0.003 |
| 1969 | 6.397 | 6.397 | 0.000 | 0.000 | 6.397 | 0.000000 | 0.000000 | 116.369 | 116.368 | 0.001 |
| 1970 | 6.741 | 6.741 | 0.000 | 0.000 | 6.741 | 0.000000 | 0.000000 | 124.142 | 124.138 | 0.003 |

MICRO - ECONOMIC MODEL FOR LATIN AMERICA

AGRICUL+FOOD

$$V = (-0.003554 * T + 0.2865982) * YM$$

| Year | V | Z | U | W | YV | U/Y | W/Y | YM | YVT | ERR% |
|------|--------|--------|--------|--------|--------|----------|----------|---------|---------|-------|
| 1950 | 12.316 | 19.384 | 6.304 | 7.068 | 13.080 | 0.146696 | 0.164471 | 42.974 | 42.972 | 0.005 |
| 1951 | 12.698 | 19.984 | 6.537 | 7.287 | 13.447 | 0.145716 | 0.162432 | 44.861 | 44.858 | 0.005 |
| 1952 | 13.101 | 20.619 | 6.784 | 7.518 | 13.834 | 0.144737 | 0.160391 | 46.874 | 46.872 | 0.004 |
| 1953 | 13.527 | 21.290 | 7.047 | 7.763 | 14.242 | 0.143759 | 0.158354 | 49.023 | 49.021 | 0.004 |
| 1954 | 13.979 | 22.000 | 7.327 | 8.022 | 14.673 | 0.142778 | 0.156313 | 51.320 | 51.317 | 0.005 |
| 1955 | 14.457 | 22.753 | 7.626 | 8.297 | 15.128 | 0.141800 | 0.154276 | 53.778 | 53.776 | 0.003 |
| 1956 | 14.964 | 23.551 | 7.944 | 8.587 | 15.607 | 0.140871 | 0.152233 | 56.409 | 56.408 | 0.003 |
| 1957 | 15.502 | 24.398 | 8.283 | 8.896 | 16.115 | 0.139843 | 0.150194 | 59.231 | 59.229 | 0.003 |
| 1958 | 16.073 | 25.297 | 8.646 | 9.224 | 16.651 | 0.138845 | 0.148153 | 62.252 | 62.250 | 0.004 |
| 1959 | 16.680 | 26.251 | 9.033 | 9.572 | 17.219 | 0.137894 | 0.146112 | 65.512 | 65.509 | 0.004 |
| 1960 | 17.325 | 27.268 | 9.448 | 9.943 | 17.820 | 0.136906 | 0.144075 | 69.010 | 69.006 | 0.006 |
| 1961 | 18.013 | 28.350 | 9.893 | 10.337 | 18.457 | 0.135929 | 0.142035 | 72.778 | 72.775 | 0.004 |
| 1962 | 18.745 | 29.502 | 10.370 | 10.757 | 19.133 | 0.134949 | 0.139996 | 76.840 | 76.837 | 0.004 |
| 1963 | 19.526 | 30.731 | 10.882 | 11.206 | 19.850 | 0.133970 | 0.137959 | 81.225 | 81.223 | 0.002 |
| 1964 | 20.360 | 32.043 | 11.432 | 11.684 | 20.611 | 0.132992 | 0.135918 | 85.963 | 85.961 | 0.002 |
| 1965 | 21.251 | 33.446 | 12.026 | 12.195 | 21.420 | 0.132013 | 0.133879 | 91.093 | 91.092 | 0.001 |
| 1966 | 22.204 | 34.946 | 12.665 | 12.742 | 22.281 | 0.131035 | 0.131842 | 96.649 | 96.646 | 0.003 |
| 1967 | 23.225 | 36.552 | 13.354 | 13.324 | 23.194 | 0.130054 | 0.129797 | 102.682 | 102.680 | 0.002 |
| 1968 | 24.318 | 38.274 | 14.100 | 13.936 | 24.174 | 0.129076 | 0.127758 | 109.235 | 109.234 | 0.001 |
| 1969 | 25.493 | 40.123 | 14.907 | 14.630 | 25.225 | 0.128098 | 0.125721 | 116.569 | 116.568 | 0.001 |
| 1970 | 26.755 | 42.104 | 15.781 | 15.354 | 26.327 | 0.127117 | 0.123680 | 124.142 | 124.140 | 0.002 |

MINING+ENERGY

$$V = (-0.000378 * T + 0.0715828) * YM$$

| Year | V | Z | U | W | YV | U/Y | W/Y | YM | YVT | ERR% |
|------|-------|-------|-------|-------|-------|----------|----------|---------|---------|-------|
| 1950 | 3.076 | 3.304 | 2.184 | 0.228 | 1.121 | 0.050816 | 0.005310 | 42.974 | 42.972 | 0.005 |
| 1951 | 3.194 | 3.431 | 2.297 | 0.237 | 1.134 | 0.051198 | 0.005202 | 44.861 | 44.858 | 0.005 |
| 1952 | 3.320 | 3.566 | 2.418 | 0.246 | 1.148 | 0.051579 | 0.005094 | 46.874 | 46.872 | 0.004 |
| 1953 | 3.454 | 3.710 | 2.547 | 0.256 | 1.162 | 0.051962 | 0.004980 | 49.023 | 49.021 | 0.004 |
| 1954 | 3.596 | 3.863 | 2.686 | 0.267 | 1.176 | 0.052344 | 0.004866 | 51.320 | 51.317 | 0.005 |
| 1955 | 3.748 | 4.026 | 2.836 | 0.278 | 1.190 | 0.052726 | 0.004752 | 53.778 | 53.776 | 0.003 |
| 1956 | 3.910 | 4.200 | 2.996 | 0.290 | 1.204 | 0.053109 | 0.004638 | 56.409 | 56.408 | 0.003 |
| 1957 | 4.083 | 4.386 | 3.164 | 0.303 | 1.218 | 0.053490 | 0.004524 | 59.231 | 59.229 | 0.002 |
| 1958 | 4.268 | 4.585 | 3.354 | 0.317 | 1.231 | 0.053873 | 0.004410 | 62.252 | 62.250 | 0.004 |
| 1959 | 4.479 | 4.798 | 3.554 | 0.331 | 1.244 | 0.054254 | 0.004296 | 65.509 | 65.509 | 0.004 |
| 1960 | 4.679 | 5.026 | 3.770 | 0.344 | 1.256 | 0.054636 | 0.004182 | 69.010 | 69.006 | 0.004 |
| 1961 | 4.907 | 5.271 | 4.004 | 0.358 | 1.267 | 0.055018 | 0.004068 | 72.778 | 72.775 | 0.004 |
| 1962 | 5.152 | 5.534 | 4.257 | 0.382 | 1.277 | 0.055400 | 0.003954 | 76.840 | 76.837 | 0.004 |
| 1963 | 5.415 | 5.817 | 4.531 | 0.402 | 1.286 | 0.055783 | 0.003840 | 81.225 | 81.223 | 0.002 |
| 1964 | 5.698 | 6.121 | 4.828 | 0.445 | 1.293 | 0.056165 | 0.003726 | 85.963 | 85.961 | 0.002 |
| 1965 | 6.004 | 6.449 | 5.151 | 0.485 | 1.298 | 0.056547 | 0.003612 | 91.093 | 91.092 | 0.001 |
| 1966 | 6.334 | 6.804 | 5.502 | 0.470 | 1.301 | 0.056929 | 0.003498 | 96.649 | 96.646 | 0.003 |
| 1967 | 6.690 | 7.187 | 5.885 | 0.486 | 1.302 | 0.057311 | 0.003384 | 102.682 | 102.680 | 0.002 |
| 1968 | 7.076 | 7.601 | 6.302 | 0.525 | 1.302 | 0.057694 | 0.003270 | 109.235 | 109.234 | 0.001 |
| 1969 | 7.494 | 8.050 | 6.758 | 0.566 | 1.302 | 0.058076 | 0.003156 | 116.569 | 116.568 | 0.001 |
| 1970 | 7.944 | 8.537 | 7.252 | 0.609 | 1.302 | 0.058457 | 0.003042 | 124.142 | 124.140 | 0.002 |

MICRO - ECONOMIC MDL - FOR LATIN AMERICA

MANUFAC*CONSTRUC V=(0.003466*T+0.1451378)*YM

Table with 12 columns: Year (1950-1970), V, Z, U, M, YV, U/Y, W/Y, YM, YVI, ERW. Data values range from 6.237 to 26.624 for V and 42.974 to 124.140 for YM.

SERVICES

V=(0.000467*T+0.4966583)*YM

Table with 12 columns: Year (1950-1970), V, Z, U, M, YV, U/Y, W/Y, YM, YVI, ERW. Data values range from 21.743 to 62.814 for V and 42.974 to 124.140 for YM.

MICRO - ECONOMIC MODEL FOR LATIN AMERICA

FOOD

$$V = (-0.003554 * T + 0.2865982) * YM$$

| | V | Z | U | W | YV | UY | UY | W/Y | YM | YVT | ERR% |
|------|--------|--------|--------|--------|--------|----------|-----------|---------|---------|--------|------|
| 1950 | 12.316 | 19.384 | 6.518 | 7.068 | 12.866 | 0.151678 | 0.164473 | 42.974 | 42.974 | 0.001 | |
| 1951 | 12.698 | 19.985 | 6.744 | 7.287 | 13.241 | 0.150320 | 0.162437 | 44.861 | 44.860 | 0.001 | |
| 1952 | 13.101 | 20.619 | 6.982 | 7.518 | 13.637 | 0.148956 | 0.160597 | 46.874 | 46.874 | 0.000 | |
| 1953 | 13.527 | 21.290 | 7.236 | 7.763 | 14.055 | 0.147594 | 0.1588398 | 49.023 | 49.023 | -0.001 | |
| 1954 | 13.979 | 22.001 | 7.505 | 8.022 | 14.496 | 0.146233 | 0.156317 | 51.320 | 51.319 | 0.001 | |
| 1955 | 14.457 | 22.754 | 7.791 | 8.297 | 14.963 | 0.144871 | 0.154278 | 53.778 | 53.777 | 0.001 | |
| 1956 | 14.964 | 23.552 | 8.095 | 8.588 | 15.465 | 0.143511 | 0.152239 | 56.409 | 56.410 | -0.001 | |
| 1957 | 15.502 | 24.398 | 8.419 | 8.896 | 15.979 | 0.142145 | 0.150200 | 59.231 | 59.231 | 0.000 | |
| 1958 | 16.073 | 25.287 | 8.765 | 9.224 | 16.532 | 0.140783 | 0.148159 | 62.259 | 62.259 | 0.000 | |
| 1959 | 16.680 | 26.252 | 9.134 | 9.572 | 17.119 | 0.139420 | 0.146116 | 65.512 | 65.511 | 0.001 | |
| 1960 | 17.325 | 27.268 | 9.527 | 9.943 | 17.741 | 0.138060 | 0.144077 | 69.010 | 69.010 | 0.000 | |
| 1961 | 18.013 | 28.351 | 9.949 | 10.338 | 18.402 | 0.136698 | 0.142040 | 72.778 | 72.778 | 0.000 | |
| 1962 | 18.745 | 29.503 | 10.399 | 10.758 | 19.104 | 0.135336 | 0.140001 | 76.840 | 76.840 | 0.000 | |
| 1963 | 19.526 | 30.732 | 10.882 | 11.206 | 19.850 | 0.133974 | 0.137962 | 81.225 | 81.224 | 0.001 | |
| 1964 | 20.360 | 32.044 | 11.400 | 11.684 | 20.645 | 0.132612 | 0.135923 | 85.963 | 85.963 | 0.000 | |
| 1965 | 21.251 | 33.446 | 11.956 | 12.196 | 21.491 | 0.131248 | 0.133881 | 91.093 | 91.092 | 0.001 | |
| 1966 | 22.204 | 34.947 | 12.554 | 12.743 | 22.393 | 0.129889 | 0.131845 | 96.645 | 96.645 | -0.001 | |
| 1967 | 23.225 | 36.553 | 13.197 | 13.329 | 23.356 | 0.128527 | 0.129805 | 102.682 | 102.682 | 0.000 | |
| 1968 | 24.318 | 38.274 | 13.891 | 13.956 | 24.384 | 0.127161 | 0.127762 | 109.235 | 109.235 | 0.000 | |
| 1969 | 25.493 | 40.124 | 14.640 | 14.631 | 25.485 | 0.125801 | 0.125725 | 116.369 | 116.369 | 0.000 | |
| 1970 | 26.755 | 42.109 | 15.448 | 15.354 | 26.661 | 0.124438 | 0.123664 | 124.142 | 124.142 | 0.000 | |

NON-FOOD

$$V = (0.003554 * T + 0.7134094) * YM$$

| | V | Z | U | W | YV | UY | UY | W/Y | YM | YVT | ERR% |
|------|--------|---------|--------|--------|--------|----------|----------|---------|---------|--------|------|
| 1950 | 30.658 | 56.166 | 26.058 | 25.509 | 30.108 | 0.606369 | 0.593575 | 42.974 | 42.974 | 0.001 | |
| 1951 | 32.163 | 58.924 | 27.305 | 26.761 | 31.619 | 0.608650 | 0.596527 | 44.861 | 44.860 | 0.001 | |
| 1952 | 33.773 | 61.874 | 28.637 | 28.101 | 33.237 | 0.610931 | 0.599495 | 46.874 | 46.874 | 0.000 | |
| 1953 | 35.496 | 65.029 | 30.061 | 29.534 | 34.969 | 0.613205 | 0.602440 | 49.023 | 49.023 | -0.001 | |
| 1954 | 37.341 | 68.410 | 31.587 | 31.069 | 36.823 | 0.615486 | 0.605400 | 51.320 | 51.319 | 0.001 | |
| 1955 | 39.321 | 72.037 | 33.223 | 32.717 | 38.814 | 0.617775 | 0.608368 | 53.778 | 53.777 | 0.001 | |
| 1956 | 41.445 | 75.930 | 34.977 | 34.484 | 40.953 | 0.620049 | 0.611273 | 56.409 | 56.410 | -0.001 | |
| 1957 | 43.729 | 80.113 | 36.861 | 36.384 | 43.252 | 0.622330 | 0.614273 | 59.231 | 59.231 | 0.000 | |
| 1958 | 46.186 | 84.613 | 38.887 | 38.428 | 45.727 | 0.624603 | 0.617233 | 62.259 | 62.259 | 0.000 | |
| 1959 | 48.831 | 89.460 | 41.068 | 40.629 | 48.333 | 0.626877 | 0.620171 | 65.512 | 65.511 | 0.001 | |
| 1960 | 51.685 | 94.688 | 43.419 | 43.004 | 51.270 | 0.629173 | 0.623154 | 69.010 | 69.010 | 0.000 | |
| 1961 | 54.766 | 100.333 | 45.956 | 45.567 | 54.777 | 0.631447 | 0.626106 | 72.778 | 72.778 | 0.000 | |
| 1962 | 58.095 | 106.432 | 48.696 | 48.337 | 57.734 | 0.633728 | 0.629066 | 76.840 | 76.840 | 0.000 | |
| 1963 | 61.698 | 113.033 | 51.659 | 51.335 | 61.374 | 0.636002 | 0.632011 | 81.225 | 81.224 | 0.001 | |
| 1964 | 65.603 | 120.187 | 54.869 | 54.584 | 65.318 | 0.638283 | 0.634964 | 85.963 | 85.963 | 0.000 | |
| 1965 | 69.842 | 127.953 | 58.352 | 58.112 | 69.602 | 0.640557 | 0.637939 | 91.093 | 91.092 | 0.001 | |
| 1966 | 74.445 | 136.387 | 62.150 | 61.941 | 74.258 | 0.642838 | 0.640984 | 96.645 | 96.645 | -0.001 | |
| 1967 | 79.457 | 145.568 | 66.243 | 66.111 | 79.326 | 0.645126 | 0.643945 | 102.682 | 102.682 | 0.000 | |
| 1968 | 84.917 | 155.570 | 70.719 | 70.653 | 84.452 | 0.647392 | 0.646797 | 109.235 | 109.235 | 0.000 | |
| 1969 | 90.876 | 166.488 | 75.604 | 75.613 | 90.495 | 0.649689 | 0.649765 | 116.369 | 116.369 | 0.000 | |
| 1970 | 97.387 | 178.416 | 80.937 | 81.030 | 97.480 | 0.651962 | 0.652718 | 124.142 | 124.142 | 0.000 | |

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5. Sectorial Final Demands

F-D MATRIX FOR NORTH AMERICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

CONSUMPTION

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|---------|---------|---------|----------|--------|----------|----------|---------|
| 1950. | 247.4805 | 5.2218 | 7.0284 | 42.9624 | 47.7388 | 0.0000 | 49.3721 | 63.1563 | 31.9985 |
| 1951. | 271.6484 | 5.7317 | 7.7147 | 47.1572 | 52.4004 | 0.0000 | 54.1934 | 69.3242 | 35.1230 |
| 1952. | 280.1367 | 5.9109 | 7.9558 | 48.6309 | 54.0381 | 0.0000 | 55.8867 | 71.4902 | 36.2207 |
| 1953. | 292.6172 | 6.1742 | 8.3103 | 50.7979 | 56.4453 | 0.0000 | 58.3760 | 74.8262 | 37.8350 |
| 1954. | 289.2930 | 6.1040 | 8.2158 | 50.2207 | 55.8037 | 0.0000 | 57.7129 | 73.8262 | 37.4033 |
| 1955. | 313.7578 | 6.6202 | 8.9106 | 54.6678 | 60.5234 | 0.0000 | 62.5988 | 80.0703 | 40.5684 |
| 1956. | 318.4219 | 6.7186 | 9.0431 | 55.2773 | 61.6229 | 0.0000 | 63.5244 | 81.2598 | 41.1709 |
| 1957. | 327.0938 | 6.9016 | 9.2894 | 56.7832 | 63.0957 | 0.0000 | 65.2549 | 83.4727 | 42.2920 |
| 1958. | 323.8047 | 6.8323 | 9.1959 | 56.2119 | 62.4609 | 0.0000 | 64.5986 | 82.6348 | 41.8672 |
| 1959. | 344.5301 | 7.2698 | 9.7848 | 59.3115 | 66.4609 | 0.0000 | 68.7344 | 87.9258 | 44.5479 |
| 1960. | 353.3125 | 7.4548 | 10.0339 | 61.3340 | 68.1533 | 0.0000 | 70.4854 | 90.1641 | 45.8826 |
| 1961. | 362.1250 | 7.6407 | 10.2843 | 62.8643 | 69.8535 | 0.0000 | 72.2432 | 92.4141 | 46.8223 |
| 1962. | 387.0977 | 8.1677 | 10.9935 | 67.1992 | 74.6709 | 0.0000 | 77.2256 | 98.7852 | 50.0508 |
| 1963. | 404.0937 | 8.5264 | 11.4762 | 70.8194 | 77.9492 | 0.0000 | 80.6162 | 103.1230 | 52.2480 |
| 1964. | 425.2070 | 8.9718 | 12.0758 | 73.8194 | 82.0215 | 0.0000 | 84.8241 | 108.5117 | 54.9785 |
| 1965. | 454.5234 | 9.5905 | 12.9083 | 78.9043 | 87.6768 | 0.0000 | 90.6768 | 115.9922 | 58.7686 |
| 1966. | 468.0312 | 10.2974 | 13.8600 | 84.7217 | 94.1406 | 0.0000 | 97.3613 | 124.5849 | 63.1016 |
| 1967. | 501.2989 | 10.5773 | 14.2367 | 87.0244 | 96.6992 | 0.0000 | 100.0078 | 127.9297 | 64.8164 |
| 1968. | 526.8672 | 11.1167 | 14.9629 | 91.4609 | 101.6309 | 0.0000 | 105.1094 | 134.4531 | 68.1230 |
| 1969. | 544.3594 | 11.4858 | 15.4597 | 94.5000 | 105.0159 | 0.0000 | 108.5977 | 138.9180 | 70.8848 |
| 1970. | 541.4062 | 11.4236 | 15.3757 | 93.9883 | 104.4355 | 0.0000 | 108.0098 | 138.1641 | 70.0020 |

GOVERNMENT

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|--------|--------|--------|---------|---------|---------|--------|--------|
| 1950. | 77.5947 | 0.4035 | 0.7371 | 0.7604 | 14.5645 | 15.6806 | 44.2051 | 1.0087 | 0.2638 |
| 1951. | 84.8389 | 0.4412 | 0.8060 | 0.8314 | 15.9241 | 17.1118 | 48.3320 | 1.1029 | 0.2984 |
| 1952. | 87.1484 | 0.4532 | 0.8279 | 0.8576 | 16.3577 | 17.5776 | 49.6484 | 1.1329 | 0.2963 |
| 1953. | 90.6778 | 0.4715 | 0.8614 | 0.8886 | 17.0193 | 18.2888 | 51.6563 | 1.1788 | 0.3083 |
| 1954. | 89.2949 | 0.4643 | 0.8483 | 0.8751 | 16.7605 | 18.0107 | 50.8711 | 1.1608 | 0.3036 |
| 1955. | 96.4678 | 0.5016 | 0.9164 | 0.9454 | 18.1069 | 19.4575 | 54.9570 | 1.2541 | 0.3240 |
| 1956. | 97.5135 | 0.5071 | 0.9264 | 0.9557 | 18.3042 | 19.6697 | 55.4566 | 1.2677 | 0.3315 |
| 1957. | 99.7842 | 0.5189 | 0.9480 | 0.9779 | 18.7295 | 20.3245 | 56.6467 | 1.2972 | 0.3393 |
| 1958. | 98.3965 | 0.5117 | 0.9348 | 0.9643 | 18.4690 | 19.8464 | 56.0366 | 1.2791 | 0.3346 |
| 1959. | 104.2491 | 0.5423 | 0.9907 | 1.0220 | 19.5750 | 21.0349 | 59.4131 | 1.3558 | 0.3546 |
| 1960. | 106.5283 | 0.5539 | 1.0120 | 1.0440 | 19.9454 | 21.4866 | 60.6485 | 1.3849 | 0.3622 |
| 1961. | 108.7598 | 0.5656 | 1.0332 | 1.0658 | 20.4141 | 21.9368 | 61.9600 | 1.4139 | 0.3698 |
| 1962. | 115.8076 | 0.6022 | 1.1002 | 1.1449 | 21.7371 | 23.3584 | 65.0756 | 1.5055 | 0.3937 |
| 1963. | 120.4219 | 0.6262 | 1.1440 | 1.1801 | 22.6030 | 24.2891 | 68.6045 | 1.5655 | 0.4094 |
| 1964. | 126.2217 | 0.6563 | 1.1991 | 1.2370 | 23.6917 | 25.4587 | 71.9082 | 1.6409 | 0.4292 |
| 1965. | 134.4004 | 0.6989 | 1.2768 | 1.3171 | 25.2264 | 27.1084 | 76.5664 | 1.7472 | 0.4570 |
| 1966. | 143.7461 | 0.7475 | 1.3656 | 1.4087 | 26.8810 | 28.9932 | 81.8906 | 1.8687 | 0.4687 |
| 1967. | 147.0801 | 0.7648 | 1.3972 | 1.4414 | 27.6069 | 29.6660 | 83.7910 | 1.9120 | 0.5001 |
| 1968. | 153.9844 | 0.8007 | 1.4628 | 1.5090 | 28.9028 | 31.0586 | 87.7246 | 2.0018 | 5235 |
| 1969. | 158.4766 | 0.8241 | 1.5055 | 1.5530 | 29.7461 | 31.9644 | 90.2832 | 2.0602 | 5388 |
| 1970. | 157.0078 | 0.8164 | 1.4916 | 1.5387 | 29.4702 | 31.6685 | 89.4473 | 2.0411 | 0.5338 |

F-D MATRIX FOR NORTH AMERICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

INVESTMENT

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|--------|--------|--------|---------|---------|---------|--------|--------|--------|
| 1950. | 73,8213 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 27.0107 | 40.1797 | 1.0113 | 4.2521 | 1.3657 |
| 1951. | 80,5537 | 0.0000 | 0.0000 | 0.0000 | 29.4741 | 43.8447 | 43.8447 | 1.1056 | 4.6399 | 1.4902 |
| 1952. | 82,5611 | 0.0000 | 0.0000 | 0.0000 | 30.2158 | 44.9482 | 44.9482 | 1.1313 | 4.7567 | 1.5277 |
| 1953. | 85,7490 | 0.0000 | 0.0000 | 0.0000 | 31.3750 | 46.6729 | 46.6729 | 1.1748 | 4.9391 | 1.5863 |
| 1954. | 84,2744 | 0.0000 | 0.0000 | 0.0000 | 30.8354 | 45.8701 | 45.8701 | 1.1546 | 4.8542 | 1.5591 |
| 1955. | 90,4594 | 0.0000 | 0.0000 | 0.0000 | 33.2851 | 49.4541 | 49.4541 | 1.2448 | 5.2335 | 1.6609 |
| 1956. | 91,6631 | 0.0000 | 0.0000 | 0.0000 | 33.5391 | 49.8916 | 49.8916 | 1.2558 | 5.2798 | 1.6958 |
| 1957. | 93,5986 | 0.0000 | 0.0000 | 0.0000 | 34.2476 | 50.9453 | 50.9453 | 1.2823 | 5.3912 | 1.7316 |
| 1958. | 92,1064 | 0.0000 | 0.0000 | 0.0000 | 33.7012 | 50.1328 | 50.1328 | 1.2619 | 5.3053 | 1.7039 |
| 1959. | 97,4199 | 0.0000 | 0.0000 | 0.0000 | 35.6455 | 53.0244 | 53.0244 | 1.3346 | 5.6114 | 1.8023 |
| 1960. | 96,5047 | 0.0000 | 0.0000 | 0.0000 | 36.3358 | 54.3358 | 54.3358 | 1.3605 | 5.6119 | 1.8371 |
| 1961. | 101,1719 | 0.0000 | 0.0000 | 0.0000 | 37.0186 | 55.0674 | 55.0674 | 1.3860 | 5.8275 | 1.8717 |
| 1962. | 107,5000 | 0.0000 | 0.0000 | 0.0000 | 39.3360 | 58.5117 | 58.5117 | 1.4727 | 6.1920 | 1.9887 |
| 1963. | 111,5469 | 0.0000 | 0.0000 | 0.0000 | 40.8145 | 60.7139 | 60.7139 | 1.5282 | 6.4250 | 2.0636 |
| 1964. | 116,6899 | 0.0000 | 0.0000 | 0.0000 | 42.6885 | 63.5020 | 63.5020 | 1.5984 | 6.7201 | 2.1584 |
| 1965. | 123,9619 | 0.0000 | 0.0000 | 0.0000 | 45.3574 | 67.4717 | 67.4717 | 1.6983 | 7.1402 | 2.2933 |
| 1966. | 132,2949 | 0.0000 | 0.0000 | 0.0000 | 48.4063 | 72.0078 | 72.0078 | 1.8124 | 7.6202 | 2.4474 |
| 1967. | 135,0703 | 0.0000 | 0.0000 | 0.0000 | 49.4219 | 73.5176 | 73.5176 | 1.8505 | 7.7800 | 2.4988 |
| 1968. | 141,1016 | 0.0000 | 0.0000 | 0.0000 | 51.6279 | 78.8088 | 78.8088 | 1.9331 | 8.1274 | 2.6104 |
| 1969. | 144,9004 | 0.0000 | 0.0000 | 0.0000 | 53.0186 | 79.8672 | 79.8672 | 1.9851 | 8.3482 | 2.6807 |
| 1970. | 143,2383 | 0.0000 | 0.0000 | 0.0000 | 52.4102 | 77.9829 | 77.9829 | 1.9623 | 8.2505 | 2.6499 |

IMPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|---------|---------|--------|--------|--------|--------|
| 1950. | 16,5469 | 2.3660 | 2.3430 | 2.3926 | 2.9483 | 6.4268 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 18,6777 | 2.6933 | 2.6447 | 2.7097 | 3.5644 | 7.2544 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 19,7900 | 2.8537 | 2.8022 | 2.8616 | 3.5659 | 7.6864 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 21,2212 | 3.0601 | 3.0049 | 3.0685 | 3.4553 | 8.2423 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 21,5215 | 3.1033 | 3.0474 | 3.1120 | 3.4997 | 8.3589 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 23,9258 | 3.4501 | 3.3879 | 3.4597 | 4.3553 | 9.2927 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 24,8721 | 3.5865 | 3.5219 | 3.5965 | 4.5668 | 9.6603 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 26,1533 | 3.7712 | 3.7052 | 3.7817 | 4.7290 | 10.1580 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 26,4856 | 3.8192 | 3.7503 | 3.8298 | 4.7991 | 10.2980 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 24,8123 | 4.1547 | 4.0798 | 4.1662 | 5.2298 | 11.1907 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 30,1899 | 4.3533 | 4.2748 | 4.3654 | 5.4704 | 11.7257 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 31,5799 | 4.5566 | 4.4745 | 4.5693 | 5.7259 | 12.2733 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 34,4745 | 4.9717 | 4.8821 | 4.9455 | 6.2474 | 13.3914 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 36,7192 | 5.2949 | 5.1993 | 5.3096 | 6.4534 | 14.2617 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 39,4394 | 5.6813 | 5.5789 | 5.6971 | 7.1392 | 15.3027 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 42,9268 | 6.1899 | 6.0784 | 6.2072 | 7.7783 | 16.6726 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 46,9580 | 6.7712 | 6.6492 | 6.7900 | 8.5988 | 18.2385 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 44,1211 | 7.0831 | 7.0079 | 7.1029 | 8.5766 | 19.0786 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 52,5547 | 7.5782 | 7.4417 | 7.5494 | 9.5228 | 20.4121 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 55,2539 | 7.9675 | 7.8239 | 7.9896 | 10.0186 | 21.4604 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 55,8999 | 8.0607 | 7.9154 | 8.0830 | 10.1290 | 21.7114 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

F-D MATRIX FOR NORTH AMERICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| 1950. | 18,7871 | 1,5950 | 0,1409 | 0,3388 | 1,4729 | 9,8293 | 0,0000 | 2,4573 | 2,7448 | 0,1879 |
| 1951. | 20,3574 | 1,7283 | 0,1597 | 0,3886 | 1,5969 | 10,6509 | 0,0000 | 2,6627 | 2,9742 | 0,2036 |
| 1952. | 21,4929 | 1,8247 | 0,1612 | 0,4105 | 1,6899 | 11,2449 | 0,0000 | 2,8112 | 3,1401 | 0,2139 |
| 1953. | 22,6321 | 1,9248 | 0,1700 | 0,4354 | 1,7775 | 11,8621 | 0,0000 | 2,9659 | 3,3123 | 0,2267 |
| 1954. | 23,5395 | 1,9777 | 0,1765 | 0,4494 | 1,8463 | 12,5110 | 0,0000 | 3,0778 | 3,4377 | 0,2353 |
| 1955. | 25,4666 | 2,1619 | 0,1710 | 0,4864 | 1,9964 | 13,3230 | 0,0000 | 3,3307 | 3,7203 | 0,2546 |
| 1956. | 26,7344 | 2,2697 | 0,2005 | 0,5106 | 2,0959 | 13,9873 | 0,0000 | 3,4968 | 3,9058 | 0,2673 |
| 1957. | 28,0378 | 2,3804 | 0,2103 | 0,5355 | 2,1942 | 14,6692 | 0,0000 | 3,6673 | 4,0963 | 0,2804 |
| 1958. | 28,9683 | 2,4594 | 0,2173 | 0,5533 | 2,2711 | 15,1560 | 0,0000 | 3,7890 | 4,2322 | 0,2897 |
| 1959. | 30,8462 | 2,6188 | 0,2313 | 0,5892 | 2,4133 | 16,1387 | 0,0000 | 4,0347 | 4,5066 | 0,3025 |
| 1960. | 32,6084 | 2,7654 | 0,2446 | 0,6228 | 2,5345 | 17,0605 | 0,0000 | 4,2651 | 4,7640 | 0,3151 |
| 1961. | 34,1323 | 2,8978 | 0,2560 | 0,6519 | 2,6339 | 17,8579 | 0,0000 | 4,4645 | 4,9667 | 0,3213 |
| 1962. | 36,1111 | 3,0667 | 0,2709 | 0,6899 | 2,8334 | 18,8984 | 0,0000 | 4,7246 | 5,2772 | 0,3312 |
| 1963. | 38,0562 | 3,2310 | 0,2854 | 0,7269 | 2,9335 | 19,9106 | 0,0000 | 4,9777 | 5,5599 | 0,3406 |
| 1964. | 40,8833 | 3,4709 | 0,3066 | 0,7809 | 3,2052 | 21,5901 | 0,0000 | 5,3475 | 5,9729 | 0,4088 |
| 1965. | 43,4858 | 3,6919 | 0,3261 | 0,8306 | 3,4092 | 22,7515 | 0,0000 | 5,6879 | 6,3531 | 0,4349 |
| 1966. | 46,5005 | 3,9479 | 0,3488 | 0,8882 | 3,6456 | 24,3286 | 0,0000 | 6,0822 | 6,7936 | 0,4650 |
| 1967. | 48,8130 | 4,1442 | 0,3661 | 0,9323 | 3,8269 | 25,5386 | 0,0000 | 6,3846 | 7,1315 | 0,4881 |
| 1968. | 51,9365 | 4,4077 | 0,3894 | 0,9916 | 4,0762 | 27,1626 | 0,0000 | 6,7906 | 7,5848 | 0,5192 |
| 1969. | 55,0210 | 4,6713 | 0,4127 | 1,0509 | 4,3136 | 28,7866 | 0,0000 | 7,1967 | 8,0385 | 0,5502 |
| 1970. | 57,5746 | 4,8884 | 0,4316 | 1,0997 | 4,5141 | 30,1250 | 0,0000 | 7,5313 | 8,4121 | 0,5758 |

F-D MATRIX FOR NORTH AMERICA
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

CONSUMPTION

| YEAR | CALC. | I | II | III | IV |
|-------|----------|----------|---------|----------|-----------|
| 1950. | 247.4805 | 48.1641 | 7.0284 | 47.7388 | 144.5254 |
| 1951. | 271.6484 | 52.8287 | 7.7147 | 52.4004 | 158.6406 |
| 1952. | 280.1367 | 54.5415 | 7.9558 | 54.0381 | 163.5977 |
| 1953. | 292.6172 | 56.9717 | 8.3103 | 56.4453 | 170.4828 |
| 1954. | 289.2930 | 56.3247 | 8.2158 | 55.8037 | 168.9484 |
| 1955. | 313.7578 | 61.0879 | 8.9106 | 60.5234 | 183.2324 |
| 1956. | 314.4219 | 61.9956 | 9.0431 | 61.4229 | 185.9531 |
| 1957. | 327.0938 | 63.6846 | 9.2894 | 63.0957 | 191.0176 |
| 1958. | 323.8047 | 63.4439 | 9.1959 | 62.4609 | 189.0906 |
| 1959. | 344.5391 | 67.0811 | 9.7848 | 66.4609 | 201.2070 |
| 1960. | 353.3125 | 68.7681 | 10.0339 | 68.1533 | 206.3301 |
| 1961. | 362.1650 | 70.5049 | 10.2843 | 69.8535 | 211.4745 |
| 1962. | 387.0877 | 75.3662 | 10.9435 | 74.6709 | 226.11615 |
| 1963. | 408.0837 | 78.5758 | 11.4762 | 77.9492 | 235.9843 |
| 1964. | 425.2070 | 82.7871 | 12.0759 | 82.0215 | 248.3144 |
| 1965. | 454.5234 | 88.4941 | 12.9083 | 87.6768 | 265.4336 |
| 1966. | 488.0312 | 95.0186 | 13.8600 | 94.1408 | 285.0078 |
| 1967. | 501.2969 | 97.6016 | 14.2367 | 96.6992 | 292.7579 |
| 1968. | 526.8672 | 102.5791 | 14.9629 | 101.6309 | 307.6636 |
| 1969. | 546.3594 | 105.9854 | 15.4597 | 105.0059 | 317.8984 |
| 1970. | 541.4062 | 105.4092 | 15.3757 | 104.4355 | 316.1758 |

GOVERNMENT

| YEAR | CALC. | I | II | III | IV |
|-------|----------|--------|--------|---------|----------|
| 1950. | 77.5947 | 1.1639 | 0.7371 | 30.2151 | 45.4771 |
| 1951. | 84.3489 | 1.2726 | 0.8060 | 33.0356 | 49.7227 |
| 1952. | 87.1484 | 1.3072 | 0.8279 | 33.9351 | 51.1071 |
| 1953. | 90.6738 | 1.3601 | 0.8614 | 35.3081 | 53.1431 |
| 1954. | 89.2949 | 1.3394 | 0.8483 | 34.7710 | 52.3350 |
| 1955. | 96.4674 | 1.4470 | 0.9164 | 37.5645 | 56.5396 |
| 1956. | 97.15195 | 1.4528 | 0.9264 | 37.9736 | 57.11556 |
| 1957. | 92.7822 | 1.4567 | 0.9480 | 38.8560 | 58.44854 |
| 1958. | 98.15865 | 1.4759 | 0.9348 | 38.3154 | 57.66574 |
| 1959. | 104.2691 | 1.5043 | 0.9907 | 40.6094 | 61.1217 |
| 1960. | 106.5283 | 1.5379 | 1.0120 | 41.4819 | 62.4351 |
| 1961. | 108.7598 | 1.6314 | 1.0332 | 42.3506 | 63.7432 |
| 1962. | 115.8078 | 1.7371 | 1.1002 | 45.0952 | 67.8769 |
| 1963. | 120.4219 | 1.8663 | 1.1440 | 46.8921 | 70.15711 |
| 1964. | 126.2217 | 1.9833 | 1.1991 | 49.1504 | 73.5775 |
| 1965. | 134.4004 | 2.0160 | 1.2768 | 52.3350 | 78.7695 |
| 1966. | 143.7461 | 2.1562 | 1.3656 | 55.9741 | 84.2471 |
| 1967. | 147.0801 | 2.2062 | 1.3972 | 57.2729 | 86.2021 |
| 1968. | 153.9844 | 2.3098 | 1.4628 | 59.9614 | 90.2490 |
| 1969. | 158.4756 | 2.3771 | 1.5055 | 61.7104 | 92.8809 |
| 1970. | 157.0078 | 2.3351 | 1.4916 | 61.1387 | 92.0215 |

F-D MATRIX FOR NORTH AMERICA

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

INVESTMENT

| YEAR | CALC. | I | II | III | IV |
|-------|----------|--------|--------|----------|---------|
| 1950. | 73,8213 | 0.0000 | 0.0000 | 67.1904 | 6.6290 |
| 1951. | 80,5537 | 0.0000 | 0.0000 | 73,3184 | 7,2357 |
| 1952. | 82,5811 | 0.0000 | 0.0000 | 75,1641 | 7,4170 |
| 1953. | 85,7490 | 0.0000 | 0.0000 | 78,0474 | 7,7016 |
| 1954. | 84,2744 | 0.0000 | 0.0000 | 76,7051 | 7,5678 |
| 1955. | 90,8594 | 0.0000 | 0.0000 | 82,6392 | 8,1501 |
| 1956. | 91,6631 | 0.0000 | 0.0000 | 83,4307 | 8,2312 |
| 1957. | 93,5986 | 0.0000 | 0.0000 | 85,1924 | 8,4050 |
| 1958. | 92,1064 | 0.0000 | 0.0000 | 83,8340 | 8,2710 |
| 1959. | 97,4199 | 0.0000 | 0.0000 | 88,6699 | 8,7442 |
| 1960. | 99,3047 | 0.0000 | 0.0000 | 90,3857 | 8,9175 |
| 1961. | 101,1719 | 0.0000 | 0.0000 | 92,0854 | 9,0851 |
| 1962. | 107,5000 | 0.0000 | 0.0000 | 97,8457 | 9,6533 |
| 1963. | 111,5469 | 0.0000 | 0.0000 | 101,5283 | 10,0167 |
| 1964. | 116,6689 | 0.0000 | 0.0000 | 106,1904 | 10,4747 |
| 1965. | 123,9619 | 0.0000 | 0.0000 | 112,8291 | 11,1316 |
| 1966. | 132,2869 | 0.0000 | 0.0000 | 120,4141 | 11,8600 |
| 1967. | 135,0703 | 0.0000 | 0.0000 | 122,9395 | 12,1293 |
| 1968. | 141,1016 | 0.0000 | 0.0000 | 128,4277 | 12,6708 |
| 1969. | 144,9004 | 0.0000 | 0.0000 | 131,8848 | 13,0120 |
| 1970. | 143,2383 | 0.0000 | 0.0000 | 130,3730 | 12,8627 |

IMPORTS

| YEAR | CALC. | I | II | III | IV |
|-------|---------|---------|---------|---------|--------|
| 1950. | 16,5469 | 5,3843 | 4,7357 | 6,4266 | 0,0000 |
| 1951. | 18,6777 | 6,0777 | 5,3455 | 7,2544 | 0,0000 |
| 1952. | 19,7900 | 6,4396 | 5,6639 | 7,6864 | 0,0000 |
| 1953. | 21,2212 | 6,9053 | 6,0734 | 8,2423 | 0,0000 |
| 1954. | 21,5215 | 7,0030 | 6,1584 | 8,3584 | 0,0000 |
| 1955. | 23,9258 | 7,7854 | 6,8475 | 9,2921 | 0,0000 |
| 1956. | 24,8721 | 8,0533 | 7,1183 | 9,6603 | 0,0000 |
| 1957. | 26,1573 | 8,5101 | 7,4850 | 10,1580 | 0,0000 |
| 1958. | 26,4856 | 8,6183 | 7,5901 | 10,2870 | 0,0000 |
| 1959. | 28,8123 | 9,3754 | 8,2460 | 11,1907 | 0,0000 |
| 1960. | 30,1809 | 9,8237 | 8,6403 | 11,7257 | 0,0000 |
| 1961. | 31,5999 | 10,2825 | 9,0438 | 12,2733 | 0,0000 |
| 1962. | 34,4785 | 11,2191 | 9,8676 | 13,3914 | 0,0000 |
| 1963. | 36,7192 | 11,9482 | 10,5089 | 14,2617 | 0,0000 |
| 1964. | 39,3394 | 12,8204 | 11,2760 | 15,3027 | 0,0000 |
| 1965. | 42,9248 | 13,9083 | 12,2855 | 16,6726 | 0,0000 |
| 1966. | 46,9580 | 15,2600 | 13,4392 | 18,2385 | 0,0000 |
| 1967. | 49,1211 | 15,9838 | 14,0583 | 19,0786 | 0,0000 |
| 1968. | 52,5547 | 17,1011 | 15,0410 | 20,4121 | 0,0000 |
| 1969. | 55,2539 | 17,9795 | 15,8135 | 21,4604 | 0,0000 |
| 1970. | 55,8999 | 18,1097 | 15,9984 | 21,7114 | 0,0000 |

F-D MATRIX FOR NORTH AMERICA
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| YEAR | CALC. | EXPORTS | | | |
|-------|---------|---------|--------|---------|---------|
| | | I | II | III | IV |
| 1950. | 18,7871 | 3,0679 | 0,4997 | 9,8293 | 5,3900 |
| 1951. | 20,3574 | 3,3243 | 0,5415 | 10,6509 | 5,8405 |
| 1952. | 21,4829 | 3,5098 | 0,5717 | 11,2449 | 6,1662 |
| 1953. | 22,6721 | 3,7023 | 0,6031 | 11,8621 | 6,5045 |
| 1954. | 23,5305 | 3,8425 | 0,6259 | 12,3110 | 6,7508 |
| 1955. | 25,4646 | 4,1583 | 0,6773 | 13,3230 | 7,3057 |
| 1956. | 26,7344 | 4,3657 | 0,7111 | 13,9873 | 7,6700 |
| 1957. | 28,0378 | 4,5786 | 0,7458 | 14,6692 | 8,0438 |
| 1958. | 28,9683 | 4,7305 | 0,7705 | 15,1560 | 8,3108 |
| 1959. | 30,6462 | 5,0371 | 0,8205 | 16,1337 | 8,8496 |
| 1960. | 32,6084 | 5,3249 | 0,8674 | 17,0605 | 9,3552 |
| 1961. | 34,1323 | 5,5737 | 0,9079 | 17,8579 | 9,7925 |
| 1962. | 36,1211 | 5,8985 | 0,9608 | 18,4984 | 10,3630 |
| 1963. | 38,0562 | 6,2145 | 1,0123 | 19,9106 | 10,9181 |
| 1964. | 40,8833 | 6,6761 | 1,0875 | 21,3901 | 11,7292 |
| 1965. | 43,4858 | 7,1011 | 1,1567 | 22,7515 | 12,4758 |
| 1966. | 46,5005 | 7,5934 | 1,2369 | 24,3286 | 13,3407 |
| 1967. | 48,8130 | 7,9711 | 1,2984 | 25,5386 | 14,0042 |
| 1968. | 51,9165 | 8,4778 | 1,3810 | 27,1626 | 14,8945 |
| 1969. | 55,0210 | 8,9849 | 1,4635 | 28,7866 | 15,7853 |
| 1970. | 57,5786 | 9,4025 | 1,5316 | 30,1250 | 16,5190 |

F-D MATRIX FOR NORTH AMERICA

I--FOOD
II--NON-FOOD

| CONSUMPTION | | | |
|-------------|----------|----------|----------|
| YEAR | CALC | I | II |
| 1950. | 247.4805 | 48.1841 | 199.2960 |
| 1951. | 271.6484 | 52.8887 | 218.7597 |
| 1952. | 280.1367 | 54.5415 | 225.5952 |
| 1953. | 292.6172 | 56.9717 | 235.6455 |
| 1954. | 289.2930 | 56.3247 | 232.9683 |
| 1955. | 313.7578 | 61.0879 | 252.6699 |
| 1956. | 318.4219 | 61.9356 | 256.4863 |
| 1957. | 327.0938 | 63.4846 | 263.6092 |
| 1958. | 323.8047 | 63.0439 | 260.7608 |
| 1959. | 344.5391 | 67.0811 | 277.4580 |
| 1960. | 353.3125 | 68.7881 | 284.5244 |
| 1961. | 362.1250 | 70.5049 | 291.6201 |
| 1962. | 387.0477 | 75.3662 | 311.6815 |
| 1963. | 404.0917 | 78.6758 | 325.4159 |
| 1964. | 425.2070 | 82.7871 | 342.4200 |
| 1965. | 454.5234 | 88.4941 | 366.0293 |
| 1966. | 488.0312 | 95.0186 | 393.0126 |
| 1967. | 501.2969 | 97.6016 | 403.6953 |
| 1968. | 526.8672 | 102.5791 | 424.2881 |
| 1969. | 544.3594 | 105.9854 | 438.3740 |
| 1970. | 541.4062 | 105.4092 | 435.9970 |

GOVERNMENT

| CONSUMPTION | | | |
|-------------|----------|--------|----------|
| YEAR | CALC | I | II |
| 1950. | 77.5947 | 1.1639 | 76.4308 |
| 1951. | 84.8389 | 1.2726 | 83.5663 |
| 1952. | 87.1484 | 1.3072 | 85.8412 |
| 1953. | 90.6738 | 1.3601 | 89.3137 |
| 1954. | 89.2949 | 1.3394 | 87.9555 |
| 1955. | 96.4678 | 1.4470 | 95.0208 |
| 1956. | 97.5195 | 1.4628 | 96.0567 |
| 1957. | 99.7842 | 1.4967 | 98.2875 |
| 1958. | 94.3965 | 1.4759 | 92.9206 |
| 1959. | 104.2891 | 1.5643 | 102.7248 |
| 1960. | 106.5283 | 1.5979 | 104.9304 |
| 1961. | 104.7508 | 1.6314 | 103.1194 |
| 1962. | 115.8076 | 1.7371 | 114.0705 |
| 1963. | 120.4219 | 1.8063 | 118.6156 |
| 1964. | 126.2217 | 1.8933 | 124.3284 |
| 1965. | 134.4004 | 2.0160 | 132.3844 |
| 1966. | 143.7461 | 2.1562 | 141.5899 |
| 1967. | 147.0801 | 2.2062 | 144.8739 |
| 1968. | 153.9844 | 2.3098 | 151.6746 |
| 1969. | 158.4766 | 2.3771 | 156.1095 |
| 1970. | 157.0078 | 2.3551 | 154.6527 |

F-D MATRIX FOR NORTH AMERICA

I--FOOD
II--NON-FOOD

INVESTMENT

| YEAR | CALC | I | II |
|-------|----------|--------|----------|
| 1950. | 73.8213 | 0.0000 | 73.8193 |
| 1951. | 80.5537 | 0.0000 | 80.5518 |
| 1952. | 82.5611 | 0.0000 | 82.5791 |
| 1953. | 84.7490 | 0.0000 | 85.7471 |
| 1954. | 84.2744 | 0.0000 | 84.2725 |
| 1955. | 90.4594 | 0.0000 | 90.4574 |
| 1956. | 91.6631 | 0.0000 | 91.6611 |
| 1957. | 93.5986 | 0.0000 | 93.5967 |
| 1958. | 92.1064 | 0.0000 | 92.1045 |
| 1959. | 97.4199 | 0.0000 | 97.4180 |
| 1960. | 99.3047 | 0.0000 | 99.3027 |
| 1961. | 101.1719 | 0.0000 | 101.1709 |
| 1962. | 107.5080 | 0.0000 | 107.4990 |
| 1963. | 111.5469 | 0.0000 | 111.5449 |
| 1964. | 116.6689 | 0.0000 | 116.6670 |
| 1965. | 123.9619 | 0.0000 | 123.9600 |
| 1966. | 132.2969 | 0.0000 | 132.2930 |
| 1967. | 135.0703 | 0.0000 | 135.0684 |
| 1968. | 141.3016 | 0.0000 | 141.0977 |
| 1969. | 144.9004 | 0.0000 | 144.6965 |
| 1970. | 143.2383 | 0.0000 | 143.2344 |

IMPORTS

| YEAR | CALC | I | II |
|-------|---------|---------|---------|
| 1950. | 16.5469 | 5.3843 | 11.1624 |
| 1951. | 18.6777 | 6.0777 | 12.5999 |
| 1952. | 19.7900 | 6.4396 | 13.3502 |
| 1953. | 21.2212 | 6.9053 | 14.3157 |
| 1954. | 21.5215 | 7.0030 | 14.5183 |
| 1955. | 23.8258 | 7.7854 | 16.1401 |
| 1956. | 24.8721 | 8.0933 | 16.7786 |
| 1957. | 26.4533 | 8.5101 | 17.6428 |
| 1958. | 26.4856 | 8.6183 | 17.8669 |
| 1959. | 28.4123 | 9.3754 | 19.0365 |
| 1960. | 30.1899 | 9.8237 | 20.3660 |
| 1961. | 31.5909 | 10.2825 | 21.3071 |
| 1962. | 34.4785 | 11.2191 | 23.2598 |
| 1963. | 36.7192 | 11.9482 | 24.7705 |
| 1964. | 39.8924 | 12.8204 | 26.5716 |
| 1965. | 42.8268 | 13.7683 | 28.9580 |
| 1966. | 46.9580 | 15.2000 | 31.6777 |
| 1967. | 49.1711 | 15.9838 | 33.1367 |
| 1968. | 52.5547 | 17.1011 | 35.4531 |
| 1969. | 55.2539 | 17.9795 | 37.2739 |
| 1970. | 55.8999 | 18.1897 | 37.7095 |

F-D MATRIX FOR NORTH AMERICA
 I--FOOD
 II--NON-FOOD

EXPORTS

| YEAR | CALC | I | II |
|-------|---------|--------|---------|
| 1950. | 18.7871 | 3.0679 | 15.7199 |
| 1951. | 20.3574 | 3.3243 | 17.0327 |
| 1952. | 21.4929 | 3.5098 | 17.9827 |
| 1953. | 22.6721 | 3.7023 | 18.9695 |
| 1954. | 23.5305 | 3.8425 | 19.6875 |
| 1955. | 24.4646 | 4.1583 | 21.3059 |
| 1956. | 26.7344 | 4.3657 | 22.3682 |
| 1957. | 28.0378 | 4.5786 | 23.4587 |
| 1958. | 28.9683 | 4.7305 | 24.2373 |
| 1959. | 30.8462 | 5.0371 | 25.8086 |
| 1960. | 32.6084 | 5.3249 | 27.2830 |
| 1961. | 34.1323 | 5.5737 | 28.5581 |
| 1962. | 34.1211 | 5.8985 | 30.2222 |
| 1963. | 38.0562 | 6.2145 | 31.8418 |
| 1964. | 40.8833 | 6.6761 | 34.2065 |
| 1965. | 43.4858 | 7.1011 | 36.3848 |
| 1966. | 46.5005 | 7.5934 | 38.9058 |
| 1967. | 48.8130 | 7.9711 | 40.8408 |
| 1968. | 51.9165 | 8.4778 | 43.4380 |
| 1969. | 55.0210 | 8.9849 | 46.0352 |
| 1970. | 57.5786 | 9.4025 | 48.1753 |

F-D MATRIX FOR WESTERN EUROPE

1-AGRICULTURE
2-MINING
3-ENERGY
4-FOOD
5-MANUFACTURING
6-CONSTRUCTION
7-SERVICES I
8-SERVICES II
9-DEVELOPMENT

CONSUMPTION

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|--------|---------|---------|---------|--------|---------|--------|---------|
| 1950. | 147.9043 | 0.0000 | 6.0493 | 37.3301 | 30.9858 | 0.5472 | 24.8032 | 0.4954 | 26.3120 |
| 1951. | 153.0449 | 0.0000 | 6.2595 | 38.6279 | 32.0625 | 0.5663 | 25.6657 | 0.4924 | 27.2266 |
| 1952. | 160.8867 | 0.0000 | 6.5882 | 40.6074 | 33.7056 | 0.5953 | 26.9805 | 0.5000 | 28.6216 |
| 1953. | 168.6934 | 0.0000 | 6.9995 | 42.5771 | 35.3408 | 0.6242 | 28.2890 | 0.5000 | 29.8301 |
| 1954. | 176.4648 | 0.0000 | 7.2174 | 44.5301 | 36.9692 | 0.6529 | 29.5928 | 0.5000 | 31.3931 |
| 1955. | 186.9082 | 0.0000 | 7.4445 | 47.1748 | 39.1567 | 0.6916 | 31.3442 | 0.5000 | 31.2510 |
| 1956. | 197.3027 | 0.0000 | 8.0697 | 49.7988 | 41.3345 | 0.7300 | 33.0874 | 0.5000 | 31.2510 |
| 1957. | 204.9512 | 0.0000 | 8.3824 | 51.7295 | 42.9370 | 0.7583 | 34.3701 | 0.5000 | 31.2510 |
| 1958. | 207.1856 | 0.0000 | 8.4738 | 52.2940 | 43.4048 | 0.7666 | 34.7446 | 0.5000 | 31.2510 |
| 1959. | 217.4570 | 0.0000 | 8.8939 | 54.8857 | 45.5566 | 0.8046 | 36.4673 | 0.5000 | 31.2510 |
| 1960. | 233.0410 | 0.0000 | 9.5314 | 58.8143 | 48.8218 | 0.8022 | 39.0806 | 0.5000 | 31.2510 |
| 1961. | 245.8789 | 0.0000 | 10.0564 | 62.0506 | 51.5112 | 0.9097 | 41.2334 | 0.5000 | 31.2510 |
| 1962. | 255.9883 | 0.0000 | 10.4700 | 64.6104 | 53.6289 | 0.9472 | 42.9287 | 0.5000 | 31.2510 |
| 1963. | 266.0508 | 0.0000 | 10.8613 | 67.1504 | 55.7373 | 0.9844 | 44.6162 | 0.5000 | 31.2510 |
| 1964. | 281.3750 | 0.0000 | 11.5083 | 71.0176 | 58.9473 | 1.0411 | 47.1865 | 0.5000 | 31.2510 |
| 1965. | 293.9766 | 0.0000 | 12.0237 | 74.1992 | 61.5879 | 1.0877 | 49.2998 | 0.5000 | 31.2510 |
| 1966. | 303.8750 | 0.0000 | 12.4285 | 76.6973 | 63.6611 | 1.1243 | 50.9590 | 0.5000 | 31.2510 |
| 1967. | 313.7266 | 0.0000 | 12.8313 | 79.1836 | 65.7246 | 1.1608 | 52.6113 | 0.5000 | 31.2510 |
| 1968. | 328.7930 | 0.0000 | 13.4475 | 82.9863 | 68.8818 | 1.2165 | 55.1377 | 0.5000 | 31.2510 |
| 1969. | 349.0313 | 0.0000 | 14.2754 | 88.6930 | 73.1213 | 1.2914 | 58.5322 | 0.5000 | 31.2510 |
| 1970. | 363.9375 | 0.0000 | 14.8850 | 91.8574 | 76.2441 | 1.3466 | 61.0322 | 0.5000 | 31.2510 |

GOVERNMENT

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|---------|--------|---------|--------|--------|
| 1950. | 36.8936 | 0.0972 | 1.3224 | 0.3899 | 6.3004 | 2.3725 | 27.0503 | 0.0000 | 1.3613 |
| 1951. | 39.8921 | 0.0972 | 1.3566 | 0.3959 | 6.4625 | 2.4334 | 27.7446 | 0.0000 | 1.3962 |
| 1952. | 41.5635 | 0.1039 | 1.4131 | 0.4156 | 6.7333 | 2.5353 | 28.9072 | 0.0000 | 1.4547 |
| 1953. | 43.1875 | 0.1080 | 1.4684 | 0.4319 | 6.9963 | 2.6344 | 30.0366 | 0.0000 | 1.5115 |
| 1954. | 44.7642 | 0.1119 | 1.5220 | 0.4476 | 7.2517 | 2.7306 | 31.1333 | 0.0000 | 1.5667 |
| 1955. | 46.9741 | 0.1174 | 1.5971 | 0.4697 | 7.6097 | 2.8654 | 32.6704 | 0.0000 | 1.6441 |
| 1956. | 49.1211 | 0.1228 | 1.6701 | 0.4912 | 7.9576 | 2.9964 | 34.1636 | 0.0000 | 1.7192 |
| 1957. | 50.5400 | 0.1263 | 1.7184 | 0.5044 | 8.1675 | 3.0829 | 35.1504 | 0.0000 | 1.7689 |
| 1958. | 52.5059 | 0.1295 | 1.7703 | 0.5060 | 8.1967 | 3.0864 | 35.1904 | 0.0000 | 1.7689 |
| 1959. | 55.7949 | 0.1395 | 1.7879 | 0.5259 | 8.5189 | 3.2077 | 36.5732 | 0.0000 | 1.8405 |
| 1960. | 58.2749 | 0.1457 | 1.8970 | 0.5574 | 9.0387 | 3.4035 | 38.8052 | 0.0000 | 1.9528 |
| 1961. | 60.0508 | 0.1501 | 1.9813 | 0.5627 | 9.4416 | 3.5947 | 40.5803 | 0.0000 | 2.0396 |
| 1962. | 61.7637 | 0.1544 | 2.0417 | 0.6005 | 9.7281 | 3.6631 | 41.7651 | 0.0000 | 2.1017 |
| 1963. | 64.6828 | 0.1616 | 2.0999 | 0.6176 | 10.0057 | 3.7675 | 42.9565 | 0.0000 | 2.1617 |
| 1964. | 66.8057 | 0.1670 | 2.1375 | 0.6463 | 10.4705 | 3.9426 | 44.9521 | 0.0000 | 2.2621 |
| 1965. | 68.5057 | 0.1708 | 2.2714 | 0.6643 | 10.8225 | 4.0751 | 46.4629 | 0.0000 | 2.3391 |
| 1966. | 69.7422 | 0.1744 | 2.3223 | 0.6850 | 11.0654 | 4.0751 | 46.4629 | 0.0000 | 2.3391 |
| 1967. | 72.2715 | 0.1807 | 2.3712 | 0.6974 | 11.2981 | 4.2542 | 48.5059 | 0.0000 | 2.4409 |
| 1968. | 75.8467 | 0.1896 | 2.4572 | 0.7227 | 11.7080 | 4.2542 | 48.5059 | 0.0000 | 2.5295 |
| 1969. | 78.1719 | 0.1954 | 2.5787 | 0.7585 | 12.2871 | 4.6266 | 52.7510 | 0.0000 | 2.6546 |
| 1970. | 81.3750 | 0.1954 | 2.6576 | 0.7817 | 12.6638 | 4.7684 | 54.7441 | 0.0000 | 2.7441 |

F-D MATRIX FOR WESTERN EUROPE

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

INVESTMENT

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|--------|--------|--------|---------|---------|--------|--------|--------|
| 1950. | 38,2949 | 0.0498 | 0.0306 | 0.0038 | 17.0527 | 19.5264 | 0.6242 | 0.0000 | 1.0071 |
| 1951. | 40.7227 | 0.0529 | 0.0326 | 0.0041 | 18.1338 | 20.7642 | 0.6638 | 0.0000 | 1.0710 |
| 1952. | 43.9673 | 0.0572 | 0.0352 | 0.0044 | 19.5786 | 22.4189 | 0.7167 | 0.0000 | 1.1563 |
| 1953. | 47.3198 | 0.0615 | 0.0379 | 0.0047 | 21.0715 | 24.1284 | 0.7713 | 0.0000 | 1.2445 |
| 1954. | 50.7808 | 0.0660 | 0.0406 | 0.0051 | 22.6125 | 25.8931 | 0.8277 | 0.0000 | 1.3355 |
| 1955. | 55.1494 | 0.0717 | 0.0441 | 0.0055 | 24.5579 | 28.1206 | 0.8989 | 0.0000 | 1.4504 |
| 1956. | 59.6616 | 0.0776 | 0.0477 | 0.0060 | 26.5674 | 30.4214 | 0.9725 | 0.0000 | 1.5691 |
| 1957. | 63.4829 | 0.0825 | 0.0508 | 0.0063 | 28.2688 | 32.3701 | 1.0348 | 0.0000 | 1.6606 |
| 1958. | 65.7061 | 0.0854 | 0.0526 | 0.0066 | 29.2568 | 33.5029 | 1.0710 | 0.0000 | 1.7281 |
| 1959. | 70.5781 | 0.0918 | 0.0565 | 0.0071 | 31.4282 | 35.9873 | 1.1504 | 0.0000 | 1.8542 |
| 1960. | 77.3740 | 0.1006 | 0.0619 | 0.0077 | 34.4546 | 39.4531 | 1.2612 | 0.0000 | 2.0349 |
| 1961. | 83.4785 | 0.1085 | 0.0668 | 0.0083 | 37.1729 | 42.5654 | 1.3607 | 0.0000 | 2.1955 |
| 1962. | 88.8379 | 0.1155 | 0.0711 | 0.0089 | 39.5596 | 45.2979 | 1.4480 | 0.0000 | 2.3464 |
| 1963. | 94.3418 | 0.1226 | 0.0755 | 0.0094 | 42.0103 | 48.1045 | 1.5378 | 0.0000 | 2.4812 |
| 1964. | 101.9121 | 0.1325 | 0.0815 | 0.0102 | 45.3613 | 51.9648 | 1.6612 | 0.0000 | 2.6903 |
| 1965. | 108.7167 | 0.1413 | 0.0870 | 0.0109 | 48.4426 | 55.8355 | 1.7721 | 0.0000 | 2.8593 |
| 1966. | 114.7090 | 0.1491 | 0.0916 | 0.0115 | 51.0796 | 58.4902 | 1.8698 | 0.0000 | 3.0168 |
| 1967. | 120.8438 | 0.1571 | 0.0967 | 0.0121 | 53.8115 | 61.6182 | 1.9677 | 0.0000 | 3.1782 |
| 1968. | 129.1895 | 0.1679 | 0.1033 | 0.0129 | 57.5273 | 65.8730 | 2.1058 | 0.0000 | 3.3976 |
| 1969. | 139.8535 | 0.1818 | 0.1119 | 0.0140 | 62.2764 | 71.3105 | 2.2796 | 0.0000 | 3.6781 |
| 1970. | 148.6680 | 0.1933 | 0.1189 | 0.0149 | 66.2012 | 75.8047 | 2.4233 | 0.0000 | 3.9099 |

IMPORTS

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|---------|---------|---------|----------|--------|--------|--------|--------|
| 1950. | 28.9009 | 0.8266 | 4.7397 | 2.6473 | 10.4794 | 0.0000 | 1.0549 | 0.0000 | 0.5780 |
| 1951. | 31.4277 | 0.8988 | 5.1541 | 2.8786 | 11.3956 | 0.0000 | 1.1471 | 0.0000 | 0.6285 |
| 1952. | 34.6440 | 0.9909 | 5.6819 | 3.1736 | 12.5625 | 0.0000 | 1.2646 | 0.0000 | 0.6929 |
| 1953. | 38.0200 | 1.0874 | 6.2552 | 3.4826 | 13.7859 | 0.0000 | 1.3877 | 0.0000 | 0.7604 |
| 1954. | 41.5503 | 1.1883 | 6.8142 | 3.8040 | 15.0659 | 0.0000 | 1.5166 | 0.0000 | 0.8310 |
| 1955. | 45.9019 | 1.3128 | 7.2776 | 4.2046 | 16.4438 | 0.0000 | 1.6744 | 0.0000 | 0.9140 |
| 1956. | 50.4619 | 1.4432 | 7.8256 | 4.6225 | 18.2974 | 0.0000 | 1.8419 | 0.0000 | 1.0192 |
| 1957. | 54.5122 | 1.5990 | 8.9399 | 4.9933 | 19.7659 | 0.0000 | 1.9897 | 0.0000 | 1.0902 |
| 1958. | 57.2319 | 1.69805 | 9.3860 | 5.2424 | 20.7522 | 0.0000 | 2.0890 | 0.0000 | 1.1446 |
| 1959. | 62.3120 | 1.7821 | 10.2191 | 5.7078 | 22.5940 | 0.0000 | 2.2744 | 0.0000 | 1.2462 |
| 1960. | 69.1904 | 1.9788 | 11.3472 | 6.3378 | 25.0879 | 0.0000 | 2.5254 | 0.0000 | 1.3638 |
| 1961. | 75.5506 | 2.1610 | 12.3916 | 6.9213 | 27.3975 | 0.0000 | 2.7579 | 0.0000 | 1.5112 |
| 1962. | 81.3818 | 2.3264 | 13.3398 | 7.4509 | 29.4491 | 0.0000 | 2.9689 | 0.0000 | 1.6268 |
| 1963. | 87.3320 | 2.4977 | 14.3223 | 7.9996 | 31.6660 | 0.0000 | 3.1876 | 0.0000 | 1.7466 |
| 1964. | 95.3221 | 2.7264 | 15.6338 | 8.7322 | 34.5659 | 0.0000 | 3.4745 | 0.0000 | 1.9066 |
| 1965. | 102.7129 | 2.9376 | 16.8447 | 9.4084 | 37.2832 | 0.0000 | 3.7490 | 0.0000 | 2.0542 |
| 1966. | 109.4053 | 3.1290 | 17.9824 | 10.0213 | 39.6699 | 0.0000 | 3.9933 | 0.0000 | 2.1881 |
| 1967. | 116.3057 | 3.3263 | 19.0740 | 10.6536 | 42.11719 | 0.0000 | 4.2451 | 0.0000 | 2.3261 |
| 1968. | 125.8209 | 3.5670 | 20.5686 | 11.4845 | 45.4771 | 0.0000 | 4.5778 | 0.0000 | 2.5084 |
| 1969. | 136.9063 | 3.8155 | 22.4521 | 12.5405 | 49.6416 | 0.0000 | 4.9971 | 0.0000 | 2.7581 |
| 1970. | 146.6992 | 4.056 | 24.0586 | 13.4374 | 53.4004 | 0.0000 | 5.4233 | 0.0000 | 3.0099 |

F-D MATRIX FOR WESTERN EUROPE

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DEWELLINGS

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|--------|--------|--------|--------|---------|--------|---------|--------|--------|
| 1950. | 31.3635 | 0.5426 | 0.0063 | 1.3486 | 1.6717 | 20.2388 | 0.2791 | 5.4641 | 0.0000 | 1.6132 |
| 1951. | 35.0103 | 0.5057 | 0.0070 | 1.5054 | 1.8660 | 22.5918 | 0.3116 | 5.9867 | 0.0000 | 2.1356 |
| 1952. | 34.0303 | 0.6579 | 0.0076 | 1.6453 | 2.0270 | 24.5405 | 0.3385 | 6.5031 | 0.0000 | 2.1198 |
| 1953. | 41.9271 | 0.7132 | 0.0082 | 1.7728 | 2.1974 | 26.6035 | 0.3659 | 7.0498 | 0.0000 | 2.5148 |
| 1954. | 43.9236 | 0.7599 | 0.0088 | 1.8487 | 2.3411 | 28.3434 | 0.3909 | 7.5109 | 0.0000 | 2.6793 |
| 1955. | 48.7461 | 0.8433 | 0.0097 | 2.0961 | 2.5291 | 31.4556 | 0.4348 | 8.3354 | 0.0000 | 3.1984 |
| 1956. | 52.8326 | 0.9071 | 0.0105 | 2.2846 | 2.7446 | 33.8345 | 0.4667 | 8.9659 | 0.0000 | 3.1984 |
| 1957. | 56.2876 | 0.9738 | 0.0113 | 2.4203 | 3.0301 | 36.3223 | 0.5010 | 9.6251 | 0.0000 | 3.4335 |
| 1958. | 59.4790 | 1.0290 | 0.0119 | 2.5576 | 3.1702 | 38.3519 | 0.5294 | 10.1708 | 0.0000 | 3.6282 |
| 1959. | 64.7256 | 1.1147 | 0.0129 | 2.7432 | 3.4828 | 41.7866 | 0.5760 | 11.0679 | 0.0000 | 3.9482 |
| 1960. | 69.8740 | 1.2096 | 0.0140 | 3.0046 | 3.7242 | 45.0889 | 0.6219 | 11.9432 | 0.0000 | 4.2153 |
| 1961. | 74.6377 | 1.2912 | 0.0149 | 3.2094 | 3.9731 | 48.1631 | 0.6643 | 12.7629 | 0.0000 | 4.5223 |
| 1962. | 80.9508 | 1.3635 | 0.0161 | 3.4537 | 4.2353 | 51.9795 | 0.7169 | 13.7739 | 0.0000 | 4.8136 |
| 1963. | 86.4922 | 1.4363 | 0.0173 | 3.7192 | 4.6190 | 55.8135 | 0.7698 | 14.7900 | 0.0000 | 5.2760 |
| 1964. | 94.6426 | 1.6273 | 0.0189 | 4.0396 | 5.1444 | 61.0723 | 0.8423 | 16.1836 | 0.0000 | 5.7731 |
| 1965. | 102.4775 | 1.7728 | 0.0205 | 4.4846 | 5.4620 | 66.1289 | 0.9120 | 17.5284 | 0.0000 | 6.2511 |
| 1966. | 111.4941 | 1.9286 | 0.0223 | 4.9343 | 5.4276 | 71.8473 | 0.9923 | 19.0654 | 0.0000 | 6.8011 |
| 1967. | 119.0195 | 2.0550 | 0.0238 | 5.1175 | 6.3437 | 76.8027 | 1.0593 | 20.3521 | 0.0000 | 7.2501 |
| 1968. | 128.6680 | 2.2649 | 0.0257 | 5.8357 | 6.3572 | 83.0293 | 1.1451 | 22.0020 | 0.0000 | 7.8556 |
| 1969. | 136.5391 | 2.3967 | 0.0277 | 6.0572 | 7.3840 | 89.3284 | 1.2330 | 23.6859 | 0.0000 | 8.4508 |
| 1970. | 147.2266 | 2.5470 | 0.0294 | 6.3307 | 7.8470 | 95.0039 | 1.3103 | 25.1753 | 0.0000 | 9.0607 |

F-D MATRIX FOR WESTERN EUROPE
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| CONSUMPTION | | | | | |
|-------------|----------|----------|---------|---------|----------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 147.9043 | 49.7095 | 6.0493 | 31.5330 | 60.6104 |
| 1951. | 153.0449 | 51.4375 | 6.2595 | 32.6284 | 62.7173 |
| 1952. | 160.8867 | 54.0732 | 6.5802 | 34.3008 | 65.9307 |
| 1953. | 168.6934 | 56.6968 | 6.8995 | 35.8648 | 69.1299 |
| 1954. | 176.4643 | 59.3081 | 7.2174 | 37.6221 | 72.3145 |
| 1955. | 186.9082 | 62.8188 | 7.6445 | 39.8481 | 76.5947 |
| 1956. | 197.3027 | 66.3125 | 8.0697 | 42.0645 | 80.8535 |
| 1957. | 204.9512 | 69.8838 | 8.3824 | 43.6953 | 83.9883 |
| 1958. | 207.1836 | 69.6338 | 8.4738 | 44.1709 | 84.9033 |
| 1959. | 217.4570 | 73.0869 | 8.9939 | 46.3608 | 89.1133 |
| 1960. | 233.0410 | 78.3242 | 9.5314 | 49.8836 | 95.4990 |
| 1961. | 245.8789 | 82.6596 | 10.0564 | 52.4209 | 100.7598 |
| 1962. | 255.9883 | 86.0561 | 10.4780 | 54.5757 | 104.9023 |
| 1963. | 266.0588 | 89.4180 | 10.8933 | 56.7217 | 109.0264 |
| 1964. | 281.3750 | 94.5684 | 11.5083 | 59.9883 | 115.3066 |
| 1965. | 293.9766 | 99.8047 | 12.0237 | 62.6753 | 120.4707 |
| 1966. | 303.8750 | 102.1309 | 12.4285 | 64.7852 | 124.5264 |
| 1967. | 313.7266 | 105.4424 | 12.8313 | 66.8846 | 128.5625 |
| 1968. | 328.7930 | 110.5059 | 13.4475 | 70.0977 | 134.7383 |
| 1969. | 340.0313 | 117.3076 | 14.2754 | 74.4121 | 143.0313 |
| 1970. | 363.9375 | 122.3184 | 14.8850 | 77.5998 | 149.1406 |

| GOVERNMENT | | | | | |
|------------|---------|--------|--------|--------|---------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 38.8976 | 0.4862 | 1.3224 | 4.6732 | 28.4114 |
| 1951. | 39.8921 | 0.4986 | 1.3563 | 4.8959 | 29.1406 |
| 1952. | 41.5635 | 0.5195 | 1.4131 | 5.2686 | 30.3618 |
| 1953. | 43.1875 | 0.5398 | 1.4684 | 5.6307 | 31.5461 |
| 1954. | 44.7642 | 0.5595 | 1.5220 | 5.9826 | 32.6997 |
| 1955. | 46.9741 | 0.5872 | 1.5971 | 6.4751 | 34.8145 |
| 1956. | 49.1211 | 0.6140 | 1.6701 | 7.0540 | 36.9823 |
| 1957. | 50.5400 | 0.6317 | 1.7184 | 7.2784 | 36.9189 |
| 1958. | 50.5972 | 0.6325 | 1.7203 | 7.2830 | 36.6609 |
| 1959. | 52.5859 | 0.6573 | 1.7879 | 7.1266 | 38.4136 |
| 1960. | 55.7949 | 0.6974 | 1.8970 | 7.4421 | 40.7578 |
| 1961. | 58.2749 | 0.7284 | 1.9813 | 7.2952 | 42.5668 |
| 1962. | 60.0504 | 0.7506 | 2.0417 | 7.3392 | 43.4667 |
| 1963. | 61.7637 | 0.7720 | 2.0999 | 7.3732 | 45.1152 |
| 1964. | 64.6328 | 0.8079 | 2.1975 | 7.4130 | 47.2139 |
| 1965. | 66.8057 | 0.8351 | 2.2714 | 7.4876 | 48.6008 |
| 1966. | 68.3057 | 0.8538 | 2.3223 | 7.5231 | 49.4965 |
| 1967. | 69.7422 | 0.8718 | 2.3712 | 7.5522 | 50.9468 |
| 1968. | 72.2715 | 0.8718 | 2.4572 | 7.6165 | 52.7939 |
| 1969. | 75.8467 | 0.9481 | 2.5787 | 7.6136 | 55.4053 |
| 1970. | 78.1719 | 0.9771 | 2.6578 | 7.7432 | 57.1040 |

F-D MATRIX FOR WESTERN EUROPE
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| INVESTMENT | | | | | |
|------------|----------|--------|--------|----------|--------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 38,2949 | 0.0536 | 0.0306 | 36.5791 | 1.6313 |
| 1951. | 40,7227 | 0.0570 | 0.0326 | 38.8979 | 1.7348 |
| 1952. | 43,9673 | 0.0616 | 0.0352 | 41.0976 | 1.8730 |
| 1953. | 47,3198 | 0.0662 | 0.0379 | 45.1997 | 2.0158 |
| 1954. | 50,7898 | 0.0711 | 0.0406 | 48.5054 | 2.1632 |
| 1955. | 55,1494 | 0.0772 | 0.0441 | 52.6782 | 2.3493 |
| 1956. | 59,6616 | 0.0835 | 0.0477 | 56.9888 | 2.5416 |
| 1957. | 63,4829 | 0.0889 | 0.0508 | 60.6387 | 2.7043 |
| 1958. | 65,7061 | 0.0920 | 0.0526 | 62.7617 | 2.7990 |
| 1959. | 70,5791 | 0.0980 | 0.0565 | 67.4159 | 3.0066 |
| 1960. | 77,3740 | 0.1083 | 0.0649 | 73.9072 | 3.2961 |
| 1961. | 83,4785 | 0.1169 | 0.0688 | 78.7363 | 3.5562 |
| 1962. | 88,8379 | 0.1244 | 0.0711 | 84.8574 | 3.7845 |
| 1963. | 94,3418 | 0.1321 | 0.0755 | 90.1143 | 4.0189 |
| 1964. | 101,9121 | 0.1427 | 0.0815 | 97.3457 | 4.3414 |
| 1965. | 108,7197 | 0.1522 | 0.0870 | 103.8477 | 4.6314 |
| 1966. | 114,7090 | 0.1596 | 0.0918 | 109.5695 | 4.8865 |
| 1967. | 120,8438 | 0.1692 | 0.0967 | 115.4297 | 5.1479 |
| 1968. | 129,1895 | 0.1809 | 0.1033 | 123.4004 | 5.5034 |
| 1969. | 139,8575 | 0.1958 | 0.1119 | 133.5859 | 5.9577 |
| 1970. | 149,6680 | 0.2041 | 0.1189 | 142.0059 | 6.3332 |

| IMPORTS | | | | | |
|---------|----------|---------|---------|---------|--------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 24,9009 | 11.2220 | 5.5662 | 10.4794 | 1.6329 |
| 1951. | 31,4277 | 12.2834 | 6.0529 | 11.3956 | 1.7757 |
| 1952. | 34,4460 | 13.4529 | 6.6727 | 12.5625 | 1.9573 |
| 1953. | 36,0200 | 14.7631 | 7.3226 | 13.7859 | 2.1421 |
| 1954. | 41,5583 | 16.1338 | 8.0024 | 15.0659 | 2.3476 |
| 1955. | 45,9019 | 17.8235 | 8.8406 | 16.8438 | 2.5934 |
| 1956. | 50,4619 | 19.5942 | 9.7183 | 18.2974 | 2.8511 |
| 1957. | 54,5122 | 21.1667 | 10.4989 | 19.7659 | 3.0739 |
| 1958. | 57,2319 | 22.2229 | 11.0227 | 20.7522 | 3.2335 |
| 1959. | 62,3120 | 24.1956 | 12.0012 | 22.5940 | 3.5206 |
| 1960. | 69,1904 | 26.8660 | 13.3259 | 25.0879 | 3.9092 |
| 1961. | 75,5296 | 29.3396 | 14.5525 | 27.4975 | 4.2639 |
| 1962. | 81,3416 | 31.5247 | 15.6641 | 29.4941 | 4.5953 |
| 1963. | 87,3320 | 33.9106 | 16.8198 | 31.8663 | 4.9351 |
| 1964. | 95,6291 | 37.0156 | 18.3611 | 34.8834 | 5.2829 |
| 1965. | 102,7129 | 39.8235 | 19.5302 | 37.7322 | 5.6393 |
| 1966. | 109,4053 | 42.4214 | 21.0733 | 39.8744 | 6.1033 |
| 1967. | 116,4057 | 45.1611 | 22.4041 | 42.1322 | 6.5722 |
| 1968. | 125,6209 | 48.7002 | 24.5888 | 45.0721 | 7.1862 |
| 1969. | 136,9063 | 53.1597 | 26.3674 | 48.6416 | 7.7352 |
| 1970. | 146,6992 | 56.9629 | 28.2542 | 53.1924 | 8.2885 |

F-D MATRIX FOR WESTERN EUROPE
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| YEAR | EXPORTS
CALC. | EXPORTS | | | |
|-------|------------------|---------|--------|---------|----------|
| | | I | II | III | IV |
| 1950. | 31,3635 | 2,2142 | 1,3549 | 20,5178 | 7,2762 |
| 1951. | 35,0103 | 2,4717 | 1,5124 | 22,9033 | 8,1223 |
| 1952. | 38,0303 | 2,6849 | 1,6429 | 24,8789 | 8,8229 |
| 1953. | 41,2271 | 2,9106 | 1,7810 | 26,9702 | 9,5646 |
| 1954. | 43,9239 | 3,1010 | 1,8975 | 28,7846 | 10,1912 |
| 1955. | 48,7441 | 3,4414 | 2,1058 | 31,8894 | 11,3048 |
| 1956. | 52,4326 | 3,7017 | 2,2651 | 34,3005 | 12,1643 |
| 1957. | 56,2876 | 3,9739 | 2,4316 | 36,8228 | 13,0586 |
| 1958. | 59,4790 | 4,1992 | 2,5695 | 38,9111 | 13,7990 |
| 1959. | 64,7256 | 4,5895 | 2,7961 | 42,3423 | 15,0161 |
| 1960. | 69,8740 | 4,9330 | 3,0185 | 45,7104 | 16,2104 |
| 1961. | 74,6377 | 5,2693 | 3,2243 | 48,8271 | 17,5157 |
| 1962. | 80,5588 | 5,6868 | 3,4798 | 52,6963 | 18,6875 |
| 1963. | 86,4922 | 6,1063 | 3,7365 | 56,5830 | 20,10659 |
| 1964. | 94,6426 | 6,6817 | 4,0886 | 61,9146 | 21,9565 |
| 1965. | 102,4775 | 7,2349 | 4,4270 | 67,0400 | 23,7744 |
| 1966. | 111,4941 | 7,8715 | 4,8165 | 72,9395 | 25,8665 |
| 1967. | 119,0195 | 8,4027 | 5,1417 | 77,8613 | 27,6121 |
| 1968. | 128,6680 | 9,0837 | 5,5584 | 84,1738 | 29,8506 |
| 1969. | 138,5391 | 9,7806 | 5,9848 | 90,6309 | 32,1406 |
| 1970. | 147,2266 | 10,3940 | 6,3601 | 96,3135 | 34,1558 |

F-D MATRIX FOR WESTERN EUROPE

I--FOOD
II--NON-FOOD

CONSUMPTION

| YEAR | CALC | I | II |
|-------|----------|----------|----------|
| 1950. | 147.9043 | 49.7095 | 98.1924 |
| 1951. | 153.0449 | 51.4375 | 101.6045 |
| 1952. | 160.4467 | 54.0732 | 106.3715 |
| 1953. | 168.6934 | 56.6968 | 111.9941 |
| 1954. | 176.4648 | 59.3091 | 117.1533 |
| 1955. | 184.9042 | 62.8188 | 124.0849 |
| 1956. | 197.3027 | 66.3125 | 130.9863 |
| 1957. | 204.9512 | 68.8858 | 136.0645 |
| 1958. | 207.1836 | 69.6338 | 137.5469 |
| 1959. | 217.4570 | 73.0869 | 144.3672 |
| 1960. | 233.0410 | 78.3242 | 154.7129 |
| 1961. | 245.6789 | 82.6396 | 163.0363 |
| 1962. | 255.9883 | 86.0361 | 169.9473 |
| 1963. | 266.0508 | 89.4180 | 176.6289 |
| 1964. | 281.3750 | 94.5684 | 186.8027 |
| 1965. | 293.9766 | 98.4047 | 195.5680 |
| 1966. | 303.6750 | 102.1309 | 201.5383 |
| 1967. | 313.7266 | 105.4424 | 208.2773 |
| 1968. | 328.7930 | 110.5059 | 218.2832 |
| 1969. | 349.0313 | 117.3076 | 231.7188 |
| 1970. | 363.9375 | 122.3184 | 241.6152 |

GOVERNMENT

| YEAR | CALC | I | II |
|-------|---------|--------|---------|
| 1950. | 38.4936 | 0.4862 | 38.4067 |
| 1951. | 39.8921 | 0.4986 | 39.3926 |
| 1952. | 41.5635 | 0.5105 | 41.0435 |
| 1953. | 43.1475 | 0.5398 | 42.6470 |
| 1954. | 44.7642 | 0.5595 | 44.2036 |
| 1955. | 46.9741 | 0.5872 | 46.3862 |
| 1956. | 49.1211 | 0.6140 | 48.5063 |
| 1957. | 50.5400 | 0.6317 | 49.9072 |
| 1958. | 50.5972 | 0.6325 | 49.9639 |
| 1959. | 52.5859 | 0.6573 | 51.9277 |
| 1960. | 55.7949 | 0.6974 | 55.0967 |
| 1961. | 58.2744 | 0.7284 | 57.5464 |
| 1962. | 60.0500 | 0.7506 | 59.2993 |
| 1963. | 61.7637 | 0.7720 | 60.9912 |
| 1964. | 64.6328 | 0.8079 | 63.8242 |
| 1965. | 66.8057 | 0.8351 | 65.9697 |
| 1966. | 68.3057 | 0.8598 | 67.4502 |
| 1967. | 69.7422 | 0.8718 | 68.8701 |
| 1968. | 72.2715 | 0.9034 | 71.3672 |
| 1969. | 75.8467 | 0.9481 | 74.8975 |
| 1970. | 78.1719 | 0.9771 | 77.1934 |

F-D MATRIX FOR WESTERN EUROPE
 I--FOOD
 II--NON-FOOD

INVESTMENT

| YEAR | CALC. | I | | II | |
|-------|----------|--------|----------|----|----|
| | | I | II | I | II |
| 1950. | 38.2949 | 0.0536 | 38.2402 | | |
| 1951. | 40.7227 | 0.0570 | 40.6646 | | |
| 1952. | 43.9673 | 0.0616 | 43.9053 | | |
| 1953. | 47.3108 | 0.0662 | 47.2529 | | |
| 1954. | 50.7808 | 0.0711 | 50.7000 | | |
| 1955. | 55.1494 | 0.0772 | 55.0713 | | |
| 1956. | 59.6616 | 0.0835 | 59.5776 | | |
| 1957. | 63.4829 | 0.0889 | 63.3936 | | |
| 1958. | 65.7061 | 0.0920 | 65.6123 | | |
| 1959. | 70.5741 | 0.0988 | 70.4766 | | |
| 1960. | 77.3740 | 0.1083 | 77.2646 | | |
| 1961. | 83.4745 | 0.1169 | 83.3604 | | |
| 1962. | 88.8379 | 0.1244 | 88.7119 | | |
| 1963. | 94.3418 | 0.1321 | 94.2080 | | |
| 1964. | 101.9121 | 0.1427 | 101.7676 | | |
| 1965. | 108.7107 | 0.1522 | 108.5654 | | |
| 1966. | 114.7090 | 0.1606 | 114.5459 | | |
| 1967. | 120.8438 | 0.1692 | 120.6729 | | |
| 1968. | 129.1895 | 0.1809 | 129.0059 | | |
| 1969. | 139.8535 | 0.1958 | 139.6543 | | |
| 1970. | 148.6680 | 0.2081 | 148.4551 | | |

IMPORTS

| YEAR | CALC. | I | | II | |
|-------|----------|---------|---------|----|----|
| | | I | II | I | II |
| 1950. | 28.9009 | 11.2220 | 17.6782 | | |
| 1951. | 31.4277 | 12.2834 | 19.2241 | | |
| 1952. | 34.6440 | 13.4529 | 21.1924 | | |
| 1953. | 38.0200 | 14.7631 | 23.2563 | | |
| 1954. | 41.5503 | 16.1338 | 25.4158 | | |
| 1955. | 45.9019 | 17.4235 | 28.0776 | | |
| 1956. | 50.4619 | 19.5942 | 30.8672 | | |
| 1957. | 54.5122 | 21.1667 | 33.3442 | | |
| 1958. | 57.2319 | 22.2229 | 35.0083 | | |
| 1959. | 62.3120 | 24.1956 | 38.1157 | | |
| 1960. | 69.1904 | 26.5660 | 42.3228 | | |
| 1961. | 75.5596 | 29.3396 | 46.2188 | | |
| 1962. | 81.3418 | 31.5847 | 49.7559 | | |
| 1963. | 87.3320 | 33.9106 | 53.4199 | | |
| 1964. | 95.3291 | 37.0196 | 58.3115 | | |
| 1965. | 102.7129 | 39.8828 | 62.8281 | | |
| 1966. | 109.4853 | 42.4019 | 66.9219 | | |
| 1967. | 116.3057 | 45.1611 | 71.1416 | | |
| 1968. | 125.4209 | 48.7002 | 76.7188 | | |
| 1969. | 136.9063 | 53.1597 | 83.7432 | | |
| 1970. | 148.6892 | 56.9629 | 89.7344 | | |

F-D MATRIX FOR WESTERN EUROPE

I--FOOD
II--NON-FOOD

EXPORTS

| YEAR | CALC | I | II |
|-------|----------|---------|----------|
| 1950. | 31.3635 | 2.2142 | 29.1497 |
| 1951. | 35.0103 | 2.4717 | 32.5376 |
| 1952. | 38.0303 | 2.6649 | 35.3642 |
| 1953. | 41.2271 | 2.9106 | 38.3154 |
| 1954. | 43.9238 | 3.1010 | 40.8223 |
| 1955. | 48.7461 | 3.4414 | 45.3037 |
| 1956. | 52.4326 | 3.7017 | 48.7295 |
| 1957. | 56.2876 | 3.9739 | 52.3125 |
| 1958. | 59.4790 | 4.1942 | 55.2793 |
| 1959. | 64.7256 | 4.5695 | 60.1543 |
| 1960. | 69.8740 | 4.8330 | 64.9305 |
| 1961. | 74.6377 | 5.2693 | 69.3662 |
| 1962. | 80.5508 | 5.6668 | 74.8633 |
| 1963. | 86.4922 | 6.1063 | 80.3848 |
| 1964. | 94.6426 | 6.6817 | 87.9500 |
| 1965. | 102.4775 | 7.2349 | 95.2412 |
| 1966. | 111.4941 | 7.8715 | 103.6221 |
| 1967. | 119.0195 | 8.4027 | 110.6143 |
| 1968. | 128.6680 | 9.0837 | 119.5820 |
| 1969. | 138.5391 | 9.7806 | 128.7559 |
| 1970. | 147.2246 | 10.3940 | 136.8281 |

F-D MATRIX FOR JAPAN

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

INVESTMENT

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 1950. | 3,7475 | 0.0109 | 0.0000 | 0.0000 | 0.0000 | 1.3468 | 2.2552 | 0.0105 | 0.1240 | 0.0000 |
| 1951. | 4,2279 | 0.0123 | 0.0000 | 0.0000 | 0.0000 | 1.5195 | 2.5443 | 0.0118 | 0.1399 | 0.0000 |
| 1952. | 4,7477 | 0.0138 | 0.0000 | 0.0000 | 0.0000 | 1.7063 | 2.8471 | 0.0133 | 0.1571 | 0.0000 |
| 1953. | 5,3096 | 0.0154 | 0.0000 | 0.0000 | 0.0000 | 1.9083 | 3.1953 | 0.0149 | 0.1757 | 0.0000 |
| 1954. | 6,0402 | 0.0175 | 0.0000 | 0.0000 | 0.0000 | 2.1708 | 3.6549 | 0.0169 | 0.1959 | 0.0000 |
| 1955. | 6,9621 | 0.0202 | 0.0000 | 0.0000 | 0.0000 | 2.5022 | 4.1898 | 0.0195 | 0.2304 | 0.0000 |
| 1956. | 7,9465 | 0.0230 | 0.0000 | 0.0000 | 0.0000 | 2.8560 | 4.7822 | 0.0222 | 0.2630 | 0.0000 |
| 1957. | 8,9927 | 0.0261 | 0.0000 | 0.0000 | 0.0000 | 3.2319 | 5.4117 | 0.0252 | 0.2977 | 0.0000 |
| 1958. | 9,9331 | 0.0288 | 0.0000 | 0.0000 | 0.0000 | 3.6699 | 5.9777 | 0.0278 | 0.3288 | 0.0000 |
| 1959. | 11,2722 | 0.0327 | 0.0000 | 0.0000 | 0.0000 | 4.0512 | 6.7836 | 0.0316 | 0.3731 | 0.0000 |
| 1960. | 13,4246 | 0.0389 | 0.0000 | 0.0000 | 0.0000 | 4.8248 | 8.0789 | 0.0376 | 0.4444 | 0.0000 |
| 1961. | 16,2917 | 0.0472 | 0.0000 | 0.0000 | 0.0000 | 5.8552 | 9.8042 | 0.0456 | 0.5392 | 0.0000 |
| 1962. | 17,9495 | 0.0521 | 0.0000 | 0.0000 | 0.0000 | 6.4510 | 10.8018 | 0.0503 | 0.5941 | 0.0000 |
| 1963. | 20,7209 | 0.0601 | 0.0000 | 0.0000 | 0.0000 | 7.4471 | 12.4697 | 0.0540 | 0.6659 | 0.0000 |
| 1964. | 24,5078 | 0.0711 | 0.0000 | 0.0000 | 0.0000 | 8.8081 | 14.7485 | 0.0686 | 0.8112 | 0.0000 |
| 1965. | 28,5073 | 0.0769 | 0.0000 | 0.0000 | 0.0000 | 9.8267 | 15.9519 | 0.0742 | 0.8774 | 0.0000 |
| 1966. | 30,1980 | 0.0876 | 0.0000 | 0.0000 | 0.0000 | 10.8531 | 18.1731 | 0.0846 | 0.9996 | 0.0000 |
| 1967. | 35,5054 | 0.1030 | 0.0000 | 0.0000 | 0.0000 | 12.7685 | 21.3667 | 0.0994 | 1.1752 | 0.0000 |
| 1968. | 41,8306 | 0.1213 | 0.0000 | 0.0000 | 0.0000 | 15.0339 | 25.1173 | 0.1171 | 1.3846 | 0.0000 |
| 1969. | 48,4819 | 0.1406 | 0.0000 | 0.0000 | 0.0000 | 17.4243 | 29.1763 | 0.1357 | 1.6047 | 0.0000 |
| 1970. | 54,9365 | 0.1593 | 0.0000 | 0.0000 | 0.0000 | 19.7441 | 33.0605 | 0.1538 | 1.8184 | 0.0000 |

IMPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 1,3576 | 0.4329 | 0.1282 | 0.2316 | 0.1275 | 0.4261 | 0.0001 | 0.0000 | 0.0091 | 0.0000 |
| 1951. | 1,5071 | 0.4806 | 0.1423 | 0.2571 | 0.1476 | 0.4731 | 0.0002 | 0.0000 | 0.0101 | 0.0000 |
| 1952. | 1,6684 | 0.5321 | 0.1575 | 0.2846 | 0.1562 | 0.5237 | 0.0002 | 0.0000 | 0.0112 | 0.0000 |
| 1953. | 1,8423 | 0.5875 | 0.1739 | 0.3133 | 0.1756 | 0.5783 | 0.0002 | 0.0000 | 0.0123 | 0.0000 |
| 1954. | 2,0719 | 0.6607 | 0.1956 | 0.3535 | 0.1977 | 0.6504 | 0.0002 | 0.0000 | 0.0139 | 0.0000 |
| 1955. | 2,3637 | 0.7538 | 0.2231 | 0.4032 | 0.2255 | 0.7420 | 0.0002 | 0.0000 | 0.0158 | 0.0000 |
| 1956. | 2,6728 | 0.8523 | 0.2523 | 0.4560 | 0.2650 | 0.8390 | 0.0003 | 0.0000 | 0.0179 | 0.0000 |
| 1957. | 2,9900 | 0.9564 | 0.2831 | 0.5116 | 0.2861 | 0.9414 | 0.0003 | 0.0000 | 0.0201 | 0.0000 |
| 1958. | 3,2868 | 1.0462 | 0.3103 | 0.5607 | 0.3146 | 1.0317 | 0.0003 | 0.0000 | 0.0220 | 0.0000 |
| 1959. | 3,7033 | 1.1810 | 0.3496 | 0.6318 | 0.3533 | 1.1625 | 0.0004 | 0.0000 | 0.0248 | 0.0000 |
| 1960. | 4,3813 | 1.3972 | 0.4136 | 0.7474 | 0.4140 | 1.3753 | 0.0004 | 0.0000 | 0.0294 | 0.0000 |
| 1961. | 5,2847 | 1.6453 | 0.4949 | 0.9016 | 0.5042 | 1.6589 | 0.0005 | 0.0000 | 0.0354 | 0.0000 |
| 1962. | 5,7895 | 1.8463 | 0.5445 | 0.9877 | 0.5523 | 1.8173 | 0.0006 | 0.0000 | 0.0388 | 0.0000 |
| 1963. | 6,6443 | 2.1201 | 0.6276 | 1.1342 | 0.6342 | 2.0869 | 0.0007 | 0.0000 | 0.0445 | 0.0000 |
| 1964. | 7,8247 | 2.4953 | 0.7387 | 1.3349 | 0.7445 | 2.4561 | 0.0008 | 0.0000 | 0.0524 | 0.0000 |
| 1965. | 8,4243 | 2.6865 | 0.7953 | 1.4372 | 0.8017 | 2.6443 | 0.0008 | 0.0000 | 0.0640 | 0.0000 |
| 1966. | 9,5560 | 3.0474 | 0.9021 | 1.6302 | 0.9135 | 2.9994 | 0.0010 | 0.0000 | 0.0650 | 0.0000 |
| 1967. | 11,1902 | 3.5685 | 1.0564 | 1.9006 | 1.0675 | 3.5126 | 0.0011 | 0.0000 | 0.0640 | 0.0000 |
| 1968. | 13,1337 | 4.1883 | 1.2398 | 2.2406 | 1.2523 | 4.1226 | 0.0011 | 0.0000 | 0.0890 | 0.0000 |
| 1969. | 15,1676 | 4.8569 | 1.4318 | 2.5876 | 1.4470 | 4.7611 | 0.0013 | 0.0000 | 0.1016 | 0.0000 |
| 1970. | 17,1289 | 5.4624 | 1.6170 | 2.9222 | 1.6341 | 5.3767 | 0.0017 | 0.0000 | 0.1148 | 0.0000 |

F-D MATRIX FOR JAPAN

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| 1950. | 0.7860 | 0.0288 | 0.0003 | 0.0083 | 0.0288 | 0.5820 | 0.0028 | 0.0704 | 0.0646 | 0.0000 |
| 1951. | 1.1246 | 0.0412 | 0.0004 | 0.0119 | 0.0412 | 0.8328 | 0.0039 | 0.1008 | 0.0924 | 0.0000 |
| 1952. | 1.4714 | 0.0539 | 0.0006 | 0.0156 | 0.0539 | 1.0896 | 0.0051 | 0.1318 | 0.1209 | 0.0000 |
| 1953. | 1.8476 | 0.0676 | 0.0007 | 0.0196 | 0.0676 | 1.3681 | 0.0065 | 0.1655 | 0.1519 | 0.0000 |
| 1954. | 2.2240 | 0.0813 | 0.0009 | 0.0235 | 0.0813 | 1.6439 | 0.0078 | 0.1989 | 0.1825 | 0.0000 |
| 1955. | 2.7251 | 0.0997 | 0.0011 | 0.0289 | 0.0997 | 2.0179 | 0.0095 | 0.2442 | 0.2240 | 0.0000 |
| 1956. | 3.1952 | 0.1169 | 0.0013 | 0.0339 | 0.1169 | 2.3660 | 0.0112 | 0.2863 | 0.2626 | 0.0000 |
| 1957. | 3.6967 | 0.1353 | 0.0015 | 0.0392 | 0.1353 | 2.7374 | 0.0129 | 0.3312 | 0.3039 | 0.0000 |
| 1958. | 4.1717 | 0.1527 | 0.0017 | 0.0442 | 0.1527 | 3.0991 | 0.0146 | 0.3738 | 0.3429 | 0.0000 |
| 1959. | 4.6123 | 0.1761 | 0.0019 | 0.0510 | 0.1761 | 3.5635 | 0.0168 | 0.4312 | 0.3956 | 0.0000 |
| 1960. | 5.4732 | 0.2003 | 0.0022 | 0.0580 | 0.2003 | 4.0529 | 0.0192 | 0.4904 | 0.4499 | 0.0000 |
| 1961. | 6.1278 | 0.2243 | 0.0025 | 0.0650 | 0.2243 | 4.5376 | 0.0214 | 0.5490 | 0.5037 | 0.0000 |
| 1962. | 6.9013 | 0.2526 | 0.0028 | 0.0732 | 0.2526 | 5.1104 | 0.0242 | 0.6183 | 0.5673 | 0.0000 |
| 1963. | 7.7039 | 0.2820 | 0.0031 | 0.0817 | 0.2820 | 5.7047 | 0.0270 | 0.6903 | 0.6333 | 0.0000 |
| 1964. | 8.7354 | 0.3197 | 0.0035 | 0.0926 | 0.3197 | 6.4885 | 0.0306 | 0.7827 | 0.7160 | 0.0000 |
| 1965. | 9.7736 | 0.3577 | 0.0039 | 0.1036 | 0.3577 | 7.2373 | 0.0362 | 0.8757 | 0.8034 | 0.0000 |
| 1966. | 10.9600 | 0.4011 | 0.0044 | 0.1162 | 0.4011 | 8.1158 | 0.0384 | 0.9820 | 0.9009 | 0.0000 |
| 1967. | 12.0322 | 0.4404 | 0.0048 | 0.1275 | 0.4404 | 8.9998 | 0.0421 | 1.0781 | 0.9890 | 0.0000 |
| 1968. | 13.3510 | 0.4886 | 0.0053 | 0.1415 | 0.4886 | 9.8864 | 0.0467 | 1.1962 | 1.0974 | 0.0000 |
| 1969. | 14.7289 | 0.5391 | 0.0059 | 0.1561 | 0.5391 | 10.9067 | 0.0516 | 1.3197 | 1.2107 | 0.0000 |
| 1970. | 16.0122 | 0.5860 | 0.0064 | 0.1697 | 0.5860 | 11.8569 | 0.0560 | 1.4347 | 1.3162 | 0.0000 |

F-D MATRIX FOR JAPAN
 I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

CONSUMPTION

| YEAR | CALC. | I | II | III | IV |
|-------|---------|---------|--------|--------|---------|
| 1950. | 16,0764 | 5,1395 | 0,3714 | 2,2559 | 8,3097 |
| 1951. | 16,7383 | 5,4511 | 0,3867 | 2,3484 | 8,6520 |
| 1952. | 17,4255 | 5,7509 | 0,4025 | 2,4448 | 9,0071 |
| 1953. | 18,1389 | 6,0490 | 0,4190 | 2,5449 | 9,3759 |
| 1954. | 18,8742 | 6,3466 | 0,4352 | 2,6486 | 9,7486 |
| 1955. | 19,6317 | 6,6436 | 0,4518 | 2,7559 | 10,1255 |
| 1956. | 20,4128 | 6,9401 | 0,4688 | 2,8668 | 10,5066 |
| 1957. | 21,2172 | 7,2364 | 0,4861 | 2,9812 | 10,8912 |
| 1958. | 22,0452 | 7,5326 | 0,5036 | 3,1000 | 11,2791 |
| 1959. | 22,8971 | 7,8287 | 0,5213 | 3,2232 | 11,6704 |
| 1960. | 23,7732 | 8,1246 | 0,5392 | 3,3508 | 12,0651 |
| 1961. | 24,6748 | 8,4204 | 0,5572 | 3,4828 | 12,4632 |
| 1962. | 25,6022 | 8,7161 | 0,5754 | 3,6192 | 12,8647 |
| 1963. | 26,5557 | 9,0117 | 0,5937 | 3,7600 | 13,2696 |
| 1964. | 27,5355 | 9,3072 | 0,6122 | 3,9052 | 13,6779 |
| 1965. | 28,5418 | 9,6026 | 0,6308 | 4,0548 | 14,0896 |
| 1966. | 29,5748 | 9,8979 | 0,6495 | 4,2088 | 14,5047 |
| 1967. | 30,6347 | 10,1931 | 0,6683 | 4,3672 | 14,9232 |
| 1968. | 31,7218 | 10,4882 | 0,6872 | 4,5299 | 15,3451 |
| 1969. | 32,8363 | 10,7832 | 0,7062 | 4,6970 | 15,7704 |
| 1970. | 33,9785 | 11,0781 | 0,7253 | 4,8684 | 16,2000 |

GOVERNMENT

| YEAR | CALC. | I | II | III | IV |
|-------|--------|--------|--------|--------|--------|
| 1950. | 4,0450 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1951. | 4,1253 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1952. | 4,2052 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1953. | 4,2853 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1954. | 4,3651 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1955. | 4,4459 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1956. | 4,5266 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1957. | 4,6072 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1958. | 4,6879 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1959. | 4,7685 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1960. | 4,8491 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1961. | 4,9298 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1962. | 5,0104 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1963. | 5,0910 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1964. | 5,1716 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1965. | 5,2522 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1966. | 5,3328 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1967. | 5,4134 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1968. | 5,4940 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1969. | 5,5746 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1970. | 5,6552 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |

F-D MATRIX FOR JAPAN

I-AGRICULTURE + FOOD II-MINING + ENERGY III-MANUFACT. + CONSTRUCTION
IV-SERVICES + DWELLINGS

INVESTMENT

| YEAR | CALC. | I | II | III | IV |
|-------|---------|--------|--------|---------|--------|
| 1950. | 3,7475 | 0.0109 | 0.0000 | 3.6021 | 0.1345 |
| 1951. | 4,2279 | 0.0123 | 0.0000 | 4.0634 | 0.1518 |
| 1952. | 4,7477 | 0.0138 | 0.0000 | 4.5634 | 0.1704 |
| 1953. | 5,3096 | 0.0154 | 0.0000 | 5.1035 | 0.1906 |
| 1954. | 6,0402 | 0.0175 | 0.0000 | 5.8054 | 0.2168 |
| 1955. | 6,8621 | 0.0202 | 0.0000 | 6.6919 | 0.2499 |
| 1956. | 7,9465 | 0.0230 | 0.0000 | 7.6381 | 0.2853 |
| 1957. | 8,9927 | 0.0261 | 0.0000 | 8.6437 | 0.3228 |
| 1958. | 9,9331 | 0.0288 | 0.0000 | 9.5476 | 0.3566 |
| 1959. | 11,2722 | 0.0327 | 0.0000 | 10.8347 | 0.4047 |
| 1960. | 13,4246 | 0.0389 | 0.0000 | 12,9036 | 0.4819 |
| 1961. | 16,2917 | 0.0472 | 0.0000 | 15,6594 | 0.5849 |
| 1962. | 17,9495 | 0.0521 | 0.0000 | 17,2527 | 0.6444 |
| 1963. | 20,7209 | 0.0601 | 0.0000 | 19,9167 | 0.7439 |
| 1964. | 24,5078 | 0.0711 | 0.0000 | 23,5566 | 0.8799 |
| 1965. | 26,5073 | 0.0769 | 0.0000 | 25,4785 | 0.9516 |
| 1966. | 30,1940 | 0.0876 | 0.0000 | 29,0261 | 1.0841 |
| 1967. | 35,5054 | 0.1030 | 0.0000 | 34,1270 | 1.2746 |
| 1968. | 41,8306 | 0.1213 | 0.0000 | 40,2070 | 1.5017 |
| 1969. | 48,4819 | 0.1406 | 0.0000 | 46,6006 | 1.7405 |
| 1970. | 54,9365 | 0.1593 | 0.0000 | 52,8047 | 1.9772 |

IMPORTS

| YEAR | CALC. | I | II | III | IV |
|-------|---------|--------|--------|--------|--------|
| 1950. | 1,3576 | 0.5624 | 0.3598 | 0.4263 | 0.0001 |
| 1951. | 1,5071 | 0.6244 | 0.3994 | 0.4732 | 0.0101 |
| 1952. | 1,6684 | 0.6912 | 0.4421 | 0.5239 | 0.0112 |
| 1953. | 1,8423 | 0.7633 | 0.4882 | 0.5785 | 0.0123 |
| 1954. | 2,0719 | 0.8584 | 0.5400 | 0.6506 | 0.0139 |
| 1955. | 2,3637 | 0.9793 | 0.6264 | 0.7422 | 0.0158 |
| 1956. | 2,6728 | 1.1073 | 0.7083 | 0.8492 | 0.0179 |
| 1957. | 2,9990 | 1.2425 | 0.7947 | 0.9417 | 0.0201 |
| 1958. | 3,2868 | 1.3817 | 0.8710 | 1.0320 | 0.0220 |
| 1959. | 3,7083 | 1.5343 | 0.9814 | 1.1628 | 0.0249 |
| 1960. | 4,3813 | 1.8152 | 1.1610 | 1.3757 | 0.0274 |
| 1961. | 5,2647 | 2.1695 | 1.4004 | 1.6594 | 0.0354 |
| 1962. | 5,7802 | 2.5906 | 1.5342 | 1.8179 | 0.0388 |
| 1963. | 6,6483 | 2,7544 | 1,7618 | 2,0875 | 0,0445 |
| 1964. | 7,8247 | 3,2418 | 2,0735 | 2,4569 | 0,0524 |
| 1965. | 8,4243 | 3,4902 | 2,2325 | 2,6452 | 0,0564 |
| 1966. | 9,5540 | 3,9590 | 2,5423 | 3,0006 | 0,0640 |
| 1967. | 11,1902 | 4,6360 | 2,9654 | 3,5137 | 0,0750 |
| 1968. | 13,1337 | 5,4412 | 3,4804 | 4,1239 | 0,0880 |
| 1969. | 15,1676 | 6,2839 | 4,0194 | 4,7626 | 0,1016 |
| 1970. | 17,1289 | 7,0965 | 4,5391 | 5,3784 | 0,1140 |

F-D MATRIX FOR JAPAN
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| YEAR | CALC. | EXPORTS | | | |
|-------|---------|---------|--------|---------|--------|
| | | I | II | III | IV |
| 1950. | 0.7860 | 0.0575 | 0.0086 | 0.5848 | 0.1350 |
| 1951. | 1.1246 | 0.0823 | 0.0124 | 0.8367 | 0.1932 |
| 1952. | 1.4714 | 0.1077 | 0.0162 | 1.0947 | 0.2528 |
| 1953. | 1.8476 | 0.1352 | 0.0203 | 1.3746 | 0.3174 |
| 1954. | 2.2200 | 0.1625 | 0.0244 | 1.6517 | 0.3814 |
| 1955. | 2.7251 | 0.1895 | 0.0300 | 2.0274 | 0.4682 |
| 1956. | 3.1952 | 0.2339 | 0.0351 | 2.3772 | 0.5489 |
| 1957. | 3.6567 | 0.2706 | 0.0407 | 2.7503 | 0.6351 |
| 1958. | 4.1717 | 0.3054 | 0.0459 | 3.1037 | 0.7167 |
| 1959. | 4.8123 | 0.3523 | 0.0529 | 3.5803 | 0.8267 |
| 1960. | 5.4752 | 0.4006 | 0.0602 | 4.0720 | 0.9403 |
| 1961. | 6.1278 | 0.4486 | 0.0674 | 4.5590 | 1.0527 |
| 1962. | 6.9013 | 0.5052 | 0.0759 | 5.1345 | 1.1856 |
| 1963. | 7.7039 | 0.5632 | 0.0847 | 5.7316 | 1.3235 |
| 1964. | 8.7554 | 0.6394 | 0.0961 | 6.4990 | 1.5007 |
| 1965. | 9.7756 | 0.7154 | 0.1075 | 7.2715 | 1.6791 |
| 1966. | 10.9600 | 0.8023 | 0.1206 | 8.1542 | 1.8829 |
| 1967. | 12.0322 | 0.8808 | 0.1324 | 8.9515 | 2.0671 |
| 1968. | 13.3510 | 0.9773 | 0.1469 | 9.9330 | 2.2917 |
| 1969. | 14.7289 | 1.0782 | 0.1620 | 10.9583 | 2.5304 |
| 1970. | 16.0122 | 1.1721 | 0.1761 | 11.9130 | 2.7509 |

F-D MATRIX FOR JAPAN

I--FOOD
II--NON-FOOD

CONSUMPTION

| YEAR | CALC | I | II |
|-------|---------|---------|---------|
| 1950. | 16.0764 | 5.1305 | 10.9365 |
| 1951. | 16.7383 | 5.3511 | 11.3870 |
| 1952. | 17.4255 | 5.5709 | 11.8544 |
| 1953. | 18.1339 | 5.7900 | 12.3397 |
| 1954. | 19.2742 | 6.1518 | 13.1119 |
| 1955. | 20.4157 | 6.6546 | 14.1606 |
| 1956. | 22.3520 | 7.1364 | 15.1859 |
| 1957. | 23.7942 | 7.6069 | 16.1868 |
| 1958. | 24.8113 | 7.9320 | 16.8789 |
| 1959. | 26.6835 | 9.5146 | 18.1164 |
| 1960. | 30.0545 | 9.6096 | 20.4485 |
| 1961. | 34.6279 | 11.0704 | 23.5569 |
| 1962. | 36.2705 | 11.5955 | 24.6743 |
| 1963. | 39.8628 | 12.7440 | 27.1177 |
| 1964. | 44.3943 | 14.3684 | 30.5752 |
| 1965. | 46.3945 | 14.8322 | 31.5615 |
| 1966. | 50.4985 | 16.1440 | 34.3535 |
| 1967. | 56.7852 | 18.1541 | 38.6304 |
| 1968. | 64.0439 | 20.4744 | 43.5679 |
| 1969. | 71.1182 | 22.7363 | 48.3804 |
| 1970. | 77.2734 | 24.7041 | 52.5679 |

GOVERNMENT

| YEAR | CALC | I | II |
|-------|--------|--------|--------|
| 1950. | 4.0450 | 0.0000 | 0.0000 |
| 1951. | 4.1243 | 0.0000 | 0.0000 |
| 1952. | 4.2052 | 0.0000 | 0.0000 |
| 1953. | 4.2813 | 0.0000 | 0.0000 |
| 1954. | 4.4451 | 0.0000 | 0.0000 |
| 1955. | 4.6859 | 0.0000 | 0.0000 |
| 1956. | 4.8996 | 0.0000 | 0.0000 |
| 1957. | 5.0660 | 0.0000 | 0.0000 |
| 1958. | 5.1580 | 0.0000 | 0.0000 |
| 1959. | 5.3772 | 0.0000 | 0.0000 |
| 1960. | 5.8854 | 0.0000 | 0.0000 |
| 1961. | 6.2639 | 0.0000 | 0.0000 |
| 1962. | 6.6440 | 0.0000 | 0.0000 |
| 1963. | 7.0422 | 0.0000 | 0.0000 |
| 1964. | 7.6405 | 0.0000 | 0.0000 |
| 1965. | 7.5709 | 0.0000 | 0.0000 |
| 1966. | 7.8889 | 0.0000 | 0.0000 |
| 1967. | 8.4663 | 0.0000 | 0.0000 |
| 1968. | 9.0814 | 0.0000 | 0.0000 |
| 1969. | 9.5538 | 0.0000 | 0.0000 |
| 1970. | 9.7900 | 0.0000 | 0.0000 |

F-D MATRIX FOR JAPAN

I--FOOD
II--NON-FOOD

INVESTMENT

| YEAR | CALC | I | II |
|-------|---------|--------|---------|
| 1950. | 3.7475 | 0.0109 | 3.7366 |
| 1951. | 4.2279 | 0.0123 | 4.2155 |
| 1952. | 4.7477 | 0.0138 | 4.7338 |
| 1953. | 5.3096 | 0.0154 | 5.2941 |
| 1954. | 6.0402 | 0.0175 | 6.0226 |
| 1955. | 6.9621 | 0.0202 | 6.9418 |
| 1956. | 7.9945 | 0.0230 | 7.9713 |
| 1957. | 9.1927 | 0.0261 | 9.1664 |
| 1958. | 10.5311 | 0.0298 | 10.5012 |
| 1959. | 11.9722 | 0.0327 | 11.9394 |
| 1960. | 13.4948 | 0.0359 | 13.4585 |
| 1961. | 15.1287 | 0.0472 | 15.0814 |
| 1962. | 17.9459 | 0.0521 | 17.8937 |
| 1963. | 20.7209 | 0.0561 | 20.6648 |
| 1964. | 24.5078 | 0.0721 | 24.4357 |
| 1965. | 26.5073 | 0.0771 | 26.4302 |
| 1966. | 30.1980 | 0.0826 | 29.1154 |
| 1967. | 35.5054 | 0.0876 | 35.4178 |
| 1968. | 41.8306 | 0.1030 | 41.7276 |
| 1969. | 48.4819 | 0.1213 | 48.3605 |
| 1970. | 54.9365 | 0.1406 | 54.7959 |

IMPORTS

| YEAR | CALC | I | II |
|-------|---------|--------|---------|
| 1950. | 1.3576 | 0.5624 | 0.7951 |
| 1951. | 1.5071 | 0.6244 | 0.8827 |
| 1952. | 1.6624 | 0.6912 | 0.9712 |
| 1953. | 1.8423 | 0.7633 | 1.0790 |
| 1954. | 2.0719 | 0.8584 | 1.2135 |
| 1955. | 2.3637 | 0.9793 | 1.3844 |
| 1956. | 2.8028 | 1.1173 | 1.6854 |
| 1957. | 2.9990 | 1.2425 | 1.7565 |
| 1958. | 3.2868 | 1.3617 | 1.9251 |
| 1959. | 3.7833 | 1.5343 | 2.2490 |
| 1960. | 4.4813 | 1.8152 | 2.6660 |
| 1961. | 5.2847 | 2.1895 | 3.0952 |
| 1962. | 5.7895 | 2.5966 | 3.1928 |
| 1963. | 6.6443 | 2.7544 | 3.8898 |
| 1964. | 7.6247 | 3.2418 | 4.3829 |
| 1965. | 8.4243 | 3.4902 | 4.9340 |
| 1966. | 9.6540 | 3.9590 | 5.6950 |
| 1967. | 11.1902 | 4.6340 | 6.5562 |
| 1968. | 13.1337 | 5.4412 | 7.6925 |
| 1969. | 15.1676 | 6.2839 | 8.8837 |
| 1970. | 17.1289 | 7.0965 | 10.0322 |

F-D MATRIX FOR JAPAN

I--FOOD
II--NON-FOOD

EXPORTS

| YEAR | CALC | I | II |
|-------|---------|--------|---------|
| 1950. | 0.7860 | 0.0575 | 0.7285 |
| 1951. | 1.1246 | 0.0823 | 1.0423 |
| 1952. | 1.4714 | 0.1077 | 1.3637 |
| 1953. | 1.8476 | 0.1352 | 1.7123 |
| 1954. | 2.2200 | 0.1625 | 2.0575 |
| 1955. | 2.7251 | 0.1995 | 2.5256 |
| 1956. | 3.1952 | 0.2339 | 2.9612 |
| 1957. | 3.6947 | 0.2706 | 3.4240 |
| 1958. | 4.1717 | 0.3054 | 3.8662 |
| 1959. | 4.8123 | 0.3523 | 4.4599 |
| 1960. | 5.4732 | 0.4006 | 5.0724 |
| 1961. | 6.1378 | 0.4486 | 5.6791 |
| 1962. | 6.9013 | 0.5052 | 6.3960 |
| 1963. | 7.7039 | 0.5639 | 7.1398 |
| 1964. | 8.7354 | 0.6394 | 8.0957 |
| 1965. | 9.7736 | 0.7154 | 9.0580 |
| 1966. | 10.9600 | 0.8023 | 10.1575 |
| 1967. | 12.0322 | 0.8808 | 11.1511 |
| 1968. | 13.3510 | 0.9773 | 12.3734 |
| 1969. | 14.7289 | 1.0782 | 13.6506 |
| 1970. | 16.0122 | 1.1721 | 14.8399 |

F-D MATRIX FOR JAPAN

I--FOOD
 II--NON-FOOD

EXPORTS

| YEAR | CALC | I | | II | |
|-------|---------|--------|---------|----|----|
| | | I | II | I | II |
| 1950. | 0.7860 | 0.0575 | 0.7285 | | |
| 1951. | 1.1246 | 0.0823 | 1.0423 | | |
| 1952. | 1.4714 | 0.1077 | 1.3637 | | |
| 1953. | 1.8476 | 0.1352 | 1.7123 | | |
| 1954. | 2.2200 | 0.1625 | 2.0575 | | |
| 1955. | 2.7251 | 0.1935 | 2.5256 | | |
| 1956. | 3.1952 | 0.2330 | 2.9612 | | |
| 1957. | 3.6963 | 0.2706 | 3.4260 | | |
| 1958. | 4.1717 | 0.3054 | 3.8662 | | |
| 1959. | 4.8123 | 0.3523 | 4.4599 | | |
| 1960. | 5.4732 | 0.4006 | 5.0724 | | |
| 1961. | 6.1278 | 0.4466 | 5.6791 | | |
| 1962. | 6.9013 | 0.5052 | 6.3960 | | |
| 1963. | 7.7039 | 0.5639 | 7.1398 | | |
| 1964. | 8.7354 | 0.6394 | 8.0957 | | |
| 1965. | 9.7736 | 0.7194 | 9.0540 | | |
| 1966. | 10.9600 | 0.8023 | 10.1575 | | |
| 1967. | 12.0322 | 0.8808 | 11.1511 | | |
| 1968. | 13.3510 | 0.9773 | 12.3734 | | |
| 1969. | 14.7289 | 1.0762 | 13.6506 | | |
| 1970. | 16.0122 | 1.1721 | 14.8398 | | |

F-I MATRIX FOR CENTRAL PLANNED

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

CONSUMPTION

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|----------|--------|--------|----------|----------|--------|--------|--------|--------|
| 1950. | 74,9893 | 0.0000 | 0.8699 | 32.9937 | 29.2734 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 67.4404 | 0.0000 | 0.9618 | 36.5239 | 32.4053 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 93.6494 | 0.0000 | 1.0301 | 39.1172 | 34.7065 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 99.6105 | 0.0000 | 1.0979 | 41.6909 | 36.9897 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 110.2441 | 0.0000 | 1.2127 | 46.0488 | 40.8564 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 122.7510 | 0.0000 | 1.3503 | 51.2729 | 45.4917 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 130.8601 | 0.0000 | 1.4395 | 54.6641 | 48.5000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 143.1973 | 0.0000 | 1.5752 | 59.6135 | 53.0684 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 155.4277 | 0.0000 | 1.7097 | 64.9219 | 57.6016 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 169.6836 | 0.0000 | 1.8665 | 70.4770 | 62.8848 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 181.7090 | 0.0000 | 1.9988 | 75.8904 | 67.3408 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 193.6426 | 0.0000 | 2.1301 | 80.8843 | 71.7637 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 201.2813 | 0.0000 | 2.2141 | 84.0752 | 77.4014 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 208.8535 | 0.0000 | 2.2974 | 87.2385 | 81.7831 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 226.7656 | 0.0000 | 2.4944 | 94.7197 | 84.0391 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 236.3125 | 0.0000 | 2.6214 | 99.5430 | 88.3184 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 258.0234 | 0.0000 | 2.8383 | 107.7754 | 95.6230 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 277.5664 | 0.0000 | 3.0532 | 115.9395 | 102.8652 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 294.9023 | 0.0000 | 3.2439 | 123.1797 | 109.2910 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 308.0117 | 0.0000 | 3.3881 | 128.6583 | 114.1484 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 333.1953 | 0.0000 | 3.6651 | 139.1758 | 123.4824 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

GOVERNMENT

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|---------|--------|--------|--------|--------|
| 1950. | 4,3807 | 0.0000 | 1.7599 | 1.5923 | 4.3579 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 9.4039 | 0.0000 | 1.9748 | 1.7867 | 4.9899 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 10.2083 | 0.0000 | 2.1437 | 1.9395 | 5.3082 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 11.0262 | 0.0000 | 2.3155 | 2.0950 | 5.7335 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 12.3420 | 0.0000 | 2.5918 | 2.3440 | 6.4177 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 13.9250 | 0.0000 | 2.9242 | 2.6458 | 7.2410 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 15.0426 | 0.0000 | 3.1589 | 2.8551 | 7.8220 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 16.6765 | 0.0000 | 3.5020 | 3.1665 | 8.6716 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 20.2803 | 0.0000 | 3.8509 | 3.4852 | 9.5354 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 21.9490 | 0.0000 | 4.1988 | 3.8152 | 10.5457 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 23.7458 | 0.0000 | 4.6198 | 4.1766 | 11.4392 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 24.9990 | 0.0000 | 4.9866 | 4.5117 | 12.3477 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 26.9990 | 0.0000 | 5.2498 | 4.7498 | 12.9993 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 28.2705 | 0.0000 | 5.5167 | 4.9914 | 13.6604 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 28.8857 | 0.0000 | 5.7809 | 5.2483 | 15.0203 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 30.7490 | 0.0000 | 6.0660 | 5.4846 | 15.9846 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 33.7007 | 0.0000 | 6.4553 | 6.4031 | 17.5239 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 36.7075 | 0.0000 | 7.0770 | 6.9744 | 19.0674 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 39.4863 | 0.0000 | 8.2920 | 7.5023 | 20.5327 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 41.7529 | 0.0000 | 8.7681 | 7.9330 | 21.7109 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 45.7246 | 0.0000 | 9.6021 | 8.6876 | 23.7764 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

F-D MATRIX FOR CENTRAL PLANNED

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

INVESTMENT

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 1950. | 15,4599 | 0.4758 | 0.0000 | 0.3806 | 0.9199 | 5.5256 | 8.5579 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 17,7815 | 0.5334 | 0.0000 | 0.4268 | 1.0313 | 6.1951 | 9.5947 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 19,2866 | 0.5746 | 0.0000 | 0.4629 | 1.1186 | 6.7194 | 10.4070 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 20,8157 | 0.6245 | 0.0000 | 0.4996 | 1.2073 | 7.2521 | 11.2319 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 23,2815 | 0.6894 | 0.0000 | 0.5588 | 1.3503 | 8.1112 | 12.5625 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 26,2478 | 0.7850 | 0.0000 | 0.6299 | 1.5224 | 9.1847 | 14.1631 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 28,3328 | 0.8500 | 0.0000 | 0.6800 | 1.6433 | 9.8711 | 15.2881 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 31,3667 | 0.9416 | 0.0000 | 0.7533 | 1.8284 | 10.9351 | 16.9360 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 34,4888 | 1.0347 | 0.0000 | 0.8277 | 2.0003 | 12.0159 | 18.6099 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 38,1147 | 1.1434 | 0.0000 | 0.9147 | 2.1186 | 13.2791 | 20.5664 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 41,3319 | 1.2395 | 0.0000 | 0.9916 | 2.2563 | 14.3943 | 22.8935 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 44,5659 | 1.3370 | 0.0000 | 1.0696 | 2.5898 | 15.5266 | 24.8474 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 46,8857 | 1.4066 | 0.0000 | 1.1252 | 2.7194 | 16.3350 | 25.2993 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 49,2378 | 1.4771 | 0.0000 | 1.1817 | 2.8598 | 17.1543 | 26.5684 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 54,1040 | 1.6231 | 0.0000 | 1.2985 | 3.1380 | 18.8496 | 29.1938 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 57,5405 | 1.7262 | 0.0000 | 1.3810 | 3.3373 | 20.0471 | 31.0483 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 63,0425 | 1.8913 | 0.0000 | 1.5130 | 3.6569 | 21.9639 | 34.0171 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 68,6240 | 2.0587 | 0.0000 | 1.6469 | 3.9602 | 23.9082 | 37.0283 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 73,7734 | 2.2132 | 0.0000 | 1.7705 | 4.2788 | 25.7826 | 39.8076 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 77,9619 | 2.3388 | 0.0000 | 1.8711 | 4.5218 | 27.1616 | 42.0674 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 85,3271 | 2.5598 | 0.0000 | 2.0478 | 4.9490 | 29.7275 | 46.0420 | 0.0000 | 0.0000 | 0.0000 |

IMPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
| 1950. | 4,0526 | 0.5791 | 0.1427 | 2.6119 | 0.6192 | 0.9997 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 4,5206 | 0.6460 | 0.1591 | 2.9135 | 0.6908 | 0.1132 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 4,8776 | 0.6722 | 0.1717 | 3.1443 | 0.7435 | 0.1200 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 5,2336 | 0.7487 | 0.1844 | 3.3769 | 0.8066 | 0.1289 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 5,8318 | 0.8334 | 0.2053 | 3.7595 | 0.8911 | 0.1435 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 6,5432 | 0.9350 | 0.2303 | 4.2171 | 0.9994 | 0.1610 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 7,0294 | 1.0045 | 0.2474 | 4.5305 | 1.1071 | 0.1729 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 7,7566 | 1.1076 | 0.2728 | 4.9952 | 1.1843 | 0.1907 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 8,4771 | 1.2114 | 0.2984 | 5.4634 | 1.2943 | 0.2045 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 9,3276 | 1.3326 | 0.3283 | 6.0103 | 1.4249 | 0.2294 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 10,0631 | 1.4348 | 0.3542 | 6.4856 | 1.5375 | 0.2476 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 10,8002 | 1.5442 | 0.3804 | 6.9645 | 1.6512 | 0.2658 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 11,3186 | 1.6174 | 0.3984 | 7.2948 | 1.7295 | 0.2784 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 11,8346 | 1.6912 | 0.4166 | 7.6273 | 1.8083 | 0.2911 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 12,9481 | 1.8503 | 0.4554 | 8.3450 | 1.9795 | 0.3185 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 13,7119 | 1.9594 | 0.4827 | 8.8373 | 2.0952 | 0.3373 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 14,6596 | 2.1378 | 0.5266 | 9.6416 | 2.2653 | 0.3680 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 16,2146 | 2.1378 | 0.5266 | 9.6416 | 2.2653 | 0.3680 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 17,3618 | 2.4810 | 0.6111 | 11.1897 | 2.4778 | 0.3989 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 18,2727 | 2.6111 | 0.6432 | 11.7766 | 2.7921 | 0.4271 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 19,9167 | 2.8464 | 0.7011 | 12.8374 | 3.0435 | 0.4495 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

F-D MATRIX FOR CENTRAL PLANNED

1-AGRICULTURE
2-MINING
3-ENERGY
4-FOOD
5-MANUFACTURING
6-CONSTRUCTION
7-SERVICES I
8-SERVICES II
9-DWELLINGS

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| 1950. | 4.7530 | 0.5860 | 0.1949 | 0.7472 | 0.7476 | 2.4273 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 5.4329 | 0.8613 | 0.2227 | 0.8540 | 0.9002 | 2.7745 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 6.0302 | 0.7562 | 0.2472 | 0.9479 | 0.9992 | 3.0796 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 6.6671 | 0.8361 | 0.2733 | 1.0481 | 1.1047 | 3.4048 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 7.2327 | 0.9070 | 0.2965 | 1.1370 | 1.1985 | 3.6937 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 8.1613 | 1.0234 | 0.3346 | 1.2829 | 1.3523 | 4.1678 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 8.9144 | 1.1179 | 0.3655 | 1.4013 | 1.4771 | 4.5525 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 9.7070 | 1.2173 | 0.3980 | 1.5259 | 1.6085 | 4.9573 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 10.3940 | 1.3034 | 0.4261 | 1.6339 | 1.7223 | 5.3081 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 11.4512 | 1.4360 | 0.4695 | 1.8001 | 1.8975 | 5.8480 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 12.5052 | 1.5681 | 0.5127 | 1.9658 | 2.0721 | 6.3864 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 13.5026 | 1.6932 | 0.5536 | 2.1226 | 2.2374 | 6.8956 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 14.7207 | 1.8460 | 0.6035 | 2.3141 | 2.4392 | 7.5177 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 15.9576 | 2.0011 | 0.6583 | 2.5045 | 2.6442 | 8.1494 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 17.6147 | 2.2094 | 0.7224 | 2.7696 | 2.9194 | 8.9976 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 19.2395 | 2.4126 | 0.7888 | 3.0244 | 3.1880 | 9.8254 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 21.1001 | 2.6459 | 0.8651 | 3.3169 | 3.4963 | 10.7756 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 22.6956 | 2.8460 | 0.9305 | 3.5677 | 3.7606 | 11.5903 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 24.7122 | 3.0969 | 1.0142 | 3.8847 | 4.0648 | 12.6204 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 26.7900 | 3.3594 | 1.0984 | 4.2114 | 4.4391 | 13.6814 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 28.6555 | 3.5934 | 1.1749 | 4.5046 | 4.7442 | 14.6340 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

F-D MATRIX FOR CENTRAL PLANNED CONSUMPTION

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

| YEAR | CONSUMPTION | I | II | III | IV |
|-------|-------------|----------|--------|----------|--------|
| | CALC. | | | | |
| 1950. | 74.9893 | 48.5467 | 0.4689 | 29.2734 | 0.0000 |
| 1951. | 87.4404 | 54.0732 | 0.9618 | 32.4053 | 0.0000 |
| 1952. | 93.6494 | 57.9126 | 1.0301 | 34.7065 | 0.0000 |
| 1953. | 99.8105 | 61.7227 | 1.0979 | 36.9897 | 0.0000 |
| 1954. | 110.2441 | 68.1748 | 1.2177 | 40.8564 | 0.0000 |
| 1955. | 122.7510 | 75.9082 | 1.3503 | 45.4917 | 0.0000 |
| 1956. | 130.8691 | 80.9287 | 1.4395 | 48.5000 | 0.0000 |
| 1957. | 143.1973 | 88.5527 | 1.5752 | 53.0684 | 0.0000 |
| 1958. | 155.4277 | 96.1162 | 1.7097 | 57.6016 | 0.0000 |
| 1959. | 169.6936 | 104.9316 | 1.8665 | 62.8448 | 0.0000 |
| 1960. | 181.7090 | 112.3682 | 1.9988 | 67.3409 | 0.0000 |
| 1961. | 193.6426 | 119.7480 | 2.1301 | 71.7637 | 0.0000 |
| 1962. | 201.2813 | 124.4717 | 2.2141 | 74.5947 | 0.0000 |
| 1963. | 208.8535 | 129.1543 | 2.2974 | 77.4014 | 0.0000 |
| 1964. | 226.7656 | 140.2305 | 2.4944 | 84.0391 | 0.0000 |
| 1965. | 238.3125 | 147.3711 | 2.6214 | 88.3184 | 0.0000 |
| 1966. | 254.0234 | 159.5605 | 2.8383 | 95.6230 | 0.0000 |
| 1967. | 277.5664 | 171.6465 | 3.0532 | 102.8652 | 0.0000 |
| 1968. | 294.9023 | 182.3652 | 3.2439 | 109.2910 | 0.0000 |
| 1969. | 304.0117 | 190.4727 | 3.3881 | 114.1484 | 0.0000 |
| 1970. | 333.1953 | 206.0469 | 3.6651 | 123.4824 | 0.0000 |

GOVERNMENT

| YEAR | CONSUMPTION | I | II | III | IV |
|-------|-------------|---------|--------|---------|--------|
| | CALC. | | | | |
| 1950. | 8.3407 | 2.2628 | 1.7599 | 4.3579 | 0.0000 |
| 1951. | 9.4039 | 2.5390 | 1.9748 | 4.8899 | 0.0000 |
| 1952. | 10.2083 | 2.7562 | 2.1437 | 5.3082 | 0.0000 |
| 1953. | 11.0262 | 2.9771 | 2.3155 | 5.7335 | 0.0000 |
| 1954. | 12.3420 | 3.3323 | 2.5918 | 6.4177 | 0.0000 |
| 1955. | 13.9250 | 3.7597 | 2.9242 | 7.2410 | 0.0000 |
| 1956. | 15.0426 | 4.0615 | 3.1589 | 7.8220 | 0.0000 |
| 1957. | 16.6765 | 4.5026 | 3.5020 | 8.6716 | 0.0000 |
| 1958. | 18.3379 | 4.9512 | 3.8509 | 9.5354 | 0.0000 |
| 1959. | 20.2083 | 5.4756 | 4.2588 | 10.5847 | 0.0000 |
| 1960. | 21.9900 | 5.9397 | 4.6198 | 11.4392 | 0.0000 |
| 1961. | 23.7958 | 6.4114 | 4.9866 | 12.3877 | 0.0000 |
| 1962. | 24.9900 | 6.7497 | 5.2498 | 12.9993 | 0.0000 |
| 1963. | 26.2705 | 7.0930 | 5.5167 | 13.6004 | 0.0000 |
| 1964. | 28.8857 | 7.7991 | 6.0660 | 15.0203 | 0.0000 |
| 1965. | 30.7400 | 8.2997 | 6.4553 | 15.9846 | 0.0000 |
| 1966. | 33.7007 | 9.0991 | 7.0770 | 17.5239 | 0.0000 |
| 1967. | 36.7075 | 9.9109 | 7.7085 | 19.0874 | 0.0000 |
| 1968. | 39.4863 | 10.6611 | 8.2920 | 20.5327 | 0.0000 |
| 1969. | 41.7529 | 11.2732 | 8.7641 | 21.7109 | 0.0000 |
| 1970. | 45.7246 | 12.3456 | 9.6021 | 23.7764 | 0.0000 |

F-D MATRIX FOR CENTRAL PLANNED

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

INVESTMENT

| YEAR | CALC. | I | II | III | IV |
|-------|---------|--------|--------|---------|--------|
| 1950. | 15,0599 | 1,3957 | 0,3806 | 14,0834 | 0,0000 |
| 1951. | 17,7815 | 1,5648 | 0,4268 | 15,7898 | 0,0000 |
| 1952. | 19,2866 | 1,6972 | 0,4496 | 17,1262 | 0,0000 |
| 1953. | 20,8157 | 1,8316 | 0,4588 | 18,4839 | 0,0000 |
| 1954. | 23,2815 | 2,0488 | 0,5588 | 20,6756 | 0,0000 |
| 1955. | 26,2478 | 2,3098 | 0,6299 | 23,3076 | 0,0000 |
| 1956. | 29,3328 | 2,4933 | 0,6800 | 25,1592 | 0,0000 |
| 1957. | 31,3667 | 2,7620 | 0,7533 | 27,8711 | 0,0000 |
| 1958. | 34,4889 | 3,0350 | 0,8277 | 30,6257 | 0,0000 |
| 1959. | 38,1147 | 3,3541 | 0,9147 | 33,8452 | 0,0000 |
| 1960. | 41,3159 | 3,6358 | 0,9916 | 36,6875 | 0,0000 |
| 1961. | 44,5659 | 3,9218 | 1,0696 | 39,5737 | 0,0000 |
| 1962. | 46,8857 | 4,1259 | 1,1252 | 41,6343 | 0,0000 |
| 1963. | 49,2378 | 4,3329 | 1,1817 | 43,7227 | 0,0000 |
| 1964. | 54,1040 | 4,7611 | 1,2985 | 48,0435 | 0,0000 |
| 1965. | 57,5405 | 5,0635 | 1,3810 | 51,0952 | 0,0000 |
| 1966. | 63,0425 | 5,5477 | 1,5130 | 55,9810 | 0,0000 |
| 1967. | 68,6240 | 6,0389 | 1,6489 | 60,9365 | 0,0000 |
| 1968. | 73,7734 | 6,4920 | 1,7705 | 65,5098 | 0,0000 |
| 1969. | 77,9619 | 6,8606 | 1,8711 | 69,2285 | 0,0000 |
| 1970. | 85,3271 | 7,5887 | 2,0478 | 75,7695 | 0,0000 |

IMPORTS

| YEAR | CALC. | I | II | III | IV |
|-------|---------|--------|---------|--------|--------|
| 1950. | 4,0526 | 1,1983 | 2,7545 | 0,0997 | 0,0000 |
| 1951. | 4,5206 | 1,3367 | 3,0726 | 0,1112 | 0,0000 |
| 1952. | 4,8788 | 1,4426 | 3,3161 | 0,1200 | 0,0000 |
| 1953. | 5,2396 | 1,5493 | 3,5613 | 0,1289 | 0,0000 |
| 1954. | 5,8119 | 1,7244 | 3,9638 | 0,1435 | 0,0000 |
| 1955. | 6,5432 | 1,9348 | 4,4474 | 0,1610 | 0,0000 |
| 1956. | 7,0294 | 2,0786 | 4,7778 | 0,1729 | 0,0000 |
| 1957. | 7,7506 | 2,2918 | 5,2680 | 0,1907 | 0,0000 |
| 1958. | 8,4771 | 2,5067 | 5,7617 | 0,2085 | 0,0000 |
| 1959. | 9,3256 | 2,7575 | 6,3345 | 0,2294 | 0,0000 |
| 1960. | 10,0631 | 2,9756 | 6,8398 | 0,2476 | 0,0000 |
| 1961. | 10,8062 | 3,1953 | 7,3848 | 0,2658 | 0,0000 |
| 1962. | 11,3186 | 3,3469 | 7,6932 | 0,2784 | 0,0000 |
| 1963. | 11,8346 | 3,4995 | 8,0438 | 0,2911 | 0,0000 |
| 1964. | 12,9481 | 3,8287 | 8,8007 | 0,3185 | 0,0000 |
| 1965. | 13,7119 | 4,0546 | 9,3109 | 0,3373 | 0,0000 |
| 1966. | 14,9598 | 4,4236 | 10,1681 | 0,3640 | 0,0000 |
| 1967. | 16,2168 | 4,7952 | 11,0222 | 0,3949 | 0,0000 |
| 1968. | 17,3618 | 5,1338 | 11,8008 | 0,4271 | 0,0000 |
| 1969. | 18,2727 | 5,4032 | 12,4198 | 0,4495 | 0,0000 |
| 1970. | 19,9187 | 5,8899 | 13,5385 | 0,4900 | 0,0000 |

F-D MATRIX FOR CENTRAL PLANNED
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

EXPORTS

| YEAR | CALC. | I | II | III | IV |
|-------|---------|--------|--------|---------|--------|
| 1950. | 4,7530 | 1,3576 | 0,9420 | 2,4273 | 0,0000 |
| 1951. | 5,4329 | 1,5815 | 1,0768 | 2,7745 | 0,0000 |
| 1952. | 6,0302 | 1,7954 | 1,1952 | 3,0796 | 0,0000 |
| 1953. | 6,6671 | 1,9408 | 1,3214 | 3,4040 | 0,0000 |
| 1954. | 7,2327 | 2,1054 | 1,4335 | 3,6937 | 0,0000 |
| 1955. | 8,1613 | 2,3757 | 1,6175 | 4,1678 | 0,0000 |
| 1956. | 8,9144 | 2,5850 | 1,7666 | 4,5225 | 0,0000 |
| 1957. | 9,7070 | 2,8257 | 1,9239 | 4,9573 | 0,0000 |
| 1958. | 10,3940 | 3,0257 | 2,0601 | 5,3081 | 0,0000 |
| 1959. | 11,4512 | 3,3334 | 2,2696 | 5,8480 | 0,0000 |
| 1960. | 12,5052 | 3,6403 | 2,4785 | 6,3864 | 0,0000 |
| 1961. | 13,5026 | 3,9306 | 2,6762 | 6,8956 | 0,0000 |
| 1962. | 14,7202 | 4,2652 | 2,9176 | 7,5177 | 0,0000 |
| 1963. | 15,9576 | 4,6453 | 3,1628 | 8,1494 | 0,0000 |
| 1964. | 17,6187 | 5,1287 | 3,4919 | 8,9976 | 0,0000 |
| 1965. | 19,2395 | 5,6006 | 3,8132 | 9,8254 | 0,0000 |
| 1966. | 21,1001 | 6,1422 | 4,1819 | 10,7756 | 0,0000 |
| 1967. | 22,6956 | 6,6066 | 4,4982 | 11,5903 | 0,0000 |
| 1968. | 24,7122 | 7,1837 | 4,8979 | 12,6204 | 0,0000 |
| 1969. | 26,7900 | 7,7985 | 5,3047 | 13,8814 | 0,0000 |
| 1970. | 28,6555 | 8,3416 | 5,6795 | 14,6340 | 0,0000 |

F-D MATRIX FOR CENTRAL PLANNED

I--FOOD
II--NON-FOOD

CONSUMPTION

| YEAR | CONSUMPTION | |
|-------|-------------|----------|
| | I | II |
| 1950. | 78,9893 | 48,8467 |
| 1951. | 87,4404 | 54,0732 |
| 1952. | 93,6494 | 57,9126 |
| 1953. | 99,8105 | 61,7227 |
| 1954. | 110,2441 | 68,1748 |
| 1955. | 122,7510 | 75,9082 |
| 1956. | 130,8691 | 80,9287 |
| 1957. | 143,1973 | 88,5527 |
| 1958. | 155,4277 | 96,1162 |
| 1959. | 169,6876 | 104,9316 |
| 1960. | 181,7090 | 112,3682 |
| 1961. | 193,6476 | 119,7480 |
| 1962. | 201,2813 | 124,4717 |
| 1963. | 208,8535 | 129,1543 |
| 1964. | 226,7656 | 140,2505 |
| 1965. | 238,3125 | 147,3711 |
| 1966. | 258,0234 | 159,5605 |
| 1967. | 277,5664 | 171,6465 |
| 1968. | 294,9023 | 182,3652 |
| 1969. | 308,0117 | 190,4727 |
| 1970. | 333,1953 | 206,0469 |

GOVERNMENT

| YEAR | GOVERNMENT | |
|-------|------------|---------|
| | I | II |
| 1950. | 8,3407 | 2,2628 |
| 1951. | 9,4019 | 2,5390 |
| 1952. | 10,2083 | 2,7562 |
| 1953. | 11,0262 | 2,9771 |
| 1954. | 12,3820 | 3,3323 |
| 1955. | 13,9250 | 3,7597 |
| 1956. | 15,0426 | 4,0615 |
| 1957. | 16,6765 | 4,5026 |
| 1958. | 18,3379 | 4,9512 |
| 1959. | 20,2803 | 5,4756 |
| 1960. | 21,9900 | 5,9397 |
| 1961. | 23,7458 | 6,4114 |
| 1962. | 24,9990 | 6,7497 |
| 1963. | 26,2705 | 7,0930 |
| 1964. | 28,8657 | 7,7991 |
| 1965. | 30,7400 | 8,2997 |
| 1966. | 33,7007 | 9,0991 |
| 1967. | 36,7075 | 9,9109 |
| 1968. | 39,4863 | 10,6611 |
| 1969. | 41,7529 | 11,2732 |
| 1970. | 45,7246 | 12,3456 |

F-D MATRIX FOR CENTRAL PLANNED

I--FOOD
II--NON-FOOD

INVESTMENT

| YEAR | CALC. | I | | II | |
|-------|---------|--------|---------|----|----|
| | | I | II | I | II |
| 1950. | 15,8509 | 1,3957 | 14,4640 | | |
| 1951. | 17,7615 | 1,5648 | 16,2163 | | |
| 1952. | 19,2866 | 1,6972 | 17,5889 | | |
| 1953. | 20,6157 | 1,8318 | 18,9834 | | |
| 1954. | 23,2815 | 2,0448 | 21,2322 | | |
| 1955. | 26,2478 | 2,3048 | 23,9375 | | |
| 1956. | 28,3328 | 2,4933 | 25,8391 | | |
| 1957. | 31,3867 | 2,7620 | 28,6243 | | |
| 1958. | 34,4888 | 3,0350 | 31,4534 | | |
| 1959. | 36,1147 | 3,3541 | 34,7598 | | |
| 1960. | 41,3159 | 3,6358 | 37,6787 | | |
| 1961. | 44,5659 | 3,9218 | 40,6431 | | |
| 1962. | 46,8857 | 4,1259 | 42,7593 | | |
| 1963. | 49,2378 | 4,3329 | 44,9043 | | |
| 1964. | 54,1040 | 4,7611 | 49,3418 | | |
| 1965. | 57,5405 | 5,0635 | 52,4761 | | |
| 1966. | 63,0425 | 5,5477 | 57,4937 | | |
| 1967. | 68,6240 | 6,0389 | 62,5830 | | |
| 1968. | 73,7734 | 6,4920 | 67,2403 | | |
| 1969. | 77,9619 | 6,8606 | 71,0486 | | |
| 1970. | 85,3271 | 7,5087 | 77,8164 | | |

IMPORTS

| YEAR | CALC. | I | | II | |
|-------|---------|--------|---------|----|----|
| | | I | II | I | II |
| 1950. | 4,0526 | 1,1963 | 2,8542 | | |
| 1951. | 4,5266 | 1,3367 | 3,1838 | | |
| 1952. | 4,8788 | 1,4826 | 3,3911 | | |
| 1953. | 5,2396 | 1,5493 | 3,6902 | | |
| 1954. | 5,8318 | 1,7244 | 4,1072 | | |
| 1955. | 6,5412 | 1,9348 | 4,6083 | | |
| 1956. | 7,0294 | 2,0786 | 4,9507 | | |
| 1957. | 7,7506 | 2,2918 | 5,4586 | | |
| 1958. | 8,4771 | 2,5667 | 5,9702 | | |
| 1959. | 9,3226 | 2,7575 | 6,5679 | | |
| 1960. | 10,0631 | 2,9756 | 7,0873 | | |
| 1961. | 10,8062 | 3,1953 | 7,6147 | | |
| 1962. | 11,5126 | 3,3669 | 7,9716 | | |
| 1963. | 11,8346 | 3,4595 | 8,3348 | | |
| 1964. | 12,9441 | 3,4287 | 9,1191 | | |
| 1965. | 13,7119 | 4,0546 | 9,6571 | | |
| 1966. | 14,9598 | 4,4236 | 10,5360 | | |
| 1967. | 16,2166 | 4,7952 | 11,4211 | | |
| 1968. | 17,3618 | 5,1338 | 12,2278 | | |
| 1969. | 18,2727 | 5,4032 | 12,8693 | | |
| 1970. | 19,9187 | 5,8899 | 14,0284 | | |

F-D MATRIX FOR CENTRAL PLANNED
 I--FOOD
 II--NON-FOOD

| YEAR | CALC | EXPORTS | |
|-------|---------|---------|---------|
| | | I | II |
| 1950. | 4,7530 | 1,3836 | 3,3693 |
| 1951. | 5,4329 | 1,5615 | 3,8713 |
| 1952. | 6,0302 | 1,7554 | 4,2747 |
| 1953. | 6,6671 | 1,9403 | 4,7263 |
| 1954. | 7,2327 | 2,1054 | 5,1272 |
| 1955. | 8,1163 | 2,3757 | 5,7403 |
| 1956. | 8,9144 | 2,5950 | 6,3193 |
| 1957. | 9,7070 | 2,8257 | 6,8812 |
| 1958. | 10,3940 | 3,0257 | 7,3682 |
| 1959. | 11,4512 | 3,3334 | 8,1176 |
| 1960. | 12,5052 | 3,6403 | 8,8649 |
| 1961. | 13,5026 | 3,9306 | 9,5718 |
| 1962. | 14,7207 | 4,2052 | 10,4353 |
| 1963. | 15,9576 | 4,6453 | 11,3121 |
| 1964. | 17,6187 | 5,1287 | 12,4905 |
| 1965. | 19,2395 | 5,6006 | 13,6385 |
| 1966. | 21,1001 | 6,1422 | 14,9575 |
| 1967. | 22,6956 | 6,6066 | 16,0484 |
| 1968. | 24,7122 | 7,1937 | 17,5181 |
| 1969. | 26,7800 | 7,7985 | 18,9910 |
| 1970. | 28,6585 | 8,3416 | 20,3135 |

F-D MATRIX FOR LATIN AMERICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

CONSUMPTION

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|---------|--------|--------|---------|---------|--------|---------|---------|--------|
| 1950. | 30.8291 | 5.3642 | 0.1572 | 0.2929 | 5.5554 | 6.7084 | 0.7461 | 7.9230 | 4.0818 | 0.0000 |
| 1951. | 32.5786 | 5.6686 | 0.1661 | 0.3095 | 5.8706 | 7.0890 | 0.7084 | 8.3726 | 4.3114 | 0.0000 |
| 1952. | 33.7334 | 5.8695 | 0.1720 | 0.3205 | 6.0747 | 7.3403 | 0.8163 | 8.6694 | 4.4663 | 0.0000 |
| 1953. | 34.8457 | 6.0701 | 0.1779 | 0.3314 | 6.2844 | 7.5911 | 0.8442 | 8.9656 | 4.6188 | 0.0000 |
| 1954. | 37.8086 | 6.5746 | 0.1928 | 0.3592 | 6.8131 | 8.2271 | 0.9150 | 9.7168 | 5.0059 | 0.0000 |
| 1955. | 40.1157 | 6.9835 | 0.2047 | 0.3813 | 7.2324 | 8.7335 | 0.9713 | 10.3147 | 5.3140 | 0.0000 |
| 1956. | 41.8691 | 7.2852 | 0.2135 | 0.3978 | 7.5449 | 9.1107 | 1.0132 | 10.7603 | 5.5435 | 0.0000 |
| 1957. | 44.1860 | 7.6886 | 0.2254 | 0.4198 | 7.9626 | 9.6152 | 1.0693 | 11.3562 | 5.8505 | 0.0000 |
| 1958. | 47.0918 | 8.1938 | 0.2402 | 0.4474 | 8.4860 | 10.2471 | 1.1396 | 12.1025 | 6.2349 | 0.0000 |
| 1959. | 48.2256 | 8.3912 | 0.2459 | 0.4581 | 8.6902 | 10.4938 | 1.1671 | 12.3938 | 6.3890 | 0.0000 |
| 1960. | 51.1206 | 8.8949 | 0.2607 | 0.4856 | 9.2119 | 11.3238 | 1.2371 | 13.1379 | 6.7683 | 0.0000 |
| 1961. | 54.5972 | 9.4909 | 0.2784 | 0.5187 | 9.8384 | 11.8802 | 1.3212 | 14.0313 | 7.2246 | 0.0000 |
| 1962. | 56.8940 | 9.8995 | 0.2902 | 0.5405 | 10.2523 | 12.3801 | 1.3768 | 14.6216 | 7.5327 | 0.0000 |
| 1963. | 58.6011 | 10.1965 | 0.2989 | 0.5567 | 10.5599 | 12.7515 | 1.4181 | 15.0603 | 7.7548 | 0.0000 |
| 1964. | 63.2319 | 11.0023 | 0.3225 | 0.6007 | 11.3944 | 13.7592 | 1.5402 | 16.2505 | 8.3718 | 0.0000 |
| 1965. | 66.6846 | 11.6030 | 0.3401 | 0.6335 | 12.0164 | 14.5105 | 1.6137 | 17.1377 | 8.8289 | 0.0000 |
| 1966. | 69.5469 | 12.1011 | 0.3547 | 0.6607 | 12.5322 | 15.1333 | 1.6830 | 17.6735 | 9.2040 | 0.0000 |
| 1967. | 72.4033 | 12.5941 | 0.3693 | 0.6876 | 13.0471 | 15.7349 | 1.7521 | 18.6074 | 9.5862 | 0.0000 |
| 1968. | 77.0039 | 13.3987 | 0.3927 | 0.7315 | 13.8762 | 16.7852 | 1.8635 | 19.7900 | 10.1953 | 0.0000 |
| 1969. | 82.1807 | 14.2893 | 0.4191 | 0.7807 | 14.8088 | 17.8823 | 1.9887 | 21.1201 | 10.8806 | 0.0000 |
| 1970. | 87.3477 | 15.1982 | 0.4455 | 0.8298 | 15.7400 | 19.0068 | 2.1138 | 22.4482 | 11.5647 | 0.0000 |

GOVERNMENT

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 4.6700 | 0.0448 | 0.1403 | 0.3017 | 6.1364 | 1.5392 | 0.6776 | 1.6948 | 0.0842 | 0.0000 |
| 1951. | 4.8944 | 0.0470 | 0.1489 | 0.3162 | 6.4132 | 1.6132 | 0.7102 | 1.7752 | 0.1008 | 0.0000 |
| 1952. | 5.0259 | 0.0482 | 0.1490 | 0.3247 | 6.6565 | 1.6865 | 0.7292 | 1.8228 | 0.1055 | 0.0000 |
| 1953. | 5.1539 | 0.0495 | 0.1499 | 0.3329 | 6.9887 | 1.7478 | 0.7478 | 1.8693 | 0.1062 | 0.0000 |
| 1954. | 5.5343 | 0.0512 | 0.2138 | 0.3578 | 7.1617 | 1.8254 | 0.8036 | 2.0088 | 0.1141 | 0.0000 |
| 1955. | 5.8209 | 0.0560 | 0.2450 | 0.3765 | 7.9212 | 1.9212 | 0.8458 | 2.1141 | 0.1201 | 0.0000 |
| 1956. | 6.0240 | 0.0579 | 0.2527 | 0.3894 | 8.1760 | 1.9468 | 0.8746 | 2.1863 | 0.1242 | 0.0000 |
| 1957. | 6.3043 | 0.0605 | 0.2434 | 0.4074 | 8.1841 | 2.0786 | 0.9150 | 2.2873 | 0.1299 | 0.0000 |
| 1958. | 6.6613 | 0.0639 | 0.2571 | 0.4303 | 8.1945 | 2.1956 | 0.9666 | 2.4160 | 0.1352 | 0.0000 |
| 1959. | 6.7667 | 0.0649 | 0.2610 | 0.4367 | 8.1974 | 2.2283 | 0.9310 | 2.4160 | 0.1352 | 0.0000 |
| 1960. | 7.1018 | 0.0682 | 0.2741 | 0.4588 | 8.2074 | 2.3404 | 1.0305 | 2.4521 | 0.1353 | 0.0000 |
| 1961. | 7.5156 | 0.0722 | 0.2901 | 0.4855 | 8.2195 | 2.4771 | 1.0905 | 2.5758 | 0.1463 | 0.0000 |
| 1962. | 7.9177 | 0.0745 | 0.2995 | 0.5013 | 8.2266 | 2.4771 | 1.1259 | 2.7259 | 0.1548 | 0.0000 |
| 1963. | 8.4628 | 0.0812 | 0.3056 | 0.5115 | 8.2512 | 2.5375 | 1.1259 | 2.8144 | 0.1598 | 0.0000 |
| 1964. | 8.8398 | 0.0849 | 0.3267 | 0.5467 | 8.2471 | 2.7893 | 1.1488 | 2.8471 | 0.1631 | 0.0000 |
| 1965. | 9.1352 | 0.0877 | 0.3412 | 0.5710 | 8.2581 | 2.7893 | 1.2279 | 3.0695 | 0.1743 | 0.0000 |
| 1966. | 9.4124 | 0.0904 | 0.3633 | 0.5680 | 8.2666 | 3.0094 | 1.2527 | 3.2062 | 0.1821 | 0.0000 |
| 1967. | 9.9117 | 0.0964 | 0.3826 | 0.6080 | 8.2748 | 3.0094 | 1.3248 | 3.3115 | 0.1881 | 0.0000 |
| 1968. | 10.9117 | 0.0952 | 0.3826 | 0.6403 | 8.2884 | 3.1023 | 1.3657 | 3.4138 | 0.1939 | 0.0000 |
| 1969. | 10.4722 | 0.1005 | 0.4042 | 0.6765 | 8.3043 | 3.2669 | 1.382 | 3.5950 | 0.2042 | 0.0000 |
| 1970. | 11.0179 | 0.1058 | 0.4253 | 0.7117 | 8.3043 | 3.4516 | 1.3195 | 3.7982 | 0.2157 | 0.0000 |

F-D MATRIX FOR LATIN AMERICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

| INVESTMENT | | | | | | | | | | |
|------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1950. | 6.9284 | 0.4150 | 0.0000 | 0.0000 | 0.0000 | 3.2730 | 2.6854 | 0.0000 | 0.5550 | 0.0000 |
| 1951. | 7.3447 | 0.4399 | 0.0000 | 0.0000 | 0.0000 | 3.4696 | 2.8468 | 0.0000 | 0.5883 | 0.0000 |
| 1952. | 7.6290 | 0.4570 | 0.0000 | 0.0000 | 0.0000 | 3.6039 | 2.9570 | 0.0000 | 0.6111 | 0.0000 |
| 1953. | 7.9144 | 0.4741 | 0.0000 | 0.0000 | 0.0000 | 3.7388 | 3.0676 | 0.0000 | 0.6339 | 0.0000 |
| 1954. | 8.6044 | 0.5154 | 0.0000 | 0.0000 | 0.0000 | 4.0647 | 3.3350 | 0.0000 | 0.6892 | 0.0000 |
| 1955. | 9.1677 | 0.5488 | 0.0000 | 0.0000 | 0.0000 | 4.3284 | 3.5715 | 0.0000 | 0.7139 | 0.0000 |
| 1956. | 9.5893 | 0.5743 | 0.0000 | 0.0000 | 0.0000 | 4.5295 | 3.7164 | 0.0000 | 0.7640 | 0.0000 |
| 1957. | 10.1311 | 0.6080 | 0.0000 | 0.0000 | 0.0000 | 4.7953 | 3.9346 | 0.0000 | 0.8131 | 0.0000 |
| 1958. | 10.8919 | 0.6500 | 0.0000 | 0.0000 | 0.0000 | 5.1264 | 4.2062 | 0.0000 | 0.8692 | 0.0000 |
| 1959. | 11.1479 | 0.6678 | 0.0000 | 0.0000 | 0.0000 | 5.2663 | 4.3209 | 0.0000 | 0.8929 | 0.0000 |
| 1960. | 11.8539 | 0.7100 | 0.0000 | 0.0000 | 0.0000 | 5.5997 | 4.5945 | 0.0000 | 0.9429 | 0.0000 |
| 1961. | 12.6993 | 0.7607 | 0.0000 | 0.0000 | 0.0000 | 5.9991 | 4.9222 | 0.0000 | 1.0172 | 0.0000 |
| 1962. | 13.2748 | 0.7952 | 0.0000 | 0.0000 | 0.0000 | 6.2710 | 5.1453 | 0.0000 | 1.0636 | 0.0000 |
| 1963. | 13.7155 | 0.8215 | 0.0000 | 0.0000 | 0.0000 | 6.4792 | 5.3111 | 0.0000 | 1.0986 | 0.0000 |
| 1964. | 14.8453 | 0.8892 | 0.0000 | 0.0000 | 0.0000 | 7.0129 | 5.7540 | 0.0000 | 1.1891 | 0.0000 |
| 1965. | 15.7043 | 0.9407 | 0.0000 | 0.0000 | 0.0000 | 7.5187 | 6.0870 | 0.0000 | 1.2579 | 0.0000 |
| 1966. | 16.4290 | 0.9841 | 0.0000 | 0.0000 | 0.0000 | 7.7610 | 6.3678 | 0.0000 | 1.3159 | 0.0000 |
| 1967. | 17.1565 | 1.0277 | 0.0000 | 0.0000 | 0.0000 | 8.1047 | 6.6498 | 0.0000 | 1.3742 | 0.0000 |
| 1968. | 18.3032 | 1.0964 | 0.0000 | 0.0000 | 0.0000 | 8.5464 | 7.0942 | 0.0000 | 1.4661 | 0.0000 |
| 1969. | 19.5938 | 1.1737 | 0.0000 | 0.0000 | 0.0000 | 9.2560 | 7.5945 | 0.0000 | 1.5695 | 0.0000 |
| 1970. | 20.8680 | 1.2513 | 0.0000 | 0.0000 | 0.0000 | 9.8682 | 8.0948 | 0.0000 | 1.6732 | 0.0000 |

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| 1950. | 4.0854 | 0.4045 | 0.5270 | 0.0000 | 0.1675 | 2.4823 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 4.5615 | 0.4562 | 0.5884 | 0.0000 | 0.1870 | 3.3299 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 4.9560 | 0.4956 | 0.6393 | 0.0000 | 0.2032 | 3.6179 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 5.3737 | 0.5374 | 0.6932 | 0.0000 | 0.2205 | 3.9228 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 5.7263 | 0.5726 | 0.7387 | 0.0000 | 0.2345 | 4.1802 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 6.3561 | 0.6356 | 0.8199 | 0.0000 | 0.2636 | 4.6400 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 6.8378 | 0.6838 | 0.8851 | 0.0000 | 0.2803 | 4.9916 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 7.3417 | 0.7342 | 0.9471 | 0.0000 | 0.3010 | 5.3594 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 7.7591 | 0.7759 | 1.0099 | 0.0000 | 0.3151 | 5.6641 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 8.4447 | 0.8445 | 1.0894 | 0.0000 | 0.4462 | 6.1646 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 9.1176 | 0.9118 | 1.1761 | 0.0000 | 0.4733 | 6.6528 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 9.7464 | 0.9740 | 1.2565 | 0.0000 | 0.5944 | 7.1105 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 10.5132 | 1.0513 | 1.3562 | 0.0000 | 0.6310 | 7.5746 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 11.2409 | 1.1290 | 1.4564 | 0.0000 | 0.4627 | 8.2416 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 12.3551 | 1.2555 | 1.5938 | 0.0000 | 0.5066 | 9.0192 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 13.3793 | 1.3379 | 1.7259 | 0.0000 | 0.5445 | 9.7668 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 14.5977 | 1.4558 | 1.8779 | 0.0000 | 0.5969 | 10.6222 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 15.5417 | 1.5542 | 2.0049 | 0.0000 | 0.6372 | 11.5455 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 16.8030 | 1.6803 | 2.1675 | 0.0000 | 0.6849 | 12.5266 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 18.0935 | 1.8094 | 2.3340 | 0.0000 | 0.7419 | 13.2083 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 19.2300 | 1.9230 | 4.807 | 0.0000 | 0.7884 | 14.0378 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

F-D MATRIX FOR LATIN AMERICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DEELLINGS

IMPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 4.6312 | 0.4645 | 0.1061 | 0.0072 | 2.3925 | 0.3848 | 0.8000 | 0.4835 | 0.7946 | 0.0000 |
| 1951. | 4.9820 | 0.4997 | 0.1141 | 0.0035 | 2.5737 | 0.4140 | 0.0000 | 0.5201 | 0.8549 | 0.0000 |
| 1952. | 5.2498 | 0.5266 | 0.1202 | 0.0037 | 2.7120 | 0.4363 | 0.0000 | 0.5441 | 0.9070 | 0.0000 |
| 1953. | 5.5237 | 0.5540 | 0.1265 | 0.0039 | 2.8535 | 0.4590 | 0.0000 | 0.5767 | 0.9501 | 0.0000 |
| 1954. | 6.0062 | 0.6107 | 0.1394 | 0.0043 | 3.1456 | 0.5060 | 0.0000 | 0.6357 | 1.0473 | 0.0000 |
| 1955. | 6.5731 | 0.6593 | 0.1505 | 0.0046 | 3.3956 | 0.5462 | 0.0000 | 0.6862 | 1.1306 | 0.0000 |
| 1956. | 6.9710 | 0.6992 | 0.1596 | 0.0049 | 3.6012 | 0.5793 | 0.0000 | 0.7278 | 1.1990 | 0.0000 |
| 1957. | 7.4778 | 0.7500 | 0.1712 | 0.0052 | 3.8630 | 0.6214 | 0.0000 | 0.7807 | 1.2862 | 0.0000 |
| 1958. | 8.0979 | 0.8122 | 0.1854 | 0.0057 | 4.1833 | 0.6729 | 0.0000 | 0.8454 | 1.3928 | 0.0000 |
| 1959. | 8.4250 | 0.8450 | 0.1929 | 0.0059 | 4.3523 | 0.7001 | 0.0000 | 0.8796 | 1.4491 | 0.0000 |
| 1960. | 9.0710 | 0.9098 | 0.2077 | 0.0063 | 4.6860 | 0.7368 | 0.0000 | 0.9470 | 1.5602 | 0.0000 |
| 1961. | 9.4380 | 0.9467 | 0.2253 | 0.0069 | 5.0623 | 0.8175 | 0.0000 | 1.0271 | 1.6921 | 0.0000 |
| 1962. | 10.4086 | 1.0440 | 0.2384 | 0.0073 | 5.3771 | 0.8649 | 0.0000 | 1.0860 | 1.7903 | 0.0000 |
| 1963. | 10.8824 | 1.0915 | 0.2492 | 0.0076 | 5.6218 | 0.9043 | 0.0000 | 1.1361 | 1.8718 | 0.0000 |
| 1964. | 11.9174 | 1.1953 | 0.2729 | 0.0083 | 6.1565 | 0.9803 | 0.0000 | 1.2442 | 2.0498 | 0.0000 |
| 1965. | 12.7527 | 1.2791 | 0.2920 | 0.0089 | 6.5680 | 1.0597 | 0.0000 | 1.3314 | 2.1935 | 0.0000 |
| 1966. | 13.4929 | 1.3533 | 0.3090 | 0.0094 | 6.9705 | 1.0997 | 0.0000 | 1.4086 | 2.3208 | 0.0000 |
| 1967. | 14.2484 | 1.4291 | 0.3263 | 0.0100 | 7.3607 | 1.1213 | 0.0000 | 1.4875 | 2.4507 | 0.0000 |
| 1968. | 15.3683 | 1.5414 | 0.3519 | 0.0108 | 7.9392 | 1.1840 | 0.0000 | 1.6044 | 2.6433 | 0.0000 |
| 1969. | 16.6306 | 1.6680 | 0.3808 | 0.0116 | 8.5913 | 1.2771 | 0.0000 | 1.7362 | 2.8605 | 0.0000 |
| 1970. | 17.9199 | 1.7974 | 0.4104 | 0.0125 | 9.2573 | 1.4891 | 0.0000 | 1.8708 | 3.0872 | 0.0000 |

F-D MATRIX FOR LATIN AMERICA

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

CONSUMPTION

| YEAR | CALC. | I | II | III | IV |
|-------|---------|---------|--------|---------|---------|
| 1950. | 30.8291 | 10.9196 | 0.4501 | 7.4544 | 12.0048 |
| 1951. | 32.5786 | 11.5392 | 0.4756 | 7.8774 | 12.6559 |
| 1952. | 33.7334 | 11.9482 | 0.4925 | 8.1566 | 13.1357 |
| 1953. | 34.8857 | 12.3564 | 0.5093 | 8.4352 | 13.5644 |
| 1954. | 37.8086 | 13.3917 | 0.5520 | 9.1420 | 14.7227 |
| 1955. | 40.1357 | 14.2159 | 0.5860 | 9.7047 | 15.6247 |
| 1956. | 41.8691 | 14.6300 | 0.6113 | 10.1239 | 16.3037 |
| 1957. | 44.1480 | 15.6512 | 0.6451 | 10.6846 | 17.2665 |
| 1958. | 47.0918 | 16.6797 | 0.6875 | 11.3866 | 18.3374 |
| 1959. | 48.2256 | 17.0613 | 0.7041 | 11.6608 | 18.7748 |
| 1960. | 51.1206 | 18.1067 | 0.7464 | 12.3608 | 19.6453 |
| 1961. | 54.5972 | 19.3381 | 0.7971 | 13.2014 | 21.2598 |
| 1962. | 56.8940 | 20.1519 | 0.8306 | 13.7570 | 22.1543 |
| 1963. | 58.6011 | 20.7563 | 0.8526 | 14.1696 | 22.4101 |
| 1964. | 63.2319 | 22.3967 | 0.9232 | 15.2893 | 24.4223 |
| 1965. | 66.6846 | 23.8194 | 0.9736 | 16.1240 | 25.6246 |
| 1966. | 69.5669 | 24.6333 | 1.0154 | 16.8162 | 27.0615 |
| 1967. | 72.4033 | 25.6453 | 1.0571 | 17.5068 | 28.1936 |
| 1968. | 77.0049 | 27.2749 | 1.1243 | 18.6194 | 29.9854 |
| 1969. | 82.1807 | 29.1082 | 1.1908 | 19.8708 | 32.0005 |
| 1970. | 87.3477 | 30.9382 | 1.2753 | 21.4206 | 34.0127 |

GOVERNMENT

| YEAR | CALC. | I | II | III | IV |
|-------|---------|--------|--------|--------|--------|
| 1950. | 4.6780 | 0.1812 | 0.4819 | 2.2168 | 1.7960 |
| 1951. | 4.8944 | 0.1899 | 0.5051 | 2.3234 | 1.8740 |
| 1952. | 5.0258 | 0.1950 | 0.5147 | 2.3857 | 1.9264 |
| 1953. | 5.1539 | 0.2000 | 0.5319 | 2.4465 | 1.9754 |
| 1954. | 5.5383 | 0.2149 | 0.5715 | 2.6290 | 2.1228 |
| 1955. | 5.8289 | 0.2262 | 0.6015 | 2.7670 | 2.2342 |
| 1956. | 6.0280 | 0.2339 | 0.6221 | 2.8619 | 2.3105 |
| 1957. | 6.3063 | 0.2447 | 0.6508 | 2.9936 | 2.4172 |
| 1958. | 6.6613 | 0.2585 | 0.6874 | 3.1621 | 2.5533 |
| 1959. | 6.7607 | 0.2623 | 0.6977 | 3.2093 | 2.5913 |
| 1960. | 7.1018 | 0.2755 | 0.7329 | 3.3712 | 2.7221 |
| 1961. | 7.5156 | 0.2916 | 0.7756 | 3.5676 | 2.8637 |
| 1962. | 7.7995 | 0.3011 | 0.8008 | 3.6864 | 2.9577 |
| 1963. | 7.9177 | 0.3072 | 0.8171 | 3.7585 | 3.0349 |
| 1964. | 8.4628 | 0.3284 | 0.8734 | 4.0172 | 3.2443 |
| 1965. | 8.8598 | 0.3450 | 0.9123 | 4.1962 | 3.3693 |
| 1966. | 9.1302 | 0.3543 | 0.9492 | 4.3341 | 3.4920 |
| 1967. | 9.4124 | 0.3652 | 0.9713 | 4.4680 | 3.6277 |
| 1968. | 9.9117 | 0.3846 | 1.0229 | 4.7051 | 3.7961 |
| 1969. | 10.4722 | 0.4063 | 1.0807 | 4.9711 | 4.0139 |
| 1970. | 11.0179 | 0.4275 | 1.1370 | 5.2302 | 4.2231 |

F-D MATRIX FOR LATIN AMERICA
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| INVESTMENT | | I | II | III | IV |
|------------|---------|--------|--------|---------|--------|
| YEAR | CALC. | | | | |
| 1950. | 6.4284 | 0.4150 | 0.0000 | 5.9584 | 0.5550 |
| 1951. | 7.3447 | 0.4399 | 0.0000 | 6.3164 | 0.5983 |
| 1952. | 7.6290 | 0.4570 | 0.0000 | 6.5609 | 0.6111 |
| 1953. | 7.9144 | 0.4741 | 0.0000 | 6.8064 | 0.6339 |
| 1954. | 8.6044 | 0.5154 | 0.0000 | 7.3907 | 0.6892 |
| 1955. | 9.1627 | 0.5488 | 0.0000 | 7.8799 | 0.7339 |
| 1956. | 9.5883 | 0.5733 | 0.0000 | 8.2458 | 0.7680 |
| 1957. | 10.1511 | 0.6080 | 0.0000 | 8.7299 | 0.8131 |
| 1958. | 10.6519 | 0.6500 | 0.0000 | 9.3325 | 0.8692 |
| 1959. | 11.1479 | 0.6678 | 0.0000 | 9.5872 | 0.8929 |
| 1960. | 11.8539 | 0.7100 | 0.0000 | 10.1942 | 0.9495 |
| 1961. | 12.6993 | 0.7607 | 0.0000 | 10.9214 | 1.0172 |
| 1962. | 13.2748 | 0.7952 | 0.0000 | 11.8163 | 1.0633 |
| 1963. | 13.7155 | 0.8215 | 0.0000 | 11.7953 | 1.0986 |
| 1964. | 14.8453 | 0.8692 | 0.0000 | 12.7670 | 1.1891 |
| 1965. | 15.7043 | 0.9407 | 0.0000 | 13.5056 | 1.2579 |
| 1966. | 16.4290 | 0.9841 | 0.0000 | 14.1288 | 1.3159 |
| 1967. | 17.1565 | 1.0277 | 0.0000 | 14.7545 | 1.3742 |
| 1968. | 18.3032 | 1.0964 | 0.0000 | 15.7406 | 1.4661 |
| 1969. | 19.5938 | 1.1737 | 0.0000 | 16.8503 | 1.5695 |
| 1970. | 20.8896 | 1.2513 | 0.0000 | 17.9648 | 1.6732 |

| EXPORTS | | I | II | III | IV |
|---------|---------|--------|--------|---------|--------|
| YEAR | CALC. | | | | |
| 1950. | 4.0854 | 0.5740 | 0.5270 | 2.9823 | 0.0000 |
| 1951. | 4.5615 | 0.6432 | 0.5884 | 3.3249 | 0.0000 |
| 1952. | 4.9540 | 0.6898 | 0.6393 | 3.6179 | 0.0000 |
| 1953. | 5.3737 | 0.7577 | 0.6952 | 3.9228 | 0.0000 |
| 1954. | 5.7263 | 0.8274 | 0.7387 | 4.1402 | 0.0000 |
| 1955. | 6.3561 | 0.8962 | 0.8199 | 4.6400 | 0.0000 |
| 1956. | 6.8378 | 0.9641 | 0.8421 | 4.9416 | 0.0000 |
| 1957. | 7.3417 | 1.0352 | 0.8471 | 5.3504 | 0.0000 |
| 1958. | 7.7591 | 1.0940 | 1.0009 | 5.6641 | 0.0000 |
| 1959. | 8.4447 | 1.1907 | 1.0894 | 6.1646 | 0.0000 |
| 1960. | 9.1176 | 1.2656 | 1.1761 | 6.6558 | 0.0000 |
| 1961. | 9.7404 | 1.3734 | 1.2565 | 7.1105 | 0.0000 |
| 1962. | 10.5132 | 1.4823 | 1.3562 | 7.6746 | 0.0000 |
| 1963. | 11.2899 | 1.5919 | 1.4564 | 8.2410 | 0.0000 |
| 1964. | 12.3551 | 1.7421 | 1.5938 | 9.0192 | 0.0000 |
| 1965. | 13.3793 | 1.8665 | 1.7259 | 9.7668 | 0.0000 |
| 1966. | 14.5577 | 2.0526 | 1.8779 | 10.6272 | 0.0000 |
| 1967. | 15.5417 | 2.1914 | 2.0049 | 11.3455 | 0.0000 |
| 1968. | 16.8430 | 2.3692 | 2.1675 | 12.2661 | 0.0000 |
| 1969. | 18.0935 | 2.5842 | 2.3340 | 13.2083 | 0.0000 |
| 1970. | 19.2300 | 2.7114 | 2.4807 | 14.0378 | 0.0000 |

F-D MATRIX FOR LATIN AMERICA

| YEAR | IMPORTS
CALC. | F-D MATRIX FOR LATIN AMERICA | | | |
|-------|------------------|------------------------------|--------|--------|--------|
| | | I | II | III | IV |
| 1950. | 4.6312 | 2.8570 | 0.1093 | 0.3848 | 1.2801 |
| 1951. | 4.9820 | 3.0733 | 0.1176 | 0.4140 | 1.3770 |
| 1952. | 5.2498 | 3.2386 | 0.1239 | 0.4363 | 1.4510 |
| 1953. | 5.5237 | 3.4075 | 0.1304 | 0.4590 | 1.5267 |
| 1954. | 6.0302 | 3.7563 | 0.1417 | 0.5060 | 1.6830 |
| 1955. | 6.5731 | 4.0549 | 0.1551 | 0.5462 | 1.8168 |
| 1956. | 6.9710 | 4.3004 | 0.1645 | 0.5793 | 1.9268 |
| 1957. | 7.4778 | 4.6130 | 0.1765 | 0.6214 | 2.0668 |
| 1958. | 8.0879 | 4.9955 | 0.1911 | 0.6729 | 2.2382 |
| 1959. | 8.4250 | 5.1973 | 0.1988 | 0.7001 | 2.3286 |
| 1960. | 9.0710 | 5.5958 | 0.2141 | 0.7538 | 2.5072 |
| 1961. | 9.8380 | 6.0690 | 0.2322 | 0.8175 | 2.7192 |
| 1962. | 10.4086 | 6.4210 | 0.2456 | 0.8649 | 2.8769 |
| 1963. | 10.8424 | 6.7133 | 0.2568 | 0.9043 | 3.0079 |
| 1964. | 11.9174 | 7.5517 | 0.2812 | 0.9903 | 3.2939 |
| 1965. | 12.7527 | 7.8671 | 0.3010 | 1.0597 | 3.5248 |
| 1966. | 13.4929 | 8.3237 | 0.3184 | 1.1213 | 3.7294 |
| 1967. | 14.2484 | 8.7898 | 0.3363 | 1.1840 | 3.9382 |
| 1968. | 15.3683 | 9.4806 | 0.3627 | 1.2771 | 4.2477 |
| 1969. | 16.6306 | 10.2593 | 0.3925 | 1.3820 | 4.5967 |
| 1970. | 17.9199 | 11.0547 | 0.4229 | 1.4891 | 4.9530 |

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

F-D MATRIX FOR LATIN AMERICA

I--FOOD
II--NON-FOOD

CONSUMPTION

| YEAR | CONSUMPTION | |
|-------|-------------|---------|
| | I | II |
| 1950. | 30.8201 | 10.8196 |
| 1951. | 32.5786 | 11.5392 |
| 1952. | 33.7334 | 11.9482 |
| 1953. | 34.8857 | 12.3564 |
| 1954. | 37.0086 | 13.3917 |
| 1955. | 40.1357 | 14.2159 |
| 1956. | 41.8691 | 14.8300 |
| 1957. | 44.1880 | 15.6512 |
| 1958. | 47.0918 | 16.6797 |
| 1959. | 48.2256 | 17.0813 |
| 1960. | 51.1206 | 18.1067 |
| 1961. | 54.5972 | 19.3861 |
| 1962. | 56.8940 | 20.1519 |
| 1963. | 58.6011 | 20.7563 |
| 1964. | 63.2319 | 22.3967 |
| 1965. | 66.6546 | 23.6194 |
| 1966. | 69.5469 | 24.6333 |
| 1967. | 72.4033 | 25.6453 |
| 1968. | 77.0049 | 27.2749 |
| 1969. | 82.1807 | 29.1082 |
| 1970. | 87.3377 | 30.9382 |

GOVERNMENT

| YEAR | GOVERNMENT | |
|-------|------------|--------|
| | I | II |
| 1950. | 4.6700 | 0.1812 |
| 1951. | 4.8944 | 0.1899 |
| 1952. | 5.0258 | 0.1950 |
| 1953. | 5.1539 | 0.2000 |
| 1954. | 5.5383 | 0.2149 |
| 1955. | 5.8289 | 0.2262 |
| 1956. | 6.0240 | 0.2339 |
| 1957. | 6.3063 | 0.2447 |
| 1958. | 6.6613 | 0.2585 |
| 1959. | 6.7607 | 0.2623 |
| 1960. | 7.1018 | 0.2755 |
| 1961. | 7.5156 | 0.2916 |
| 1962. | 7.7595 | 0.3011 |
| 1963. | 7.9177 | 0.3072 |
| 1964. | 8.4628 | 0.3284 |
| 1965. | 8.8398 | 0.3430 |
| 1966. | 9.1302 | 0.3543 |
| 1967. | 9.4124 | 0.3652 |
| 1968. | 9.9117 | 0.3846 |
| 1969. | 10.4722 | 0.4063 |
| 1970. | 11.0179 | 0.4275 |

F-D MATRIX FOR LATIN AMERICA
 I--FOOD
 II--NON-FOOD

| YEAR | INVESTMENT | | I | II |
|-------|------------|--------|---------|----|
| | CALC | | | |
| 1950. | 6.9224 | 0.4150 | 6.5133 | |
| 1951. | 7.3647 | 0.4399 | 6.9047 | |
| 1952. | 7.6290 | 0.4570 | 7.1720 | |
| 1953. | 7.9144 | 0.4741 | 7.4403 | |
| 1954. | 8.6044 | 0.5154 | 8.0889 | |
| 1955. | 9.1627 | 0.5488 | 8.6138 | |
| 1956. | 9.5883 | 0.5743 | 9.0138 | |
| 1957. | 10.1511 | 0.6080 | 9.5428 | |
| 1958. | 10.8510 | 0.6500 | 10.2017 | |
| 1959. | 11.4479 | 0.6678 | 10.4801 | |
| 1960. | 11.8539 | 0.7100 | 11.1437 | |
| 1961. | 12.6993 | 0.7607 | 11.9486 | |
| 1962. | 13.2748 | 0.7952 | 12.4795 | |
| 1963. | 13.7155 | 0.8215 | 12.8878 | |
| 1964. | 14.6453 | 0.8592 | 13.9561 | |
| 1965. | 15.7043 | 0.9407 | 14.7634 | |
| 1966. | 16.4290 | 0.9841 | 15.4447 | |
| 1967. | 17.1585 | 1.0277 | 16.1287 | |
| 1968. | 18.3032 | 1.0964 | 17.2065 | |
| 1969. | 19.5938 | 1.1737 | 18.4197 | |
| 1970. | 20.8896 | 1.2513 | 19.6379 | |

| YEAR | EXPORTS | | I | II |
|-------|---------|--------|---------|----|
| | CALC | | | |
| 1950. | 4.0854 | 0.5760 | 3.5093 | |
| 1951. | 4.5015 | 0.6432 | 3.8583 | |
| 1952. | 4.9560 | 0.6948 | 4.2571 | |
| 1953. | 5.3737 | 0.7577 | 4.6160 | |
| 1954. | 5.7243 | 0.8074 | 4.9188 | |
| 1955. | 6.3561 | 0.8962 | 5.4598 | |
| 1956. | 6.8378 | 0.9641 | 5.8737 | |
| 1957. | 7.3417 | 1.0352 | 6.3085 | |
| 1958. | 7.7591 | 1.0940 | 6.6650 | |
| 1959. | 8.4447 | 1.1907 | 7.2539 | |
| 1960. | 9.1176 | 1.2856 | 7.8319 | |
| 1961. | 9.7404 | 1.3734 | 8.3669 | |
| 1962. | 10.5132 | 1.4823 | 9.0306 | |
| 1963. | 11.2499 | 1.5919 | 9.6479 | |
| 1964. | 12.3551 | 1.7421 | 10.6129 | |
| 1965. | 13.3793 | 1.8565 | 11.4927 | |
| 1966. | 14.5577 | 2.0526 | 12.5051 | |
| 1967. | 15.5417 | 2.1914 | 13.3502 | |
| 1968. | 16.8030 | 2.3692 | 14.4386 | |
| 1969. | 18.0935 | 2.5512 | 15.5422 | |
| 1970. | 19.2300 | 2.7114 | 16.5183 | |

F-D MATRIX FOR LATIN AMERICA

I--FOOD
 II--NON-FOOD

| YEAR | IMPORTS | | I | II |
|-------|---------|---------|--------|----|
| | CALC | | | |
| 1950. | 4.6312 | 2.8570 | 1.7742 | |
| 1951. | 4.9820 | 3.0733 | 1.9086 | |
| 1952. | 5.2498 | 3.2886 | 2.0112 | |
| 1953. | 5.5217 | 3.4079 | 2.1161 | |
| 1954. | 6.0882 | 3.7263 | 2.3327 | |
| 1955. | 6.5731 | 4.0549 | 2.5181 | |
| 1956. | 6.9710 | 4.3004 | 2.6706 | |
| 1957. | 7.4778 | 4.6130 | 2.8647 | |
| 1958. | 8.0979 | 4.9955 | 3.1022 | |
| 1959. | 8.4250 | 5.1973 | 3.2276 | |
| 1960. | 8.0710 | 5.5958 | 3.4751 | |
| 1961. | 9.8340 | 6.0680 | 3.7689 | |
| 1962. | 10.4046 | 6.4210 | 3.9875 | |
| 1963. | 10.8824 | 6.7133 | 4.1690 | |
| 1964. | 11.9174 | 7.3517 | 4.5654 | |
| 1965. | 12.7527 | 7.8671 | 4.8855 | |
| 1966. | 13.4929 | 8.3237 | 5.1691 | |
| 1967. | 14.2484 | 8.7898 | 5.4585 | |
| 1968. | 15.3683 | 9.4806 | 5.8875 | |
| 1969. | 16.6306 | 10.2593 | 6.3711 | |
| 1970. | 17.9199 | 11.0547 | 6.8650 | |

F-D MATRIX FOR MIDDLE EAST

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-PINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

| CONSUMPTION | | | | | | | | | | |
|-------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1950. | 11.0928 | 3.3041 | 0.0155 | 0.2015 | 1.7650 | 2.1979 | 0.0000 | 1.4007 | 2.1880 | 0.0000 |
| 1951. | 11.3988 | 3.4014 | 0.0160 | 0.2075 | 1.8170 | 2.2626 | 0.0000 | 1.4419 | 2.2524 | 0.0000 |
| 1952. | 11.7478 | 3.5056 | 0.0164 | 0.2138 | 1.8726 | 2.3319 | 0.0000 | 1.4861 | 2.3214 | 0.0000 |
| 1953. | 12.0820 | 3.6053 | 0.0169 | 0.2199 | 1.9259 | 2.3983 | 0.0000 | 1.5284 | 2.3874 | 0.0000 |
| 1954. | 12.4016 | 3.7006 | 0.0174 | 0.2257 | 1.9768 | 2.4617 | 0.0000 | 1.5688 | 2.4505 | 0.0000 |
| 1955. | 12.7424 | 3.8172 | 0.0179 | 0.2324 | 2.0391 | 2.5393 | 0.0000 | 1.6182 | 2.5277 | 0.0000 |
| 1956. | 13.0927 | 3.9089 | 0.0183 | 0.2384 | 2.0881 | 2.6003 | 0.0000 | 1.6571 | 2.5985 | 0.0000 |
| 1957. | 13.4366 | 3.9199 | 0.0184 | 0.2384 | 2.0940 | 2.6076 | 0.0000 | 1.6617 | 2.5958 | 0.0000 |
| 1958. | 13.9207 | 4.1539 | 0.0195 | 0.2534 | 2.2190 | 2.7632 | 0.0000 | 1.7609 | 2.7507 | 0.0000 |
| 1959. | 14.1790 | 4.2310 | 0.0199 | 0.2581 | 2.2601 | 2.8145 | 0.0000 | 1.7936 | 2.8017 | 0.0000 |
| 1960. | 14.6827 | 4.3813 | 0.0206 | 0.2672 | 2.3404 | 2.9145 | 0.0000 | 1.8573 | 2.9013 | 0.0000 |
| 1961. | 15.1793 | 4.5295 | 0.0213 | 0.2763 | 2.4196 | 3.0131 | 0.0000 | 1.9202 | 2.9994 | 0.0000 |
| 1962. | 15.9719 | 4.7660 | 0.0224 | 0.2907 | 2.5459 | 3.1704 | 0.0000 | 2.0204 | 3.1560 | 0.0000 |
| 1963. | 16.5471 | 4.9376 | 0.0232 | 0.3012 | 2.6376 | 3.2845 | 0.0000 | 2.0931 | 3.2697 | 0.0000 |
| 1964. | 17.7439 | 5.2947 | 0.0248 | 0.3229 | 2.8234 | 3.5222 | 0.0000 | 2.2446 | 3.5082 | 0.0000 |
| 1965. | 19.0173 | 5.6747 | 0.0266 | 0.3461 | 3.0314 | 3.7749 | 0.0000 | 2.4056 | 3.7578 | 0.0000 |
| 1966. | 19.5125 | 5.8225 | 0.0273 | 0.3551 | 3.1103 | 3.8730 | 0.0000 | 2.4683 | 3.8556 | 0.0000 |
| 1967. | 20.1624 | 6.0164 | 0.0282 | 0.3670 | 3.2139 | 4.0022 | 0.0000 | 2.5505 | 3.9840 | 0.0000 |
| 1968. | 21.9253 | 6.5425 | 0.0307 | 0.3990 | 3.4949 | 4.3521 | 0.0000 | 2.7735 | 4.3324 | 0.0000 |
| 1969. | 23.3562 | 6.9695 | 0.0327 | 0.4251 | 3.7230 | 4.6362 | 0.0000 | 2.9545 | 4.6151 | 0.0000 |
| 1970. | 24.4553 | 7.2975 | 0.0342 | 0.4451 | 3.8982 | 4.8544 | 0.0000 | 3.0936 | 4.8323 | 0.0000 |

GOVERNMENT

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 1.3906 | 0.0117 | 0.0000 | 0.1774 | 0.0047 | 1.0045 | 0.0834 | 0.0314 | 0.0734 | 0.0000 |
| 1951. | 1.5215 | 0.0128 | 0.0000 | 0.1941 | 0.0052 | 1.1034 | 0.0913 | 0.0344 | 0.0803 | 0.0000 |
| 1952. | 1.6634 | 0.0140 | 0.0000 | 0.2122 | 0.0057 | 1.2063 | 0.0998 | 0.0376 | 0.0878 | 0.0000 |
| 1953. | 1.8117 | 0.0152 | 0.0000 | 0.2312 | 0.0062 | 1.3138 | 0.1087 | 0.0409 | 0.0957 | 0.0000 |
| 1954. | 1.9663 | 0.0165 | 0.0000 | 0.2509 | 0.0067 | 1.4259 | 0.1180 | 0.0444 | 0.1038 | 0.0000 |
| 1955. | 2.1416 | 0.0180 | 0.0000 | 0.2733 | 0.0073 | 1.5531 | 0.1285 | 0.0484 | 0.1131 | 0.0000 |
| 1956. | 2.3126 | 0.0194 | 0.0000 | 0.2951 | 0.0079 | 1.6771 | 0.1388 | 0.0523 | 0.1221 | 0.0000 |
| 1957. | 2.4428 | 0.0205 | 0.0000 | 0.3117 | 0.0083 | 1.7715 | 0.1466 | 0.0552 | 0.1290 | 0.0000 |
| 1958. | 2.7238 | 0.0229 | 0.0000 | 0.3475 | 0.0093 | 1.9753 | 0.1634 | 0.0616 | 0.1438 | 0.0000 |
| 1959. | 2.9164 | 0.0245 | 0.0000 | 0.3721 | 0.0099 | 2.1150 | 0.1750 | 0.0659 | 0.1540 | 0.0000 |
| 1960. | 3.1719 | 0.0268 | 0.0000 | 0.4047 | 0.0108 | 2.3002 | 0.1903 | 0.0717 | 0.1675 | 0.0000 |
| 1961. | 3.4415 | 0.0289 | 0.0000 | 0.4391 | 0.0117 | 2.4968 | 0.2065 | 0.0778 | 0.1817 | 0.0000 |
| 1962. | 3.7977 | 0.0319 | 0.0000 | 0.4846 | 0.0129 | 2.7541 | 0.2279 | 0.0858 | 0.2005 | 0.0000 |
| 1963. | 4.1285 | 0.0346 | 0.0000 | 0.5262 | 0.0140 | 2.9903 | 0.2474 | 0.0932 | 0.2177 | 0.0000 |
| 1964. | 4.6316 | 0.0389 | 0.0000 | 0.5910 | 0.0157 | 3.3588 | 0.2779 | 0.1047 | 0.2465 | 0.0000 |
| 1965. | 5.1968 | 0.0437 | 0.0000 | 0.6631 | 0.0177 | 3.7687 | 0.3118 | 0.1174 | 0.2744 | 0.0000 |
| 1966. | 5.5797 | 0.0469 | 0.0000 | 0.7120 | 0.0190 | 4.0464 | 0.3348 | 0.1261 | 0.2946 | 0.0000 |
| 1967. | 6.0556 | 0.0507 | 0.0000 | 0.7695 | 0.0205 | 4.3734 | 0.3616 | 0.1363 | 0.3184 | 0.0000 |
| 1968. | 6.8571 | 0.0576 | 0.0000 | 0.8750 | 0.0233 | 4.9727 | 0.4114 | 0.1550 | 0.3621 | 0.0000 |
| 1969. | 7.6355 | 0.0641 | 0.0000 | 0.9743 | 0.0260 | 5.5372 | 0.4581 | 0.1726 | 0.4032 | 0.0000 |
| 1970. | 8.3546 | 0.0702 | 0.0000 | 1.0660 | 0.0284 | 6.0587 | 0.5013 | 0.1888 | 0.4411 | 0.0000 |

F-D MATRIX FOR MIDDLE EAST

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

INVESTMENT

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5447 | 1.3048 | 0.0000 | 0.1043 | 0.0000 |
| 1951. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5756 | 1.3787 | 0.0000 | 0.1172 | 0.0000 |
| 1952. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6089 | 1.4584 | 0.0000 | 0.1166 | 0.0000 |
| 1953. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6424 | 1.5397 | 0.0000 | 0.1231 | 0.0000 |
| 1954. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6773 | 1.6224 | 0.0000 | 0.1297 | 0.0000 |
| 1955. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7173 | 1.7182 | 0.0000 | 0.1374 | 0.0000 |
| 1956. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7542 | 1.8066 | 0.0000 | 0.1445 | 0.0000 |
| 1957. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7767 | 1.8604 | 0.0000 | 0.1488 | 0.0000 |
| 1958. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8453 | 2.0246 | 0.0000 | 0.1619 | 0.0000 |
| 1959. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8843 | 2.1182 | 0.0000 | 0.1694 | 0.0000 |
| 1960. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9407 | 2.2533 | 0.0000 | 0.1802 | 0.0000 |
| 1961. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9992 | 2.3934 | 0.0000 | 0.1914 | 0.0000 |
| 1962. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0804 | 2.5879 | 0.0000 | 0.2069 | 0.0000 |
| 1963. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.1504 | 2.7556 | 0.0000 | 0.2203 | 0.0000 |
| 1964. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.2681 | 3.0375 | 0.0000 | 0.2429 | 0.0000 |
| 1965. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.3974 | 3.3472 | 0.0000 | 0.2677 | 0.0000 |
| 1966. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.4745 | 3.5319 | 0.0000 | 0.2824 | 0.0000 |
| 1967. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.5673 | 3.7540 | 0.0000 | 0.3002 | 0.0000 |
| 1968. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.7535 | 4.2001 | 0.0000 | 0.3359 | 0.0000 |
| 1969. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.9223 | 4.6045 | 0.0000 | 0.3692 | 0.0000 |
| 1970. | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 2.0720 | 4.9630 | 0.0000 | 0.3969 | 0.0000 |

IMPORTS

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 0.2728 | 0.0154 | 0.0097 | 0.7173 | 2.9290 | 0.0000 | 0.0618 | 0.0352 | 0.0000 |
| 1951. | 0.2625 | 0.0159 | 0.0100 | 0.7428 | 3.0331 | 0.0000 | 0.0640 | 0.0364 | 0.0000 |
| 1952. | 0.2929 | 0.0165 | 0.0104 | 0.7792 | 3.1449 | 0.0000 | 0.0664 | 0.0377 | 0.0000 |
| 1953. | 0.3031 | 0.0171 | 0.0108 | 0.7970 | 3.2544 | 0.0000 | 0.0687 | 0.0391 | 0.0000 |
| 1954. | 0.3131 | 0.0176 | 0.0111 | 0.8233 | 3.3617 | 0.0000 | 0.0710 | 0.0404 | 0.0000 |
| 1955. | 0.3250 | 0.0183 | 0.0116 | 0.8547 | 3.4900 | 0.0000 | 0.0737 | 0.0419 | 0.0000 |
| 1956. | 0.3350 | 0.0189 | 0.0119 | 0.8810 | 3.5977 | 0.0000 | 0.0759 | 0.0432 | 0.0000 |
| 1957. | 0.3383 | 0.0190 | 0.0120 | 0.9120 | 3.6323 | 0.0000 | 0.0767 | 0.0436 | 0.0000 |
| 1958. | 0.3610 | 0.0203 | 0.0124 | 0.9422 | 3.6760 | 0.0000 | 0.0818 | 0.0465 | 0.0000 |
| 1959. | 0.3863 | 0.0217 | 0.0132 | 0.9737 | 3.9761 | 0.0000 | 0.0839 | 0.0477 | 0.0000 |
| 1960. | 0.4023 | 0.0226 | 0.0143 | 1.0157 | 4.1476 | 0.0000 | 0.0876 | 0.0498 | 0.0000 |
| 1961. | 0.4265 | 0.0240 | 0.0152 | 1.0640 | 4.3200 | 0.0000 | 0.0912 | 0.0519 | 0.0000 |
| 1962. | 0.4454 | 0.0251 | 0.0158 | 1.1214 | 4.5606 | 0.0000 | 0.0967 | 0.0550 | 0.0000 |
| 1963. | 0.4616 | 0.0271 | 0.0171 | 1.1713 | 4.7631 | 0.0000 | 0.1010 | 0.0574 | 0.0000 |
| 1964. | 0.4816 | 0.0293 | 0.0185 | 1.2663 | 5.1708 | 0.0000 | 0.1092 | 0.0621 | 0.0000 |
| 1965. | 0.5204 | 0.0303 | 0.0191 | 1.3685 | 5.5880 | 0.0000 | 0.1180 | 0.0671 | 0.0000 |
| 1966. | 0.5395 | 0.0316 | 0.0210 | 1.4161 | 5.7826 | 0.0000 | 0.1221 | 0.0694 | 0.0000 |
| 1967. | 0.5614 | 0.0347 | 0.0219 | 1.4742 | 6.0274 | 0.0000 | 0.1272 | 0.0724 | 0.0000 |
| 1968. | 0.6160 | 0.0373 | 0.0235 | 1.6198 | 6.4144 | 0.0000 | 0.1396 | 0.0794 | 0.0000 |
| 1969. | 0.6621 | 0.0373 | 0.0235 | 1.7411 | 7.1117 | 0.0000 | 0.1501 | 0.0854 | 0.0000 |
| 1970. | 0.7001 | 0.0394 | 0.0249 | 1.8411 | 7.5170 | 0.0000 | 0.1567 | 0.0902 | 0.0000 |

F-D MATRIX FOR MIDDLE EAST

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|---------|--------|--------|--------|--------|--------|--------|
| 1950. | 4.0590 | 0.1396 | 0.0000 | 3.7679 | 0.0024 | 0.0187 | 0.0000 | 0.0000 | 0.1303 | 0.0000 |
| 1951. | 4.4375 | 0.1526 | 0.0000 | 4.1193 | 0.0027 | 0.0204 | 0.0000 | 0.0000 | 0.1424 | 0.0000 |
| 1952. | 4.7258 | 0.1628 | 0.0000 | 4.3870 | 0.0028 | 0.0217 | 0.0000 | 0.0000 | 0.1517 | 0.0000 |
| 1953. | 5.0276 | 0.1729 | 0.0000 | 4.6671 | 0.0030 | 0.0231 | 0.0000 | 0.0000 | 0.1614 | 0.0000 |
| 1954. | 5.2613 | 0.1810 | 0.0000 | 4.8840 | 0.0032 | 0.0242 | 0.0000 | 0.0000 | 0.1689 | 0.0000 |
| 1955. | 5.7401 | 0.1975 | 0.0000 | 5.3285 | 0.0034 | 0.0264 | 0.0000 | 0.0000 | 0.1843 | 0.0000 |
| 1956. | 6.0744 | 0.2090 | 0.0000 | 5.6389 | 0.0036 | 0.0279 | 0.0000 | 0.0000 | 0.1950 | 0.0000 |
| 1957. | 6.4202 | 0.2209 | 0.0000 | 5.9598 | 0.0039 | 0.0295 | 0.0000 | 0.0000 | 0.2106 | 0.0000 |
| 1958. | 6.6838 | 0.2299 | 0.0000 | 6.2045 | 0.0040 | 0.0307 | 0.0000 | 0.0000 | 0.2146 | 0.0000 |
| 1959. | 7.1703 | 0.2467 | 0.0000 | 6.4561 | 0.0043 | 0.0330 | 0.0000 | 0.0000 | 0.2302 | 0.0000 |
| 1960. | 7.6354 | 0.2627 | 0.0000 | 7.0879 | 0.0046 | 0.0351 | 0.0000 | 0.0000 | 0.2451 | 0.0000 |
| 1961. | 8.0496 | 0.2769 | 0.0000 | 7.4723 | 0.0048 | 0.0370 | 0.0000 | 0.0000 | 0.2584 | 0.0000 |
| 1962. | 8.5784 | 0.2951 | 0.0000 | 7.9633 | 0.0051 | 0.0395 | 0.0000 | 0.0000 | 0.2754 | 0.0000 |
| 1963. | 9.1001 | 0.3130 | 0.0000 | 8.4475 | 0.0055 | 0.0419 | 0.0000 | 0.0000 | 0.2921 | 0.0000 |
| 1964. | 9.8820 | 0.3386 | 0.0000 | 9.1364 | 0.0059 | 0.0453 | 0.0000 | 0.0000 | 0.3159 | 0.0000 |
| 1965. | 10.5378 | 0.3625 | 0.0000 | 9.7822 | 0.0063 | 0.0485 | 0.0000 | 0.0000 | 0.3393 | 0.0000 |
| 1966. | 11.3416 | 0.3901 | 0.0000 | 10.5283 | 0.0068 | 0.0522 | 0.0000 | 0.0000 | 0.3641 | 0.0000 |
| 1967. | 11.9812 | 0.4121 | 0.0000 | 11.1221 | 0.0072 | 0.0551 | 0.0000 | 0.0000 | 0.3846 | 0.0000 |
| 1968. | 12.8225 | 0.4411 | 0.0000 | 11.9031 | 0.0077 | 0.0590 | 0.0000 | 0.0000 | 0.4116 | 0.0000 |
| 1969. | 13.6725 | 0.4703 | 0.0000 | 12.6921 | 0.0082 | 0.0629 | 0.0000 | 0.0000 | 0.4389 | 0.0000 |
| 1970. | 14.3940 | 0.4951 | 0.0000 | 13.3619 | 0.0086 | 0.0662 | 0.0000 | 0.0000 | 0.4621 | 0.0000 |

F-D MATRIX FOR MIDDLE EAST
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

CONSUMPTION

| YEAR | CALC. | I | II | III | IV |
|-------|----------|---------|--------|--------|--------|
| 1950. | 11.0728 | 5.0690 | 0.2170 | 2.1979 | 3.5886 |
| 1951. | 11.3988 | 5.2183 | 0.2234 | 2.2626 | 3.6943 |
| 1952. | 11.7478 | 5.3781 | 0.2303 | 2.3319 | 3.8074 |
| 1953. | 12.0820 | 5.5311 | 0.2368 | 2.3983 | 3.9167 |
| 1954. | 12.4016 | 5.6774 | 0.2431 | 2.4617 | 4.0193 |
| 1955. | 12.7924 | 5.8263 | 0.2507 | 2.5393 | 4.1459 |
| 1956. | 13.0907 | 5.9870 | 0.2567 | 2.6003 | 4.2455 |
| 1957. | 13.1366 | 6.0139 | 0.2575 | 2.6076 | 4.2575 |
| 1958. | 13.9207 | 6.3729 | 0.2728 | 2.7632 | 4.5116 |
| 1959. | 14.1790 | 6.4911 | 0.2779 | 2.8145 | 4.5953 |
| 1960. | 14.6827 | 6.7217 | 0.2878 | 2.9145 | 4.7586 |
| 1961. | 15.1733 | 6.9490 | 0.2975 | 3.0131 | 4.9186 |
| 1962. | 15.7719 | 7.3119 | 0.3130 | 3.1704 | 5.1745 |
| 1963. | 16.5471 | 7.5752 | 0.3243 | 3.2845 | 5.3628 |
| 1964. | 17.17439 | 8.1230 | 0.3478 | 3.5222 | 5.7507 |
| 1965. | 19.0173 | 8.7061 | 0.3727 | 3.7749 | 6.1635 |
| 1966. | 19.5125 | 8.9327 | 0.3824 | 3.8732 | 6.3239 |
| 1967. | 20.1624 | 9.2302 | 0.3952 | 4.0022 | 6.5585 |
| 1968. | 21.9253 | 10.0374 | 0.4297 | 4.3521 | 7.1059 |
| 1969. | 23.3562 | 10.6824 | 0.4578 | 4.6362 | 7.5696 |
| 1970. | 24.4553 | 11.1957 | 0.4793 | 4.8544 | 7.9259 |

GOVERNMENT

| YEAR | CALC. | I | II | III | IV |
|-------|--------|--------|--------|--------|--------|
| 1950. | 1.3506 | 0.0144 | 0.1774 | 1.0919 | 0.1048 |
| 1951. | 1.5215 | 0.0180 | 0.1941 | 1.1947 | 0.1147 |
| 1952. | 1.6634 | 0.0196 | 0.2122 | 1.3061 | 0.1254 |
| 1953. | 1.8117 | 0.0214 | 0.2312 | 1.4225 | 0.1366 |
| 1954. | 1.9663 | 0.0232 | 0.2509 | 1.5439 | 0.1443 |
| 1955. | 2.1416 | 0.0253 | 0.2733 | 1.6816 | 0.1615 |
| 1956. | 2.3126 | 0.0273 | 0.2951 | 1.8158 | 0.1744 |
| 1957. | 2.4426 | 0.0288 | 0.3117 | 1.9181 | 0.1842 |
| 1958. | 2.7228 | 0.0321 | 0.3475 | 2.1387 | 0.2054 |
| 1959. | 2.9164 | 0.0344 | 0.3721 | 2.2899 | 0.2159 |
| 1960. | 3.1719 | 0.0374 | 0.4047 | 2.4905 | 0.2322 |
| 1961. | 3.4415 | 0.0406 | 0.4391 | 2.7022 | 0.2522 |
| 1962. | 3.7277 | 0.0448 | 0.4846 | 2.9419 | 0.2663 |
| 1963. | 4.1215 | 0.0487 | 0.5262 | 3.2377 | 0.3189 |
| 1964. | 4.6376 | 0.0547 | 0.5910 | 3.6367 | 0.3492 |
| 1965. | 5.1549 | 0.0613 | 0.6631 | 4.0404 | 0.3915 |
| 1966. | 5.5797 | 0.0658 | 0.7120 | 4.3812 | 0.4207 |
| 1967. | 6.0306 | 0.0712 | 0.7695 | 4.7352 | 0.4547 |
| 1968. | 6.4571 | 0.0809 | 0.8750 | 5.3841 | 0.5170 |
| 1969. | 7.6355 | 0.0901 | 0.9743 | 5.8953 | 0.5757 |
| 1970. | 8.3546 | 0.0986 | 1.0660 | 6.5599 | 0.6299 |

F-D MATRIX FOR MIDDLE EAST

I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| INVESTMENT | | | | | |
|------------|--------|--------|--------|--------|--------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 1.9589 | 0.0000 | 0.0000 | 1.8495 | 0.1043 |
| 1951. | 2.0645 | 0.0000 | 0.0000 | 1.9542 | 0.1102 |
| 1952. | 2.1839 | 0.0000 | 0.0000 | 2.0673 | 0.1166 |
| 1953. | 2.3056 | 0.0000 | 0.0000 | 2.1825 | 0.1231 |
| 1954. | 2.4295 | 0.0000 | 0.0000 | 2.2997 | 0.1277 |
| 1955. | 2.5729 | 0.0000 | 0.0000 | 2.4355 | 0.1374 |
| 1956. | 2.7053 | 0.0000 | 0.0000 | 2.5608 | 0.1445 |
| 1957. | 2.7858 | 0.0000 | 0.0000 | 2.6370 | 0.1483 |
| 1958. | 3.0318 | 0.0000 | 0.0000 | 2.8609 | 0.1619 |
| 1959. | 3.1719 | 0.0000 | 0.0000 | 3.0025 | 0.1694 |
| 1960. | 3.3742 | 0.0000 | 0.0000 | 3.1940 | 0.1802 |
| 1961. | 3.5840 | 0.0000 | 0.0000 | 3.4926 | 0.1914 |
| 1962. | 3.8753 | 0.0000 | 0.0000 | 3.8683 | 0.2069 |
| 1963. | 4.1284 | 0.0000 | 0.0000 | 4.3050 | 0.2203 |
| 1964. | 4.5446 | 0.0000 | 0.0000 | 4.8057 | 0.2429 |
| 1965. | 5.0124 | 0.0000 | 0.0000 | 5.3746 | 0.2677 |
| 1966. | 5.2859 | 0.0000 | 0.0000 | 5.9063 | 0.2824 |
| 1967. | 5.6215 | 0.0000 | 0.0000 | 6.5213 | 0.3002 |
| 1968. | 6.2895 | 0.0000 | 0.0000 | 7.2356 | 0.3259 |
| 1969. | 6.8951 | 0.0000 | 0.0000 | 8.0682 | 0.3682 |
| 1970. | 7.4319 | 0.0000 | 0.0000 | 9.0350 | 0.3969 |

IMPORTS

| YEAR | CALC. | I | II | III | IV |
|-------|---------|--------|--------|--------|--------|
| 1950. | 4.0411 | 0.9901 | 0.0251 | 2.9290 | 0.0970 |
| 1951. | 4.1843 | 1.0253 | 0.0259 | 3.0331 | 0.1004 |
| 1952. | 4.3390 | 1.0630 | 0.0269 | 3.1449 | 0.1041 |
| 1953. | 4.4901 | 1.1001 | 0.0278 | 3.2544 | 0.1074 |
| 1954. | 4.6381 | 1.1363 | 0.0288 | 3.3617 | 0.1113 |
| 1955. | 4.8152 | 1.1797 | 0.0299 | 3.4900 | 0.1156 |
| 1956. | 4.9637 | 1.2161 | 0.0308 | 3.5977 | 0.1161 |
| 1957. | 5.0915 | 1.2278 | 0.0311 | 3.6323 | 0.1203 |
| 1958. | 5.3477 | 1.3102 | 0.0332 | 3.8760 | 0.1275 |
| 1959. | 5.4658 | 1.3440 | 0.0340 | 3.9761 | 0.1317 |
| 1960. | 5.7224 | 1.4020 | 0.0355 | 4.1476 | 0.1373 |
| 1961. | 5.9603 | 1.4603 | 0.0370 | 4.3200 | 0.1470 |
| 1962. | 6.3199 | 1.5484 | 0.0392 | 4.5806 | 0.1517 |
| 1963. | 6.5992 | 1.6168 | 0.0409 | 4.7831 | 0.1584 |
| 1964. | 7.1391 | 1.7478 | 0.0442 | 5.1708 | 0.1712 |
| 1965. | 7.1708 | 1.8859 | 0.0478 | 5.5880 | 0.1850 |
| 1966. | 7.9743 | 1.9547 | 0.0495 | 5.7826 | 0.1915 |
| 1967. | 8.3167 | 2.0376 | 0.0516 | 6.0276 | 0.1976 |
| 1968. | 9.1259 | 2.2358 | 0.0566 | 6.6144 | 0.2190 |
| 1969. | 9.8120 | 2.4039 | 0.0608 | 7.1117 | 0.2355 |
| 1970. | 10.3723 | 2.5412 | 0.0643 | 7.5178 | 0.2489 |

F-D MATRIX FOR MIDDLE EAST
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| YEAR | CALC. | EXPORTS | | | |
|-------|---------|---------|---------|--------|--------|
| | | I | II | III | IV |
| 1950. | 4.0590 | 0.1421 | 3.7679 | 0.6187 | 0.1303 |
| 1951. | 4.4375 | 0.1553 | 4.1193 | 0.6204 | 0.1424 |
| 1952. | 4.7258 | 0.1654 | 4.3870 | 0.6217 | 0.1517 |
| 1953. | 5.0276 | 0.1760 | 4.6671 | 0.6231 | 0.1614 |
| 1954. | 5.2613 | 0.1841 | 4.8840 | 0.6242 | 0.1689 |
| 1955. | 5.7411 | 0.2009 | 5.3285 | 0.6264 | 0.1843 |
| 1956. | 6.0744 | 0.2126 | 5.6389 | 0.6279 | 0.1950 |
| 1957. | 6.4202 | 0.2247 | 5.9598 | 0.6295 | 0.2061 |
| 1958. | 6.6638 | 0.2339 | 6.2045 | 0.6307 | 0.2146 |
| 1959. | 7.1703 | 0.2510 | 6.6561 | 0.6330 | 0.2302 |
| 1960. | 7.6354 | 0.2672 | 7.0879 | 0.6351 | 0.2451 |
| 1961. | 8.0496 | 0.2817 | 7.4723 | 0.6370 | 0.2584 |
| 1962. | 8.5784 | 0.3002 | 7.8633 | 0.6395 | 0.2754 |
| 1963. | 9.1001 | 0.3185 | 8.4475 | 0.6419 | 0.2921 |
| 1964. | 9.8420 | 0.3445 | 9.1364 | 0.6453 | 0.3159 |
| 1965. | 10.5378 | 0.3688 | 9.7822 | 0.6485 | 0.3383 |
| 1966. | 11.3416 | 0.3969 | 10.5283 | 0.6522 | 0.3641 |
| 1967. | 11.9812 | 0.4193 | 11.1221 | 0.6551 | 0.3846 |
| 1968. | 12.8225 | 0.4488 | 11.9031 | 0.6590 | 0.4116 |
| 1969. | 13.6725 | 0.4785 | 12.6921 | 0.6629 | 0.4389 |
| 1970. | 14.3940 | 0.5038 | 13.3619 | 0.6662 | 0.4621 |

F-D MATRIX FOR MIDDLE EAST

I--FOOD
II--NON-FOOD

| YEAR | CONSUMPTION | | I | II |
|-------|-------------|--|---------|---------|
| | CALC | | | |
| 1950. | 11.0728 | | 5.0690 | |
| 1951. | 11.3948 | | 5.2183 | 6.0035 |
| 1952. | 11.7478 | | 5.3781 | 6.1803 |
| 1953. | 12.0820 | | 5.5311 | 6.3696 |
| 1954. | 12.4016 | | 5.6774 | 6.5508 |
| 1955. | 12.7924 | | 5.8563 | 6.7220 |
| 1956. | 13.0907 | | 5.9970 | 6.9359 |
| 1957. | 13.3866 | | 6.0139 | 7.1025 |
| 1958. | 13.9207 | | 6.3729 | 7.1226 |
| 1959. | 14.1790 | | 6.4911 | 7.5477 |
| 1960. | 14.6927 | | 6.7217 | 7.6877 |
| 1961. | 15.1793 | | 6.9400 | 7.9608 |
| 1962. | 15.9719 | | 7.3119 | 8.2301 |
| 1963. | 16.5471 | | 7.5752 | 8.6598 |
| 1964. | 17.2439 | | 8.1280 | 8.9716 |
| 1965. | 18.0173 | | 8.7061 | 9.6206 |
| 1966. | 19.2125 | | 8.9327 | 10.3110 |
| 1967. | 20.1624 | | 9.2302 | 10.5793 |
| 1968. | 21.9253 | | 10.0374 | 10.9318 |
| 1969. | 23.3562 | | 10.6924 | 11.8877 |
| 1970. | 24.4553 | | 11.1957 | 12.6636 |
| | | | | 13.2595 |

GOVERNMENT

| YEAR | CONSUMPTION | | I | II |
|-------|-------------|--|--------|--------|
| | CALC | | | |
| 1950. | 1.3906 | | 0.0164 | |
| 1951. | 1.5215 | | 0.0180 | 1.3742 |
| 1952. | 1.6634 | | 0.0196 | 1.5035 |
| 1953. | 1.8117 | | 0.0214 | 1.6437 |
| 1954. | 1.9663 | | 0.0232 | 1.7903 |
| 1955. | 2.1416 | | 0.0253 | 1.9431 |
| 1956. | 2.3126 | | 0.0273 | 2.1163 |
| 1957. | 2.4828 | | 0.0288 | 2.2952 |
| 1958. | 2.7538 | | 0.0321 | 2.4139 |
| 1959. | 2.9164 | | 0.0344 | 2.5916 |
| 1960. | 3.1719 | | 0.0374 | 2.8819 |
| 1961. | 3.4415 | | 0.0406 | 3.1344 |
| 1962. | 3.7477 | | 0.0448 | 3.4008 |
| 1963. | 4.1235 | | 0.0487 | 3.7528 |
| 1964. | 4.6316 | | 0.0547 | 4.0747 |
| 1965. | 5.1968 | | 0.0613 | 4.5768 |
| 1966. | 5.5797 | | 0.0658 | 5.1353 |
| 1967. | 6.0306 | | 0.0712 | 5.5137 |
| 1968. | 6.4871 | | 0.0809 | 5.9583 |
| 1969. | 7.6355 | | 0.0901 | 6.7760 |
| 1970. | 8.3546 | | 0.0986 | 7.5452 |
| | | | | 8.2559 |

F-D MATRIX FOR MIDDLE EAST

I--FOOD
II--NON-FOOD

INVESTMENT

| YEAR | CALC. | | I | | II | |
|-------|--------|--------|--------|--------|----|--|
| | | | | | | |
| 1950. | 1.9539 | 0.0000 | 0.0000 | 1.9539 | | |
| 1951. | 2.0645 | 0.0000 | 0.0000 | 2.0645 | | |
| 1952. | 2.1839 | 0.0000 | 0.0000 | 2.1839 | | |
| 1953. | 2.3056 | 0.0000 | 0.0000 | 2.3056 | | |
| 1954. | 2.4295 | 0.0000 | 0.0000 | 2.4295 | | |
| 1955. | 2.5729 | 0.0000 | 0.0000 | 2.5729 | | |
| 1956. | 2.7053 | 0.0000 | 0.0000 | 2.7052 | | |
| 1957. | 2.7858 | 0.0000 | 0.0000 | 2.7858 | | |
| 1958. | 3.0318 | 0.0000 | 0.0000 | 3.0318 | | |
| 1959. | 3.1719 | 0.0000 | 0.0000 | 3.1719 | | |
| 1960. | 3.3242 | 0.0000 | 0.0000 | 3.3242 | | |
| 1961. | 3.5840 | 0.0000 | 0.0000 | 3.5840 | | |
| 1962. | 3.8753 | 0.0000 | 0.0000 | 3.8753 | | |
| 1963. | 4.1254 | 0.0000 | 0.0000 | 4.1263 | | |
| 1964. | 4.5446 | 0.0000 | 0.0000 | 4.5485 | | |
| 1965. | 5.0124 | 0.0000 | 0.0000 | 5.0123 | | |
| 1966. | 5.2889 | 0.0000 | 0.0000 | 5.2888 | | |
| 1967. | 5.6215 | 0.0000 | 0.0000 | 5.6215 | | |
| 1968. | 6.2695 | 0.0000 | 0.0000 | 6.2894 | | |
| 1969. | 6.8951 | 0.0000 | 0.0000 | 6.8950 | | |
| 1970. | 7.4319 | 0.0000 | 0.0000 | 7.4318 | | |

IMPORTS

| YEAR | CALC. | | I | | II | |
|-------|---------|--------|--------|--------|----|--|
| | | | | | | |
| 1950. | 4.0411 | 0.9901 | 0.9901 | 3.0510 | | |
| 1951. | 4.1848 | 1.0253 | 1.0253 | 3.1595 | | |
| 1952. | 4.3390 | 1.0630 | 1.0630 | 3.2759 | | |
| 1953. | 4.4901 | 1.1001 | 1.1001 | 3.3900 | | |
| 1954. | 4.6391 | 1.1363 | 1.1363 | 3.5017 | | |
| 1955. | 4.8152 | 1.1797 | 1.1797 | 3.6354 | | |
| 1956. | 4.9657 | 1.2161 | 1.2161 | 3.7475 | | |
| 1957. | 5.0115 | 1.2278 | 1.2278 | 3.7836 | | |
| 1958. | 5.3477 | 1.3102 | 1.3102 | 4.0374 | | |
| 1959. | 5.4858 | 1.3440 | 1.3440 | 4.1417 | | |
| 1960. | 5.7224 | 1.4020 | 1.4020 | 4.3294 | | |
| 1961. | 5.9603 | 1.4603 | 1.4603 | 4.4999 | | |
| 1962. | 6.3179 | 1.5444 | 1.5444 | 4.7714 | | |
| 1963. | 6.5992 | 1.6168 | 1.6168 | 4.9823 | | |
| 1964. | 7.1341 | 1.7478 | 1.7478 | 5.3862 | | |
| 1965. | 7.7098 | 1.8889 | 1.8889 | 5.8208 | | |
| 1966. | 7.9783 | 1.9547 | 1.9547 | 6.0235 | | |
| 1967. | 8.3167 | 2.0376 | 2.0376 | 6.2789 | | |
| 1968. | 9.1259 | 2.2356 | 2.2356 | 6.8900 | | |
| 1969. | 9.8120 | 2.4037 | 2.4037 | 7.4060 | | |
| 1970. | 10.3723 | 2.5414 | 2.5414 | 7.8310 | | |

F-D MATRIX FOR MIDDLE EAST

I--FOOD
II--NON-FOOD

EXPORTS

| YEAR | CALC | I | II |
|-------|---------|--------|---------|
| 1950. | 4.0000 | 0.1471 | 3.9169 |
| 1951. | 4.4375 | 0.1553 | 4.2821 |
| 1952. | 4.7258 | 0.1654 | 4.5604 |
| 1953. | 5.0276 | 0.1760 | 4.8515 |
| 1954. | 5.2613 | 0.1841 | 5.0771 |
| 1955. | 5.7401 | 0.2009 | 5.5391 |
| 1956. | 6.0744 | 0.2126 | 5.8617 |
| 1957. | 6.4202 | 0.2247 | 6.1954 |
| 1958. | 6.6838 | 0.2339 | 6.4498 |
| 1959. | 7.1703 | 0.2510 | 6.9193 |
| 1960. | 7.6354 | 0.2672 | 7.3680 |
| 1961. | 8.0496 | 0.2817 | 7.7676 |
| 1962. | 8.5784 | 0.3032 | 8.2740 |
| 1963. | 8.1001 | 0.3145 | 8.7414 |
| 1964. | 9.8420 | 0.3445 | 9.4974 |
| 1965. | 10.5378 | 0.3668 | 10.1689 |
| 1966. | 11.3416 | 0.3969 | 10.9445 |
| 1967. | 11.9812 | 0.4193 | 11.5616 |
| 1968. | 12.8225 | 0.4488 | 12.3735 |
| 1969. | 13.6725 | 0.4785 | 13.1938 |
| 1970. | 14.3940 | 0.5038 | 13.8901 |

F-D MATRIX FOR MAIN AFRICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

CONSUMPTION

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 8.4949 | 0.0136 | 0.0544 | 0.7459 | 0.9021 | 0.0000 | 1.5962 | 1.6607 | 0.0000 |
| 1951. | 8.9059 | 0.0142 | 0.0570 | 0.7619 | 0.9454 | 0.0000 | 1.6734 | 1.7411 | 0.0000 |
| 1952. | 9.3875 | 0.0149 | 0.0598 | 0.1198 | 0.9916 | 0.0000 | 1.7545 | 1.8255 | 0.0000 |
| 1953. | 9.7691 | 0.0157 | 0.0626 | 0.6595 | 1.0396 | 0.0000 | 1.8394 | 1.9137 | 0.0000 |
| 1954. | 10.2620 | 0.0164 | 0.0657 | 0.9010 | 1.0899 | 0.0000 | 1.9282 | 2.0062 | 0.0000 |
| 1955. | 10.7574 | 0.0172 | 0.0689 | 0.9445 | 1.1424 | 0.0000 | 2.0213 | 2.1031 | 0.0000 |
| 1956. | 11.2770 | 0.0180 | 0.0722 | 0.9901 | 1.1976 | 0.0000 | 2.1189 | 2.2046 | 0.0000 |
| 1957. | 11.8212 | 0.0189 | 0.0757 | 1.0374 | 1.2554 | 0.0000 | 2.2212 | 2.3110 | 0.0000 |
| 1958. | 12.3824 | 0.0198 | 0.0792 | 1.0872 | 1.3150 | 0.0000 | 2.3267 | 2.4207 | 0.0000 |
| 1959. | 13.1613 | 0.0211 | 0.0842 | 1.1552 | 1.3977 | 0.0000 | 2.4730 | 2.5730 | 0.0000 |
| 1960. | 14.3131 | 0.0229 | 0.0916 | 1.2567 | 1.5201 | 0.0000 | 2.6894 | 2.7982 | 0.0000 |
| 1961. | 14.4701 | 0.0232 | 0.0926 | 1.2705 | 1.5367 | 0.0000 | 2.7189 | 2.8289 | 0.0000 |
| 1962. | 14.9232 | 0.0239 | 0.0955 | 1.3103 | 1.5848 | 0.0000 | 2.8041 | 2.9174 | 0.0000 |
| 1963. | 15.6366 | 0.0250 | 0.1001 | 1.3729 | 1.6606 | 0.0000 | 2.9381 | 3.0559 | 0.0000 |
| 1964. | 16.5740 | 0.0265 | 0.1061 | 1.4552 | 1.7601 | 0.0000 | 3.1143 | 3.2402 | 0.0000 |
| 1965. | 17.3911 | 0.0278 | 0.1113 | 1.2699 | 1.8469 | 0.0000 | 3.2678 | 3.4909 | 0.0000 |
| 1966. | 18.1670 | 0.0291 | 0.1163 | 1.5951 | 1.9293 | 0.0000 | 3.4136 | 3.7516 | 0.0000 |
| 1967. | 19.2852 | 0.0309 | 0.1234 | 1.6932 | 2.0481 | 0.0000 | 3.6237 | 3.7702 | 0.0000 |
| 1968. | 20.0540 | 0.0321 | 0.1283 | 1.7607 | 2.1297 | 0.0000 | 3.7681 | 3.9205 | 0.0000 |
| 1969. | 21.4014 | 0.0342 | 0.1370 | 1.8790 | 2.2728 | 0.0000 | 4.0213 | 4.1839 | 0.0000 |
| 1970. | 22.3418 | 0.0357 | 0.1430 | 1.9616 | 2.3727 | 0.0000 | 4.1980 | 4.3678 | 0.0000 |

GOVERNMENT

| YEAR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 0.0162 | 0.0000 | 0.0338 | 0.0078 | 0.0698 | 0.0294 | 0.6085 | 0.0515 | 0.0000 |
| 1951. | 0.0164 | 0.0000 | 0.0366 | 0.0084 | 0.0726 | 0.0318 | 0.6594 | 0.0559 | 0.0000 |
| 1952. | 0.0178 | 0.0000 | 0.0396 | 0.0091 | 0.0766 | 0.0344 | 0.7157 | 0.0604 | 0.0000 |
| 1953. | 0.0192 | 0.0000 | 0.0428 | 0.0099 | 0.0805 | 0.0373 | 0.7719 | 0.0653 | 0.0000 |
| 1954. | 0.0208 | 0.0000 | 0.0463 | 0.0106 | 0.0856 | 0.0403 | 0.8344 | 0.0706 | 0.0000 |
| 1955. | 0.0225 | 0.0000 | 0.0500 | 0.0115 | 0.0913 | 0.0435 | 0.9013 | 0.0762 | 0.0000 |
| 1956. | 0.0243 | 0.0000 | 0.0540 | 0.0124 | 0.1115 | 0.0470 | 0.9750 | 0.0823 | 0.0000 |
| 1957. | 0.0262 | 0.0000 | 0.0583 | 0.0134 | 0.1203 | 0.0507 | 1.0499 | 0.0883 | 0.0000 |
| 1958. | 0.0282 | 0.0000 | 0.0628 | 0.0144 | 0.1297 | 0.0546 | 1.1314 | 0.0947 | 0.0000 |
| 1959. | 0.0308 | 0.0000 | 0.0686 | 0.0157 | 0.1417 | 0.0597 | 1.2366 | 0.1046 | 0.0000 |
| 1960. | 0.0338 | 0.0000 | 0.0767 | 0.0176 | 0.1584 | 0.0667 | 1.3822 | 0.1149 | 0.0000 |
| 1961. | 0.0358 | 0.0000 | 0.0844 | 0.0193 | 0.1646 | 0.0693 | 1.4357 | 0.1215 | 0.0000 |
| 1962. | 0.0379 | 0.0000 | 0.0908 | 0.0203 | 0.1743 | 0.0749 | 1.5205 | 0.1286 | 0.0000 |
| 1963. | 0.0408 | 0.0000 | 0.0987 | 0.0215 | 0.1875 | 0.0819 | 1.6355 | 0.1384 | 0.0000 |
| 1964. | 0.0444 | 0.0000 | 0.1043 | 0.0227 | 0.2039 | 0.0859 | 1.7769 | 0.1505 | 0.0000 |
| 1965. | 0.0477 | 0.0000 | 0.1093 | 0.0244 | 0.2195 | 0.0924 | 1.9147 | 0.1620 | 0.0000 |
| 1966. | 0.0511 | 0.0000 | 0.1138 | 0.0261 | 0.2351 | 0.0990 | 2.0510 | 0.1735 | 0.0000 |
| 1967. | 0.0557 | 0.0000 | 0.1189 | 0.0284 | 0.2558 | 0.1077 | 2.2319 | 0.1848 | 0.0000 |
| 1968. | 0.0593 | 0.0000 | 0.1239 | 0.0303 | 0.2726 | 0.1148 | 2.3783 | 0.2012 | 0.0000 |
| 1969. | 0.0648 | 0.0000 | 0.1343 | 0.0331 | 0.2980 | 0.1254 | 2.6001 | 0.2208 | 0.0000 |
| 1970. | 0.0693 | 0.0000 | 0.1443 | 0.0354 | 0.3186 | 0.1362 | 2.7799 | 0.2352 | 0.0000 |

F-D MATRIX FOR MAIN AFRICA

1-AGRICULTURE 4-FUOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

| INVESTMENT | | | | | | | | | | |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1950. | 1.5111 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.5787 | 0.9323 | 0.0000 | 0.0000 | 0.0000 |
| 1951. | 1.5961 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6113 | 0.9848 | 0.0000 | 0.0000 | 0.0000 |
| 1952. | 1.6641 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6458 | 1.0403 | 0.0000 | 0.0000 | 0.0000 |
| 1953. | 1.7010 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.6821 | 1.0989 | 0.0000 | 0.0000 | 0.0000 |
| 1954. | 1.8812 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7205 | 1.1607 | 0.0000 | 0.0000 | 0.0000 |
| 1955. | 1.9970 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.7610 | 1.2260 | 0.0000 | 0.0000 | 0.0000 |
| 1956. | 2.0949 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8039 | 1.2950 | 0.0000 | 0.0000 | 0.0000 |
| 1957. | 2.2170 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8491 | 1.3679 | 0.0000 | 0.0000 | 0.0000 |
| 1958. | 2.3402 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.8963 | 1.4439 | 0.0000 | 0.0000 | 0.0000 |
| 1959. | 2.5045 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.9460 | 1.5465 | 0.0000 | 0.0000 | 0.0000 |
| 1960. | 2.7470 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0521 | 1.6949 | 0.0000 | 0.0000 | 0.0000 |
| 1961. | 2.7987 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.0719 | 1.7288 | 0.0000 | 0.0000 | 0.0000 |
| 1962. | 2.9089 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.1141 | 1.7948 | 0.0000 | 0.0000 | 0.0000 |
| 1963. | 3.0718 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.1765 | 1.8953 | 0.0000 | 0.0000 | 0.0000 |
| 1964. | 3.2815 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.2568 | 2.0247 | 0.0000 | 0.0000 | 0.0000 |
| 1965. | 3.4704 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.3291 | 2.1412 | 0.0000 | 0.0000 | 0.0000 |
| 1966. | 3.6539 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.3994 | 2.2544 | 0.0000 | 0.0000 | 0.0000 |
| 1967. | 3.9096 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.4974 | 2.4122 | 0.0000 | 0.0000 | 0.0000 |
| 1968. | 4.0979 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.5695 | 2.5284 | 0.0000 | 0.0000 | 0.0000 |
| 1969. | 4.4042 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.6883 | 2.7198 | 0.0000 | 0.0000 | 0.0000 |
| 1970. | 4.6388 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.7766 | 2.8621 | 0.0000 | 0.0000 | 0.0000 |

| IMPORTS | | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1950. | 2.2122 | 0.1380 | 0.1068 | 0.0438 | 0.2494 | 1.3678 | 0.0000 | 0.3073 | 0.0000 | 0.0000 |
| 1951. | 2.3470 | 0.1465 | 0.1134 | 0.0465 | 0.2636 | 1.4511 | 0.0000 | 0.3260 | 0.0000 | 0.0000 |
| 1952. | 2.4901 | 0.1554 | 0.1203 | 0.0493 | 0.2796 | 1.5396 | 0.0000 | 0.3459 | 0.0000 | 0.0000 |
| 1953. | 2.6417 | 0.1648 | 0.1276 | 0.0523 | 0.2967 | 1.6334 | 0.0000 | 0.3664 | 0.0000 | 0.0000 |
| 1954. | 2.8023 | 0.1749 | 0.1353 | 0.0555 | 0.3147 | 1.7327 | 0.0000 | 0.3892 | 0.0000 | 0.0000 |
| 1955. | 2.9725 | 0.1855 | 0.1436 | 0.0589 | 0.3338 | 1.8379 | 0.0000 | 0.4129 | 0.0000 | 0.0000 |
| 1956. | 3.1532 | 0.1968 | 0.1523 | 0.0624 | 0.3541 | 1.9496 | 0.0000 | 0.4380 | 0.0000 | 0.0000 |
| 1957. | 3.3446 | 0.2067 | 0.1615 | 0.0662 | 0.3756 | 2.0680 | 0.0000 | 0.4646 | 0.0000 | 0.0000 |
| 1958. | 3.5450 | 0.2212 | 0.1712 | 0.0702 | 0.3981 | 2.1919 | 0.0000 | 0.4924 | 0.0000 | 0.0000 |
| 1959. | 3.7427 | 0.2379 | 0.1842 | 0.0755 | 0.4292 | 2.3574 | 0.0000 | 0.5246 | 0.0000 | 0.0000 |
| 1960. | 4.1955 | 0.2518 | 0.2026 | 0.0831 | 0.4712 | 2.5941 | 0.0000 | 0.5827 | 0.0000 | 0.0000 |
| 1961. | 4.2948 | 0.2678 | 0.2073 | 0.0867 | 0.4820 | 2.6536 | 0.0000 | 0.5961 | 0.0000 | 0.0000 |
| 1962. | 4.4746 | 0.2795 | 0.2163 | 0.0886 | 0.5029 | 2.7691 | 0.0000 | 0.6221 | 0.0000 | 0.0000 |
| 1963. | 4.7342 | 0.2963 | 0.2293 | 0.0944 | 0.5332 | 2.9354 | 0.0000 | 0.6595 | 0.0000 | 0.0000 |
| 1964. | 5.0924 | 0.3178 | 0.2460 | 0.1008 | 0.5719 | 3.1486 | 0.0000 | 0.7073 | 0.0000 | 0.0000 |
| 1965. | 5.4047 | 0.3374 | 0.2611 | 0.1071 | 0.6072 | 3.3629 | 0.0000 | 0.7510 | 0.0000 | 0.0000 |
| 1966. | 5.7147 | 0.3566 | 0.2760 | 0.1131 | 0.6418 | 3.5334 | 0.0000 | 0.7938 | 0.0000 | 0.0000 |
| 1967. | 6.1381 | 0.3830 | 0.2965 | 0.1215 | 0.6893 | 3.7952 | 0.0000 | 0.8526 | 0.0000 | 0.0000 |
| 1968. | 6.4983 | 0.4030 | 0.3119 | 0.1279 | 0.7253 | 3.9932 | 0.0000 | 0.8971 | 0.0000 | 0.0000 |
| 1969. | 6.9737 | 0.4352 | 0.3368 | 0.1381 | 0.7831 | 4.3118 | 0.0000 | 0.9686 | 0.0000 | 0.0000 |
| 1970. | 7.3641 | 0.4596 | 0.3558 | 0.1458 | 0.8272 | 4.5544 | 0.0000 | 1.0231 | 0.0000 | 0.0000 |

F-D MATRIX FOR MAIN AFRICA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 1.9512 | 0.5217 | 0.2722 | 0.0084 | 0.1508 | 0.0542 | 0.0000 | 0.1354 | 0.0084 | 0.0000 |
| 1951. | 2.1512 | 0.5752 | 0.3001 | 0.0093 | 0.1663 | 0.0418 | 0.0000 | 0.1493 | 0.0093 | 0.0000 |
| 1952. | 2.3056 | 0.6176 | 0.3222 | 0.0099 | 0.1765 | 1.0111 | 0.0000 | 0.1603 | 0.0099 | 0.0000 |
| 1953. | 2.4764 | 0.6622 | 0.3455 | 0.0106 | 0.1914 | 3.0842 | 0.0000 | 0.1719 | 0.0106 | 0.0000 |
| 1954. | 2.6111 | 0.6942 | 0.3642 | 0.0112 | 0.2018 | 1.1431 | 0.0000 | 0.1812 | 0.0112 | 0.0000 |
| 1955. | 2.8594 | 0.7673 | 0.4003 | 0.0123 | 0.2218 | 1.2562 | 0.0000 | 0.1931 | 0.0123 | 0.0000 |
| 1956. | 3.0577 | 0.8176 | 0.4265 | 0.0131 | 0.2364 | 1.3387 | 0.0000 | 0.2122 | 0.0131 | 0.0000 |
| 1957. | 3.2576 | 0.8700 | 0.4539 | 0.0140 | 0.2515 | 1.4244 | 0.0000 | 0.2278 | 0.0140 | 0.0000 |
| 1958. | 3.4022 | 0.9116 | 0.4756 | 0.0147 | 0.2675 | 1.4926 | 0.0000 | 0.2366 | 0.0147 | 0.0000 |
| 1959. | 3.6803 | 0.9341 | 0.5134 | 0.0158 | 0.2845 | 1.6112 | 0.0000 | 0.2554 | 0.0158 | 0.0000 |
| 1960. | 3.9429 | 1.0543 | 0.5500 | 0.0170 | 0.3063 | 1.7262 | 0.0000 | 0.2736 | 0.0170 | 0.0000 |
| 1961. | 4.1811 | 1.1180 | 0.5833 | 0.0180 | 0.3242 | 1.8305 | 0.0000 | 0.2902 | 0.0180 | 0.0000 |
| 1962. | 4.4311 | 1.1982 | 0.6251 | 0.0193 | 0.3444 | 1.9618 | 0.0000 | 0.3110 | 0.0193 | 0.0000 |
| 1963. | 4.7708 | 1.2781 | 0.6568 | 0.0206 | 0.3695 | 2.0926 | 0.0000 | 0.3317 | 0.0206 | 0.0000 |
| 1964. | 5.1170 | 1.3806 | 0.7250 | 0.0223 | 0.4017 | 2.2752 | 0.0000 | 0.3617 | 0.0223 | 0.0000 |
| 1965. | 5.5451 | 1.4956 | 0.7802 | 0.0240 | 0.4323 | 2.4486 | 0.0000 | 0.3882 | 0.0240 | 0.0000 |
| 1966. | 6.0497 | 1.6177 | 0.8439 | 0.0260 | 0.4676 | 2.6485 | 0.0000 | 0.4198 | 0.0260 | 0.0000 |
| 1967. | 6.4219 | 1.7172 | 0.8958 | 0.0276 | 0.4964 | 2.9115 | 0.0000 | 0.4457 | 0.0276 | 0.0000 |
| 1968. | 6.9052 | 1.8464 | 0.9633 | 0.0297 | 0.5338 | 3.0231 | 0.0000 | 0.4792 | 0.0297 | 0.0000 |
| 1969. | 7.3966 | 1.9773 | 1.0318 | 0.0318 | 0.5718 | 3.2382 | 0.0000 | 0.5133 | 0.0318 | 0.0000 |
| 1970. | 7.8214 | 2.0914 | 1.0911 | 0.0336 | 0.6046 | 3.4242 | 0.0000 | 0.5428 | 0.0336 | 0.0000 |

F-D MATRIX FOR MAIN AFRICA

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

CONSUMPTION

| YEAR | CALC. | I | II | III | IV |
|-------|---------|---------|--------|--------|--------|
| 1950. | 8.4949 | 4.2678 | 0.0680 | 0.9021 | 3.2589 |
| 1951. | 8.9059 | 4.4742 | 0.0712 | 0.9458 | 3.4145 |
| 1952. | 9.3375 | 4.6912 | 0.0747 | 0.9916 | 3.5800 |
| 1953. | 9.7891 | 4.9180 | 0.0783 | 1.0390 | 3.7531 |
| 1954. | 10.2650 | 5.1595 | 0.0821 | 1.0893 | 3.9344 |
| 1955. | 10.7574 | 5.4045 | 0.0861 | 1.1424 | 4.1243 |
| 1956. | 11.2770 | 5.6655 | 0.0902 | 1.1976 | 4.3235 |
| 1957. | 11.8212 | 5.9388 | 0.0946 | 1.2554 | 4.5322 |
| 1958. | 12.3824 | 6.2209 | 0.0991 | 1.3150 | 4.7474 |
| 1959. | 13.1613 | 6.6121 | 0.1053 | 1.3977 | 5.0460 |
| 1960. | 14.3131 | 7.1909 | 0.1145 | 1.5201 | 5.4876 |
| 1961. | 14.8701 | 7.2697 | 0.1158 | 1.5367 | 5.478 |
| 1962. | 14.9232 | 7.4974 | 0.1194 | 1.5848 | 5.7215 |
| 1963. | 15.6346 | 7.9558 | 0.1251 | 1.6606 | 5.9950 |
| 1964. | 16.5740 | 8.3265 | 0.1326 | 1.7601 | 6.7544 |
| 1965. | 17.3911 | 8.7372 | 0.1391 | 1.8469 | 6.6077 |
| 1966. | 18.1670 | 9.1270 | 0.1453 | 1.9293 | 6.5652 |
| 1967. | 19.2852 | 9.6887 | 0.1543 | 2.0481 | 7.3939 |
| 1968. | 20.0540 | 10.0750 | 0.1604 | 2.1297 | 7.4087 |
| 1969. | 21.4014 | 10.7320 | 0.1712 | 2.2728 | 8.2082 |
| 1970. | 22.3418 | 11.2244 | 0.1787 | 2.3727 | 8.5658 |

GOVERNMENT

| YEAR | CALC. | I | II | III | IV |
|-------|--------|--------|--------|--------|--------|
| 1950. | 0.6162 | 0.0229 | 0.0338 | 0.0992 | 0.4603 |
| 1951. | 0.6840 | 0.0248 | 0.0366 | 0.1074 | 0.7152 |
| 1952. | 0.9568 | 0.0269 | 0.0396 | 0.1163 | 0.7740 |
| 1953. | 1.0349 | 0.0291 | 0.0428 | 0.1257 | 0.8372 |
| 1954. | 1.1136 | 0.0314 | 0.0463 | 0.1354 | 0.9049 |
| 1955. | 1.2083 | 0.0340 | 0.0500 | 0.1460 | 0.9775 |
| 1956. | 1.3305 | 0.0367 | 0.0540 | 0.1565 | 1.0553 |
| 1957. | 1.4875 | 0.0396 | 0.0583 | 0.1710 | 1.1387 |
| 1958. | 1.5158 | 0.0426 | 0.0628 | 0.1843 | 1.2271 |
| 1959. | 1.6578 | 0.0466 | 0.0686 | 0.2014 | 1.3412 |
| 1960. | 1.8531 | 0.0521 | 0.0767 | 0.2251 | 1.4902 |
| 1961. | 1.9248 | 0.0541 | 0.0797 | 0.2339 | 1.5572 |
| 1962. | 2.0495 | 0.0573 | 0.0844 | 0.2444 | 1.6491 |
| 1963. | 2.1927 | 0.0616 | 0.0900 | 0.2664 | 1.7739 |
| 1964. | 2.3689 | 0.0670 | 0.0987 | 0.2893 | 1.9294 |
| 1965. | 2.5670 | 0.0721 | 0.1063 | 0.3119 | 2.0777 |
| 1966. | 2.7992 | 0.0773 | 0.1158 | 0.3341 | 2.2205 |
| 1967. | 2.9922 | 0.0841 | 0.1239 | 0.3632 | 2.4207 |
| 1968. | 3.1685 | 0.0896 | 0.1320 | 0.3874 | 2.5795 |
| 1969. | 3.4859 | 0.0940 | 0.1443 | 0.4235 | 2.8201 |
| 1970. | 3.7269 | 0.1047 | 0.1543 | 0.4528 | 3.0150 |

F-D MATRIX FOR MAIN AFRICA

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

INVESTMENT

| YEAR | CALC. | I | II | III | IV |
|-------|--------|--------|--------|--------|--------|
| 1950. | 1,5111 | 0.0000 | 0.0000 | 1,5111 | 0.0000 |
| 1951. | 1,5961 | 0.0000 | 0.0000 | 1,5961 | 0.0000 |
| 1952. | 1,6861 | 0.0000 | 0.0000 | 1,6861 | 0.0000 |
| 1953. | 1,7810 | 0.0000 | 0.0000 | 1,7810 | 0.0000 |
| 1954. | 1,8812 | 0.0000 | 0.0000 | 1,8812 | 0.0000 |
| 1955. | 1,9870 | 0.0000 | 0.0000 | 1,9870 | 0.0000 |
| 1956. | 2,0889 | 0.0000 | 0.0000 | 2,0889 | 0.0000 |
| 1957. | 2,1970 | 0.0000 | 0.0000 | 2,1970 | 0.0000 |
| 1958. | 2,3102 | 0.0000 | 0.0000 | 2,3102 | 0.0000 |
| 1959. | 2,4285 | 0.0000 | 0.0000 | 2,4285 | 0.0000 |
| 1960. | 2,5520 | 0.0000 | 0.0000 | 2,5520 | 0.0000 |
| 1961. | 2,6807 | 0.0000 | 0.0000 | 2,6807 | 0.0000 |
| 1962. | 2,8145 | 0.0000 | 0.0000 | 2,8145 | 0.0000 |
| 1963. | 2,9534 | 0.0000 | 0.0000 | 2,9534 | 0.0000 |
| 1964. | 3,0974 | 0.0000 | 0.0000 | 3,0974 | 0.0000 |
| 1965. | 3,2464 | 0.0000 | 0.0000 | 3,2464 | 0.0000 |
| 1966. | 3,3996 | 0.0000 | 0.0000 | 3,3996 | 0.0000 |
| 1967. | 3,5570 | 0.0000 | 0.0000 | 3,5570 | 0.0000 |
| 1968. | 3,7187 | 0.0000 | 0.0000 | 3,7187 | 0.0000 |
| 1969. | 3,8847 | 0.0000 | 0.0000 | 3,8847 | 0.0000 |
| 1970. | 4,0550 | 0.0000 | 0.0000 | 4,0550 | 0.0000 |

IMPORTS

| YEAR | CALC. | I | II | III | IV |
|-------|--------|--------|--------|--------|--------|
| 1950. | 2,2172 | 0,3865 | 0,1566 | 1,4674 | 0,2067 |
| 1951. | 2,3270 | 0,4100 | 0,1629 | 1,4511 | 0,2230 |
| 1952. | 2,4401 | 0,4350 | 0,1696 | 1,4306 | 0,2409 |
| 1953. | 2,5567 | 0,4615 | 0,1769 | 1,4054 | 0,2604 |
| 1954. | 2,6768 | 0,4896 | 0,1848 | 1,3757 | 0,2817 |
| 1955. | 2,8005 | 0,5193 | 0,2024 | 1,3419 | 0,3059 |
| 1956. | 2,9278 | 0,5509 | 0,2147 | 1,3046 | 0,3334 |
| 1957. | 3,0587 | 0,5846 | 0,2278 | 1,2630 | 0,3646 |
| 1958. | 3,1932 | 0,6205 | 0,2414 | 1,2174 | 0,4000 |
| 1959. | 3,3314 | 0,6587 | 0,2556 | 1,1679 | 0,4411 |
| 1960. | 3,4733 | 0,7000 | 0,2704 | 1,1147 | 0,4886 |
| 1961. | 3,6188 | 0,7454 | 0,2857 | 1,0580 | 0,5431 |
| 1962. | 3,7680 | 0,7950 | 0,3016 | 1,0000 | 0,6054 |
| 1963. | 3,9208 | 0,8488 | 0,3183 | 0,9400 | 0,6764 |
| 1964. | 4,0772 | 0,9069 | 0,3358 | 0,8780 | 0,7560 |
| 1965. | 4,2372 | 0,9694 | 0,3542 | 0,8140 | 0,8450 |
| 1966. | 4,4008 | 1,0364 | 0,3734 | 0,7480 | 0,9444 |
| 1967. | 4,5680 | 1,1080 | 0,3934 | 0,6800 | 1,0544 |
| 1968. | 4,7388 | 1,1842 | 0,4140 | 0,6100 | 1,1754 |
| 1969. | 4,9132 | 1,2650 | 0,4358 | 0,5380 | 1,3074 |
| 1970. | 5,0912 | 1,3514 | 0,4586 | 0,4640 | 1,4514 |

F-D MATRIX FOR MAIN AFRICA

I-AGRICULTURE + FOOD
 II-MINING + ENERGY
 III-MANUFACT. + CONSTRUCTION
 IV-SERVICES + DWELLINGS

| YEAR | CALC. | EXPORTS | | | |
|-------|--------|---------|--------|--------|--------|
| | | I | II | III | IV |
| 1950. | 1.9512 | 0.6726 | 0.2806 | 0.8542 | 0.1439 |
| 1951. | 2.1512 | 0.7415 | 0.3093 | 0.9418 | 0.1585 |
| 1952. | 2.3096 | 0.7961 | 0.3321 | 1.0111 | 0.1702 |
| 1953. | 2.4764 | 0.8536 | 0.3561 | 1.0842 | 0.1825 |
| 1954. | 2.6111 | 0.9000 | 0.3755 | 1.1431 | 0.1924 |
| 1955. | 2.8694 | 0.9891 | 0.4126 | 1.2362 | 0.2115 |
| 1956. | 3.0577 | 1.0540 | 0.4397 | 1.3347 | 0.2254 |
| 1957. | 3.2536 | 1.1215 | 0.4679 | 1.4244 | 0.2398 |
| 1958. | 3.4802 | 1.1751 | 0.4902 | 1.4926 | 0.2513 |
| 1959. | 3.6803 | 1.2686 | 0.5242 | 1.6112 | 0.2712 |
| 1960. | 3.9429 | 1.3591 | 0.5670 | 1.7262 | 0.2906 |
| 1961. | 4.1811 | 1.4412 | 0.6012 | 1.8305 | 0.3081 |
| 1962. | 4.4811 | 1.5446 | 0.6404 | 1.9618 | 0.3302 |
| 1963. | 4.7708 | 1.6476 | 0.6873 | 2.0926 | 0.3523 |
| 1964. | 5.1190 | 1.7914 | 0.7473 | 2.2752 | 0.3830 |
| 1965. | 5.5331 | 1.9279 | 0.8043 | 2.4486 | 0.4122 |
| 1966. | 6.0497 | 2.0853 | 0.8699 | 2.6485 | 0.4459 |
| 1967. | 6.4219 | 2.2136 | 0.9235 | 2.8115 | 0.4733 |
| 1968. | 6.9052 | 2.3802 | 0.9880 | 3.0231 | 0.5089 |
| 1969. | 7.3966 | 2.5496 | 1.0636 | 3.2382 | 0.5451 |
| 1970. | 7.8214 | 2.6960 | 1.1247 | 3.4242 | 0.5764 |

F-D MATRIX FOR MAIN AFRICA

I--FOOD
II--NON-FOOD

CONSUMPTION

| YEAR | CALC | I | II |
|-------|---------|---------|---------|
| 1950. | 8.4949 | 4.2678 | 4.2270 |
| 1951. | 8.9059 | 4.4742 | 4.4315 |
| 1952. | 9.3375 | 4.6912 | 4.6483 |
| 1953. | 9.7801 | 4.9180 | 4.8710 |
| 1954. | 10.2620 | 5.1555 | 5.1063 |
| 1955. | 10.7574 | 5.4045 | 5.3528 |
| 1956. | 11.2770 | 5.6655 | 5.6113 |
| 1957. | 11.8212 | 5.9386 | 5.8821 |
| 1958. | 12.3824 | 6.2209 | 6.1614 |
| 1959. | 13.1613 | 6.6121 | 6.5480 |
| 1960. | 14.3131 | 7.1909 | 7.1221 |
| 1961. | 14.4701 | 7.2697 | 7.2083 |
| 1962. | 14.9232 | 7.4974 | 7.4257 |
| 1963. | 15.6366 | 7.8558 | 7.7806 |
| 1964. | 16.5740 | 8.3265 | 8.2471 |
| 1965. | 17.3911 | 8.7372 | 8.6537 |
| 1966. | 18.1670 | 9.1270 | 9.0398 |
| 1967. | 19.2852 | 9.6887 | 9.5962 |
| 1968. | 20.8540 | 10.0750 | 9.9788 |
| 1969. | 21.4014 | 10.7520 | 10.6492 |
| 1970. | 22.3418 | 11.2244 | 11.1172 |

GOVERNMENT

| YEAR | CALC | I | II |
|-------|--------|--------|--------|
| 1950. | 0.8152 | 0.0229 | 0.7923 |
| 1951. | 0.8440 | 0.0248 | 0.8192 |
| 1952. | 0.9268 | 0.0269 | 0.9009 |
| 1953. | 1.0349 | 0.0291 | 1.0058 |
| 1954. | 1.1186 | 0.0314 | 1.0872 |
| 1955. | 1.2053 | 0.0340 | 1.1713 |
| 1956. | 1.3045 | 0.0367 | 1.2678 |
| 1957. | 1.4175 | 0.0396 | 1.3679 |
| 1958. | 1.5168 | 0.0426 | 1.4742 |
| 1959. | 1.6574 | 0.0466 | 1.6112 |
| 1960. | 1.8531 | 0.0521 | 1.8010 |
| 1961. | 1.9248 | 0.0541 | 1.8707 |
| 1962. | 2.0385 | 0.0573 | 1.9812 |
| 1963. | 2.1127 | 0.0616 | 2.0510 |
| 1964. | 2.2563 | 0.0670 | 2.1893 |
| 1965. | 2.3576 | 0.0721 | 2.2855 |
| 1966. | 2.7407 | 0.0773 | 2.6634 |
| 1967. | 2.9922 | 0.0841 | 2.9081 |
| 1968. | 3.1885 | 0.0886 | 3.0998 |
| 1969. | 3.4859 | 0.0980 | 3.3879 |
| 1970. | 3.7269 | 0.1047 | 3.6221 |

F-D MATRIX FOR MAIN AFRICA

I--FOOD
II--NON-FOOD

| INVESTMENT | | | IMPORTS | | |
|------------|--------|--------|---------|--------|--------|
| YEAR | CALC | I | YEAR | CALC | I |
| 1950. | 1.5111 | 0.0000 | 1950. | 2.2122 | 0.1665 |
| 1951. | 1.5961 | 0.0000 | 1951. | 2.3670 | 0.4100 |
| 1952. | 1.6861 | 0.0000 | 1952. | 2.4901 | 0.4350 |
| 1953. | 1.7810 | 0.0000 | 1953. | 2.6417 | 0.4615 |
| 1954. | 1.8812 | 0.0000 | 1954. | 2.8023 | 0.4896 |
| 1955. | 1.9870 | 0.0000 | 1955. | 2.9725 | 0.5193 |
| 1956. | 2.0989 | 0.0000 | 1956. | 3.1532 | 0.5509 |
| 1957. | 2.2170 | 0.0000 | 1957. | 3.3446 | 0.5843 |
| 1958. | 2.3402 | 0.0000 | 1958. | 3.5480 | 0.6193 |
| 1959. | 2.5065 | 0.0000 | 1959. | 3.7637 | 0.6661 |
| 1960. | 2.7470 | 0.0000 | 1960. | 4.1955 | 0.7329 |
| 1961. | 2.7987 | 0.0000 | 1961. | 4.2918 | 0.7498 |
| 1962. | 2.9089 | 0.0000 | 1962. | 4.4786 | 0.7824 |
| 1963. | 3.0718 | 0.0000 | 1963. | 4.7482 | 0.8295 |
| 1964. | 3.2815 | 0.0000 | 1964. | 5.0924 | 0.8896 |
| 1965. | 3.4704 | 0.0000 | 1965. | 5.4067 | 0.9445 |
| 1966. | 3.6539 | 0.0000 | 1966. | 5.7147 | 0.9984 |
| 1967. | 3.9096 | 0.0000 | 1967. | 6.1381 | 1.0723 |
| 1968. | 4.0979 | 0.0000 | 1968. | 6.4583 | 1.1283 |
| 1969. | 4.4082 | 0.0000 | 1969. | 6.9737 | 1.2183 |
| 1970. | 4.6388 | 0.0000 | 1970. | 7.3661 | 1.2868 |
| | | | | | 1.6092 |
| | | | | | 1.8257 |
| | | | | | 1.9370 |
| | | | | | 2.0551 |
| | | | | | 2.1802 |
| | | | | | 2.3127 |
| | | | | | 2.4532 |
| | | | | | 2.6023 |
| | | | | | 2.7603 |
| | | | | | 2.9257 |
| | | | | | 3.1486 |
| | | | | | 3.4225 |
| | | | | | 3.5420 |
| | | | | | 3.6961 |
| | | | | | 3.9186 |
| | | | | | 4.2027 |
| | | | | | 4.4620 |
| | | | | | 4.7163 |
| | | | | | 5.0657 |
| | | | | | 5.3300 |
| | | | | | 5.7553 |
| | | | | | 6.0792 |

F-D MATRIX FOR MAIN AFRICA

 I--FOOD
 II--NON-FOOD

EXPORTS

| YEAR | CALC | I | II |
|-------|--------|--------|--------|
| 1950. | 1.9512 | 0.6726 | 1.2786 |
| 1951. | 2.1512 | 0.7415 | 1.4097 |
| 1952. | 2.3096 | 0.7961 | 1.5185 |
| 1953. | 2.4764 | 0.8536 | 1.6228 |
| 1954. | 2.6111 | 0.9000 | 1.7110 |
| 1955. | 2.8694 | 0.9891 | 1.8803 |
| 1956. | 3.0577 | 1.0540 | 2.0037 |
| 1957. | 3.2536 | 1.1215 | 2.1320 |
| 1958. | 3.4092 | 1.1751 | 2.2340 |
| 1959. | 3.6803 | 1.2686 | 2.4117 |
| 1960. | 3.9429 | 1.3591 | 2.5837 |
| 1961. | 4.1811 | 1.4412 | 2.7398 |
| 1962. | 4.4311 | 1.5446 | 2.9364 |
| 1963. | 4.7798 | 1.6476 | 3.1321 |
| 1964. | 5.1970 | 1.7914 | 3.4055 |
| 1965. | 5.5931 | 1.9279 | 3.6651 |
| 1966. | 6.0497 | 2.0853 | 3.9643 |
| 1967. | 6.4219 | 2.2136 | 4.2082 |
| 1968. | 6.9052 | 2.3802 | 4.5249 |
| 1969. | 7.3966 | 2.5496 | 4.8469 |
| 1970. | 7.8214 | 2.6960 | 5.1253 |

F-D MATRIX FOR SOUTH EAST ASIA

| YEAR | CALC. | CONSUMPTION | | | | | | | | |
|-------|---------|-------------|--------|--------|---------|--------|--------|---------|--------|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1950. | 43,6167 | 25,1709 | 0.0000 | 0.1527 | 5.5393 | 4.5143 | 0.0000 | 8.2394 | 0.0000 | 0.0000 |
| 1951. | 44,8590 | 25,9087 | 0.0000 | 0.1571 | 5,7017 | 4.6466 | 0.0000 | 8.4806 | 0.0000 | 0.0000 |
| 1952. | 46,1006 | 26,6392 | 0.0000 | 0.1616 | 5,8624 | 4.7776 | 0.0000 | 8.7197 | 0.0000 | 0.0000 |
| 1953. | 49,6011 | 28,6245 | 0.0000 | 0.1736 | 6,2993 | 5.1337 | 0.0000 | 9.3696 | 0.0000 | 0.0000 |
| 1954. | 50,8301 | 29,3340 | 0.0000 | 0.1779 | 6,4554 | 5.2609 | 0.0000 | 9.6017 | 0.0000 | 0.0000 |
| 1955. | 52,0444 | 30,0356 | 0.0000 | 0.1822 | 6,6199 | 5.3868 | 0.0000 | 9.8315 | 0.0000 | 0.0000 |
| 1956. | 54,6455 | 31,5605 | 0.0000 | 0.1914 | 6,9454 | 5.6602 | 0.0000 | 10.3306 | 0.0000 | 0.0000 |
| 1957. | 55,1553 | 31,8301 | 0.0000 | 0.1936 | 7,0843 | 5.7086 | 0.0000 | 10.4138 | 0.0000 | 0.0000 |
| 1958. | 57,0415 | 32,9185 | 0.0000 | 0.2062 | 7,4614 | 6.0970 | 0.0000 | 10.7750 | 0.0000 | 0.0000 |
| 1959. | 58,2087 | 33,9561 | 0.0000 | 0.2175 | 7,7454 | 6.4344 | 0.0000 | 11.1278 | 0.0000 | 0.0000 |
| 1960. | 62,1685 | 35,8774 | 0.0000 | 0.2264 | 8,1458 | 6.6957 | 0.0000 | 11.7202 | 0.0000 | 0.0000 |
| 1961. | 64,6924 | 37,3340 | 0.0000 | 0.2327 | 8,4441 | 6.8817 | 0.0000 | 12.2558 | 0.0000 | 0.0000 |
| 1962. | 66,4902 | 38,3711 | 0.0000 | 0.2436 | 8,8449 | 7.2100 | 0.0000 | 13.1549 | 0.0000 | 0.0000 |
| 1963. | 69,6671 | 40,2021 | 0.0000 | 0.2572 | 9,3337 | 7.6066 | 0.0000 | 13.8528 | 0.0000 | 0.0000 |
| 1964. | 73,4941 | 42,4131 | 0.0000 | 0.2644 | 9,7686 | 7.9787 | 0.0000 | 14.8171 | 0.0000 | 0.0000 |
| 1965. | 75,1465 | 42,2129 | 0.0000 | 0.2682 | 10,2427 | 8.3475 | 0.0000 | 14,2703 | 0.0000 | 0.0000 |
| 1966. | 75,5449 | 43,5967 | 0.0000 | 0.2905 | 10,5393 | 8.5891 | 0.0000 | 15,2351 | 0.0000 | 0.0000 |
| 1967. | 80,6593 | 46,5439 | 0.0000 | 0.3104 | 11,2622 | 9.1782 | 0.0000 | 16,7512 | 0.0000 | 0.0000 |
| 1968. | 82,9863 | 47,8916 | 0.0000 | 0.3254 | 11,8064 | 9.6217 | 0.0000 | 17,5608 | 0.0000 | 0.0000 |
| 1969. | 88,6787 | 51,1758 | 0.0000 | | | | | | | |
| 1970. | 92,9639 | 53,6494 | 0.0000 | | | | | | | |

| YEAR | CALC. | GOVERNMENT | | | | | | | | |
|-------|---------|------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1950. | 3,5529 | 1,6489 | 0.0000 | 0.2778 | 0.0810 | 0.5604 | 0.0000 | 0.9445 | 0.0000 | 0.0000 |
| 1951. | 3,7749 | 1,7519 | 0.0000 | 0.2952 | 0.0861 | 0.5957 | 0.0000 | 1.0140 | 0.0000 | 0.0000 |
| 1952. | 4,0036 | 1,8581 | 0.0000 | 0.3131 | 0.0913 | 0.6314 | 0.0000 | 1.1094 | 0.0000 | 0.0000 |
| 1953. | 4,4347 | 2,0581 | 0.0000 | 0.3468 | 0.1011 | 0.6994 | 0.0000 | 1.2289 | 0.0000 | 0.0000 |
| 1954. | 4,6817 | 2,1728 | 0.0000 | 0.3661 | 0.1067 | 0.7384 | 0.0000 | 1.2973 | 0.0000 | 0.0000 |
| 1955. | 4,9354 | 2,2905 | 0.0000 | 0.3859 | 0.1125 | 0.7849 | 0.0000 | 1.5676 | 0.0000 | 0.0000 |
| 1956. | 5,3362 | 2,4765 | 0.0000 | 0.4173 | 0.1217 | 0.8420 | 0.0000 | 1.4786 | 0.0000 | 0.0000 |
| 1957. | 5,5347 | 2,5687 | 0.0000 | 0.4328 | 0.1262 | 0.8734 | 0.0000 | 1.5337 | 0.0000 | 0.0000 |
| 1958. | 5,8836 | 2,7306 | 0.0000 | 0.4601 | 0.1341 | 0.9284 | 0.0000 | 1.6303 | 0.0000 | 0.0000 |
| 1959. | 6,2425 | 2,8971 | 0.0000 | 0.4882 | 0.1423 | 0.9451 | 0.0000 | 1.7298 | 0.0000 | 0.0000 |
| 1960. | 6,7652 | 3,1397 | 0.0000 | 0.5290 | 0.1542 | 1.0676 | 0.0000 | 1.8746 | 0.0000 | 0.0000 |
| 1961. | 7,2959 | 3,3535 | 0.0000 | 0.5651 | 0.1647 | 1.1402 | 0.0000 | 2.0023 | 0.0000 | 0.0000 |
| 1962. | 7,6198 | 3,5363 | 0.0000 | 0.5959 | 0.1737 | 1.2024 | 0.0000 | 2.1114 | 0.0000 | 0.0000 |
| 1963. | 8,1875 | 3,7998 | 0.0000 | 0.6403 | 0.1867 | 1.2920 | 0.0000 | 2.2687 | 0.0000 | 0.0000 |
| 1964. | 8,8353 | 4,1097 | 0.0000 | 0.6925 | 0.2019 | 1.3974 | 0.0000 | 2.4538 | 0.0000 | 0.0000 |
| 1965. | 9,0319 | 4,1917 | 0.0000 | 0.7063 | 0.2059 | 1.3974 | 0.0000 | 2.5027 | 0.0000 | 0.0000 |
| 1966. | 9,5560 | 4,4349 | 0.0000 | 0.7473 | 0.2174 | 1.5079 | 0.0000 | 2.6479 | 0.0000 | 0.0000 |
| 1967. | 10,4475 | 4,8486 | 0.0000 | 0.8170 | 0.2332 | 1.6486 | 0.0000 | 2.8950 | 0.0000 | 0.0000 |
| 1968. | 11,0049 | 5,1074 | 0.0000 | 0.8606 | 0.2509 | 1.7366 | 0.0000 | 3.0494 | 0.0000 | 0.0000 |
| 1969. | 12,0349 | 5,585 | 0.0000 | 0.9411 | 0.2744 | 1.8991 | 0.0000 | 3.3348 | 0.0000 | 0.0000 |
| 1970. | 12,9040 | 5,9905 | 0.0000 | 1.0094 | 0.2943 | 2.0369 | 0.0000 | 3.5768 | 0.0000 | 0.0000 |

F-D MATRIX FOR SOUTH EAST ASIA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DEWELLINGS

INVESTMENT

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| 1950. | 5,3506 | 0,3392 | 0,0000 | 0,0000 | 0,0000 | 4,0338 | 0,0000 | 0,0775 | 0,0000 | 0,0000 |
| 1951. | 5,6915 | 0,3608 | 0,0000 | 0,0000 | 0,0000 | 4,2904 | 0,0000 | 1,0394 | 0,0000 | 0,0000 |
| 1952. | 6,0428 | 0,3831 | 0,0000 | 0,0000 | 0,0000 | 4,5554 | 0,0000 | 1,1040 | 0,0000 | 0,0000 |
| 1953. | 6,7002 | 0,4248 | 0,0000 | 0,0000 | 0,0000 | 5,0512 | 0,0000 | 1,2241 | 0,0000 | 0,0000 |
| 1954. | 7,0603 | 0,4489 | 0,0000 | 0,0000 | 0,0000 | 5,3374 | 0,0000 | 1,2946 | 0,0000 | 0,0000 |
| 1955. | 7,4708 | 0,4736 | 0,0000 | 0,0000 | 0,0000 | 5,6322 | 0,0000 | 1,3649 | 0,0000 | 0,0000 |
| 1956. | 8,0846 | 0,5126 | 0,0000 | 0,0000 | 0,0000 | 6,0044 | 0,0000 | 1,4270 | 0,0000 | 0,0000 |
| 1957. | 8,3923 | 0,5321 | 0,0000 | 0,0000 | 0,0000 | 6,3248 | 0,0000 | 1,5353 | 0,0000 | 0,0000 |
| 1958. | 8,9285 | 0,5661 | 0,0000 | 0,0000 | 0,0000 | 6,7311 | 0,0000 | 1,6320 | 0,0000 | 0,0000 |
| 1959. | 9,4803 | 0,6010 | 0,0000 | 0,0000 | 0,0000 | 7,1472 | 0,0000 | 1,7320 | 0,0000 | 0,0000 |
| 1960. | 10,2615 | 0,6516 | 0,0000 | 0,0000 | 0,0000 | 7,7511 | 0,0000 | 1,8784 | 0,0000 | 0,0000 |
| 1961. | 10,8004 | 0,6967 | 0,0000 | 0,0000 | 0,0000 | 8,2844 | 0,0000 | 2,0077 | 0,0000 | 0,0000 |
| 1962. | 11,5961 | 0,7352 | 0,0000 | 0,0000 | 0,0000 | 8,7422 | 0,0000 | 2,1186 | 0,0000 | 0,0000 |
| 1963. | 12,4679 | 0,7905 | 0,0000 | 0,0000 | 0,0000 | 9,3994 | 0,0000 | 2,2779 | 0,0000 | 0,0000 |
| 1964. | 13,4932 | 0,8555 | 0,0000 | 0,0000 | 0,0000 | 10,1724 | 0,0000 | 2,4652 | 0,0000 | 0,0000 |
| 1965. | 13,7703 | 0,8730 | 0,0000 | 0,0000 | 0,0000 | 10,3813 | 0,0000 | 2,5158 | 0,0000 | 0,0000 |
| 1966. | 14,5776 | 0,9242 | 0,0000 | 0,0000 | 0,0000 | 10,9900 | 0,0000 | 2,6633 | 0,0000 | 0,0000 |
| 1967. | 15,8463 | 1,0110 | 0,0000 | 0,0000 | 0,0000 | 12,0219 | 0,0000 | 2,8104 | 0,0000 | 0,0000 |
| 1968. | 16,8059 | 1,0655 | 0,0000 | 0,0000 | 0,0000 | 12,6599 | 0,0000 | 3,0704 | 0,0000 | 0,0000 |
| 1969. | 18,3882 | 1,1658 | 0,0000 | 0,0000 | 0,0000 | 13,8628 | 0,0000 | 3,3545 | 0,0000 | 0,0000 |
| 1970. | 14,7317 | 1,2510 | 0,0000 | 0,0000 | 0,0000 | 14,8755 | 0,0000 | 3,6049 | 0,0000 | 0,0000 |

IMPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 5,2896 | 1,2991 | 0,2163 | 0,4526 | 0,0341 | 3,2032 | 0,0000 | 0,0030 | 0,0000 | 0,0000 |
| 1951. | 5,5294 | 1,3558 | 0,2258 | 0,4725 | 0,0347 | 3,4265 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1952. | 5,7445 | 1,4133 | 0,2354 | 0,4926 | 0,0344 | 3,5718 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1953. | 6,2635 | 1,5395 | 0,2564 | 0,5366 | 0,0451 | 3,4908 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1954. | 6,5119 | 1,5903 | 0,2643 | 0,5574 | 0,0449 | 4,0419 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1955. | 6,7586 | 1,6599 | 0,2744 | 0,5745 | 0,0437 | 4,1950 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1956. | 7,1942 | 1,7679 | 0,2944 | 0,6162 | 0,0519 | 4,4574 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1957. | 7,3578 | 1,8071 | 0,3009 | 0,6293 | 0,0530 | 4,5670 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1958. | 7,7119 | 1,4940 | 0,3154 | 0,6801 | 0,0555 | 4,7867 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1959. | 8,0710 | 1,9822 | 0,3301 | 0,6909 | 0,0541 | 5,0096 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1960. | 8,6313 | 2,1198 | 0,3530 | 0,7398 | 0,0621 | 5,3574 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1961. | 9,1013 | 2,2353 | 0,3722 | 0,7791 | 0,0655 | 5,6490 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1962. | 9,4781 | 2,3278 | 0,3977 | 0,8113 | 0,0622 | 5,8831 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1963. | 10,0614 | 2,4711 | 0,4115 | 0,8613 | 0,0724 | 6,2450 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1964. | 10,7544 | 2,6413 | 0,4398 | 0,9206 | 0,0774 | 6,6752 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1965. | 10,8438 | 2,6632 | 0,4435 | 0,9282 | 0,0791 | 6,7306 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1966. | 11,4657 | 2,7865 | 0,4640 | 0,9712 | 0,0817 | 7,0422 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1967. | 12,2703 | 3,0135 | 0,5019 | 1,0503 | 0,0843 | 7,6161 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1968. | 12,7891 | 3,1410 | 0,5281 | 1,0947 | 0,0921 | 7,9381 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1969. | 13,8430 | 3,3998 | 0,5662 | 1,1850 | 0,0997 | 8,5923 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |
| 1970. | 14,6590 | 3,6100 | 0,6012 | 1,2582 | 0,1058 | 9,1235 | 0,0000 | 0,0000 | 0,0000 | 0,0000 |

F-D MATRIX FOR SOUTH EAST ASIA

1-AGRICULTURE 4-FOOD 7-SERVICES I
 2-MINING 5-MANUFACTURING 8-SERVICES II
 3-ENERGY 6-CONSTRUCTION 9-DWELLINGS

EXPORTS

| YEAR | CALC. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1950. | 4.2925 | 1.4398 | 0.1511 | 0.0279 | 0.1226 | 1.5350 | 0.0000 | 1.0169 | 0.0000 | 0.0000 |
| 1951. | 4.5784 | 1.5387 | 0.1612 | 0.0298 | 0.1307 | 1.6372 | 0.0000 | 1.0846 | 0.0000 | 0.0000 |
| 1952. | 4.7579 | 1.5948 | 0.1675 | 0.0309 | 0.1361 | 1.7014 | 0.0000 | 1.1271 | 0.0000 | 0.0000 |
| 1953. | 4.9401 | 1.6559 | 0.1739 | 0.0321 | 0.1413 | 1.7666 | 0.0000 | 1.1703 | 0.0000 | 0.0000 |
| 1954. | 5.0463 | 1.6915 | 0.1776 | 0.0328 | 0.1443 | 1.8046 | 0.0000 | 1.1955 | 0.0000 | 0.0000 |
| 1955. | 5.3749 | 1.8016 | 0.1892 | 0.0349 | 0.1537 | 1.9221 | 0.0000 | 1.2733 | 0.0000 | 0.0000 |
| 1956. | 5.5536 | 1.8615 | 0.1955 | 0.0361 | 0.1588 | 1.9860 | 0.0000 | 1.3156 | 0.0000 | 0.0000 |
| 1957. | 5.7320 | 1.9214 | 0.2018 | 0.0373 | 0.1639 | 2.0497 | 0.0000 | 1.3579 | 0.0000 | 0.0000 |
| 1958. | 5.8281 | 1.9536 | 0.2052 | 0.0379 | 0.1667 | 2.0841 | 0.0000 | 1.3807 | 0.0000 | 0.0000 |
| 1959. | 6.1071 | 2.0471 | 0.2150 | 0.0397 | 0.1747 | 2.1839 | 0.0000 | 1.4468 | 0.0000 | 0.0000 |
| 1960. | 6.3529 | 2.1205 | 0.2246 | 0.0413 | 0.1817 | 2.2718 | 0.0000 | 1.5050 | 0.0000 | 0.0000 |
| 1961. | 6.5433 | 2.1933 | 0.2303 | 0.0425 | 0.1871 | 2.3499 | 0.0000 | 1.5501 | 0.0000 | 0.0000 |
| 1962. | 6.8133 | 2.2838 | 0.2388 | 0.0443 | 0.1949 | 2.4364 | 0.0000 | 1.6141 | 0.0000 | 0.0000 |
| 1963. | 7.0626 | 2.3674 | 0.2486 | 0.0459 | 0.2020 | 2.5256 | 0.0000 | 1.6731 | 0.0000 | 0.0000 |
| 1964. | 7.4646 | 2.5021 | 0.2628 | 0.0485 | 0.2135 | 2.6289 | 0.0000 | 1.7684 | 0.0000 | 0.0000 |
| 1965. | 7.8118 | 2.6182 | 0.2749 | 0.0508 | 0.2234 | 2.7332 | 0.0000 | 1.8504 | 0.0000 | 0.0000 |
| 1966. | 8.2166 | 2.7582 | 0.2892 | 0.0534 | 0.2350 | 2.8382 | 0.0000 | 1.9465 | 0.0000 | 0.0000 |
| 1967. | 8.4843 | 2.8439 | 0.2986 | 0.0551 | 0.2426 | 3.0339 | 0.0000 | 2.0099 | 0.0000 | 0.0000 |
| 1968. | 8.8759 | 2.9752 | 0.3124 | 0.0577 | 0.2538 | 3.1740 | 0.0000 | 2.1027 | 0.0000 | 0.0000 |
| 1969. | 9.2518 | 3.1012 | 0.3257 | 0.0601 | 0.2646 | 3.3084 | 0.0000 | 2.1917 | 0.0000 | 0.0000 |
| 1970. | 9.5219 | 3.1917 | 0.3352 | 0.0619 | 0.2723 | 3.4050 | 0.0000 | 2.2557 | 0.0000 | 0.0000 |

F-D MATRIX FOR SOUTH EAST ASIA
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| CONSUMPTION | | | | | |
|-------------|---------|---------|--------|--------|---------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 43.6167 | 30.7102 | 0.1527 | 4.5143 | 6.2391 |
| 1951. | 44.8950 | 31.6104 | 0.1571 | 4.6446 | 6.4806 |
| 1952. | 46.1606 | 32.5015 | 0.1616 | 4.7776 | 6.7197 |
| 1953. | 49.4011 | 34.9238 | 0.1736 | 5.1337 | 7.1606 |
| 1954. | 50.8301 | 35.7891 | 0.1779 | 5.2609 | 7.4117 |
| 1955. | 52.0464 | 36.6455 | 0.1822 | 5.3866 | 7.6315 |
| 1956. | 54.6885 | 38.5059 | 0.1914 | 5.6602 | 10.3306 |
| 1957. | 55.1553 | 39.4245 | 0.1930 | 5.7086 | 10.4198 |
| 1958. | 57.0415 | 40.1626 | 0.1986 | 5.9038 | 10.7750 |
| 1959. | 58.9087 | 41.4775 | 0.2062 | 6.0970 | 11.1278 |
| 1960. | 62.1685 | 43.7725 | 0.2176 | 6.4344 | 11.7415 |
| 1961. | 64.6924 | 45.5498 | 0.2264 | 6.6957 | 12.2202 |
| 1962. | 66.4902 | 46.8149 | 0.2327 | 6.8817 | 12.5498 |
| 1963. | 69.0621 | 49.0480 | 0.2438 | 7.2100 | 13.1599 |
| 1964. | 73.4941 | 51.7466 | 0.2572 | 7.6066 | 13.8828 |
| 1965. | 73.1465 | 51.5024 | 0.2560 | 7.5707 | 13.8171 |
| 1966. | 74.5449 | 53.1909 | 0.2644 | 7.8188 | 14.2703 |
| 1967. | 80.6523 | 56.7866 | 0.2823 | 8.3475 | 15.2351 |
| 1968. | 82.9863 | 58.4307 | 0.2905 | 8.5891 | 15.6740 |
| 1969. | 88.6787 | 62.8380 | 0.3104 | 9.1782 | 16.7512 |
| 1970. | 92.9689 | 65.4551 | 0.3254 | 9.6217 | 17.5608 |

| GOVERNMENT | | | | | |
|------------|---------|--------|--------|--------|--------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 3.5229 | 1.7299 | 0.2778 | 0.5606 | 0.9845 |
| 1951. | 3.7749 | 1.8380 | 0.2952 | 0.5957 | 1.0460 |
| 1952. | 4.0036 | 1.9433 | 0.3131 | 0.6314 | 1.1094 |
| 1953. | 4.4347 | 2.1292 | 0.3468 | 0.6946 | 1.2209 |
| 1954. | 4.6417 | 2.2795 | 0.3661 | 0.7348 | 1.2973 |
| 1955. | 4.9354 | 2.4030 | 0.3859 | 0.7708 | 1.3676 |
| 1956. | 5.1562 | 2.5141 | 0.4173 | 0.8420 | 1.4746 |
| 1957. | 5.5587 | 2.6949 | 0.4328 | 0.8734 | 1.5337 |
| 1958. | 5.8836 | 2.8647 | 0.4601 | 0.9284 | 1.6303 |
| 1959. | 6.2425 | 3.0394 | 0.4882 | 0.9551 | 1.7298 |
| 1960. | 6.7752 | 3.2939 | 0.5200 | 1.0676 | 1.8746 |
| 1961. | 7.2259 | 3.5142 | 0.5651 | 1.1402 | 2.0023 |
| 1962. | 7.6198 | 3.7101 | 0.5959 | 1.2024 | 2.1114 |
| 1963. | 8.1177 | 3.9665 | 0.6403 | 1.2920 | 2.2657 |
| 1964. | 8.8553 | 4.3116 | 0.6925 | 1.3974 | 2.4538 |
| 1965. | 9.0339 | 4.3975 | 0.7063 | 1.4252 | 2.5027 |
| 1966. | 9.5559 | 4.6527 | 0.7473 | 1.5079 | 2.6479 |
| 1967. | 10.4475 | 5.0868 | 0.8170 | 1.6486 | 2.8950 |
| 1968. | 11.0047 | 5.3582 | 0.8606 | 1.7366 | 3.0484 |
| 1969. | 12.0349 | 5.8597 | 0.9411 | 1.8991 | 3.3348 |
| 1970. | 12.9080 | 6.2848 | 1.0094 | 2.0369 | 3.5768 |

F-D MATRIX FOR SOUTH EAST ASIA
 I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| INVESTMENT | | | | | |
|------------|----------|--------|--------|---------|--------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 5,350.6 | 0,3392 | 0,0000 | 4,0338 | 0,9775 |
| 1951. | 5,691.5 | 0,3608 | 0,0000 | 4,2908 | 1,0398 |
| 1952. | 6,042.8 | 0,3831 | 0,0000 | 4,5556 | 1,1040 |
| 1953. | 6,700.2 | 0,4248 | 0,0000 | 5,0512 | 1,2241 |
| 1954. | 7,080.3 | 0,4449 | 0,0000 | 5,3379 | 1,2936 |
| 1955. | 7,470.8 | 0,4736 | 0,0000 | 5,6322 | 1,3649 |
| 1956. | 8,084.6 | 0,5126 | 0,0000 | 6,0948 | 1,4770 |
| 1957. | 8,392.5 | 0,5321 | 0,0000 | 6,3264 | 1,5353 |
| 1958. | 8,928.5 | 0,5661 | 0,0000 | 6,7311 | 1,6312 |
| 1959. | 9,480.3 | 0,6010 | 0,0000 | 7,1472 | 1,7320 |
| 1960. | 10,281.5 | 0,6518 | 0,0000 | 7,7511 | 1,8784 |
| 1961. | 10,988.4 | 0,6967 | 0,0000 | 8,2848 | 2,0077 |
| 1962. | 11,459.1 | 0,7352 | 0,0000 | 8,7422 | 2,1186 |
| 1963. | 12,467.9 | 0,7805 | 0,0000 | 9,3994 | 2,2732 |
| 1964. | 13,493.2 | 0,8255 | 0,0000 | 10,1724 | 2,4652 |
| 1965. | 13,770.3 | 0,8730 | 0,0000 | 10,3813 | 2,5158 |
| 1966. | 14,577.6 | 0,9242 | 0,0000 | 10,9900 | 2,6633 |
| 1967. | 15,946.3 | 1,0110 | 0,0000 | 12,0219 | 2,9134 |
| 1968. | 16,805.9 | 1,0655 | 0,0000 | 12,6699 | 3,0704 |
| 1969. | 18,388.2 | 1,1658 | 0,0000 | 13,8628 | 3,3595 |
| 1970. | 19,731.7 | 1,2510 | 0,0000 | 14,8755 | 3,6049 |

| IMPORTS | | | | | |
|---------|----------|--------|--------|--------|--------|
| YEAR | CALC. | I | II | III | IV |
| 1950. | 5,289.6 | 1,3372 | 0,6691 | 3,2982 | 0,0000 |
| 1951. | 5,520.4 | 1,3955 | 0,6983 | 3,4265 | 0,0000 |
| 1952. | 5,754.5 | 1,4547 | 0,7279 | 3,5710 | 0,0000 |
| 1953. | 6,268.5 | 1,5847 | 0,7930 | 3,8908 | 0,0000 |
| 1954. | 6,511.9 | 1,6462 | 0,8237 | 4,0419 | 0,0000 |
| 1955. | 6,759.6 | 1,7186 | 0,8550 | 4,1950 | 0,0000 |
| 1956. | 7,193.2 | 1,8197 | 0,9106 | 4,4678 | 0,0000 |
| 1957. | 7,357.8 | 1,8600 | 0,9308 | 4,5670 | 0,0000 |
| 1958. | 7,711.9 | 1,9496 | 0,9755 | 4,7467 | 0,0000 |
| 1959. | 8,071.0 | 2,0403 | 1,0210 | 5,0096 | 0,0000 |
| 1960. | 8,631.3 | 2,1820 | 1,0918 | 5,3574 | 0,0000 |
| 1961. | 8,101.3 | 2,3008 | 1,1513 | 5,6490 | 0,0000 |
| 1962. | 9,474.1 | 2,3961 | 1,1900 | 5,8431 | 0,0000 |
| 1963. | 10,061.4 | 2,5435 | 1,2728 | 6,2450 | 0,0000 |
| 1964. | 10,754.4 | 2,7187 | 1,3604 | 6,6752 | 0,0000 |
| 1965. | 10,843.8 | 2,7413 | 1,3717 | 6,7305 | 0,0000 |
| 1966. | 11,345.7 | 2,8682 | 1,4552 | 7,0422 | 0,0000 |
| 1967. | 12,270.3 | 3,1019 | 1,5522 | 7,6161 | 0,0000 |
| 1968. | 12,785.1 | 3,2330 | 1,6178 | 7,9381 | 0,0000 |
| 1969. | 13,843.0 | 3,4995 | 1,7511 | 8,5923 | 0,0000 |
| 1970. | 14,699.0 | 3,7159 | 1,8504 | 9,1235 | 0,0000 |

F-D MATRIX FOR SOUTH EAST ASIA

I-AGRICULTURE + FOOD III-MANUFACT. + CONSTRUCTION
 II-MINING + ENERGY IV-SERVICES + DWELLINGS

| EXPORTS | | I | II | III | IV |
|---------|--------|--------|--------|--------|--------|
| YEAR | CALC. | | | | |
| 1950. | 4.2925 | 1.5616 | 0.1790 | 1.5350 | 1.0169 |
| 1951. | 4.5784 | 1.6656 | 0.1909 | 1.6372 | 1.0846 |
| 1952. | 4.7579 | 1.7309 | 0.1984 | 1.7014 | 1.1271 |
| 1953. | 4.9401 | 1.7972 | 0.2060 | 1.7666 | 1.1703 |
| 1954. | 5.0463 | 1.8358 | 0.2104 | 1.8046 | 1.1955 |
| 1955. | 5.1749 | 1.9554 | 0.2241 | 1.9221 | 1.2733 |
| 1956. | 5.5336 | 2.0204 | 0.2316 | 1.9860 | 1.3156 |
| 1957. | 5.7320 | 2.0853 | 0.2390 | 2.0497 | 1.3579 |
| 1958. | 5.8281 | 2.1202 | 0.2430 | 2.0841 | 1.3607 |
| 1959. | 6.1071 | 2.2217 | 0.2547 | 2.1839 | 1.4468 |
| 1960. | 6.3529 | 2.3112 | 0.2649 | 2.2718 | 1.5050 |
| 1961. | 6.5433 | 2.3804 | 0.2729 | 2.3399 | 1.5501 |
| 1962. | 6.8133 | 2.4787 | 0.2841 | 2.4364 | 1.6141 |
| 1963. | 7.0626 | 2.5693 | 0.2845 | 2.5256 | 1.6731 |
| 1964. | 7.4646 | 2.7156 | 0.3113 | 2.6693 | 1.7684 |
| 1965. | 7.8110 | 2.8416 | 0.3257 | 2.7932 | 1.8504 |
| 1966. | 8.2166 | 2.9891 | 0.3426 | 2.9382 | 1.9465 |
| 1967. | 8.4843 | 3.0665 | 0.3538 | 3.0339 | 2.0099 |
| 1968. | 8.8759 | 3.2290 | 0.3701 | 3.1740 | 2.1027 |
| 1969. | 9.2518 | 3.3658 | 0.3858 | 3.3084 | 2.1917 |
| 1970. | 9.5219 | 3.4640 | 0.3971 | 3.4050 | 2.2557 |

F-D MATRIX FOR SOUTH EAST ASIA

I--FOOD
II--NON-FOOD

CONSUMPTION

| YEAR | CALC | I | II |
|-------|---------|---------|---------|
| 1950. | 43.6167 | 30.7102 | 12.9061 |
| 1951. | 44.8950 | 31.6104 | 13.2843 |
| 1952. | 46.1606 | 32.5015 | 13.6588 |
| 1953. | 46.8011 | 34.9238 | 14.6769 |
| 1954. | 50.8301 | 35.7891 | 15.0404 |
| 1955. | 52.0444 | 36.6455 | 15.4004 |
| 1956. | 54.6885 | 38.5059 | 16.1821 |
| 1957. | 55.1553 | 38.8345 | 16.3203 |
| 1958. | 57.0415 | 40.1626 | 16.8784 |
| 1959. | 58.9087 | 41.4775 | 17.4309 |
| 1960. | 62.1685 | 43.7725 | 18.3955 |
| 1961. | 64.6924 | 45.5468 | 19.1421 |
| 1962. | 66.4902 | 46.8149 | 19.6741 |
| 1963. | 69.6621 | 49.0488 | 20.6125 |
| 1964. | 73.4941 | 51.7466 | 21.7466 |
| 1965. | 73.1465 | 51.5024 | 21.6438 |
| 1966. | 75.5449 | 53.1909 | 22.3535 |
| 1967. | 80.6523 | 56.7866 | 23.8647 |
| 1968. | 82.9863 | 58.4307 | 24.5554 |
| 1969. | 88.6787 | 62.4380 | 26.2397 |
| 1970. | 92.9639 | 65.4551 | 27.5078 |

GOVERNMENT

| YEAR | CALC | I | II |
|-------|---------|--------|--------|
| 1950. | 3.5529 | 1.7299 | 1.8230 |
| 1951. | 3.7749 | 1.8380 | 1.9369 |
| 1952. | 4.0036 | 1.9493 | 2.0542 |
| 1953. | 4.4347 | 2.1592 | 2.2754 |
| 1954. | 4.6817 | 2.2795 | 2.4021 |
| 1955. | 4.9384 | 2.4030 | 2.5323 |
| 1956. | 5.3352 | 2.5281 | 2.7379 |
| 1957. | 5.5347 | 2.6949 | 2.8398 |
| 1958. | 5.8836 | 2.8647 | 3.0189 |
| 1959. | 6.2425 | 3.0394 | 3.2030 |
| 1960. | 6.7652 | 3.2939 | 3.4712 |
| 1961. | 7.2259 | 3.5182 | 3.7076 |
| 1962. | 7.6198 | 3.7101 | 3.9097 |
| 1963. | 8.1875 | 3.9865 | 4.2010 |
| 1964. | 8.4553 | 4.3116 | 4.5436 |
| 1965. | 9.0319 | 4.3975 | 4.6342 |
| 1966. | 9.5559 | 4.6527 | 4.9030 |
| 1967. | 10.4475 | 5.0868 | 5.3605 |
| 1968. | 11.0049 | 5.3582 | 5.6465 |
| 1969. | 12.0349 | 5.8597 | 6.1750 |
| 1970. | 12.9080 | 6.2848 | 6.5230 |

F-D MATRIX FOR SOUTH EAST ASIA

I--FOOD
II--NON-FOOD

INVESTMENT

| YEAR | CALC | | I | II |
|-------|---------|--------|---------|---------|
| | I | II | | |
| 1950. | 5.3506 | 0.3392 | 5.0113 | 5.0113 |
| 1951. | 5.6915 | 0.3608 | 5.3306 | 5.3306 |
| 1952. | 6.0428 | 0.3631 | 5.6596 | 5.6596 |
| 1953. | 6.7002 | 0.4248 | 6.2753 | 6.2753 |
| 1954. | 7.0803 | 0.4489 | 6.6313 | 6.6313 |
| 1955. | 7.8708 | 0.4736 | 6.9971 | 6.9971 |
| 1956. | 8.0646 | 0.5126 | 7.5718 | 7.5718 |
| 1957. | 8.3923 | 0.5321 | 7.8602 | 7.8602 |
| 1958. | 8.9285 | 0.5661 | 8.3622 | 8.3622 |
| 1959. | 9.4803 | 0.6010 | 8.8792 | 8.8792 |
| 1960. | 10.2815 | 0.6518 | 9.6295 | 9.6295 |
| 1961. | 10.9894 | 0.6967 | 10.2925 | 10.2925 |
| 1962. | 11.5961 | 0.7352 | 10.8607 | 10.8607 |
| 1963. | 12.4679 | 0.7905 | 11.6772 | 11.6772 |
| 1964. | 13.4932 | 0.8555 | 12.6375 | 12.6375 |
| 1965. | 13.7703 | 0.8730 | 12.8971 | 12.8971 |
| 1966. | 14.5776 | 0.9242 | 13.6532 | 13.6532 |
| 1967. | 15.9463 | 1.0110 | 14.9352 | 14.9352 |
| 1968. | 16.8059 | 1.0655 | 15.7402 | 15.7402 |
| 1969. | 18.3882 | 1.1658 | 17.2222 | 17.2222 |
| 1970. | 19.7317 | 1.2510 | 18.4802 | 18.4802 |

IMPORTS

| YEAR | CALC | | I | II |
|-------|---------|--------|---------|---------|
| | I | II | | |
| 1950. | 5.2896 | 1.3372 | 3.9523 | 3.9523 |
| 1951. | 5.5204 | 1.3955 | 4.1248 | 4.1248 |
| 1952. | 5.7545 | 1.4547 | 4.2997 | 4.2997 |
| 1953. | 6.2645 | 1.5847 | 4.6837 | 4.6837 |
| 1954. | 6.5119 | 1.6462 | 4.8656 | 4.8656 |
| 1955. | 6.7596 | 1.7086 | 5.0499 | 5.0499 |
| 1956. | 7.1192 | 1.8197 | 5.3784 | 5.3784 |
| 1957. | 7.3578 | 1.8600 | 5.4777 | 5.4777 |
| 1958. | 7.7119 | 1.9496 | 5.7623 | 5.7623 |
| 1959. | 8.0710 | 2.0403 | 6.0306 | 6.0306 |
| 1960. | 8.6313 | 2.1520 | 6.4492 | 6.4492 |
| 1961. | 9.1013 | 2.3008 | 6.8004 | 6.8004 |
| 1962. | 9.4741 | 2.3961 | 7.0820 | 7.0820 |
| 1963. | 10.0614 | 2.5435 | 7.5177 | 7.5177 |
| 1964. | 10.7544 | 2.7187 | 8.0355 | 8.0355 |
| 1965. | 10.8438 | 2.7413 | 8.1023 | 8.1023 |
| 1966. | 11.3457 | 2.8682 | 8.4774 | 8.4774 |
| 1967. | 12.2703 | 3.1019 | 9.1682 | 9.1682 |
| 1968. | 12.7891 | 3.2330 | 9.5559 | 9.5559 |
| 1969. | 13.8430 | 3.4995 | 10.3414 | 10.3414 |
| 1970. | 14.6990 | 3.7159 | 10.9829 | 10.9829 |

F-D MATRIX FOR SOUTH EAST ASIA
 I--FOOD
 II--NON-FOOD

| YEAR | EXPORTS | |
|-------|---------|--------|
| | I | II |
| 1950. | 4.2925 | 1.5616 |
| 1951. | 4.5784 | 1.6656 |
| 1952. | 4.7579 | 1.7309 |
| 1953. | 4.9401 | 1.7972 |
| 1954. | 5.0463 | 1.8358 |
| 1955. | 5.3749 | 1.9554 |
| 1956. | 5.5536 | 2.0204 |
| 1957. | 5.7320 | 2.0853 |
| 1958. | 5.8241 | 2.1202 |
| 1959. | 6.1071 | 2.2217 |
| 1960. | 6.3529 | 2.3112 |
| 1961. | 6.5433 | 2.3804 |
| 1962. | 6.8133 | 2.4787 |
| 1963. | 7.0626 | 2.5693 |
| 1964. | 7.4646 | 2.7156 |
| 1965. | 7.8110 | 2.8416 |
| 1966. | 8.2166 | 2.9891 |
| 1967. | 8.4843 | 3.0865 |
| 1968. | 8.8759 | 3.2290 |
| 1969. | 9.2518 | 3.3658 |
| 1970. | 9.5219 | 3.4640 |

2.7308

2.9128

3.0269

3.1429

3.2104

3.4195

3.5332

3.6467

3.7078

3.8553

4.0417

4.1626

4.3345

4.4932

4.7489

4.9693

5.2274

5.3976

5.6468

5.8859

6.0577