



OECD DEVELOPMENT CENTRE

Working Paper No. 3
(Formerly Technical Paper No. 3)

THE IMPACT OF BUDGET
RETRENCHMENT ON INCOME
DISTRIBUTION IN INDONESIA: A SOCIAL
ACCOUNTING MATRIX APPLICATION

by

Steven Keuning and Erik Thorbecke

Research programme on:
Adjustment Programmes and Equitable Growth



**THE IMPACT OF BUDGET RETRENCHMENT ON
INCOME DISTRIBUTION IN INDONESIA: A SOCIAL
ACCOUNTING MATRIX APPLICATION**

by

Steven Keuning
Institute of Social Studies

and

Erik Thorbecke*
Cornell University

Under the direction of:
Christian Morrisson

June 1989

© OECD 1989

(*) We acknowledge the valuable research assistance of Sharon Flanagan.

TABLE OF CONTENTS

Summary	7
Preface	9
I. The Changing Macroeconomic Setting In Indonesia In The 1980s	11
II. The Social Accounting Matrix As A Framework To Capture The General Interdependence Within The Socioeconomic System And The Impact Of Budget Retrenchment On Income Distribution	12
III. Initial Income Distribution And Budget Retrenchment Simulation Exercises	17
Notes and references	25
Bibliography	27
Figures and tables	29

SUMMARY

This document sets out a new method for assessing the implications of public expenditure cuts for income distribution. The instrument is a social accounting matrix providing the appropriate conceptual framework for estimating all the direct and indirect effects of changes in any given category of public expenditure (e.g. agricultural investment or education spending). By using this matrix it is possible to calculate the upstream effects of an adjustment measure on income distribution. It shows, for instance, that a decline in agricultural investment reduces employment and wages in the building sector. Similarly, a fall in education spending depresses the incomes of the skilled dependent labour force. The downstream effects have also been estimated: in the case of education this means cutbacks in free services to families and so a fall in their incomes.

This method has been applied to Indonesia in 1984-88 by comparing the observed effects of lower public spending due to structural adjustment with the effects that would have been produced had the reduction represented a constant percentage for each class of expenditure. In fact some classes of expenditure came in for the brunt of the government cuts while others were spared.

A statistical annex to accompany this paper has been published separately as Technical Paper No. 3a, available from the Development Centre.

RESUME

Ce document présente une nouvelle méthode pour évaluer l'incidence des réductions de dépenses publiques sur la distribution des revenus. L'instrument choisi est une matrice de compatibilité sociale qui fournit le cadre conceptuel approprié pour estimer l'ensemble des effets directs et indirects de la variation d'une catégorie de dépenses publiques (par exemple les investissements dans l'agriculture ou les dépenses d'éducation). Grâce à cette matrice, on peut calculer les effets en amont d'une mesure d'ajustement sur la distribution des revenus; on observe ainsi que la baisse des investissements dans l'agriculture entraîne une réduction de l'emploi et des salaires dans le secteur du bâtiment, de même que la baisse des dépenses d'éducation conduit à celle des revenus des salariés qualifiés. D'autre part, on estime les effets en aval : pour l'éducation cela se traduit par une diminution des services fournis gratuitement aux familles et donc une diminution de leur revenus.

On a appliqué cette méthode à l'Indonésie en 1984-88 en comparant les effets observés de la réduction des dépenses publiques pour cause d'ajustement structurel aux effets qu'on aurait obtenus si la réduction avait représenté un pourcentage constant pour chaque catégorie de dépenses alors qu'en réalité le gouvernement a fait supporter l'essentiel de la baisse à certaines catégories tandis que d'autres étaient épargnées.

Une annexe statistique relative à ce document a été publiée dans la série Documents techniques no. 3a, disponible sur demande au Centre de Développement.

PREFACE

In January 1987 the Development Centre launched a research project on "Adjustment programmes and equitable growth" under the direction of Christian Morrisson. The importance of the subject is reflected in the fact that many developing countries have embarked on programmes whose short-term effects are often negative, such as lower employment and lower real wages or cutbacks in health education services which hit poor families particularly hard. As has been seen, the groups concerned react strongly to such measures.

In all adjustment programmes, public expenditure cuts play a key role. As a rule, the agreement between the international organisations, donor countries and the country in question simply states that the aim is to reduce overall expenditure without specifying how.

As a result, each government may distribute the cuts in any way it likes. Yet the social impact will obviously be very different depending on whether it is the pay of senior civil servants that is reduced or spending on primary education in rural areas.

It is thus very enlightening to be able to calculate the effects of public expenditure cuts on income distribution and poverty by class of expenditure. The effects are of two kinds. Those upstream concern goods and factor services bought by central government. Should central government cut back spending on roadbuilding, employment and employer/employee earnings in the public works sector would fall sharply, given the heavy weight of public contracts. The other effects are downstream; if schools are closed in a country region, rural families will sustain a loss of income equal to the service provided free of charge. Normally only this downstream effect is assessed, since up to now there has been no way of measuring the upstream effect. For this reason, the Development Centre asked S. Keuning and E. Thorbecke to devise an instrument capable of calculating all the upstream direct and indirect effects of a reduction in public spending. They were able to develop a highly sophisticated social accounts matrix to answer this need.

Their method was applied to Indonesia for the periods 1979-83 and 1984-88. The authors identified four classes of operating expenditure and nine classes of capital expenditure. They also broke down the labour force into eight income groups. They used the matrix to compare the income distribution and the average income of each group, with reference both to effectively lower expenditure because of the structural adjustment programme, and to notional budgets (higher expenditure planned before the adjustment or expenditure cut by a constant percentage, even though the government has heavily cut certain items and spared others). In a first phase, the upstream effects were estimated, with the downstream effects being added subsequently, so as to obtain a full picture of each budget. The findings for Indonesia show that, for the same reduction in public spending, the effects on the average incomes of each group and hence on poverty, will differ according to the budget options selected. The method developed and applied by S. Keuning and E. Thorbecke is thus a most valuable tool for all governments desirous of minimising the social costs of the public spending cuts that structural adjustment inevitably entails.

Louis Emmerij
President of the OECD Development Centre
June 1989

I. THE CHANGING MACROECONOMIC SETTING IN INDONESIA IN THE 1980s

Before the early eighties, oil exports constituted the major engine of growth of the Indonesian economy for nearly two decades. Earnings in 1982 from crude oil and petroleum products accounted for two-thirds of export earnings, one-fourth of total GDP, and about 70 per cent of total government domestic revenues. Through a combination of price collapse and production restraint, oil export earnings in 1986 fell to less than one-third the level of earnings just five years previously. To maintain economic stability in the face of these external shocks, the government responded quickly and forcefully with measures that included selective devaluations, significant reductions in government expenditures, and policies that liberalised both internal markets and external trade. The policies which were implemented were intended not only to bring about short term stabilization, but also long term structural change towards a more diversified export oriented internationally competitive economy (1).

Table 1 illustrates the course of Indonesian public finance throughout the 1980s. Given the extreme dependence of government domestic revenues on royalties from oil (see row 7), total domestic government revenues leveled off in real terms (see row 1). It can be seen that government savings (row 3), at 1980 constant prices (amounting to total domestic revenues minus total government current expenditures), remained almost constant before dropping sharply. Since total government capital expenditures (row 4) rose steeply until the mid-eighties, this entailed a very significant increase in foreign borrowing, mainly project aid, (row 5) to bridge the gap. Debt servicing jumped from 6.7 per cent of total government expenditures in 1980-81 to over 23 per cent by 1986-87 (see row 9) and a staggering anticipated 36.8 per cent in the budget year 1988-89 (see Table A.1 in appendix under II). Faced with a second oil shock around 1986 and a mounting foreign public debt the government was forced to undertake a drastic budget retrenchment exercise starting in 1986-87 as Table 1 reveals -- with the burden of the budget cuts falling on government capital expenditures as opposed to current expenditures.

In a nutshell throughout Repelita III (the Five-Year Development Plan covering 1979-80 to 1983-84), the government continued to spend at an increasing rate -- particularly in a variety of investment programmes -- notwithstanding the observed leveling off of domestic revenues in constant terms. Given the inherent fiscal conservatism inherent to Indonesia (which has the equivalent of a balance budget requirement), it meant that the rising gap between constant domestic revenues and rising capital expenditures had to be bridged through an increasing flow of foreign borrowing -- largely project aid. As a consequence, total foreign debt rose from approximately (US) \$20 billion in 1982 to about \$45 billion in 1988, with over 90 per cent of the debt being owed by the government.

The level and composition of government expenditures affect the incomes of the different socioeconomic household groups in both the short run and the medium to long run. A high level of government current expenditures allocated today to such programmes as subsidies to farmers (e.g. for fertilizer), household transfers for education and health, wages and salaries for civil servants, benefits present consumption (and incomes) of these groups at the expense of future consumption (and incomes). At the margin, some of these funds could have been spent on investment projects yielding future growth and income benefits. Furthermore, if government current expenditure programmes are financed -- at least partially and indirectly -- through

foreign loans, the burden of amortizing these loans in the future may require a significant, if not drastic, curtailment of current expenditure programmes. To the extent that debt servicing is intractable (i.e. can only to a very limited extent be postponed or rolled over) it implies that the burden of budget retrenchment will fall that much more heavily on the remaining government current expenditure categories, as well as on public investment expenditures. In this connection, if an estimated 36.8 per cent of total government expenditures is required in 1988-89 to service the foreign debt (compared with only 6.7 per cent in the base period 1980-81) this is bound to reduce tremendously the budgetary flexibility with regard to other categories of government expenditures.

A high level of government capital expenditures today will almost certainly entail a trade-off. The income levels and consumption standards of the various socioeconomic groups may be compressed, in the short run, to allow higher sectoral growth rates of output and incomes sometime in the future. However, here again, if a significant and rising part of the government investment programmes is financed through foreign loans, the same fiscal intractability discussed above arises.

In spite of the first oil shock which occurred in the early eighties, the planned expenditure programmes in Repelita IV (1984-85 to 1988-89) were based on optimistic expectations and assumptions regarding trends in oil prices and export volumes and other exogenous factors. Clearly the second oil shock which appeared in 1986 had not been anticipated at the time Repelita IV was formulated and forced a drastic curtailment of expenditures. Table A.1 in the appendix provides detailed (disaggregated by programme) information on actual (i.e. realised) expenditures compared to planned expenditures during Repelita IV. Among others, it shows that total government expenditures expressed at constant 1980 prices had to be cut 21 per cent on average, from their planned level (see III in Table A.1). The retrenchment effort was quite selective affecting certain expenditure categories relatively much more heavily than others. For example, government investment expenditures were reduced by respectively 51 per cent in the health sector and 44 per cent in the education sector. In contrast, actual salaries of civil servants relative to their planned levels were cut by only 19 per cent in education and health and 6 per cent in all other sectors.

In section III of this paper the initial income distribution and inequality by socioeconomic groups is reviewed and the impact of alternative government expenditure programmes on income distribution is estimated. Among the various policy experiments which are explored (using the SAM methodology) are i) a comparison of the impact of the *planned* expenditure programme in Repelita IV with the *actual* (realised) programme; and ii) a comparison of the impact on income distribution of alternative counterfactual government expenditure programmes in Repelita III -- varying both the levels of total current and capital expenditures and their respective distribution among specific categories of current expenditure categories and investment programmes.

II. THE SOCIAL ACCOUNTING MATRIX AS A FRAMEWORK TO CAPTURE THE GENERAL INTERDEPENDENCE WITHIN THE SOCIOECONOMIC SYSTEM AND THE IMPACT OF BUDGET RETRENCHMENT ON INCOME DISTRIBUTION

To present the initial conditions which prevail in an economy and to trace through the effects of adjustment measures (and in the present context, more specifically, the effects of budget retrenchment) on income distribution, a disaggregated framework is needed which incorporates the structure of production and the resulting factorial and household income distributions (by socioeconomic groups). The framework must also supply initial values for variables in other accounts (e.g. capital, rest of the world, and government) which are directly or indirectly influenced by the

adjustment measures. In other words, a comprehensive and consistent disaggregated general equilibrium data system is required to capture the initial conditions and the structure of the socioeconomic system. The Social Accounting Matrix (SAM) provides just such a conceptual framework (2).

In addition, the SAM framework possesses at least two other advantages. First, the classification scheme can be designed to conform closely to the issues which are to be scrutinised. This means, in the present context, that it should incorporate a detailed breakdown of government current and capital expenditures into a set of specific programmes. Secondly, the SAM provides the basic information set needed to calibrate a comparative static or dynamic simulation model capable of evaluating the macroeconomic and disaggregated impact of adjustment policy.

In this paper we limit ourselves to using the SAM as a fixed price multiplier framework to explore the effects of alternative government expenditure packages on the socioeconomic system. However, it should be noted that as a broader part of this research project, a computable general equilibrium model integrating a real and a financial sector and calibrated on a SAM is in the process of being built for Indonesia (3).

An important reason for undertaking the present study is the availability of what is perhaps the most comprehensive and reliable SAM in existence. In October of 1986, the Indonesian Central Bureau of Statistics published a 1980 SAM containing a transactions matrix including 106 accounts (CBS, October 1986). However, for the purpose of this study, a number of fairly major adjustments had to be made to the published CBS SAM to arrive at an appropriate new SAM which is referred to as the OECD SAM from here on (4).

The transactions matrix of the OECD SAM appears in Table 2. The major characteristics and novel features of this SAM which distinguish it from the CBS SAM are the following. First, the OECD SAM consists of a total of 75 accounts with, respectively 70 endogenous and 5 exogenous accounts. The 70 endogenous accounts are broken down into the following sets:

- i) *Factors of production* with a) sixteen labour categories (SAM 1-16) distinguished according to type of occupation, rural vs. urban, and paid (i.e. employees) vs. unpaid (i.e. self-employed) status; and b) seven types of capital (17-23), with four kinds of unincorporated capital and three types of corporate capital;
- ii) *Institutions*: Eight socioeconomic household groups (24-31) i.e. agricultural employees (typically the landless), small farmers (farm operators cultivating less than half a ha.), medium farmers (operating between .5 and 1 ha.), large farmers (operating more than one ha.), rural non-agricultural low, rural non-agricultural high, urban low, and finally, urban high; and b) companies (32);
- iii) *Government expenditures* with a) four programmes of current government expenditures (33-36), on, respectively, education and health, other wages and salaries, other goods and services, and household transfers; and b) nine government investment programmes (37-45) covering, respectively, agriculture, industry and mining, energy, transport and tourism, education, health, housing and water works, general services, and finally, other activities;
- iv) *Production activities-cum-commodities*: disaggregated into 24 categories (46-69), including four public works categories (59-62) (in, respectively,

agriculture, transportation, utilities and communications, and other activities); and

- v) *Indirect taxes* (70). Finally, the five exogenous accounts are, respectively, subsidies (71); total government current expenditures (72); total government capital expenditures (73); private capital (74); and, the rest of the world (75).

A few brief examples should suffice to illustrate the meaning of the matrix in Table 2. First, say that we want to identify the expenditure pattern and the source of incomes, respectively, of the socioeconomic group consisting of agricultural employees (the landless). Column 24 would provide the former and row 24 the latter. Thus, reading down column 24 it can be seen that this group transfers some incomes to the benefit of other socioeconomic groups (e.g. Rp 6.91 billion consist of transfers received by the urban low group). Next, agricultural employees' households consume a variety of goods and services and their complete consumption pattern is given by the intersection of column 24 and rows 47 to 69 [e.g. they spend Rp 579.89 billion on processed food (row 53)]. Finally, they pay direct taxes to the government (row 72) amounting to Rp 34.57 billion and save Rp 47.61 billion (row 74). Total expenditures (=total incomes) of agricultural employees amounts to Rp 1 575.98 billion as can be ascertained by looking at the total of column 24 and the total of row 24.

In turn, reading along row 24, the various sources of incomes received by agricultural employees can be determined. First, this group receives income from different types of labour performed by members of their households (i.e. the intersection of row 24 and columns 1 to 16 shows how much they received from each of the 16 labour categories with the most important source of labour income being from the "agricultural paid rural" category, i.e. Rp 953.85 billion). Secondly, agricultural employees' households obtain some income from different types of capital (property) they own and, mainly, from imputed rent on the marginal land holdings (vegetable gardens) they possess which amounts to Rp 111.58 billion (see row 24, column 17). The third source of income consists of transfers received from other socioeconomic groups (see row 24 and columns 24 to 31). Finally, agricultural employees receive some direct transfers from the government, i.e. Rp 11.90 billion (row 24, column 36) and some remittances from abroad, i.e. Rp 8.87 billion (row 24, column 75).

The distinction between exogenous and endogenous accounts in a SAM is a crucial one. It is assumed that the socioeconomic system represented by the SAM is affected by exogenous changes and injections, namely, budgetary measures under the control of the government (i.e. subsidies, total government current and total government capital expenditures), changes originating in the rest of the world which influence exports and the size and pattern of private investment. The impact of these exogenous shocks is transmitted through the interdependent SAM system and their total (direct and indirect) effects on the endogenous accounts (i.e. the incomes of the various factors and socioeconomic groups and the total output of the different production activities) is estimated through the multiplier process.

The treatment of public finance in the OECD SAM is of particular interest. The level and distribution of government current and capital expenditures among the four current expenditure categories and nine investment programmes is specified exogenously. In turn, these thirteen programmes are endogenous in the sense that once they receive given injections from the public sector, they spend them according to fixed proportions. Thus, for example, government current expenditure on education and health is assumed to be spent on the activity "education and health" (68), and government expenditures on "other wages and salaries" are spent according to the distribution of civil servants' wages by labour type, i.e. mainly to the benefit of urban

and rural paid professional and clerical labour. Likewise, the nine government investment programmes allocate their exogenous injections on different categories of public works (i.e. in agriculture, transportation, utilities and communication, and other activities), the building and construction sector, and other activities such as metal products manufacturing.

By endogenizing the expenditure pattern of these thirteen government programmes, their differential impact on the socioeconomic system can be captured. The direct effects operate through such variables as wages of civil servants, commodities on which government consumption is expended; and on public works, building and construction and other production activities embedded into public investment. The indirect effects generated by these direct effects are captured by the multiplier analysis.

For analytical purposes, the transaction matrix in Table 2 is converted into the corresponding matrix of average expenditure propensities. These can be obtained simply by dividing a particular element in any of the endogenous accounts by the total income for the column account in which the element occurs (5). Thus, whereas the transaction matrix is expressed in money flows, the A_n and A_l (leakages) matrices are expressed as ratios with each column adding up to exactly one, as can be readily verified by looking at Table A-2 in the appendix which presents these average expenditure propensities.

From the definition of A_n , it follows that in the transaction matrix, each endogenous total income (Y_n) is given as follows:

$$y_n = A_n y_n + x \quad (1)$$

which states that row sums of the endogenous accounts (1-70) can be obtained by multiplying the average expenditure propensities for each row of the endogenous accounts by the level of income recorded in each column and adding *total* exogenous income x (6).

Equation (1) can be rewritten as

$$\begin{aligned} y_n &= (I - A_n)^{-1} x \\ &= M_a x \end{aligned} \quad (2)$$

Thus, from (2) endogenous incomes y_n can be derived by premultiplying injection x by a multiplier matrix M_a (7). One limitation of the accounting multiplier matrix M_a is that it implies unitary expenditure elasticities (the prevailing average expenditure propensities in A_n are assumed to apply to any incremental injection). A more realistic alternative is to specify a matrix of marginal expenditure propensities (C_n below) corresponding to the observed income and expenditure elasticities of the different agents, under the assumption that prices remain fixed. Expressing the changes in income (dy_n) resulting from changes in injections (dx), one obtains:

$$\begin{aligned} dy_n &= C_n dy_n + dx \\ &= (I - C)^{-1} dx = M_c dx \end{aligned} \quad (3)$$

M_c has been coined a fixed price multiplier matrix and its advantage is that it allows any non-negative income and expenditure elasticities to be reflected in M_c . An attempt was made to estimate the likely magnitudes of these elasticities but only as they relate to the expenditure pattern of the socioeconomic groups (8). Since the expenditure (income) elasticity (e_{yij}) for any good i and household group j is equal to the ratio of the marginal expenditure propensity (MEP_{ij}) to the average expenditure propensity (AEP_{ij}) it follows that the marginal expenditure propensity can be simply

derived once the expenditure elasticities and the corresponding average expenditures propensities are known (9).

Another advantage of relying on the marginal expenditure propensity matrix, with regard to the expenditure behaviour of the different household groups, is that it allows taking into account, as well, the marginal leakages of the households such as their marginal propensities to save which are likely to differ from their corresponding average propensities.

In principle a similar procedure could be used to obtain the marginal expenditure propensities corresponding to the other submatrices of A. However for lack of information, we assumed that all marginal expenditure coefficients in the C matrix -- except for those relating to the above mentioned expenditure pattern of households -- were equal to their corresponding average coefficients as they appear in the A matrix. The resulting C matrix is given in Table 3 (10).

In summary, for simulation purposes, we assume that the ownership pattern of factors remains constant, as well as the pattern of inter-institutional transfers and the technological coefficients for any given activity. In contrast, realistic income elasticities of demand are postulated for the different socioeconomic groups. Once matrix C_n is given (as in Table 3), the corresponding fixed price multiplier matrix M_c can be derived through equation (3) above. This matrix is given in Table 4 (11).

By varying the matrix of exogenous demand, i.e. the expenditures of the exogenous accounts (subsidies, government current expenditures, government capital expenditures, private capital and the rest of the world) and premultiplying these injections by M_c yields the corresponding total incomes of the 70 endogenous variables appearing in the OECD SAM. Both direct and indirect effects are generated by injections circulating throughout the economy and these total effects are, in principle, captured by the multiplier matrix if a certain number of conditions are met. In particular, the existence of excess capacity -- allowing prices to remain constant -- is assumed. Since most policy experiments which we simulate in the next section entail budget retrenchments (cuts), these policy scenarios are consistent with the assumption of excess capacity. A curtailment of different categories of government expenditures, *ris paribus*, reduces the degree of capacity utilization and should not *per se* invalidate the presumption that prices will remain fixed.

The key assumption which is made throughout the analysis is that C and M_c accurately capture and reflect the structural and behavioral features of the Indonesian economy throughout the eighties. In other words, the initial conditions prevailing in 1980 -- the last year for which a full-fledged SAM is available -- are supposed to reflect, approximately, the conditions existing during the course of Repelita III and IV (12).

The matrix of exogenous injections is referred to as "X". For the base year 1980, this matrix appears in Table 2 (see rows 1-70 and columns 71-75). The "X" is thus a 70x5 matrix. We use the subscript 0 to refer to the base year (1980) values so that X_0 is the actual 1980 exogenous injection matrix and is reproduced in Table 5. The following relationship can be obtained:

$$M_c X_0 = Y_0 \quad (4)$$

where M_c (70x70) is the fixed price multiplier matrix for 1980. In turn, Y_0 would be a 70x5 matrix of endogenous receipts generated by the injection matrix X_0 . Y_0 can be given the following interpretation. It yields the endogenous receipts for each of the 70 endogenous categories of the SAM generated directly and indirectly by each of the five exogenous injections. Thus, for example, one can break down what part of the total income of a given socioeconomic group (say small farmers) could be ascribed in the multiplier process to, respectively, subsidies, government capital or current

expenditures, private capital and rest of the world. By summing along the rows of Y_0 one obtains the resulting total incomes of each of the 70 endogenous categories, i.e.

$$Y_0 e = y_0 \quad (5)$$

where e is the vector of units (5x1) and y_0 is the vector (69x1) of the total incomes accruing to the endogenous categories of the SAM (13). Table 6-A. presents the resulting Y_0 matrix and the total incomes of the endogenous accounts (the vector Y_0). In turn Table 6-B. reveals that in the base period the incomes of each of the four agricultural household groups were mainly influenced by exports (accounting for between 37 and 42 per cent of these groups' total incomes) and government current expenditures (accounting for between 21 and 24 per cent of total incomes). In contrast, the incomes of the rural urban elites were relatively much more dependent on government current expenditures injections (accounting for respectively 56 and 41 per cent of total incomes) than on exports (22 and 31 per cent). Finally, the incomes of the other two socioeconomic groups (i.e. the rural and urban poor) tended to be approximately equally responsive to injections from government current expenditures, private capital and rest of the world.

III. INITIAL INCOME DISTRIBUTION AND BUDGET RETRENCHMENT SIMULATION EXERCISES

Before comparing the results of counterfactual experiments on income distribution it is important to capture clearly and review briefly the initial income distribution and inequality among household groups which prevailed in the base year 1980. Figure 1 graphically summarizes household incomes on a per capita basis. Each household group is represented by a bar which is proportional to the group's population size and whose height reflects its average per capita income (14). The dotted line reflects the national average. For each group three different sources of income are given, i.e. labour income, capital income and other.

For agricultural households, annual income averages range from Rp 104 000 among the Agricultural labourers to Rp 324 000 among the Larger Operators. Per capita labour incomes actually fall over these four categories, while capital incomes rise sharply. Other sources of income (inter-household transfers, the imputed value of government subsidies on health and education, remittances from abroad, etc.) do not contribute significantly to per capita income inequality among these agricultural households (15).

Outside agriculture, average incomes range from Rp 199 000 among the Rural Lower households to Rp 484 000 among the Urban Higher households. Both the Rural Lower and Inactive households (16) have averages that fall below those of the Medium and Large Agricultural Operators, but nonetheless noticeably above the Agricultural labourers and Small Operators. The Urban Lower households have per capita incomes which also fall below Larger Agricultural Operators but which surpass all other rural household categories. In making such comparisons between urban and rural groups, however, one must recall that urban prices tend to be higher. Hence, higher per capita urban incomes and outlays do not necessarily imply higher levels of living.

By varying the pattern of exogenous demand -- and more particularly the pattern of government expenditures -- the impact on the whole socioeconomic system and, in particular on income distribution, can be estimated. In the present context, this amounts to postulating different alternative X_i matrices and measuring their effects on endogenous incomes, i.e. the y_i vector in equation (6).

In addition to the base year scenario (Experiment 0) which is used as the reference scenario, six alternative experiments were simulated as follows. In each case an alternative matrix of exogenous demand is postulated, with subscripts 1-6 denoting which experiment is explored.

Experiment 0: Base year 1980 experiment using actual exogenous demand matrix X_0 from the 1980 SAM transactions matrix.

Experiment 1: Selective budget retrenchment in 1980. Each individual category of government expenditures in 1980 was reduced in proportion to the selective cut in actual Repelita IV expenditures compared to planned Repelita IV expenditures; exogenous demand by private capital and rest of the world are assumed to remain at their actual 1980 base year values as in Experiment 0. The logic behind this experiment is that if the government had actually anticipated the two oil shocks and had adopted a more prudent course with regard to foreign borrowing, it could have started cutting expenditures on a selective basis already during Repelita III.

Experiment 2: Equiproportional budget retrenchment during Repelita III. Each individual category of government expenditures in 1980 was reduced by the same proportion as total actual to total planned government expenditures to endogenous accounts in Repelita IV; exogenous demand by private capital and the rest of the world are assumed to remain at their actual base year 1980 values. Although total size of the budget is the same in Experiment 2 as in Experiment 1, the former differs from the latter in the sense that each and every of the thirteen government current and investment expenditure programmes were cut by an equal proportion (i.e. 23 per cent).

Experiment 3: Reflects the actual (realised) exogenous demand prevailing on average during Repelita IV. Thus, in particular, the pattern (composition) of government expenditures among its thirteen programmes corresponded to the actual government allocation and realisation.

Experiment 4: Reflects the planned exogenous demand during Repelita IV. Thus, the level and composition of government current and capital expenditures appearing in X_4 reflect the planned expenditures as of the beginning of the Repelita IV Five-Year Plan. In turn, the other two elements of exogenous demand (private capital and rest of the world) reflect the expectations of the planners at the outset of Repelita IV.

Experiment 5: Postulates the actual pattern of government expenditures which prevailed during Repelita IV combined with the planned and expected exogenous demand for private capital and rest of the world. The notion behind this experiment is to isolate the effects of unforeseen, and unexpected changes in rest of the world and private capital injections.

Experiment 6: This counterfactual exercise assumes that the total government expenditures were equal to their actual level in Repelita IV but instead of retrenchment being allocated selectively and differentially to different programmes, they were, in fact, allocated equiproportionately. This was combined with the actual exogenous demand for private capital and the rest of the world during Repelita IV.

Thus, there is a distinct exogenous demand matrix corresponding to each one of these experiments above, i.e. X_i , where $i = 0,1,2,\dots,6$. For each experiment we computed the resulting Y_i matrix and the total endogenous income vector, y_i , i.e.

$$M_c X_i = Y_i, \quad i = 0,1,2,\dots,6 \quad (6)$$

and $Y_i e = y_i$, where e as before is the unit vector

The six x_i matrices are given in Appendix Tables A.6-A.11. Likewise, the corresponding Y_i matrices and the y_i vectors are given in appendix Tables A.12-A.17.

The results of these policy experiments on total endogenous incomes (the y_i 's) were consolidated into Table 7 and expressed as index numbers (base year, 1980=100) in Table 8 to facilitate the comparison among them (17).

The first useful comparison is among Experiments 0-2. This helps to answer the question of what would have been the likely impact of two alternative counterfactual budget retrenchment scenarios (selective or equiproportional) had these alternatives been adopted at the outset of Repelita III. Experiment 1 entails the same selective proportional cut as occurred in actual Repelita IV compared to planned Repelita IV. As can be verified from the second column of Table 8, government investment programmes were curtailed relatively much more drastically than the four government current expenditure programmes. In particular, government expenditures on wages and salaries would only have been cut by 6 per cent as compared to the 1980 base year; in contrast, government investment in health (presumably the building of hospitals and dispensaries) would be cut by 51 per cent. (These figures can be read off by looking at rows 33-45 of column 2 in Table 8.)

In contrast, Experiment 2 would have entailed an equal proportional cut in each and every programme of 24.34 per cent (see rows 33-45 of column 2 in Table 8). Looking more specifically at the impact on income distribution by socioeconomic group of Experiments 1 and 2 as compared to the base year suggests the following observations:

- i) Under Experiment 1 the fall in incomes would have been less for all socioeconomic groups (except for the medium farmers and rural non-agricultural low group) than under the equiproportional budget retrenchment Experiment 2. In particular, the pattern of government expenditures under Experiment 1 provides the greatest relative protection to the rural non-agricultural high and the urban high groups (the impact on socioeconomic groups incomes can be read off from Table 8 by comparing column 2 and 3 and looking at rows 24-31);
- ii) The major reason why the rural non-agricultural high and the urban high groups fare better under Experiment 1 is that government wages and salaries were much less reduced in the former case. Both of these groups contain a large proportion of civil servants who obtain income mainly from the labour categories "professionally paid rural and urban" (categories 13 and 14 in the SAM) and "clerical paid rural and urban" (9 and 10). An examination of total labour incomes in these categories in Table 8 confirms the fact that it remained much higher under Experiment 1 than Experiment 2. (For example, professional paid rural total incomes dropped to index number 89.35 under Experiment 1 and to 79.31 under experiment 2; 3) Among the production activities, it can be seen that the greater retrenchment in the various government investment programmes under Experiment 1 translated itself in lower total incomes for such activities as building and construction and public works as compared with Experiment 2. Incidentally, the greater relative fall in the total value of output of the chemical and mineral industry (56) was due to the much more pronounced reduction in the fertilizer subsidy under 1 as compared to 2.

The next useful comparison is among the four alternative Repelita IV policy scenarios (Experiments 3-6). First let us compare the impact on incomes of the actual Repelita IV pattern of exogenous demand (Experiment 3) with the base year situation

(Experiment 0). If we first contrast X_3 (in Table A-8) with X_0 (in Table 5) it can be seen that most export volumes were higher during the Repelita IV period than in 1980 (18). In particular, textiles and wood product exports increased substantially. On the other hand, mining (crude oil) exports were lower than in 1980. Although total real government expenditures were only slightly higher in Experiment 3 than in the base year (by 6.9 per cent), the composition by programmes changed rather drastically (compare the sum of rows 33-45 in column 1 with those in column 4, Table 8). Total current expenditures went up in real terms while total capital expenditures remained at about the same level. Thus, it can be seen that "other wages and salaries" went up by 50 per cent while government expenditures on education and health and on "other goods and services" fell by between 22 and 24 per cent, respectively. Total government investment expenditures during Repelita IV remained, on average, at almost exactly their same level in constant terms as in 1980. Even though all socioeconomic groups were better off, it is especially the rural elites which seem to have benefitted from the change in the pattern of injections (i.e. higher agricultural exports and higher real wages and salaries for civil servants). Rural non-agricultural "lower level" households as well as the urban "low level" households were not able to improve their incomes as much as the other groups. This is related to the dependence of these groups on employment opportunities in construction and public works which in turn depend on government investment expenditures which were rather depressed during Repelita IV. Indeed, an examination of column 4 of Table 8 reveals that total incomes of manual workers increased much less than of those of other categories and particularly of those of paid professionals and paid clerical workers (under which classification most civil servants would fall). This is confirmed by looking at the total incomes of the various production activities which shows that the building and construction industry and some of the public works programmes, in fact, underwent an actual fall in real output.

The next interesting contrast is between Experiment 3 (the actual Repelita IV conditions) with Experiment 4 (the planned Repelita IV situation). The elements of X_3 (in Table A-8) are generally smaller than their corresponding elements in X_4 (Table A-9) except for a few categories of non-oil exports (e.g. textiles) where actual exports surpassed the planned levels. Notice that the fall in oil prices is mostly felt through its negative impact on government revenues entailing a real fall in public expenditures (as compared to the Plan). It is clear from Table 8 that the actual budget retrenchment during Repelita IV as compared to what had been planned tended to be quite selective. Notably wages and salaries and transfers to households were spared -- presumably in view of the negative political consequences drastic cuts of the civil servants' wage bill would have engendered. In contrast, investment programmes were decreased proportionally more than current expenditures.

The combined effects of the actual pattern of exogenous demand during Repelita IV, in contrast with the planned one, shows that household incomes for all socioeconomic groups under the first alternative (Experiment 3) increased by 19-25 percentage points less since 1980 than they would have under the planned alternative (Experiment 4). Furthermore, it is interesting to note that *actual* income growth was more divergent ranging from 13.68 per cent for the rural non-agricultural low group to 21.16 per cent for the rural non-agricultural high group than *planned* income growth which ranges from 35.81 per cent for the urban high to 40.86 per cent for the large farmers. (These figures can be read off from Table 8 comparing column 3 and 4 of rows 24-31.) Also, in a relative sense, planned income growth would have benefitted poor households somewhat more than richer households. This follows from a pattern of government expenditures in the actual case which sheltered wages and salaries to civil servants relatively much more than government investment. Here, again, it can be verified from Table 8 that this pattern benefitted, relatively speaking, the professional

and clerical labour group at the expense of manual labour and discriminated against the construction and public works industries.

A comparison of Experiments 3 and 5 (assuming the same actual pattern of government expenditures in both instances but contrasting the actual pattern of exogenous demand for private capital and rest of the world with the planned one) does not reveal any significant change in income distribution; the rural non-agricultural high group and the urban high group would not have gained relatively quite as much under Experiment 5 than under 3.

The next meaningful comparison which suggests itself is between Experiment 3 actual selective retrenchment during Repelita IV with the counterfactual case of an equiproportional budget retrenchment during Repelita IV assuming in both instances the same actual and realised exogenous demand for private capital and rest of the world (Experiment 6). It is interesting to see that should the government have reduced all public expenditures categories by the same proportion all household groups would have suffered relatively much more than as a consequence of the actual selective budget retrenchment. In particular, the groups which appear to have benefitted relatively most from the selective retrenchment are the rural elite and urban high groups as well as to a somewhat lesser extent the agricultural employees.

The main conclusion which is suggested by the above comparative analysis is that the government, when faced with unexpectedly deteriorating external conditions (in the present context, the two oil shocks), opted for a policy which mitigated the short term income losses for the population at large and, in particular, for the politically important civil servants, i.e. the higher level non-agricultural households in both the rural and urban areas.

The differential effects of government programmes on the incomes of household groups can readily be verified by looking at the multipliers corresponding to the impact of the 13 government programmes on the incomes of the eight socioeconomic groups as shown in Table 9. Reading along rows one can readily determine which policy programme will be most (or least) beneficial to any given household group. Thus, for example, it can be seen that government household transfers and government investment in agriculture, respectively, have the greatest positive impact on incomes of agricultural employees (a 100 R expenditure of either programme would increase incomes of this group by 19.9 R and 19.6 R, respectively). In contrast, by far the most favorable programme for the "urban high" group consists of government wages (a 100 R injection on this programme would yield a 50.6 R rise in this group's income).

A potentially interesting extension of the above multiplier exercises is to derive the whole network of paths through which different patterns of government expenditures influence, directly and indirectly, the variables and sectors of the Indonesian socioeconomic system as represented by the SAM. In particular, by using structural path analysis, the various direct and indirect paths can be identified through which given budget retrenchment policies (in the present context through varying 13 current and capital expenditure programmes) ultimately influenced the incomes of different socioeconomic groups (19). Clearly, as has already been repeatedly pointed out, the mechanisms through which say a public works programme in agriculture affects the incomes of the different household groups is very different from that of a reduction in government current expenditures on, say, education or the wages of public servants (20).

An attempt was made in Figures 2 and 3 to identify the various paths through which alternative selective government current expenditure and investment programmes ultimately affected the incomes of a specific socioeconomic group. Thus, in Case 1, Figure 2, it can be seen that government current expenditures on education and health

influences the incomes of the urban high group through the production activity "education and health", which in turn requires clerical paid urban and professional paid urban labour which then gets mapped into incomes of this particular socioeconomic group. In this last instance, it can be seen that the global influence of this policy intervention on household income would be .371 (i.e. the multiplier value which can be read off from Table 4) (21). The last column of Figure 2 also reveals that 80 per cent of the global influence would travel along the two paths explicitly shown under case 1.

In general, the following observations are suggested by Figure 2:

- i) Government current expenditures on education and health benefit the urban high group significantly more than the urban low group (the corresponding fixed price multipliers being .371 and .277) and, likewise, government current expenditures on "other wages and salaries" (cases 3 and 4 in Figure 2) have the same relative impact (.506 as compared to .378); and
- ii) Government transfers to households tend to have a direct and very large impact on the incomes of the urban low group (a multiplier value of .806) and because of the high marginal propensity to consume food of this group, this policy intervention would, in turn, have a significant positive impact on its food consumption.

In contrast, Figure 3 shows that government investment programmes operate indirectly through their effects on sectoral production particularly through their impact on construction and public works activities in agriculture, industry and other activities. Case 1 shows that government investment in agriculture leads to public works projects (such as irrigation schemes) which employ "agricultural paid" workers who typically originate in agricultural employees (landless) households. Incidentally, the corresponding multiplier value of .196 for this group is the largest which can be obtained by any specific government programme -- except for transfers (see row 1 of Table 9). Cases 2 and 3 reveal that government investment in industry and in education (e.g. school construction) is relatively labour intensive (mainly unskilled) -- benefitting, as a result, the urban low group. Similarly, in cases 4 and 5, government investment programmes in education and in general services, through their impact on construction, provide job opportunities for manual labour which, in turn, yield additional incomes to the rural non-agricultural low group.

A final qualification is in order at this stage. In the preceding multiplier analysis yielding the total endogenous incomes accruing to the socioeconomic groups, the imputed benefits of government current expenditures on education and health were not included. The rationale for this procedure is that if these subsidies had been imputed back as income to the household groups (before the multiplier analysis), this would have amounted to a change in total incomes which could have been spent on any and all expenditure categories (in fixed proportions) according to the groups' marginal expenditure propensities. Such a treatment would have been unrealistic since educational and health services provided by the government to households are largely non-fungible. Therefore, it was felt to be more appropriate and defensible to add the value of government expenditures on education and health (in each one of the policy experiments) as imputed benefits to households *after* the multiplier analysis had been executed on the assumption that these benefits were typically non-fungible. Thus, Table 10 provides estimates of incomes of socioeconomic household groups under the various alternative budget retrenchment scenarios *after* including back educational and health benefits.

Two distinct comparisons suggest themselves to determine what difference this imputations makes to the income distribution and to the income levels. The first

comparison is between the income distributions prevailing, respectively, *before* and *after* the imputation of educational and health benefits under the alternative policy scenarios. It entails contrasting Table 8 (rows 24-31) and Table 10a. It is clear that the imputation of benefits did not alter in any significant way the pre-imputation income distribution. In general, because of the cut in government current expenditures on education and health in the six counterfactual experiments as compared to the base year 1980, the incomes of the socioeconomic groups tend to be marginally lower after the imputation as compared to before the imputation.

However, perhaps, a more revealing comparison is to compute the relative (percentage) contributions of these imputed benefits to the total incomes of these groups under the alternative scenarios. This second comparison appears in Table 10b. It is noteworthy that the relative importance of these benefits is significantly lower in each of the counterfactual experiments compared to their importance in the base year (Experiment 0). Thus, for example, whereas the imputed value of educational and health benefits accruing to agricultural employees' households would have added 5.03 per cent to their pre-imputation incomes, this share goes down to only 2.93 per cent under the actual Repelita IV scenario. The corresponding estimated reduction for the urban low households is from 5.25 per cent to 3.62 per cent. Clearly the budget retrenchment process affected negatively the relative contribution of these services to the different socioeconomic groups. Interestingly a comparison among Experiment 3 (Actual Expenditure Patterns under Repelita IV), Experiment 4 (Planned Expenditure Pattern under Repelita IV), and the situation prevailing in the 1980 base year (Experiment 0) suggests that relative cuts in government current expenditure on health and education had been planned for Repelita IV (Experiment 4) even before the second oil shock forced the government to go through its budget retrenchment exercise (22).

The main results of this study can now be recapitulated. The objective of this study was to estimate the likely effects on the whole Indonesian socioeconomic system (represented by the SAM) and, more particularly, on income distribution of a number of alternative counterfactual budget retrenchment experiments. The two oil shocks which had hit the Indonesian economy in the eighties affected government oil revenues negatively and required in order to maintain a balanced budget either large scale foreign borrowing or a scaling down of government expenditures to bring them in line with the reduced oil revenues. During Repelita III (the Five-Year Plan covering 1979-84) the government opted to maintain a high level of government expenditures by choosing the first option above which entailed a drastic increase in the size of the foreign public debt.

In order to specify meaningful and realistic budgetary expenditure scenarios, a public finance module had to be incorporated into the OECD SAM. First, the level and distribution of government current and capital expenditures were divided among four current expenditure categories and nine investment programmes and the total for each programme specified exogenously. In turn, these thirteen programmes were made endogenous in the sense that once they receive given injections from the public sector, they spend them according to fixed proportions. Thus, by endogenizing the expenditure pattern of these thirteen government programmes, the differential impact on the socioeconomic system could be captured.

The first set of counterfactual exercises helps to answer the question of what would have been the likely impact of two counterfactual budget retrenchment scenarios (i.e. selective or equi-proportional) had these alternatives already been adopted at the *outset* of Repelita III. In other words, if the government had balanced its budget during Repelita III by cutting expenditures rather than through large scale borrowing abroad – the actual base year situation – how would the incomes of the various socioeconomic groups have been affected? Under the selective retrenchment scenario, the fall in

incomes would have been less for most socioeconomic groups than under an equi-proportional retrenchment scenario. In particular, by reducing current expenditures less than capital expenditures in the former experiment as compared to the latter, the incomes of the rural and urban elites are protected somewhat at the expense of the incomes of the other groups.

The second set of counterfactual experiments related to the Repelita IV period (1984-89) and entailed comparing the actual pattern of government expenditures and other exogenous demand under Repelita IV (Experiment 3) with the planned pattern (Experiment 4) and an alternative scenario where all government current and capital expenditure programmes would have been cut by the same proportion (Experiment 6). In turn, the consequences of each of these alternatives on the socioeconomic system was compared to the base year (Experiment 0) run.

As expected, household incomes for all socioeconomic groups would have increased significantly more under the *planned* as compared to the *actual* Repelita IV exogenous demand (and budgetary) pattern. Also, the former alternative would have benefited, in a relative sense, poor households somewhat more than richer households. However, it is clear that the selective budget retrenchment package which was actually adopted and implemented during Repelita IV (Experiment 3) sheltered the incomes of all household groups relatively much more than if the government had decided to reduce all public expenditures categories by the same proportion. As was already indicated, the main conclusion is that the government -- faced with unforeseen deteriorating external conditions -- chose a policy which mitigated the short term income losses for the population at large and, in particular, for the politically important civil servants in both the urban and rural areas.

A final important issue which should be brought up at this stage is that the impact of a reduction in government investment expenditures affects sectoral output and income growth in the future. The comparative static nature of the SAM multiplier analysis used in this study precludes capturing and estimating these dynamic effects. It is particularly in this area that a CGE model might provide useful results concerning the tradeoff between higher government current expenditures *today* (at the expense of relatively lower government capital expenditures) entailing higher *present* consumption at the expense of some foregone output and income and consumption growth in the *future*.

NOTES AND REFERENCES

1. For a detailed discussion of this question, see the paper by Thorbecke and Berrian (1988) prepared for the OECD Development Centre.
2. For a more detailed discussion of the SAM as a general equilibrium data system and basis for economy-wide analysis, see E. Thorbecke (1988).
3. For an early version of this model which excludes the financial sector and assumes full employment, see Roland-Holst and Thorbecke (1988).
4. These adjustments are described in detail in the methodological notes to Table 2 which should be read carefully since they are not repeated in the text.
5. In fact, to be exact, the matrix of average expenditures propensities consists of two parts: A_n which is the square matrix of average expenditure propensities for the endogenous accounts (in this specific instance of the OECD SAM, this is a 70x70 matrix), while the second part consists of the so-called leakages i.e. the proportions of each endogenous variable which leaks out as expenditure into any one of the six exogenous accounts (indirect taxes, subsidies, total government current expenditures, total government capital expenditures, private capital, and rest of the world). If this last matrix is denoted by A_1 , its dimension would be the 70 endogenous columns and the 5 exogenous rows (i.e. it would embrace columns 1-70 and rows 71-75).
6. In the present context exogenous income x would be the sum of the five exogenous categories (71-75). This point is clarified explicitly in the empirical application which follows.
7. The accounting multiplier matrix, M_a , is given in Appendix Table A-3.
8. Given the lack of information on the magnitude of these elasticities for the different socioeconomic groups, many of the specific elasticities had to be guesstimated. Whenever possible, whatever available empirical evidence was used. For more information, see Haider A. Khan and Erik Thorbecke (1988), p. 36 and Centre for World Food Studies (1988), p. A.28. In any case, the estimates appearing in appendix Table A-4 should be taken as illustrative of the likely magnitudes of expenditure elasticities of the various socioeconomic groups rather than as empirically derived parameters.
9. Thus, given the submatrix of average expenditure propensities of the socioeconomic groups (columns 24-31 and rows 1-75 of Table A-2) and the corresponding expenditure elasticities of demand as given in appendix Table A-4, the corresponding marginal expenditure propensities matrix could easily be derived and is given in Table A-5.
10. Here again as in the case of the A matrix, C is constituted of two parts, C_n which yields the 70x70 endogenous marginal expenditure propensities and C_1 which yields the 5x70 leakages. Each of the 70 columns adds up to 1.

11. A quick perusal of the magnitudes of the multipliers in this last table compared to the corresponding accounting multipliers in Table A-3 reveals that they are typically smaller. The reason for this is obvious and is related to the postulation of expenditure elasticities of demand for food and other commodities of less than unity for the various socioeconomic groups.
12. The CBS is preparing a SAM for 1985 which should become available shortly and could be used to undertake counterfactual exercises covering the Repelita IV period. Whereas the present methodology is valuable in depicting key trends resulting from changes in exogenous injections, it is not a substitute for a full-fledged price endogenous CGE model which is being built as a parallel exercise as part of this study. On the other hand, it could be argued that a SAM fixed price multiplier exercise might yield more robust results than most CGEs (which are very sensitive to alternative specifications and closure rules). In any case, the two approaches supplement and complement each other.
13. It should be noted that if X_0 had been premultiplied by the accounting multiplier matrix, M_a instead of M_c , this would have yielded the total incomes (= expenditures) for each endogenous category actually prevailing in 1980 and appearing in the SAM transactions matrix in Table 2. Since the individual multipliers in M_c are lower than in M_a , the vector of total incomes, y_0 , differs slightly from the actual totals in Table 2. This does not matter because the purpose of the simulation exercises is to compare the results of alternative counterfactual patterns of government expenditures on incomes to base year incomes.
14. It should be recalled that the SAM, per se, only yields information on total group incomes. It does not show explicitly average income or size of each group. The average incomes of the socioeconomic groups reported in Figure 1 may differ marginally from those obtained by dividing total group incomes in the SAM Table 2 by their corresponding population sizes because of minor subsequent adjustments.
15. See IFAD (1988), pp. 131-139 for a thorough discussion of the 1980 income distribution by socioeconomic groups based on the CBS SAM.
16. In the present SAM we have grouped together the Rural Lower and Rural Inactive households into "Rural Nonagricultural Low" and likewise, the Urban Low and Inactive have been consolidated into the "Urban Low" group. It should be noted that the Urban Inactive, dominated by students and retired persons rather than unemployed job-seekers, seem relatively well-off. (Unemployed individuals, especially in urban areas, typically reside in households whose head is active).
17. In these results, the imputed benefits of government current expenditures on education and health are excluded for the reasons indicated in the Note to Table 2 (see point 9). Subsequently the benefits are imputed back and added to the incomes of the socioeconomic groups (see Table 10). It will be seen that the income distribution was only marginally affected by this adjustment.
18. It should be recalled that these are volume changes since all prices are expressed at their 1980 values to be consistent with the fixed price multiplier model.
19. For the methodology underlying structural path analysis, see Defourny-Thorbecke, (1984) and for an earlier application to Indonesia, see H. Khan and E. Thorbecke, (1988).

20. Incidentally, the complete and exhaustive set of structural path analysis for any given pole of origin (e.g. specific government programme) and any given pole of destination (e.g. a specific socioeconomic group) is available on request from the authors.
21. In other words, this means that an additional injection of Rp 100 by the government on education and health ultimately would increase the incomes of the urban high group by Rp 37.1.
22. It should be mentioned at this stage that we are still working on improving the imputation procedure. In particular, the method which was used in the 1980 SAM to add the public expenditures on education and health by the socioeconomic groups to the other government transfers to households yielded some questionable results. In particular, the average expenditure propensities on (private) education and health of the two urban socioeconomic groups are much too low to be credible. Improved estimates of private expenditures on these services might provide a somewhat more realistic picture but are unlikely to change most of the conclusions derived in this study.

BIBLIOGRAPHY

- Central Bureau of Statistics, *Social Accounting Matrix of Indonesia, 1980*, Jakarta, October 1986.
- Centre for World Food Studies, *Agriculture in Repelita V: A Review of Policy Issues in Indonesia Through 1993*, Amsterdam, September 1988.
- DEFOURNY, J. and THORBECKE, E., "Structural Path Analysis and Multiplier Decomposition within a Social Accounting Matrix Framework", *The Economic Journal* 94:111-136, March 1984.
- International Fund for Agricultural Development, *Rural Indonesia: Socio-economic Development in a Changing Environment*, Report of the Special programming Mission to Indonesia, Report No. 0055-ID, May 1988.
- KHAN, Haider A. and Erik Thorbecke, *Macroeconomic Effects and Diffusion of Alternative Technologies Within a Social Accounting Matrix Framework: The Case of Indonesia*, A study prepared for the International Labour Office with the framework of the world Employment programme, Gower, 1988.
- ROLAND-HOLST, D.W. and THORBECKE, E., "The Debt Problem, Stabilization and Structural Adjustment and their Socioeconomic Impact: The Case of Indonesia", paper prepared for the Annual Meetings of the American Economic Association, December 27-30, 1988, New York City.
- STAVENUITER, S., "Input-Output Analysis for Indonesian Employment Planning," Summary Report of the Department of Manpower UNDP/ILO Project on Implementation of an Employment Creation Strategy, April 1987.
- THORBECKE, E., "The Impact of Stabilization and Structural Adjustment Measures and Reforms on Agriculture and Equity" in: (Elliot Berg, Ed.) *Policy Reform and Equity: Extending the Benefits of Development*, A Sequoia Institute Seminar, ICS Press, San Francisco, 1988.
- THORBECKE, E. and BERRIAN, D., "Stabilization and Structural Adjustment of the Indonesian Economy, 1979-1987", A Report Prepared for the Organisation for Economic Co-operation and Development Centre, Paris, January 1988.

FIGURES AND TABLES

THOUSAND OF
RUPIAH

FIGURE 1 PER CAPITA INCOME DISTRIBUTION
BY HOUSEHOLD GROUP & SOURCE — 1980

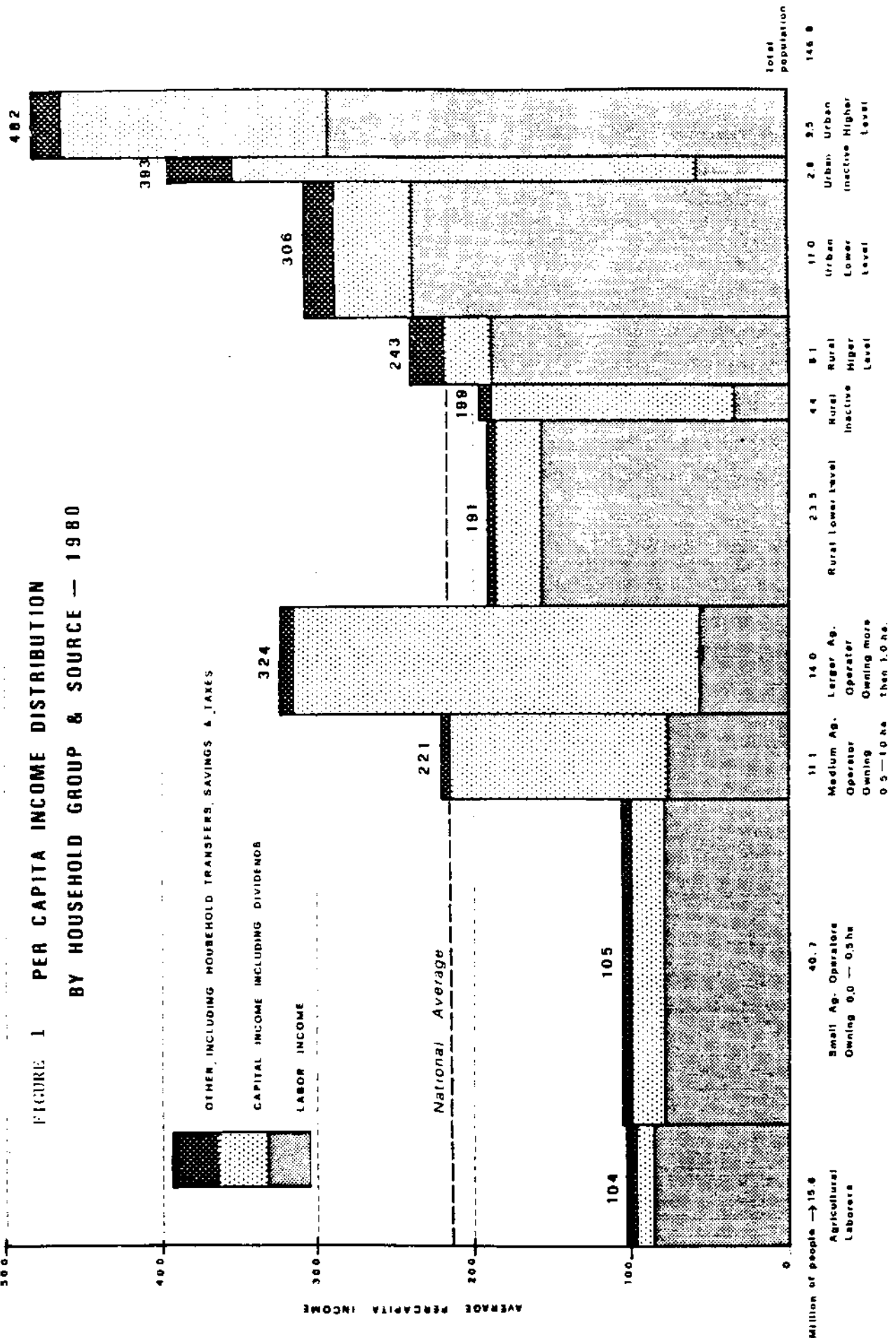


Fig. 2
 IMPACT OF DIFFERENT GOVERNMENT CURRENT EXPENDITURES PROGRAMS ON INCOME AND FOOD CONSUMPTION OF SOCIOECONOMIC GROUPS

	Policy Intervention	Production Activity Income	Labor Type Income	Socioeconomic Household Group Income	Global Influence on Household Income	Global Influence Food Consumption	%Along Path(s) Shown
1.	GovCurrentExp. on Educ&Health	Education & Health	Clerical PaidUrban	UrbanHigh	.371	.059	80%
2.	GovCurrentExp. on Educ&Health	Education & Health	Prof.Paid Urban	UrbanLow	.277	.074	21%
3.	Gov.CurrentExp. on Other Wages &Sal.		Clerical PaidUrban Prof.Paid Urban	UrbanHigh	.506	.080	87%
4.	Gov.CurrentExp. on Other Wages &Sal.		Clerical PaidUrban Prof.Paid Urban	UrbanLow	.378	.101	51%
5.	Gov.CurrentExp.			UrbanLow	.806	.215	90%

Fig. 3

IMPACT OF DIFFERENT GOVERNMENT INVESTMENT PROGRAMS ON INCOME AND FOOD CONSUMPTION OF SELECTED SOCIOECONOMIC HOUSEHOLD GROUPS

Policy Intervention	Production Activity Income	Labor Type Income	Socioeconomic Household Group Income	Global Influence on Household Income	Global Influence Food Consumption*	%Along Path(s) Shown
1. GovInvAgr.	Public Works in Agr.	Agr.Paid Rural	Agr. Employees	.196	.155	91%
2. GovInvIndustry	Public Works Other	ManualPd. Urban	Urban Low	.226	.060	18%
3. GovInvEduc.	Building & Construct.	ManualPd. Urban	Urban Low	.205	.055	19%
4. GovInvEduc.	Building & Construct.	ManualPd. Rural	Rural NonAg. Low	.201	.087	28%
5. GovInvGen. Service	Building & Construct.	ManualPd. Rural Low	Rural NonAg	.225	.097	29%

* Global Influence on Household Income multiplied by marginal expenditure propensity on food of corresponding household group.

Table 1

INDONESIA GOVERNMENT BUDGET AT CONSTANT 1980 PRICES (BILLION RUPIAH), SELECTED YEARS AND ANNUAL
AVERAGE REPELITA III (1979-80 TO 1983-84) AND REPELITA IV (1984-85 TO 1988-89)

	1980/81	1983/84	1985/86	1986/87	Repelita III	Repelita IV
1. Total Domestic Revenues	10 227	10 613	11 740	10 358		
2. Total Government Current Expenditures, of which:	6 808	7 071	7 796	7 675	6 821	7 715
2a. Interest on Foreign Public Debt	(439)	(856)	(1 039)	(1 597)	(555)	(1 553)
3. Government Savings (1-2)	3 419	3 542	3 944	2 683		
4. Total Government Capital Expenditures, of which:	(346)	(691)	(987)	(1 341)	(463)	(1 767)
4.a Principal Amortization of Foreign Public Debt						
5. Foreign Borrowing (mainly Project Aid) (4-3)	1 489	2 851	2 178	2 358		
6. Government Total Expenditures (2+4)	11 716	13 464	13 917	12 716	12 062	13 700
7. Share of Total Domestic Revenues from Oil Taxes (%)	68.6	66.0	57.9	54.6		
8. Share of Foreign Borrowing (Project Aid) out of Total Government Expenditures (5+6) (%)	12.7	21.2	15.6	18.5		
9. Share of Debt Amortization out of Total Government Expenditures [(2a+4a) : 6]	6.7	11.5	14.6	23.1	8.4	24.2

Source: World Bank and Table A.1 in Appendix.

Table 2 Social Accounting Matrix of Indonesia, 1980 (10 million Rupiah)

	IndTax 70	Subsid 71	GovCur 72	GovCap 73	PrivCa 74	RestWo 75	TOTAL
1 AgPaidRur	0	0	0	0	0	0	126691
2 AgPaidUrb	0	0	0	0	0	0	12116
3 AgUnpaidRur	0	0	0	0	0	0	396560
4 AgUnpaidUrb	0	0	0	0	0	0	12119
5 ManPaidRur	0	0	0	0	0	0	142154
6 ManPaidUrb	0	0	0	0	0	0	147631
7 ManUnpaidRur	0	0	0	0	0	0	99332
8 ManUnpaidUrb	0	0	0	0	0	0	55773
9 ClerPaidRur	0	0	0	0	0	0	81295
10 ClerPaidUrb	0	0	0	0	0	0	195676
11 ClerUnpaidRur	0	0	0	0	0	0	168882
12 ClerUnpaidUrb	0	0	0	0	0	0	162071
13 ProfPaidRur	0	0	0	0	0	0	105455
14 ProfPaidUrb	0	0	0	0	0	0	138069
15 ProfUnpaidRur	0	0	0	0	0	0	3101
16 ProfUnpaidUrb	0	0	0	0	0	0	6558
17 UnincorpAgCap	0	0	0	0	0	0	525073
18 UnincorpHouseCap	0	0	0	0	0	0	94395
19 UnincorpOtherRurCap	0	0	0	0	0	0	209346
20 UnincorpOtherUrbCap	0	0	0	0	0	0	162489
21 PrivateCap	0	0	0	0	0	0	394092
22 PublicCap	0	0	0	0	0	0	607894
23 ForeignCap	0	0	0	0	0	0	992012
24 AgEmployees	0	0	0	0	0	887	157598
25 Small Farmers	0	0	0	0	0	2786	419246
26 Medium Farmers	0	0	0	0	0	2435	243005
27 Large Farmers	0	0	0	0	0	2496	448489
28 RuralNonAgLow	0	0	0	0	0	2447	527706
29 RuralNonAgHigh	0	0	0	0	0	561	194557
30 UrbanLow	0	0	0	0	0	2783	609941
31 UrbanHigh	0	0	0	0	0	2260	445373
32 Companies	0	0	0	0	0	7508	1789028
33 GovExpEdu&Health	0	0	91747	0	0	0	91747
34 GovExpWages&Sal	0	0	234469	0	0	0	234469
35 GovExpGoods&Serv	0	0	176211	0	0	0	176211
36 GovExpHHTransfer	0	0	8113	0	0	0	8113
37 GovInvAgric	0	0	0	51549	0	0	51549
38 GovInvInd&Mines	0	0	0	41802	0	0	41802
39 GovInvEnergy	0	0	0	36185	0	0	36185
40 GovInvTransp&Tour	0	0	0	62756	0	0	62756
41 GovInvEducation	0	0	0	46529	0	0	46529
42 GovInvHealth	0	0	0	17747	0	0	17747
43 GovInvHouse&Water	0	0	0	15384	0	0	15384
44 GovInvGenService	0	0	0	31965	0	0	31965
45 GovInvOther	0	0	0	97740	0	0	97740
46 Trade&TransMarg	0	0	0	0	0	0	860809
47 FoodCrops	0	0	0	0	11883	3600	892574
48 OtherCrops	0	0	0	0	5518	138231	445059
49 Livestock	0	0	0	0	10253	1355	225251
50 Forest&Wood	0	0	0	0	5535	123642	321282
51 Fishery	0	0	0	0	0	13294	151907
52 Mining	0	0	0	0	90330	1133301	1504962
53 Food Process	0	18696	0	0	2620	11917	815963
54 Textiles	0	0	0	0	3006	8968	214081
55 Paper&MetalProd	0	0	0	0	340946	10140	951214
56 Chem&Minerals	0	120520	0	0	9124	122294	1005222
57 Utilities	0	0	0	0	0	0	53262
58 BuildConstruction	0	0	0	0	308569	0	484898
59 PublicWorksAg	0	0	0	0	0	0	55525
60 PWTransp	0	0	0	0	0	0	91212
61 PWUtil&Comm.	0	0	0	0	0	0	51634
62 PWOther	0	0	0	0	0	0	69999
63 Trade&TransServ	0	0	0	0	0	3108	753718
64 Restaurant&Hotel	0	0	0	0	0	5917	244584
65 LandTransport	0	0	0	0	0	322	212448
66 OtherTrans&Commun	0	0	0	0	0	31548	142732
67 FinanRE.&BusServ	0	0	0	0	0	3075	354733
68 Educ&Health	0	0	0	0	0	7	177991
69 Pers&HHServices	0	0	0	0	0	5497	210381
70 IndirectTaxes	0	0	0	0	0	0	179440
71 Subsidies	0	0	139216	0	0	0	139216
72 GovCurrent	179440	0	0	0	0	2232	1033486
73 GovCapital	0	0	338648	0	0	140135	478783
74 PrivateCapital	0	0	0	46838	0	0	1252781
75 Rest of World	0	0	45082	30288	464997	0	1782746
TOTAL	179440	139216	1033486	478783	1252781	1782746	

Table 2
Methodological Notes Regarding the Construction of the
Social Accounting Matrix (SAM) for the OECD Development Center Project

For the purpose of the project under consideration, the authors had to make a number of modifications to, and elaborations on the existing Indonesian SAM for 1980. The starting point was the 106 X 106 sector transactions matrix published by the Indonesian Central Bureau for the Statistics (CBS, October 1986). The following adjustments were made to the CBS SAM to arrive at a new SAM (which we refer to as the OECD SAM) which could be used as a basis to estimate the effects of actual and alternative counterfactual budget retrenchment experiments on the whole socioeconomic system and, more particularly, on income distribution by socioeconomic household groups.

1. For each commodity group, domestic and imported commodities were consolidated by combining their respective rows and columns.

2. Commodities and activities for each category were consolidated by deleting rows of activities (diagonal elements) and adding columns of activities to the combined commodity columns under 1. above.

3. The following aggregation of categories was done by combining rows and columns of, respectively:

a. Inactive and lower level households which yielded the following two consolidated socioeconomic groups: rural, non-agricultural low (No. 28 in the new OECD SAM) and urban low (No. 30), instead of the four categories appearing in the CBS 1980 SAM.

b. The following production activities-cum-commodities were consolidated: oil and coal mining together with other mining; restaurants and hotels; and finance and real estate together with business services.

c. Trade margins were combined with transport margins (46).

4. The placement of some accounts was changed; in particular, the net indirect taxes account (70) now appears among the exogenous accounts. The other exogenous accounts are: subsidies (71); government current account (72); government capital account (73); private capital (74); and, rest of the world (75).

5. The following production activities-cum-commodities were disaggregated:

a. Wood products and construction account were broken down into
i) wood products; and ii) construction.

b. The social and community, recreation and cultural services account was broken down into i) public administration; ii) education and health; and iii) recreation and cultural services.

The above breakdown was done with the help of CBS (October 1986) and our own estimates on the allocation of capital income.

6. Next the following aggregation was done by combining rows and columns of, respectively: a) forestry and wood products (50); and b) finance, real estate and business services and recreation and cultural services (67).

7. The construction account was further disaggregated into 5 subsectors (construction of buildings, public works in agriculture, public works in transport infrastructure, public works in utilities and communication, and other public works). This disaggregation was done on the basis of the 1980 input-output table (170 X 170 sectors) for all cells except the value added disaggregation where we used our own estimates. In this connection, it should be noted that although agricultural laborers employed in public works in agriculture, in fact, perform manual work and their labor receipts should be classified as such (as has been done in the published 1980 CBS SAM), this creates problems in an ordinary multiplier analysis. In the latter, the two-dimensional matrix format becomes too restrictive, since agricultural laborer households then receive a small share of the income of all manual workers, instead of a substantial share of the income of those manual workers who are employed in public works in agriculture, and (virtually) nothing of the income of all other manual workers; actually a three-dimensional format (households X factors X activities) would be called for in this instance. Keeping the existing mapping would blur the distributional consequences of changes in the expenditures on public works in agriculture. Consequently, to remedy this situation, the following solution has been chosen. Instead of assigning the income of manual workers employed in public works in agriculture to the former, these incomes were assigned to the labor category agricultural workers. This income flow is subsequently distributed over household groups in accordance with the distribution of agricultural labor income. Finally, the allocation of manual labor income to households is reduced by the same amount, so that this static 1980 household income distribution does not change as a consequence of these reallocations. Only the comparative static effects of a change in "injections" will now differ from the original situation and become more plausible.

8. The joint category of "indirect taxes and subsidies" in the 1980 CBS SAM was disaggregated into these two components. Subsidies were transformed into a column instead of a row of negative entries. The disaggregation was based on disaggregated public expenditures data as well as input/output table work files.

9. A new interpretation was given to government current expenditures on education and health. In a multiplier analysis, these expenditures cannot be looked at as implicit subsidies to households since any given change in these subsidies would amount to a change in total incomes which could be potentially spent on all expenditure categories in fixed proportions depending on the average or marginal expenditure propensities. This last treatment is unrealistic since educational and health services provided to households by the government

are typically nonfungible. (Of course, it could be argued, that for richer socioeconomic groups, the availability of public subsidies on these services could replace and release income which would otherwise have been allocated to private expenditures on these services. However, for most socioeconomic groups, it can be safely assumed that government subsidies on education and health are only to a very limited extent fungible.) For the sake of accuracy, current government expenditures on education and health should be added as imputed benefits to household incomes after the multiplier analysis has been executed. This point is discussed further in the text. Therefore in the present OECD SAM, government current expenditures on education and health have been subtracted from household consumption (of education and health services) and added to government consumption. To compensate for this, government transfers to households have been accordingly reduced.

10. Total government current expenditures were subdivided into four programs on, respectively, a) education and health (33); b) other wages and salaries (34); c) on other goods and services (35); and d) household transfers (36). For each of these four programs, corresponding rows and columns were inserted in the endogenous part of the SAM. Making these accounts endogenous allows their totals to be varied exogenously but the distribution over the elements of each of the accounts to remain stable. In order to create these four programs, the following steps were taken: a) wages and salaries of civil servants were moved from the public administration column to the wages and salaries program column; b) government expenditures on education and health were moved to the education and health program column; c) government expenditures on "other goods and services" were moved to the "other goods and services program" column; and, d) government transfers to households were moved to the household transfers program column.

11. The public administration activity was aggregated with government current expenditures by combining their respective rows and columns. Since depreciation of public administration is already included in government savings, both government receipts and outlays are reduced by this amount to avoid double-counting.

12. The capital account was broken down into public capital and private capital. This is done on the basis of data relating to government expenditures, balance of payments, private investment etc. It should be noted that in the published 1980 CBS SAM, public transfers to abroad erroneously include the amortization of the public debt (i.e. the repayment of the principal). This has been corrected so that current transfers to the rest of the world have been accordingly reduced, and government savings and capital transfers to the rest of the world have been correspondingly increased. It should also be noted that payments of private capital to the rest of the world is a net figure which has been computed residually.

13. Government capital expenditures were broken down into 9 government investment expenditure programs, i.e. a) government investment in agriculture (37); b) government investment in industry and mining (38); c) government investment in energy (39); government investment in transport and tourism (40); government investment in education (41); government investment in health (42); government investment in housing and water supply (43); government investment in general services (44); and, finally, government investment in other sectors (45). Each one of these government investment programs was given its own endogenous row and column. The allocation of these investment expenditure programs to commodities was estimated by us based on detailed accounts of government expenditures and the work of Stavenuiter et al. (1987). All changes in stocks were assumed to be part of private capital expenditures (since they amount to less than 1% of total capital expenditures, this is negligible in any case).

14. Resulting classification of OECD SAM for Indonesia, 1980

The above mentioned adjustments on the CBS SAM (discussed in points 1-13 above) yielded what we call the OECD SAM. This modified SAM consists of a total of 75 accounts with, respectively, 70 endogenous accounts and five exogenous accounts. The complete set of accounts is given in Table 2 in the text (SAM Transaction Matrix) which should be consulted. The 70 endogenous accounts are broken down into the following sets: 1) factors of production: 16 labor categories (SAM 1-16), and 7 types of capital (17-23); 2) institutions: eight socioeconomic household groups (24-31) and companies (32); 3) government expenditures programs with a) four programs of current government expenditures (33-36) and b) nine government investment programs (37-45); 4) production activities-cum-commodities 24 categories (46-69), including four public works categories (59-62); and 5) indirect taxes. The five exogenous accounts are, respectively, subsidies (71); total government current expenditures (72); total government capital expenditures (73); private capital (74); and the rest of the world (75).

Table 5

Experiment 0: Base Year Experiment. Actual Exogenous Demand in 1980 (ten million Rupiah in constant 1980 prices) — X_0 matrix.

	71	72	73	74	75	TOTAL*
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	
1 AgPaidRur	0	0	0	0	0	0
2 AgPaidUrb	0	0	0	0	0	0
3 AgUnpaidRur	0	0	0	0	0	0
4 AgUnpaidUrb	0	0	0	0	0	0
5 ManPaidRur	0	0	0	0	0	0
6 ManPaidUrb	0	0	0	0	0	0
7 ManUnpaidRur	0	0	0	0	0	0
8 ManUnpaidUrb	0	0	0	0	0	0
9 ClerPaidRur	0	0	0	0	0	0
10 ClerPaidUrb	0	0	0	0	0	0
11 ClerUnpaidRur	0	0	0	0	0	0
12 ClerUnpaidUrb	0	0	0	0	0	0
13 ProfPaidRur	0	0	0	0	0	0
14 ProfPaidUrb	0	0	0	0	0	0
15 ProfUnpaidRur	0	0	0	0	0	0
16 ProfUnpaidUrb	0	0	0	0	0	0
17 UnincorpAgCap	0	0	0	0	0	0
18 UnincorpHouseCap	0	0	0	0	0	0
19 UnincorpOtherRurCap	0	0	0	0	0	0
20 UnincorpOtherUrbCap	0	0	0	0	0	0
21 PrivateCap	0	0	0	0	0	0
22 PublicCap	0	0	0	0	0	0
23 ForeignCap	0	0	0	0	0	0
24 AgEmployees	0	0	0	0	887	887
25 Small Farmers	0	0	0	0	2786	2786
26 Medium Farmers	0	0	0	0	2435	2435
27 Large Farmers	0	0	0	0	2496	2496
28 RuralNonAgLow	0	0	0	0	2447	2447
29 RuralNonAgHigh	0	0	0	0	561	561
30 UrbanLow	0	0	0	0	2783	2783
31 UrbanHigh	0	0	0	0	2260	2260
32 Companies	0	0	0	0	7508	7508
33 GovExpEdu&Health	0	91747	0	0	0	91747
34 GovExpWages&Sal	0	234469	0	0	0	234469
35 GovExpGoods&Serv	0	176211	0	0	0	176211
36 GovExpHITransfer	0	8113	0	0	0	8113
37 GovInvAgric	0	0	51549	0	0	51549
38 GovInvInd&Mines	0	0	41802	0	0	41802
39 GovInvEnergy	0	0	36185	0	0	36185
40 GovInvTransp&Tour	0	0	62756	0	0	62756
41 GovInvEducation	0	0	46529	0	0	46529
42 GovInvHealth	0	0	17747	0	0	17747
43 GovInvHouse&Water	0	0	15384	0	0	15384
44 GovInvGenService	0	0	31965	0	0	31965

45	GovInvOther	0	0	0	0	0	0	0	0	97740	0	97740
46	Trade&TransMarg	0	0	0	0	0	0	0	0	0	0	0
47	FoodCrops	0	0	0	0	0	0	11883	0	0	3600	15483
48	OtherCrops	0	0	0	0	0	0	5518	0	0	138231	143749
49	Livestock	0	0	0	0	0	0	10253	0	0	1355	11608
50	Forest&Wood	0	0	0	0	0	0	5535	0	0	123642	129177
51	Fishery	0	0	0	0	0	0	0	0	0	13294	13294
52	Mining	0	0	0	0	0	0	90330	0	0	1133301	1223631
53	Food Process	18696	0	0	0	0	0	2620	0	0	11917	33233
54	Textiles	0	0	0	0	0	0	3006	0	0	8968	11974
55	Paper&MetalProd	0	0	0	0	0	0	340946	0	0	10140	351086
56	Chem&Minerals	120520	0	0	0	0	0	9124	0	0	122294	251938
57	Utilities	0	0	0	0	0	0	0	0	0	0	0
58	BuildConstruction	0	0	0	0	0	0	308569	0	0	0	308569
59	PublicWorksAg	0	0	0	0	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0	0	0	0	0
63	Trade&TransServ	0	0	0	0	0	0	0	0	0	3108	3108
64	Restaurant&Hotel	0	0	0	0	0	0	0	0	0	5917	5917
65	LandTransport	0	0	0	0	0	0	0	0	0	322	322
66	OtherTrans&Commun	0	0	0	0	0	0	0	0	0	31548	31548
67	FinanRE.&BusServ	0	0	0	0	0	0	0	0	0	3075	3075
68	Educ&Health	0	0	0	0	0	0	0	0	0	7	7
69	Pers&HServices	0	0	0	0	0	0	0	0	0	5497	5497
70	IndirectTaxes	0	0	0	0	0	0	0	0	0	0	0
71	Subsidies	0	139216	0	0	0	0	0	0	0	0	139216
72	GovCurrent	0	0	0	0	0	0	0	0	0	2232	1033486
73	GovCapital	0	338648	0	0	0	0	0	0	0	140135	478783
74	PrivateCapital	0	0	0	0	0	46838	0	0	0	0	1252781
75	Rest of World	0	45082	0	0	0	30288	464997	0	0	0	1782746
TOTAL		139216	1033486	478783	1252781	1782746						

* Total of columns 71-75 for rows 1-70. Overall totals for rows 71-75 (equal to totals of columns 71-75 in this table)

Table 6A

EXPERIMENT 0: BASE YEAR (1980)* — Y₀ MATRIX

	71	72	73	74	75	TOTAL	
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	Y ₀	
1	AgPaidRur	2750	15960	19168	14853	36251	88983
2	AgPaidUrb	285	1825	927	1677	4119	8833
3	AgUnpaidRur	9613	54668	28179	51690	92862	237012
4	AgUnpaidUrb	293	1865	926	1700	3053	7838
5	ManPaidRur	3612	24765	35858	40204	32723	137162
6	ManPaidUrb	4527	30655	34854	38931	36061	145028
7	ManUnpaidRur	3099	19336	16143	26513	29882	94972
8	ManUnpaidUrb	1782	13558	9053	15158	15486	55037
9	ClerPaidRur	1440	50559	4899	8045	14549	79492
10	ClerPaidUrb	4621	103462	15408	26155	42739	192385
11	ClerUnpaidRur	7979	30480	19504	39369	54099	151431
12	ClerUnpaidUrb	7542	31040	18733	37467	51708	146490
13	ProfPaidRur	878	83651	3576	5670	9893	103667
14	ProfPaidUrb	1879	95639	8091	12761	18023	136394
15	ProfUnpaidRur	100	951	360	612	806	2829
16	ProfUnpaidUrb	217	1884	929	1700	1700	6431
17	UnincorpAgCap	11893	76248	41768	78706	168072	376686
18	UnincorpHouseCap	3136	27126	12351	18876	37366	98855
19	UnincorpOtherRurCap	8151	40603	27383	48853	64203	189193
20	UnincorpOtherUrbCap	6354	38565	20285	37721	50660	153585
21	PrivateCap	14391	62676	71007	114189	111558	373821
22	PublicCap	25039	63488	65919	91343	347752	593540
23	ForeignCap	21014	33485	55590	116451	755240	981780
24	AgEmployees	3644	28922	21169	21623	44995	120354
25	Small Farmers	10905	69337	37446	63588	111365	292642
26	Medium Farmers	6754	40470	23037	40966	72134	183361
27	Large Farmers	10993	69910	37980	69504	138495	326882
28	RuralNonAgLow	17138	115954	77074	117549	151690	479405
29	RuralNonAgHigh	3696	102116	13734	22713	41088	183346
30	UrbanLow	20853	167215	80666	131905	178461	583501
31	UrbanHigh	11537	178519	40864	68137	135610	434668
32	Companies	55637	149297	177324	292175	1073053	1747486
33	GovExpEdu&Health	0	91747	0	0	0	91747
34	GovExpWages&Sal	0	234469	0	0	0	234469
35	GovExpGoods&Serv	0	176211	0	0	0	176211
36	GovExpHTransfer	0	8113	0	0	0	8113
37	GovInvAgric	0	0	51549	0	0	51549
38	GovInvInd&Mines	0	0	41802	0	0	41802
39	GovInvEnergy	0	0	36185	0	0	36185
40	GovInvTransp&Tour	0	0	62756	0	0	62756
41	GovInvEducation	0	0	46529	0	0	46529
42	GovInvHealth	0	0	17747	0	0	17747
43	GovInvHouse&Water	0	0	15384	0	0	15384
44	GovInvGenService	0	0	31965	0	0	31965
45	GovInvOther	0	0	97740	0	0	97740
46	Trade&TransMarg	43616	128039	100966	209928	271219	753768
47	FoodCrops	22408	119226	59324	107666	160635	469258

48	OtherCrops	10465	54755	26190	48010	233671	373091
49	Livestock	5530	52338	21105	47149	58535	184657
50	Forest&Wood	2280	19899	45347	84858	161300	313684
51	Fishery	3720	31147	14487	22525	51654	123532
52	Mining	27008	29480	69972	151877	1222183	1500520
53	Food Process	35661	132058	63261	101437	174182	506598
54	Textiles	7110	67101	25639	46466	82714	229029
55	Paper&MetalProd	14087	162193	129269	534672	166069	1006290
56	Chem&Minerals	147758	142976	185341	225605	290405	992084
57	Utilities	2197	18746	6413	10474	15927	53756
58	BuildConstruction	1143	25088	131178	315392	11930	484730
59	PublicWorksAg	68	1131	51821	512	1359	54891
60	PWTransp	165	1333	84499	1067	3940	91002
61	PWUtil&Comm.	137	1154	48723	565	1045	51624
62	PWOther	122	952	65795	564	2500	69933
63	Trade&TransServ	37562	116299	87702	181372	241544	664478
64	Restaurant&Hotel	7272	97389	28317	43612	77114	253705
65	LandTransport	9457	56024	27665	50538	72983	216667
66	OtherTrans&Commun	4270	36535	13574	23066	69123	146568
67	FinanRE.&BusServ	11787	101940	46416	70934	140420	371497
68	Educ&Health	2725	112841	10336	17006	28146	171054
69	Pers&HServices	5723	89241	20013	33939	66456	215372
70	IndirectTaxes	7008	31586	25843	52995	44484	161916
	TOTAL	691030	3964242	2815457	4039028	7575232	

* Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_c X_{ij}$) (in ten million Rupiah in constant 1980 prices)

Table 68

EXPERIMENT 0: PERCENT DISTRIBUTION, BASE YEAR (1980)* — Y₀ MATRIX

	71	72	73	74	75	TOTAL	
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	y ₀	
1	AgPaidRur	3.09	17.94	21.54	16.69	40.74	100.00
2	AgPaidUrb	3.23	20.66	10.49	18.99	46.64	100.00
3	AgUnpaidRur	4.06	23.07	11.89	21.81	39.18	100.00
4	AgUnpaidUrb	3.74	23.80	11.82	21.69	38.95	100.00
5	ManPaidRur	2.63	18.06	26.14	29.31	23.86	100.00
6	ManPaidUrb	3.12	21.14	24.03	26.84	24.86	100.00
7	ManUnpaidRur	3.26	20.36	17.00	27.92	31.46	100.00
8	ManUnpaidUrb	3.24	24.63	16.45	27.54	28.14	100.00
9	ClerPaidRur	1.81	63.60	6.16	10.12	18.30	100.00
10	ClerPaidUrb	2.40	53.78	8.01	13.60	22.22	100.00
11	ClerUnpaidRur	5.27	20.13	12.88	26.00	35.72	100.00
12	ClerUnpaidUrb	5.15	21.19	12.79	25.58	35.30	100.00
13	ProfPaidRur	0.85	80.69	3.45	5.47	9.54	100.00
14	ProfPaidUrb	1.38	70.12	5.93	9.36	13.21	100.00
15	ProfUnpaidRur	3.55	33.62	12.74	21.62	28.48	100.00
16	ProfUnpaidUrb	3.38	29.30	14.45	26.44	26.44	100.00
17	UnincorpAgCap	3.16	20.24	11.09	20.89	44.62	100.00
18	UnincorpHouseCap	3.17	27.44	12.49	19.09	37.80	100.00
19	UnincorpOtherRurCap	4.31	21.46	14.47	25.82	33.93	100.00
20	UnincorpOtherUrbCap	4.14	25.11	13.21	24.56	32.98	100.00
21	PrivateCap	3.85	16.77	18.99	30.55	29.84	100.00
22	PublicCap	4.22	10.70	11.11	15.39	58.59	100.00
23	ForeignCap	2.14	3.41	5.66	11.86	76.93	100.00
24	AgEmployees	3.03	24.03	17.59	17.97	37.39	100.00
25	Small Farmers	3.73	23.69	12.80	21.73	38.06	100.00
26	Medium Farmers	3.68	22.07	12.56	22.34	39.34	100.00
27	Large Farmers	3.36	21.39	11.62	21.26	42.37	100.00
28	RuralNonAgLow	3.57	24.19	16.08	24.52	31.64	100.00
29	RuralNonAgHigh	2.02	55.70	7.49	12.39	22.41	100.00
30	UrbanLow	3.57	28.66	14.58	22.61	30.58	100.00
31	UrbanHigh	2.65	41.07	9.40	15.68	31.20	100.00
32	Companies	3.18	8.54	10.15	16.72	61.41	100.00
33	GovExpEdu&Health	0.00	100.00	0.00	0.00	0.00	100.00
34	GovExpWages&Sal	0.00	100.00	0.00	0.00	0.00	100.00
35	GovExpGoods&Serv	0.00	100.00	0.00	0.00	0.00	100.00
36	GovExpHHTransfer	0.00	100.00	0.00	0.00	0.00	100.00
37	GovInvAgric	0.00	0.00	100.00	0.00	0.00	100.00
38	GovInvInd&Mines	0.00	0.00	100.00	0.00	0.00	100.00
39	GovInvEnergy	0.00	0.00	100.00	0.00	0.00	100.00
40	GovInvTransp&Tour	0.00	0.00	100.00	0.00	0.00	100.00
41	GovInvEducation	0.00	0.00	100.00	0.00	0.00	100.00
42	GovInvHealth	0.00	0.00	100.00	0.00	0.00	100.00
43	GovInvHouse&Water	0.00	0.00	100.00	0.00	0.00	100.00
44	GovInvGenService	0.00	0.00	100.00	0.00	0.00	100.00
45	GovInvOther	0.00	0.00	100.00	0.00	0.00	100.00
46	Trade&TransMarg	5.79	16.99	13.39	27.85	35.98	100.00

47	FoodCrops	4.78	25.41	12.64	22.94	34.23	100.00
48	OtherCrops	2.80	14.68	7.02	12.87	62.63	100.00
49	Livestock	2.99	28.34	11.43	25.53	31.70	100.00
50	Forest&Wood	0.73	6.34	14.46	27.05	51.42	100.00
51	Fishery	3.01	25.21	11.73	18.23	41.81	100.00
52	Mining	1.80	1.96	4.66	10.12	81.45	100.00
53	Food Process	7.04	26.07	12.49	20.02	34.38	100.00
54	Textiles	3.10	29.30	11.19	20.29	36.12	100.00
55	Paper&MetalProd	1.40	16.12	12.85	53.13	16.50	100.00
56	Chem&Minerals	14.89	14.41	18.68	22.74	29.27	100.00
57	Utilities	4.09	34.87	11.93	19.48	29.63	100.00
58	BuildConstruction	0.24	5.18	27.06	65.07	2.46	100.00
59	PublicWorksAg	0.12	2.06	94.41	0.93	2.48	100.00
60	PHTransp	0.18	1.46	92.85	1.17	4.33	100.00
61	PHUtil&Comm.	0.27	2.24	94.38	1.10	2.02	100.00
62	PHOther	0.17	1.36	94.08	0.81	3.58	100.00
63	Trade&TransServ	5.65	17.50	13.20	27.30	36.35	100.00
64	Restaurant&Hotel	2.87	38.39	11.16	17.19	30.40	100.00
65	LandTransport	4.36	25.86	12.77	23.33	33.68	100.00
66	OtherTrans&Commun	2.91	24.93	9.26	15.74	47.16	100.00
67	FinanRE.&BusServ	3.17	27.44	12.49	19.09	37.80	100.00
68	Educ&Health	1.59	65.97	6.04	9.94	16.45	100.00
69	Pers&HHServices	2.66	41.44	9.29	15.76	30.86	100.00
70	IndirectTaxes	4.33	19.51	15.96	32.73	27.47	100.00

* Percent Distribution of Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_c X_0$) (in ten million Rupiah in constant 1980 prices). Derived from Table 6A.

Table 7

COMPARISON OF EXPERIMENTS: TOTAL ENDOGENOUS INCOMES*

	1980 Base Experiment 0				Selective Budget Retrench. '80 Experiment 1				Equiprop. Budget Retrench. '80 Experiment 2				Actual Rep IV Experiment 3				Planned Rep IV Experiment 4				Actual Rep IV Gov. Plan for rest Experiment 5				Equiprop. Budget Retrech. Rep IV Actual Demand Experiment 6			
	Y0	Y1	Y2	Y3	Y1	Y2	Y3	Y4	Y3	Y4	Y5	Y6	Y3	Y4	Y5	Y6	Y3	Y4	Y5	Y6	Y3	Y4	Y5	Y6	Y3	Y4	Y5	Y6
1	AgPaidRur	88983	80028	79763	101080	119965	107422	98884																				
2	AgPaidUrb	8833	8129	8094	10583	12339	11281	10378																				
3	AgUnpaidRur	237012	215854	214507	276985	326393	294620	270761																				
4	AgUnpaidUrb	7838	7130	7087	9216	10855	9794	8999																				
5	ManPaidRur	137162	118435	121527	151925	191996	160872	153217																				
6	ManPaidUrb	145028	125458	127981	162534	203586	171769	162291																				
7	ManUnpaidRur	94972	83976	85582	107046	129543	112865	107361																				
8	ManUnpaidUrb	55037	48266	49100	60993	74973	64732	60845																				
9	ClerPaidRur	79492	72147	65642	102260	116592	104775	87475																				
10	ClerPaidUrb	192385	173567	162327	239154	276986	247363	211834																				
11	ClerUnpaidRur	151431	134901	137323	170908	206343	182239	170845																				
12	ClerUnpaidUrb	146490	130297	132539	164953	199394	175842	164654																				
13	ProfPaidRur	103667	92632	82223	129417	147338	131321	106761																				
14	ProfPaidUrb	136394	121601	110689	166430	192157	170355	141769																				
15	ProfUnpaidRur	2829	2470	2486	3036	3711	3216	2984																				
16	ProfUnpaidUrb	6431	5612	5693	6837	8476	7294	6786																				
17	UnincorpAgCap	376686	345956	345066	458351	530957	484453	450650																				
18	UnincorpHouseCap	98855	88469	88483	109367	131082	115731	106663																				
19	UnincorpOtherRurCap	189193	168688	170661	207873	251896	221287	206641																				
20	UnincorpOtherUrbCap	153585	136457	137714	172947	208598	183396	170918																				
21	PrivateCap	373821	329684	337780	425782	520059	451416	429662																				
22	PublicCap	593540	545968	555948	586283	690114	620657	590397																				
23	ForeignCap	981780	944580	954984	895322	987189	932480	902681																				
24	AgEmployees	120354	108364	107275	139271	166137	148613	134768																				
25	Small Farmers	292642	265005	263996	342215	408496	366942	334574																				
26	Medium Farmers	183361	166189	166259	214209	256465	230672	210643																				
27	Large Farmers	326882	298610	297945	391374	460435	417815	384346																				
28	RuralNonAgLow	479405	425692	428250	544965	662501	579699	536147																				
29	RuralNonAgHigh	183346	165038	154249	222143	257395	229889	196687																				
30	UrbanLow	583501	518035	517019	664701	805411	705491	645685																				
31	UrbanHigh	434668	392349	378462	501975	590326	526457	463739																				
32	Companies	1747486	1628447	1654444	1724032	2002430	1824422	1737731																				
33	GovExpEdu&Health	91747	73398	69416	71975	90277	71975	62706																				
34	GovExpWages&Sal	234469	218056	177399	351749	383927	351749	266676																				
35	GovExpGoods&Serv	176211	125110	133321	133904	193772	133904	134594																				
36	GovExpHHTransfer	8113	8032	6138	9066	9240	9066	6418																				
37	GovInvAgric	51549	38662	39002	41265	56495	41265	39241																				
38	GovInvInd&Mines	41802	23827	31627	35040	65441	35040	45455																				

39	GovInvEnergy	36185	22435	27378	54239	92335	54239	64136
40	GovInvTransp&Tour	62756	46439	47481	69800	95872	69800	66593
41	GovInvEducation	46529	26056	35204	59653	111239	59653	77267
42	GovInvHealth	17747	8696	13427	15478	33793	15478	23473
43	GovInvHouse&Water	15384	9077	11640	17292	28828	17292	20024
44	GovInvGenService	31965	19818	24185	19550	34812	19550	24180
45	GovInvOther	97740	63531	73950	96045	150963	96045	104859
46	Trade&TransMarg	753768	673310	687412	852065	1028197	909796	855881
47	FoodCrops	469258	424184	420345	530843	634381	567006	516419
48	OtherCrops	373091	352074	350842	441864	512254	481155	435740
49	Livestock	184657	166525	165434	210143	250695	224003	203718
50	Forest&Wood	313684	291551	297248	488057	518420	480811	494106
51	Fishery	123532	112255	111519	149894	175986	159090	145861
52	Mining	1500520	1455326	1469740	1327071	1445007	1379171	1338426
53	Food Process	506598	457344	450376	556798	674104	600838	540509
54	Textiles	229029	205693	204726	335301	365186	331029	327544
55	Paper&MetalProd	1006290	919051	931919	1040804	1288106	1146384	1045726
56	Chem&Minerals	992084	812803	876207	975053	1325168	1080768	1023437
57	Utilities	53756	46847	47098	58888	72069	62330	57443
58	BuildConstruction	484730	423727	446417	466698	637754	527493	498208
59	PublicWorksAg	54891	41612	41986	45132	61065	45306	43077
60	PMTransp	91002	66178	70070	97259	137067	97475	96750
61	PMUtil&Comm.	51624	32998	39451	71439	118251	71671	82594
62	PMOther	69933	45503	53657	65929	105577	66115	74123
63	Trade&TransServ	664478	593724	605681	753133	908480	804541	755677
64	Restaurant&Hotel	253705	221613	221338	279969	341127	295696	270770
65	LandTransport	216667	193128	193995	245921	296055	261293	241200
66	OtherTrans&Commun	146568	132851	133332	178044	212266	192623	175164
67	FinanRE.&BusServ	371497	332466	332518	411000	492604	434917	400837
68	Educ&Health	171054	144795	140410	164124	200354	170062	152216
69	Per&HHServices	215372	185959	187386	231316	283219	243365	225941
70	IndirectTaxes	161916	143977	295185	175196	216178	188823	175146

* Derived from Table 6A and Tables A.12-A.19. Annual Averages in ten million Rupiah in 1980 prices.

Table 8

COMPARISON OF EXPERIMENTS: TOTAL ENDOGENOUS INCOMES*, 1980 BASE = 100

	1980 Base		Selective Budget		Equipprop. Budget		Actual Rep. IV		Planned Rep. IV		Actual Rep. IV		Equipprop. Budget	
	Experiment 0	y0	Experiment 1	y1	Experiment 2	y2	Experiment 3	y3	Experiment 4	y4	Experiment 5	y5	Experiment 6	y6
1 AgPaidRur	100.00	89.94	89.64	113.59	113.59	134.82	120.72	120.72	134.82	120.72	111.13			
2 AgPaidUrb	100.00	92.03	91.63	119.81	119.81	139.69	127.72	127.72	139.69	127.72	117.49			
3 AgUnpaidRur	100.00	91.07	90.50	116.87	116.87	137.71	124.31	124.31	137.71	124.31	114.24			
4 AgUnpaidUrb	100.00	90.97	90.42	117.59	117.59	138.49	124.96	124.96	138.49	124.96	114.82			
5 ManPaidRur	100.00	86.35	88.60	110.76	110.76	139.98	117.29	117.29	139.98	117.29	111.71			
6 ManPaidUrb	100.00	86.51	88.25	112.07	112.07	140.38	118.44	118.44	140.38	118.44	111.90			
7 ManUnpaidRur	100.00	88.42	90.11	112.71	112.71	136.40	118.84	118.84	136.40	118.84	113.05			
8 ManUnpaidUrb	100.00	87.70	89.21	110.82	110.82	136.22	117.62	117.62	136.22	117.62	110.55			
9 ClerPaidRur	100.00	90.76	82.58	128.64	128.64	146.67	131.81	131.81	146.67	131.81	110.04			
10 ClerPaidUrb	100.00	90.22	84.38	124.31	124.31	143.98	128.58	128.58	143.98	128.58	110.11			
11 ClerUnpaidRur	100.00	89.08	90.68	112.86	112.86	136.26	120.34	120.34	136.26	120.34	112.82			
12 ClerUnpaidUrb	100.00	88.95	90.48	112.60	112.60	136.11	120.04	120.04	136.11	120.04	112.40			
13 ProfPaidRur	100.00	89.35	79.31	124.84	124.84	142.13	126.68	126.68	142.13	126.68	103.94			
14 ProfPaidUrb	100.00	89.15	81.15	122.02	122.02	140.88	124.90	124.90	140.88	124.90	105.47			
15 ProfUnpaidRur	100.00	87.29	87.85	107.31	107.31	131.16	113.66	113.66	131.16	113.66	105.53			
16 ProfUnpaidUrb	100.00	87.27	88.53	106.32	106.32	131.81	113.42	113.42	131.81	113.42	105.64			
17 UnincorpAgCap	100.00	91.84	91.61	121.68	121.68	140.95	128.61	128.61	140.95	128.61	119.64			
18 UnincorpHouseCap	100.00	89.49	89.51	110.63	110.63	132.60	117.07	117.07	132.60	117.07	107.90			
19 UnincorpOtherRurCap	100.00	89.16	90.20	109.87	109.87	133.14	116.96	116.96	133.14	116.96	109.22			
20 UnincorpOtherUrbCap	100.00	88.85	89.67	112.61	112.61	135.82	119.41	119.41	135.82	119.41	111.29			
21 PrivateCap	100.00	88.19	90.36	113.90	113.90	139.12	120.76	120.76	139.12	120.76	114.94			
22 PublicCap	100.00	91.98	93.67	98.78	98.78	116.27	104.57	104.57	116.27	104.57	99.47			
23 ForeignCap	100.00	96.21	97.27	91.19	91.19	100.55	94.98	94.98	100.55	94.98	91.94			
24 AgEmployees	100.00	90.04	89.13	115.72	115.72	138.04	123.48	123.48	138.04	123.48	111.98			
25 Small Farmers	100.00	90.56	90.21	116.94	116.94	139.59	125.39	125.39	139.59	125.39	114.33			
26 Medium Farmers	100.00	90.64	90.67	116.82	116.82	139.87	125.80	125.80	139.87	125.80	114.88			
27 Large Farmers	100.00	91.35	91.15	119.73	119.73	140.86	127.82	127.82	140.86	127.82	117.58			
28 RuralNonAgLow	100.00	88.80	89.33	113.68	113.68	138.19	120.92	120.92	138.19	120.92	111.84			
29 RuralNonAgHigh	100.00	90.01	84.13	121.16	121.16	140.39	125.39	125.39	140.39	125.39	107.28			
30 UrbanLow	100.00	88.78	88.61	113.92	113.92	138.03	120.91	120.91	138.03	120.91	110.66			
31 UrbanHigh	100.00	90.26	87.07	115.48	115.48	135.81	121.12	121.12	135.81	121.12	106.69			
32 Companies	100.00	93.19	94.68	98.66	98.66	114.59	104.40	104.40	114.59	104.40	99.44			
33 GovExpEdu&Health	100.00	80.00	75.66	78.45	78.45	98.40	78.45	78.45	98.40	78.45	68.35			
34 GovExpWages&Sal	100.00	93.00	75.66	150.02	150.02	163.74	150.02	150.02	163.74	150.02	113.74			
35 GovExpGoods&Serv	100.00	71.00	75.66	75.99	75.99	109.97	75.99	75.99	109.97	75.99	76.38			
36 GovExpHTransfcr	100.00	99.00	75.66	111.75	111.75	113.89	80.05	80.05	113.89	111.75	79.11			
37 GovInvAgric	100.00	75.00	75.66	83.82	83.82	109.59	80.05	80.05	109.59	80.05	76.12			
38 GovInvMines	100.0	57.00	75.66	83.82	83.82	156.55	83.82	83.82	156.55	83.82	108.74			
39 GovInv&Energie	100.0	62.00	75.66	149.89	149.89	255.17	149.89	149.89	255.17	149.89	177.24			

40 Govin&Transp&tour	100.0	74.00	111.22	152.77	111.22	106.11
41 Govin&Education	100.0	56.00	128.21	239.07	128.21	166.06
42 Govin&Health	100.0	49.0	87.21	190.42	87.21	132.26
43 Govin&House&Water	100.0	59.00	112.40	187.39	112.40	130.16
44 Govin&GenService	100.0	62.0	61.16	108.91	61.16	75.65
45 Govin&Others	100.0	65.0	98.27	154.45	98.27	107.28
46 Trade&Trans&Marg	100.0	89.33	113.04	136.41	120.70	113.55
47 Food&Crops	100.0	90.39	113.12	135.19	120.83	110.05
48 Other&crops	100.0	94.37	118.43	137.30	128.96	116.79
49 Livestock	100.0	90.18	113.80	135.76	121.31	110.32
50 Forest&Wood	100.0	92.94	155.59	165.27	153.28	157.52
51 Fishery	100.0	90.87	121.34	142.46	128.78	118.08
52 Mining	100.0	96.99	88.44	96.30	91.91	89.20
53 Food&Process	100.0	90.28	109.91	133.06	118.60	106.69
54 Textiles	100.0	89.81	146.40	159.45	144.54	143.01
55 Paper&Metal&Prod	100.0	91.33	103.43	128.01	113.92	103.92
56 Chem&Minerals	100.0	81.93	98.28	133.57	108.94	103.16
57 Utilities	100.0	87.15	109.55	134.07	115.95	106.86
58 Build&Construction	100.0	87.42	96.28	131.57	108.82	102.78
59 Public&Works&Ag	100.0	75.81	82.22	111.25	82.54	78.48
60 PW&Transp	100.0	72.72	106.88	150.62	107.11	106.32
61 PW&Util&Comm	100.0	63.92	138.38	229.06	138.83	159.99
62 PW&Other	100.0	65.07	94.27	150.97	94.54	105.99
63 Trade&Trans&Serv	100.0	83.35	113.34	136.72	121.08	113.72
64 Restaurant&Hotel	100.0	87.35	110.35	134.46	116.55	106.73
65 Land&Transport	100.0	89.14	113.50	136.64	120.60	111.32
66 Other&Trans&Comm	100.0	90.64	121.48	144.82	131.42	119.51
67 Finan&RE&Bus&Serv	100.0	89.49	110.63	132.60	117.07	107.90
68 Edu&Health	100.0	84.65	95.95	117.13	99.42	88.99
69 Pers&HH&Services	100.0	86.34	107.40	131.50	113.00	104.91
70 Indirect&Taxes	100.0	88.92	108.20	133.51	116.62	108.17

* Derived from Table 7, Annual Averages in ten million Rupiah in 1980 prices.

Table 9

IMPACT OF DIFFERENCE GOVERNMENT PROGRAMS ON INCOMES OF SOCIOECONOMIC GROUPS*

	GExEdH 33	GExWag 34	GExGoS 35	GExHHT 36	GInvAg 37	GInvIn 38	GInvEn 39	GInvTr 40	GInvEd 41	GInvHe 42	GInvHo 43	GInvGS 44	GIInvOt 45
24	AgEmployees	0.066	0.039	0.199	0.196	0.034	0.028	0.029	0.033	0.029	0.032	0.037	0.032
25	Small Farmers	0.136	0.112	0.189	0.133	0.095	0.073	0.077	0.095	0.086	0.088	0.106	0.087
26	Medium Farmers	0.081	0.084	0.071	0.102	0.061	0.044	0.047	0.062	0.056	0.056	0.069	0.054
27	Large Farmers	0.140	0.149	0.118	0.185	0.101	0.072	0.076	0.103	0.092	0.093	0.116	0.090
28	RuralNonAgLow	0.209	0.258	0.197	0.198	0.208	0.175	0.184	0.201	0.181	0.198	0.225	0.200
29	RuralNonAgHigh	0.248	0.304	0.044	0.066	0.036	0.029	0.031	0.035	0.032	0.034	0.039	0.033
30	UrbanLow	0.277	0.378	0.264	0.806	0.226	0.218	0.224	0.205	0.193	0.219	0.224	0.233
31	UrbanHigh	0.371	0.506	0.135	0.255	0.106	0.100	0.104	0.100	0.094	0.103	0.108	0.107
32	Companies	0.316	0.259	0.325	0.278	0.421	0.436	0.482	0.390	0.356	0.435	0.435	0.444

* Derived from Table 4

Table 10a

INCOMES OF SOCIOECONOMIC HOUSEHOLD GROUPS UNDER ALTERNATIVE BUDGET RETRENCHMENT SCENARIOS AFTER IMPUTING EDUCATIONAL AND HEALTH BENEFITS*

Socioeconomic Group	1980 Base Experiment 0		Selective Budget Retrench. '80 Experiment 1		Equiprop. Budget Retrech. '80 Experiment 2		Actual Rep. IV Experiment 3		Planned Rep. IV Experiment 4		Actual Rep. IV Gov. Plan for rest Experiment 5		Equiprop. Budget Retrech. Reply Actual Demand Experiment 6	
	Y0		Y1	Y2	Y3	Y4	Y5	Y6						
AgEmp (6.6)	100.00		89.56	88.49	113.93	136.14	121.32	109.89						
SmFarm (12.6)	100.00		90.15	89.66	115.48	138.02	123.61	112.58						
MedFarm (3.8)	100.00		90.44	90.39	116.11	139.10	124.92	114.01						
LargeFarm (7.4)	100.00		91.12	90.83	118.89	139.99	126.81	116.58						
RuNALo (13.0)	100.00		88.58	89.00	112.82	137.23	119.89	110.78						
RuNAHi (3.6)	100.00		89.84	83.98	120.40	139.64	124.55	106.59						
UrbLo (33.4)	100.00		88.34	87.96	112.15	136.05	118.79	108.55						
UrbHi (19.6)	100.00		89.86	86.62	114.01	134.32	119.42	105.16						

* In the multiplier analysis yielding the total endogenous incomes accruing to the socioeconomic groups, the imputed benefits of government current expenditures on education and health were not included since any given change in these subsidies would have amounted to a change in total incomes which could have been spent on all expenditure categories in fixed proportions according to the marginal expenditure propensities. Such a treatment would have been unrealistic since educational and health services provided by the government to households are largely nonfungible. Therefore, the value of government expenditures on education and health was added as imputed benefits to household incomes after the multiplier analysis had been executed. The above estimates were arrived at by adding to the total incomes of the socioeconomic groups (in Table 7) a fixed proportion of the value of government expenditures on education and health in each respective experiment. These base year shares are given in parenthesis next to the socioeconomic groups and add up to 100%.

Table 10b

PERCENTAGE CONTRIBUTION OF IMPUTED EDUCATIONAL AND HEALTH BENEFITS TO TOTAL INCOMES OF SOCIOECONOMIC GROUPS UNDER ALTERNATIVE BUDGET RETRENCHMENT SCENARIOS**

Socioeconomic Group	1980 Base Experiment 0	Selective Budget Retrench. '80 Experiment 1	Equiprop. Budget Retrench. '80 Experiment 2	Actual Rep. IV Experiment 3	Planned Rep. IV Experiment 4	Actual RepIV Gov. Plan for rest Experiment 5	Retrench. RepIV Actual Demand Experiment 6
AgEmp (6.6)	5.03	4.53	4.27	2.93	3.59	3.20	3.07
SmFarm (12.6)	3.95	3.53	3.31	2.64	2.78	2.46	2.36
MedFarm (3.8)	1.90	1.70	1.59	1.28	1.34	1.19	1.13
LargeFarm (7.4)	2.08	1.84	1.72	1.36	1.45	1.27	1.21
RuNALo (13.0)	2.49	2.27	2.11	1.72	1.77	1.61	1.52
RuNAHI (3.6)	1.80	1.62	1.62	1.17	1.26	1.13	1.15
UrbLo (33.4)	5.25	4.79	4.48	3.62	3.74	3.41	3.24
UrbHi (19.6)	4.14	3.71	3.59	2.81	3.00	2.68	2.65

** The imputed value of educational and health benefits received by each socioeconomic group was computed as a percentage of the total incomes of the corresponding groups obtained under the different policy scenarios (as given in rows 24-31 of Table 7).



OECD DEVELOPMENT CENTRE

Working Paper No. 3 A
(Formerly Technical Paper No. 3 A)

THE IMPACT OF BUDGET
RETRENCHMENT ON INCOME
DISTRIBUTION IN INDONESIA: A SOCIAL
ACCOUNTING MATRIX APPLICATION
(Statistical Annex)

by

Steven Keuning and Erik Thorbecke

Research programme on:
Adjustment Programmes and Equitable Growth



**THE IMPACT OF BUDGET RETRENCHMENT ON
INCOME DISTRIBUTION IN INDONESIA: A SOCIAL
ACCOUNTING MATRIX APPLICATION**

STATISTICAL ANNEX

by

Steven Keuning
Institute of Social Studies

and

Erik Thorbecke*
Cornell University

Under the direction of:
Christian Morrisson

June 1989

© OECD 1989

(*) We acknowledge the valuable research assistance of Sharon Flanagan.

LIST OF TABLES

Table A

.1	Planned and Realized Central Government Expenditures, 1979/80-1988/89 . . .	11
.2	Indonesia: Matrix of Average Expenditure Propensities: A Matrix for 1980 . . .	17
.3	Indonesia: Accounting Multiplier Matrix for 1980	20
.4	Matrix of Expenditure Elasticities for Socio-economic Groups	23
.5	Marginal Expenditure Propensities of Socio-economic Groups	24
.6	Experiment 1: Exogenous Demand in 1980 Reflecting Selective Budget Retrenchment	25
.7	Experiment 2: Exogenous Demand in 1980 Reflecting Equal Proportional Budget Retrenchment	27
.8	Experiment 3: Actual Exogenous Demand during Repelita IV	29
.9	Experiment 4: Planned Exogenous Demand During Repelita IV	31
.10	Experiment 5: Actual Exogenous Demand During Repelita for Pattern of Government Expenditures	33
.11	Experiment 6: Exogenous Demand During Repelita IV Reflecting Equiproportional Budget Retrenchment	35
.12	Experiment 1: Selective Budget Retrenchment, 1980	37
.13	Experiment 2: Equiproportional Budget Retrenchment, 1980	39
.14	Experiment 3: Actual Repelita IV Scenario	41
.15	Experiment 4: Planned Repelita IV Scenario	43
.16	Experiment 5: Actual Pattern of Government Expenditures in Repelita IV	45
.17	Experiment 6: Equiproportional Budget Retrenchment in Repelita IV	47

SUMMARY

This statistical annex has been prepared to be used in conjunction with Development Centre Technical Paper No. 3, "The Impact Of Budget Retrenchment On Income Distribution In Indonesia: A Social Accounting Matrix Application".

RESUME

Cet annexe statistique complète le Document Technique No. 3 publié par le Centre de Développement et intitulé "L'impact d'une réduction des dépenses budgétaires sur la distribution des revenus en Indonésie : utilisation d'une matrice de comptabilité sociale".

STATISTICAL ANNEX

Table A.1

PLANNED AND REALIZED CENTRAL GOVERNMENT EXPENDITURES, 1979/80 - 1988/89

Billions of Rupiah	fiscal years											Yearly average III	
	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	IV		
			Repelita III										
I. Total planned	6934.00	7737.30	8644.50	9545.70	10649.10	20560.40	24891.80	29997.70	36268.90	42862.60	8702.12	30916.28	
A. Routine expenditures	3445.90	3845.40	4294.20	4767.50	5308.20	10107.10	12042.80	14582.50	17725.50	21520.00	4332.24	15194.38	
B. Development expenditures	3488.10	3891.90	4350.30	4778.20	5340.90	10459.30	12849.00	15415.20	18543.40	21342.60	4369.88	15721.90	
II. Total realized	8076.00	11716.10	13917.70	14355.90	18311.00	19380.90	22824.60	21891.30	26959.00	28963.60	13275.34	24003.88	
A. Routine expenditures	4061.80	5800.00	6977.60	6996.30	8411.80	9429.00	11951.50	13559.30	17482.00	20066.00	6449.50	14497.56	
B. Development expenditures	4014.20	5916.10	6940.10	7359.60	9899.20	9951.90	10873.10	8332.00	9477.00	8897.60	6825.84	9506.32	
II.A. Routine expenditures	4061.80	5800.00	6977.60	6996.30	8411.80	9429.00	11951.50	13559.30	17482.00	20066.00	6449.50	14497.56	
1. Wages and salaries	2022.81	2901.69	3366.16	3601.96	4149.21	4726.90	6265.90	6720.80	7209.00	7472.00	3208.37	6478.92	
2. Purchase of commodities	635.99	768.41	1043.34	1122.74	1211.79	1386.10	1608.50	1606.00	1553.00	1570.00	966.45	1544.72	
3. Debt payments	684.10	784.80	931.00	1224.50	2102.70	2776.50	3323.10	5058.10	8205.00	10648.00	1145.42	6002.14	
4. Others	718.90	1345.10	1637.10	997.10	948.10	539.50	754.00	174.40	515.00	376.00	1129.26	471.78	
II.B. Development expenditures	4014.20	5916.10	6940.10	7359.60	9899.20	9951.90	10873.10	8332.00	9477.00	8897.60	6825.84	9506.32	
1. Fertilizer subsidy	125.00	283.60	371.40	420.10	324.20	731.60	477.10	467.20	756.00	200.00	304.86	526.38	
2. Expenditure programs	3889.20	5632.50	6568.70	6939.50	9575.00	9220.30	10396.00	7864.80	8721.00	8697.60	6520.98	8979.94	
II.A.3. Debt payments	684.10	784.80	931.00	1224.50	2102.70	2776.50	3323.10	5058.10	8205.00	10648.00	1145.42	6002.14	
a. Total interest	381.10	439.00	456.00	679.60	1163.50	1492.00	1704.00	2750.00	3566.76	4400.00	623.84	2782.55	
i. Domestic	0.00	0.00	0.00	0.00	0.00	0.000.00	0.00	0.00	0.00	0.00	0.00	0.00	
ii. Foreign	381.10	439.00	456.00	679.60	1163.50	1492.00	1704.00	2750.00	3566.76	4400.00	623.84	2782.55	
b. Total amortization	303.00	345.80	475.00	544.90	939.20	1284.50	1619.10	2308.10	4638.24	6248.00	521.58	3219.59	
i. Domestic	36.50	30.80	16.00	19.80	29.80	39.30	20.00	0.00	39.00	40.00	26.58	27.66	
ii. Foreign	266.50	315.00	459.00	525.10	909.40	1245.20	1599.10	2308.10	4599.24	6208.00	495.00	3191.93	
II.A.4. Other expenditures	718.90	1345.10	1637.10	997.10	948.10	539.50	754.00	174.40	515.00	375.50	1129.26	471.68	
a. Subsidies	659.80	1303.60	1540.00	963.00	928.10	506.70	374.20	29.40	402.00	266.50	1078.90	315.76	
i. on Food	124.90	281.60	224.00	1.00	0.00	0.00	0.00	29.40	0.00	0.00	126.30	5.88	
ii. on Oil products etc.	534.90	1022.00	1316.00	962.00	928.10	506.70	374.20	0.00	402.00	266.50	952.60	309.88	
b. Other (elections etc.)	59.10	41.50	97.10	34.10	20.00	32.80	379.80	145.00	113.00	109.00	50.36	155.92	

II.B.2. Expenditure programs --(dummy total)--												
	3889.00	5633.00	6569.00	6940.00	9575.00	9219.00	10396.00	7864.76	8721.00	8697.60	6542.80	8979.67
a. Agriculture	383.00	646.00	583.00	511.00	589.00	967.00	660.00	422.66	1128.30	1099.50	546.20	855.49
b. Industry and mining	402.00	491.00	827.00	913.00	2153.00	839.00	1189.00	680.70	404.00	374.20	942.80	697.38
c. Electric power	330.00	431.00	530.00	758.00	660.00	911.00	1447.00	960.40	1164.90	1086.60	574.00	1113.98
d. Transportation and tourism	466.00	780.00	807.00	876.00	1032.00	1428.00	1484.00	1131.40	1487.27	1654.30	891.20	1436.99
e. Education	362.00	575.00	726.00	703.00	1032.00	1231.00	1413.00	1184.40	1179.45	1075.60	679.60	1216.69
f. Health	142.00	218.00	286.00	259.00	279.00	320.00	398.00	325.90	239.82	289.20	236.80	314.58
g. Housing and water supply	117.00	191.00	166.00	151.00	221.00	224.00	335.00	336.60	475.71	438.40	169.20	361.94
h. General public services	473.00	700.00	800.00	785.00	899.00	927.00	977.00	768.60	657.44	647.70	731.40	795.59
i. Other expenditure programs	748.00	1212.00	1455.00	1703.00	1981.00	2080.00	2273.00	1842.50	1763.57	1824.20	1419.80	1956.65
j. Capital participation (in private sector)	466.00	389.00	389.00	281.00	234.00	292.00	220.00	211.40	220.53	207.90	351.80	230.37

II.B.2. Expenditure programs												
	3889.20	5632.50	6568.70	6939.50	9575.00	9220.30	10396.00	7864.80	8721.00	8697.60	6520.98	8979.94
i. Current expenditures (19%)	738.95	1070.18	1248.05	1318.51	1819.25	1751.86	1975.24	1494.31	1656.99	1652.54	1238.99	1706.19
* Wages and salaries (38.64%)	285.53	413.52	482.25	509.47	702.96	676.92	763.23	577.40	640.26	638.54	478.74	659.27
Goods and services (61.36%)	453.42	656.66	765.81	809.03	1116.29	1074.94	1212.01	916.91	1016.73	1014.00	760.24	1046.92
ii. Capital expenditures (81%)	3150.25	4562.33	5320.65	5621.00	7755.75	7468.44	8420.76	6370.49	7064.01	7045.06	5281.99	7273.75
* Transfers to private Investments	466.00	389.00	389.00	281.00	234.00	292.00	220.00	211.40	220.53	207.90	351.80	230.37
	2684.25	4173.33	4931.65	5340.00	7521.75	7176.44	8200.76	6159.09	6843.48	6837.16	4930.19	7043.38

I. Total realized												
	8076.00	11716.10	13917.70	14355.90	18311.00	19380.90	22824.60	21891.30	26959.00	28963.10	13275.34	24003.78
A. Current expenditures	4622.75	6807.98	8122.05	8190.01	9616.05	10627.96	12784.74	13212.71	15256.75	15670.04	7471.77	13510.44
1. On education and health	594.02	828.73	917.62	915.82	988.49	1054.20	1286.59	1247.22	1323.14	1358.14	848.93	1253.86
2. Other wages and salaries	1816.96	2629.67	3089.34	3353.85	4034.47	4581.55	6025.60	6325.38	6817.21	7051.20	2984.86	6160.19
3. Other goods and services	986.77	1281.88	1650.60	1823.53	2157.29	2229.11	2278.45	2248.52	2278.63	2285.21	1580.01	2315.79
4. Interest on debt	381.10	439.00	456.00	679.60	1163.50	1492.00	1704.00	2750.00	3566.76	4400.00	623.84	2782.55
5. Subsidies	784.80	1587.20	1911.40	1383.10	1252.30	1238.30	851.30	496.60	1158.00	466.50	1383.76	842.14
a. On food	124.90	281.60	224.00	1.00	0.00	0.00	0.00	29.40	0.00	0.00	126.30	5.88
b. On chemicals	659.90	1305.60	1687.40	1382.10	1252.30	1238.30	851.30	467.20	1158.00	466.50	1257.46	836.26
6. Others	59.10	41.50	97.10	34.10	20.00	32.80	379.80	145.00	113.00	109.00	50.36	185.92
B. Capital expenditures	3453.25	4908.13	5795.65	6165.90	8694.95	8752.94	10039.86	8678.59	11702.25	13293.06	5803.57	10493.34
1. Debt amortization	303.00	345.80	475.00	544.90	939.20	1284.50	1619.10	2308.10	4638.24	6248.00	521.58	3219.59
a. Domestic	36.50	30.80	16.00	19.80	29.80	39.30	20.00	0.00	39.00	40.00	26.58	27.66
b. Foreign	266.50	315.00	459.00	525.10	909.40	1245.20	1599.10	2308.10	4599.24	6208.00	495.00	3191.93
2. Transfers to private	466.00	389.00	389.00	281.00	234.00	292.00	220.00	211.40	220.53	207.90	351.80	230.37
3. Investments	2684.25	4173.33	4931.65	5340.00	7521.75	7176.44	8200.76	6159.09	6843.48	6837.16	4930.19	7043.38
a. Agriculture	323.25	545.22	492.05	431.28	497.12	816.15	557.04	356.73	952.29	927.98	457.79	722.04
b. Industry and mining	339.29	414.40	697.99	770.57	1817.13	708.12	1003.52	574.51	340.98	315.82	807.88	588.59
c. Electric power	278.52	363.76	447.32	639.75	557.04	768.88	1221.27	810.58	983.18	917.09	457.28	940.20
d. Transportation and tourism	393.30	658.32	681.11	739.34	1288.79	1205.23	1252.50	954.90	1255.26	1396.23	752.17	1212.82
e. Education	305.53	485.30	612.74	593.33	871.01	1038.96	1192.57	999.63	995.46	907.81	573.58	1026.89
f. Health	119.85	183.99	241.38	218.60	235.48	270.08	335.91	275.06	202.40	244.08	199.86	265.51
g. Housing and water supply	98.75	161.20	140.10	127.44	186.52	189.06	282.74	284.09	401.50	370.01	142.80	305.48
h. General public services	194.45	338.19	390.93	382.34	396.70	424.44	436.80	348.52	223.97	218.51	340.52	330.45
i. Other expenditure programs	631.31	1022.93	1228.02	1437.33	1671.96	1755.52	1918.41	1555.07	1488.46	1539.62	1198.31	1651.42

II. Total realized (at constant 1980 prices)		10626.32	11716.10	12538.47	11963.25	13463.9712667.25	13917.44	12715.58	14432.51	14767.05	12061.62	13699.97
A. Current expenditures		6082.56	6807.98	7317.16	6825.00	7070.63	7795.57	7674.62	8167.70	7989.49	6820.67	7714.75
1. On education and health		781.60	828.73	826.68	763.18	726.83	784.50	724.45	708.34	692.46	785.41	719.75
2. Other wages and salaries		2390.73	2629.67	2783.19	2794.87	2966.52	2994.48	3674.11	3649.60	3595.11	2713.00	3517.49
3. Other goods and services		1298.38	1281.88	1487.02	1519.61	1586.24	1547.23	1306.05	1219.87	1165.13	1434.63	1339.04
4. Interest on debt		501.45	439.00	410.81	566.33	855.15	1039.02	1597.34	1909.47	2243.37	554.62	1552.87
5. Subsidies		1032.63	1587.20	1721.98	1152.58	920.81	809.35	288.45	619.94	237.85	1283.04	494.93
a. On food		164.34	281.60	201.80	0.83	0.00	0.00	17.08	0.00	0.00	129.72	3.42
b. On chemicals		868.29	1305.60	1520.18	1151.75	920.81	809.35	271.37	619.94	237.85	1153.33	491.52
6. Others		77.76	41.50	87.48	28.42	14.71	21.44	84.22	60.49	55.57	49.97	90.66
B. Capital expenditures		4543.75	4908.13	5221.30	5138.25	6393.35	6121.87	5040.97	6264.80	6777.56	5240.95	5985.22
1. Debt amortization		398.68	345.80	427.93	454.08	690.59	987.26	1340.66	2483.08	3185.59	463.42	1767.23
a. Domestic		48.03	30.80	14.41	16.50	21.91	25.69	12.20	20.88	20.39	26.33	15.83
b. Foreign		350.66	315.00	413.51	437.58	668.68	975.06	1340.66	2462.21	3165.19	437.09	1751.40
2. Transfers to private		613.16	389.00	350.45	234.17	172.06	134.15	122.79	118.06	106.00	351.77	134.37
3. Investments		3531.91	4173.33	4442.93	4450.00	5530.70	5000.46	3577.51	3663.66	3485.97	4425.77	4083.62
a. Agriculture		425.33	545.22	443.29	359.40	365.53	339.66	207.20	509.81	473.14	427.76	412.65
b. Industry and mining		446.43	414.40	628.82	642.14	1336.13	611.90	333.71	182.54	161.03	693.58	350.40
c. Electric power		366.47	363.76	402.99	533.13	409.59	502.54	744.68	526.34	467.59	415.19	542.39
d. Transportation and tourism		517.51	658.32	613.61	616.12	947.64	763.72	554.66	672.00	711.88	670.64	698.00
e. Education		402.01	485.30	552.02	494.44	640.45	679.06	727.18	532.92	462.85	514.84	596.53
f. Health		157.69	183.99	217.46	182.16	173.14	204.82	159.77	108.36	124.49	182.89	154.78
g. Housing and water supply		129.93	161.20	126.22	106.20	137.15	172.40	165.01	214.94	188.65	132.14	172.92
h. General public services		255.86	338.19	352.19	318.62	291.69	266.34	202.44	119.90	111.41	311.31	195.50
i. Other expenditure programs (implicit deflator)		830.67	1022.93	1106.32	1197.78	1229.39	1147.40	903.26	796.85	764.99	1077.42	960.45
		78.00	100.00	111.00	120.00	136.00	164.80	172.16	186.79	196.13	110.06	175.21
I.A. Routine expenditures (planned in Repelita)		3445.90	3845.40	4294.20	4767.50	5308.2010101.10	52042.80	14582.50	17725.50	21520.00	4332.24	15194.38
1. Wages and salaries		1716.09	1915.04	2138.55	2374.25	2643.53	4543.34	6671.56	8072.79	9674.52	2157.49	6871.88
2. Purchase of commodities		539.55	602.11	672.38	746.49	831.75	1326.90	1948.45	2357.69	2825.48	678.34	2006.95
3. Debt payments		580.37	647.65	723.24	802.96	894.02	3192.70	4438.10	5450.38	6809.36	729.65	4745.31
a. Total interest		323.31	360.80	402.91	447.31	498.04	1959.58	2545.89	3414.93	4435.11	406.47	3052.20
i. Domestic		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ii. Foreign		323.31	360.80	402.91	447.31	498.04	1959.58	2545.89	3414.93	4435.11	406.47	3052.20
b. Total amortization		257.06	286.86	320.34	355.64	395.98	1290.21	1532.54	2035.45	2374.25	323.17	1693.11
i. Domestic		36.50	30.80	16.00	19.80	29.80	39.30	0.00	0.00	40.00	26.58	27.66
ii. Foreign		220.56	256.06	304.34	335.84	366.18	1193.82	1270.21	1996.45	2334.25	296.59	1665.45
4. Other routine expenditures		609.89	680.60	760.03	843.80	939.50	1038.16	1233.26	1844.64	2210.64	766.77	1570.23
a. Subsidies		550.79	639.10	662.93	809.70	919.50	1005.36	853.46	1731.64	2101.64	716.41	1414.31
i. On food		104.26	138.06	96.43	0.84	0.00	0.00	0.00	0.00	0.00	67.92	0.00
ii. On oil products etc.		446.53	501.04	566.51	808.86	919.50	1005.36	853.46	1731.64	2101.64	648.49	1414.31
b. Other (elections etc.)		59.10	41.50	97.10	34.10	20.00	32.80	379.80	113.00	109.00	50.36	155.92

I.B. Development expenditures (dummy allocation)	3488.00	3891.90	4350.30	4778.20	5340.90	10459.30	12849.00	15415.20	18543.40	21342.60	4369.86	15721.90
1. Fertilizer subsidy	99.38	110.89	123.95	136.14	152.18	684.64	841.06	1009.04	1213.80	1397.03	124.51	1029.11
2. Agriculture	319.62	356.63	398.63	437.84	489.40	717.06	880.90	1056.83	1271.29	1463.20	400.42	1077.85
3. Industry and mining	463.00	516.61	577.46	634.26	708.96	925.60	1137.08	1364.17	1641.01	1888.72	580.06	1391.32
4. Electric power	332.00	370.44	414.08	454.81	508.37	1025.30	1259.56	1511.11	1817.76	2092.16	415.94	1541.18
6. Transportation and tourism	512.00	571.29	638.58	701.39	783.99	1392.10	1710.16	2051.71	2468.07	2840.63	641.45	2092.54
7. Education	356.00	397.22	444.01	487.68	545.11	1501.90	1845.05	2213.54	2662.73	3064.68	446.01	2257.58
8. Health	133.00	148.40	165.88	182.20	203.65	408.00	501.22	601.32	723.35	832.54	166.63	613.29
9. Housing and water supply	78.00	87.03	97.28	106.85	119.44	432.70	531.56	637.72	767.14	882.94	97.72	650.41
10. General public services	412.00	459.71	513.85	564.40	630.86	940.20	1155.01	1385.69	1666.89	1918.51	516.16	1413.26
11. Other expenditure programs	714.00	796.68	890.51	978.11	1093.29	2204.90	2708.67	3249.64	3909.09	4499.18	894.52	3314.30
12. Capital participation (in private sector)	69.00	76.99	86.06	94.52	105.65	226.90	278.74	334.41	402.27	463.00	86.45	341.06

I.B. Development expenditures (final allocation)	3488.00	3891.84	4350.23	4778.12	5340.81	10459.30	12848.98	15415.18	18543.37	21342.57	4369.80	15721.88
1. Fertilizer subsidy	99.38	211.48	236.39	259.64	290.21	684.64	652.11	782.35	941.12	1083.18	219.42	828.68
2. Agriculture	319.62	345.98	386.73	424.77	474.80	717.06	971.70	1185.77	1482.34	1614.03	390.38	1174.18
3. Industry and mining	463.00	410.15	458.46	503.55	562.85	925.60	1103.60	1324.01	1592.69	1833.11	479.60	1355.80
4. Electric power	332.00	294.20	328.86	361.20	403.74	1025.30	1622.10	1946.06	2340.98	2694.36	344.00	1925.76
6. Transportation and tourism	512.00	608.76	680.46	747.39	838.48	1392.10	1608.43	1929.67	2321.25	2671.65	676.00	1984.62
7. Education	356.00	407.18	455.14	499.91	558.78	1501.90	1892.48	2270.45	2731.19	3143.48	455.40	2307.90
8. Health	133.00	147.53	164.90	181.12	202.45	408.00	586.07	703.13	845.81	973.49	165.80	703.30
9. Housing and water supply	78.00	96.23	107.57	118.15	132.06	432.70	480.38	576.32	693.27	797.93	106.40	596.12
10. General public services	412.00	411.84	460.35	505.63	565.18	940.20	1126.58	1351.58	1625.86	1871.28	471.00	1383.15
11. Other expenditure programs	714.00	894.69	1000.07	1098.44	1227.80	2204.90	2529.73	3034.96	3650.85	4201.96	987.00	3124.48
12. Capital participation (in private sector)	69.00	63.80	71.32	78.33	87.55	226.90	275.80	330.88	398.02	458.11	74.00	337.94

I.B.-2. Expenditure programs	3388.62	3680.36	4113.84	4518.48	5050.60	9774.66	12196.87	14632.82	17602.26	20259.39	6520.98	8979.94
i. Current expenditures (19%)	643.84	699.27	781.63	859.51	959.61	1857.19	2317.40	2780.24	3344.43	3849.28	1238.99	1706.19
* Wages and salaries (38.64%)	248.78	270.20	302.02	331.73	370.79	717.62	895.45	1074.28	1292.29	1487.36	478.74	659.27
Goods and services (61.36%)	395.06	429.07	479.61	526.78	588.82	1139.57	1421.96	1705.95	2052.14	2361.92	760.24	1046.92
ii. Capital expenditures (81%)	2744.78	2981.09	3332.21	3659.97	4090.99	7917.48	9879.46	11852.59	14257.83	16410.10	5281.99	7273.75
* Transfers to private	69.00	63.80	71.32	78.33	87.55	226.90	275.80	330.88	398.02	458.11	74.00	337.94
Investments	2675.78	2917.29	3260.90	3581.64	4003.43	7690.58	9603.67	11521.71	13859.81	15952.00	5207.99	6935.81
I. Total planned	6933.90	7737.24	8644.43	9545.62	10649.01	20560.40	24891.78	29997.68	36268.87	42862.57	8702.04	30916.26

A. Current expenditures	3932.07	4469.29	4991.88	5530.01	6162.05	11409.80	13722.12	16612.55	19975.60	24078.22	5017.06	17159.65
1. On education and health	510.02	547.29	569.95	608.96	574.88	1145.66	1327.80	1538.94	1783.64	2067.24	582.22	1572.66
2. Other wages and salaries	1542.97	1732.51	1969.10	2202.24	2536.98	4367.35	5256.92	6545.47	7973.85	9549.45	1997.12	6738.61
3. Other goods and services	846.49	936.61	1053.51	1168.05	1320.64	2214.42	2706.10	3315.83	4017.42	4732.60	1065.06	3397.27
4. Interest on debt	323.31	360.80	402.91	447.31	498.04	1959.58	2545.89	2905.49	3414.93	4435.11	406.47	3052.20
5. Subsidies	650.17	850.58	899.32	1069.34	1209.71	1690.00	1505.57	2161.81	2672.76	3184.82	935.83	2242.99
a. On food	104.26	138.06	96.43	0.84	0.00	0.00	0.00	0.00	0.00	0.00	67.92	0.00
b. On chemicals	545.91	712.52	802.89	1068.50	1209.71	1690.00	1505.57	2161.81	2672.76	3184.82	867.91	2242.99
6. Others	59.10	41.50	97.10	34.10	20.00	32.80	379.80	145.00	113.00	109.00	50.36	155.92

B. Capital expenditures	3001.83	3267.95	3652.55	4015.62	4486.96	9150.60	11169.68	13385.13	16293.27	18784.35	3684.98	13756.61
1. Debt amortization	257.06	286.86	320.34	355.64	395.98	1233.12	1290.21	1532.54	2035.45	2374.25	323.17	1693.11
a. Domestic	36.50	30.80	16.00	19.80	29.80	39.30	20.00	0.00	39.00	40.00	26.58	27.66
b. Foreign	220.56	256.06	304.34	335.84	366.18	1193.82	1270.21	1532.54	1996.45	2334.25	296.59	1665.45
2. Transfers to private	69.00	63.80	71.32	78.33	87.55	226.90	275.80	330.88	398.02	458.11	74.00	337.94
3. Investments	2675.78	2917.29	3260.90	3581.64	4003.43	7690.58	9603.67	11521.71	13859.81	15952.00	3287.81	11725.55
a. Agriculture	269.76	292.01	326.40	358.51	400.73	605.20	820.12	983.91	1183.57	1362.24	329.48	991.01
b. Industry and mining	390.77	346.16	386.94	425.00	475.04	781.21	931.44	1117.46	1344.23	1547.14	404.78	1144.30
c. Electric power	280.21	248.31	277.55	304.85	340.76	865.35	1369.05	1642.48	1975.79	2274.04	290.34	1625.34
d. Transportation and tourism	432.13	513.79	574.31	630.79	705.08	1174.93	1357.51	1628.64	1959.14	2254.88	571.22	1675.02
e. Education	300.46	343.66	384.14	421.92	471.61	1267.60	1597.26	1916.26	2305.13	2653.09	384.36	1947.87
f. Health	112.25	124.51	139.18	152.87	170.87	344.35	494.65	593.44	713.86	821.62	139.94	593.59
g. Housing and water supply	65.83	81.22	90.78	99.71	111.46	365.20	405.44	486.41	585.12	673.45	89.80	503.13
h. General public services	221.75	212.51	237.54	260.90	291.63	425.79	493.12	591.60	711.65	819.08	244.87	608.25
i. Other expenditure programs	602.62	755.12	844.06	927.08	1036.26	1860.94	2135.09	2561.51	3081.32	3546.45	833.03	2637.06
I. Total planned (at constant 1980 prices)	9123.55	7737.24	7787.77	7954.68	7830.16	1613998.09	15691.68	17509.65	19601.99	21449.66	8086.68	17650.22
A. Current expenditures	5173.77	3922.00	4497.19	4608.34	4530.92	7768.11	8650.36	9696.75	10796.07	12049.43	4546.44	9792.15
1. On education and health	671.08	547.29	513.46	507.47	422.70	780.00	837.05	898.28	963.99	1034.50	532.40	902.77
2. Other wages and salaries	2030.22	2185.24	1773.97	1835.20	1866.75	2973.41	3313.94	3820.59	4309.57	4778.82	1938.28	3839.27
3. Other goods and services	1113.80	1031.18	949.11	973.38	971.06	1507.64	1705.91	1935.45	2171.27	2368.33	1007.70	1937.72
4. Interest on debt	425.41	360.80	362.98	372.76	366.21	1334.14	1604.92	1695.94	1845.64	2219.46	377.63	1740.02
5. Subsidies	855.49	850.58	810.20	891.12	889.50	1150.60	949.11	1261.85	1444.53	1593.78	859.38	1279.97
a. On food	137.19	138.06	86.87	0.70	0.00	0.00	0.00	0.00	0.00	0.00	72.56	0.00
b. On chemicals	718.30	712.52	723.33	890.42	889.50	1150.60	949.11	1261.85	1444.53	1593.78	786.81	1279.97
c. Others	77.76	41.50	87.48	28.42	14.71	22.33	239.42	84.64	61.07	54.55	49.97	92.40
B. Capital expenditures	3949.78	3267.95	3290.58	3346.35	3299.24	6229.98	7041.32	7812.90	8805.91	9400.23	3430.78	7858.07
1. Debt amortization	338.23	286.86	288.59	296.37	291.16	839.54	813.35	894.54	1100.08	1188.14	300.24	967.13
a. Domestic	48.03	30.80	14.41	16.50	21.91	26.76	12.61	0.00	21.08	20.02	26.33	16.09
b. Foreign	290.20	256.06	274.18	279.87	269.25	812.78	800.74	894.54	1079.01	1168.13	273.91	951.04
2. Transfers to private	90.79	63.80	64.25	65.27	64.38	154.48	173.86	193.13	215.12	229.25	69.70	193.17
3. Investments	3520.76	2917.29	2937.75	2984.70	2943.70	5235.96	6054.12	6725.22	7490.71	7982.84	3060.84	6697.77
a. Agriculture	354.94	292.01	294.06	298.76	294.65	412.04	517.00	574.31	639.68	681.70	306.88	564.95
b. Industry and mining	514.17	346.16	348.59	354.16	349.30	531.87	587.17	652.26	726.51	774.24	382.48	654.41
c. Electric power	368.69	248.31	250.05	254.05	250.56	589.16	863.04	958.71	1067.84	1137.99	274.33	923.35
d. Transportation and tourism	568.59	513.79	517.39	525.66	518.44	799.93	855.77	950.64	1058.84	1128.40	528.77	958.72
e. Education	395.35	343.66	346.07	351.60	346.77	863.02	1006.90	1118.52	1245.84	1327.68	356.69	1112.39
f. Health	147.70	124.51	125.38	127.39	125.64	234.44	311.82	346.39	385.82	411.16	130.12	337.93
g. Housing and water supply	86.82	81.22	81.79	83.10	81.95	288.64	255.59	283.92	316.24	337.01	82.94	288.28
h. General public services	291.78	212.51	214.00	217.42	214.43	289.89	310.86	345.32	384.62	409.89	230.03	348.12
i. Other expenditure programs (implicit deflator)	792.92	755.12	760.41	772.57	761.96	1266.98	1345.95	1495.15	1665.34	1774.75	768.60	1509.63
	76.00	100.00	111.00	120.00	136.00	146.88	158.83	171.32	185.03	199.83	107.61	175.16

III. Total realized - planned (at constant 1980 prices)													
A. Current expenditures	908.79	1502.76	3978.86	4750.69	4008.57	5633.81	-1330.84	-1774.25	-4794.07	-5169.48	-6682.61	3974.94	-3950.25
1. On education and health	110.52	285.98	281.44	2819.98	2216.67	2539.7	-821.74	-854.79	-2022.13	-2628.37	-4059.95	2274.22	-2077.39
2. Other wages and salaries	360.51	444.43	444.43	1009.23	959.67	1099.78	21.06	360.20	-146.49	-659.97	-1183.71	253.01	-183.01
3. Other goods and services	184.58	250.70	250.70	537.92	546.24	615.18	-50.70	158.68	-629.40	-951.40	-1203.20	426.92	-598.68
4. Interest on debt	76.04	78.20	78.20	47.83	193.57	489.31	-358.97	-565.89	-98.60	63.82	23.92	176.99	-187.15
5. Subsidies	177.14	736.62	736.62	911.78	261.47	31.31	-341.25	-430.02	-973.40	-824.59	-1355.93	423.66	-785.04
a. On food	27.15	143.54	143.54	114.93	0.13	0.00	0.00	0.00	17.08	0.00	0.00	57.15	3.42
b. On chemicals	149.99	593.08	593.08	796.85	261.33	31.31	-341.25	-430.02	-990.48	-824.59	-1355.93	366.51	-788.45
6. Others	0.00	0.00	0.00	0.00	0.00	0.00	-0.89	-7.84	-0.41	-0.58	1.03	0.00	-1.74
B. Capital expenditures	593.97	1640.18	1640.18	1930.72	1791.90	3094.11	-509.10	-919.46	-2771.94	-2541.11	-2622.67	1810.17	-1872.85
1. Debt amortization	60.45	58.94	58.94	139.34	157.71	399.43	0.00	173.91	446.12	1383.00	1997.45	163.17	800.09
a. Domestic	0.00	0.00	0.00	0.00	0.00	0.00	-1.07	-0.41	0.00	-0.20	0.38	0.00	-0.26
b. Foreign	60.45	58.94	58.94	139.34	157.71	399.43	1.07	174.32	446.12	1383.20	1997.07	163.17	800.36
2. Transfers to private	522.37	325.20	325.20	286.20	168.89	107.68	36.37	-39.71	-70.34	-97.05	-123.25	282.07	-58.80
3. Investments	11.15	1256.04	1256.04	1505.18	1465.29	2587.00	-545.47	-1053.65	-3147.71	-3827.06	-4496.87	1364.93	-2614.15
a. Agriculture	70.39	253.22	253.22	149.23	60.65	70.87	121.39	-177.34	-367.10	-129.87	-208.57	120.87	-152.30
b. Industry and mining	-67.74	68.24	68.24	280.23	287.98	986.83	-69.05	24.73	-318.56	-543.96	-613.21	311.11	-304.01
c. Electric power	-2.22	115.46	115.46	152.94	279.08	159.03	-86.62	-118.37	-487.89	-541.50	-670.41	140.86	-380.96
d. Transportation and tourism	-51.08	144.53	144.53	96.22	90.46	429.20	-12.19	-92.06	-395.98	-386.84	-416.53	141.86	260.72
e. Education	6.66	141.64	141.64	205.95	142.84	293.68	-183.96	-279.73	-537.88	-712.92	-864.83	158.16	-515.86
f. Health	9.99	59.48	59.48	92.08	54.77	47.51	-57.92	-107.00	-186.62	-277.46	-286.72	52.77	-183.14
9. Housing and water supply	43.31	79.99	79.99	44.43	23.11	55.20	-125.07	-83.19	-118.91	-101.30	-148.36	49.21	-115.36
h. General public services	-35.92	125.68	125.68	138.19	101.20	77.26	-12.48	-44.51	-142.88	-264.72	-298.48	81.28	-152.62
i. Other expenditure programs	37.76	267.81	267.81	345.91	425.21	467.43	-119.58	-176.19	-591.89	-868.49	-989.76	308.82	-549.18
III. Total realized / planned (at constant 1980 prices)	1.16	1.51	1.51	1.61	1.50	1.72	0.90	0.89	0.73	0.74	0.69	1.50	0.79
A. Current expenditures	1.18	1.74	1.74	1.63	1.48	1.56	0.89	0.90	0.79	0.76	0.66	1.52	0.80
1. On education and health	1.16	1.51	1.51	1.61	1.50	1.72	0.88	0.94	0.81	0.73	0.67	1.50	0.81
2. Other wages and salaries	1.18	1.20	1.20	1.57	1.52	1.59	1.11	1.11	0.96	0.85	0.75	1.41	0.94
3. Other goods and services	1.17	1.24	1.24	1.57	1.56	1.63	0.97	0.97	0.67	0.56	0.49	1.43	0.72
4. Interest on debt	1.18	1.22	1.22	1.13	1.29	2.34	0.73	0.65	0.94	1.03	1.01	1.48	0.87
5. Subsidies	1.21	1.87	1.87	2.13	1.29	1.04	0.70	0.55	0.23	0.43	0.15	1.51	0.41
a. On food	1.20	2.04	2.04	2.32	1.19	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
b. On chemicals	1.21	1.83	1.83	2.10	1.29	1.04	0.70	0.55	0.22	0.43	0.15	1.49	0.41
6. Others	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.97	1.00	0.99	1.02	1.00	0.99
B. Capital expenditures	1.15	1.50	1.50	1.59	1.54	1.94	0.92	0.87	0.65	0.71	0.72	1.54	0.77
1. Debt amortization	1.18	1.21	1.21	1.48	1.53	2.37	1.00	1.21	1.50	2.26	2.68	1.55	1.73
a. Domestic	1.00	1.00	1.00	1.00	1.00	1.00	0.96	0.97	1.00	1.00	1.00	1.00	1.00
b. Foreign	1.21	1.23	1.23	1.51	1.56	2.48	1.00	1.22	1.50	2.28	2.71	1.60	1.74
2. Transfers to private	6.75	6.10	6.10	5.45	3.59	2.67	1.24	0.77	0.64	0.55	0.46	4.91	0.73
3. Investments	1.00	1.43	1.43	1.51	1.49	1.88	0.90	0.83	0.53	0.49	0.44	1.46	0.64
a. Agriculture	1.20	1.87	1.87	1.51	1.20	1.24	1.29	0.86	0.36	0.80	0.69	1.40	0.76
b. Industry and mining	0.87	1.20	1.20	1.81	1.81	3.83	0.87	1.04	0.51	0.25	0.21	1.50	0.58
c. Electric power	0.99	1.46	1.46	1.61	2.10	1.63	0.85	0.86	0.49	0.49	0.41	1.56	0.62
d. Transportation and tourism	0.91	1.28	1.28	1.19	1.17	1.83	0.98	0.89	0.58	0.63	0.63	1.28	0.75
e. Education	1.02	1.41	1.41	1.60	1.41	1.85	0.79	0.72	0.52	0.43	0.35	1.46	0.56
f. Health	1.07	1.48	1.48	1.73	1.43	1.38	0.75	0.66	0.46	0.28	0.30	1.42	0.49
9. Housing and water supply	1.50	1.98	1.98	1.54	1.28	1.67	0.50	0.67	0.38	0.68	0.56	1.60	0.60
h. General public services	0.88	1.59	1.59	1.65	1.47	1.36	0.96	0.86	0.59	0.31	0.27	1.39	0.60
i. Other expenditure programs	1.05	1.35	1.35	1.45	1.55	1.61	0.91	0.87	0.60	0.48	0.44	1.40	0.66

*Realized expenditures in 1988/89 were assumed to be equal to the expenditures budgeted at the beginning of that fiscal year.

Table A.3

INDONESIA; ACCOUNTING MULTIPLIER MATRIX FOR 1980 (INVERSE[1-A])

Table with columns 1 to 76 and rows 1 to 76, listing various economic sectors such as Agriculture, Manufacturing, Services, and Government. Each cell contains a numerical value representing an element of the inverse multiplier matrix.

Table A.4

MATRIX OF EXPENDITURE ELASTICITIES FOR SOCIO-ECONOMIC GROUPS

		AgEmp1	SmFarm	MedFar	LrgFar	RuNAlo	RuNAhi	UrbLow	UrbHi
		24	25	26	27	28	29	30	31
24	AgEmployees	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
25	Small Farmers	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
26	Medium Farmers	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
27	Large Farmers	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
28	RuralNonAgLow	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
29	RuralNonAgHigh	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
30	UrbanLow	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
31	UrbanHigh	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
47	FoodCrops	0.75	0.65	0.55	0.49	0.49	0.48	0.45	0.25
48	OtherCrops	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.70
49	Livestock	1.65	1.30	1.20	1.10	1.10	0.90	0.50	0.40
50	Forest&Wood	1.20	1.20	1.15	1.10	1.10	1.00	0.90	0.60
51	Fishery	1.80	1.30	1.20	1.10	1.10	0.90	0.50	0.40
52	Mining	1.01	1.00	1.00	1.00	1.00	1.00	1.00	0.50
53	Food Process	0.95	1.00	0.85	0.65	0.78	0.50	0.47	0.25
54	Textiles	1.40	1.40	1.40	1.30	1.40	1.30	1.25	1.10
55	Paper&MetalProd	1.27	1.29	1.30	1.31	1.31	1.31	2.10	1.61
56	Chem&Minerals	1.20	1.20	1.10	1.10	1.20	1.10	1.10	1.20
57	Utilities	1.10	1.10	1.15	1.20	1.20	1.20	1.10	1.20
58	BuildConstruction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	PublicWorksAg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	PWTransp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61	PWUtil&Comm.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	PWOther	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	Trade&TransServ	1.10	1.10	1.10	1.20	1.10	1.20	1.20	1.25
64	Restaurant&Hote	11.00	1.00	1.20	1.00	1.20	1.50	1.20	1.10
65	LandTransport	2.00	1.85	1.80	1.70	1.60	1.50	1.20	1.05
66	OtherTrans&Commun	1.10	1.12	1.15	1.17	1.20	1.30	1.30	1.35
67	FinanRE.&BusServ	1.25	1.31	1.33	1.34	1.35	1.36	1.23	1.15
68	Educ&Health	1.1	1.10	1.20	1.20	1.10	1.20	1.20	1.25
69	Pers&HHServices	1.10	1.10	1.20	1.20	1.10	1.20	1.20	1.25
70	IndirectTaxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
71	Subsidies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	GovCurrent	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
73	GovCapital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	PrivateCapital	1.02	1.17	1.34	1.38	1.37	1.40	1.42	1.43
75	Rest of World	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table A.5
MARGINAL EXPENDITURE PROPENSITIES OF SOCIO-ECONOMIC GROUPS

	AgEmp1 24	SmFarm 25	MedFar 26	LrgFar 27	RuNA1o 28	RuNAhi 29	UrbLow 30	UrbHi 31	
47	FoodCrops	0.2263	0.1686	0.1229	0.0794	0.0792	0.0519	0.0406	0.0082
48	OtherCrops	0.0682	0.0572	0.0356	0.026	0.032	0.0178	0.0164	0.0068
49	Livestock	0.0649	0.0514	0.0447	0.0424	0.0334	0.0337	0.0195	0.0166
50	Forest&Wood	0.0349	0.0272	0.0171	0.0123	0.0132	0.0093	0.0067	0.0039
51	Fishery	0.0799	0.0566	0.0425	0.0361	0.0434	0.0374	0.0192	0.0103
52	Mining	0.0035	0.0033	0.003	0.0021	0.002	0.0017	0.0015	0.0006
53	Food Process	0.3494	0.2921	0.1947	0.1285	0.1945	0.1122	0.0873	0.0373
54	Textiles	0.0286	0.0501	0.0481	0.049	0.0512	0.0551	0.0361	0.038
55	PaperMetal&Manu	0.0153	0.0401	0.0562	0.0623	0.0702	0.0775	0.1079	0.0854
56	Chem&Minerals	0.0102	0.0202	0.0338	0.0428	0.0494	0.0599	0.0715	0.0714
57	Utilities	0.0009	0.0008	0.0016	0.003	0.0046	0.0098	0.0086	0.0113
58	BuildConst	0	0	0	0	0	0	0	0
59	PublicWorksAg	0	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0	0
63	Trade&TransServ	0.0002	0.0006	0.0006	0.0011	0.0011	0.0018	0.0025	0.0038
64	Rest&Hotel	0.0065	0.0153	0.0501	0.0448	0.0667	0.0804	0.1125	0.1068
65	LandTransport	0.0162	0.0252	0.0271	0.0264	0.0396	0.0413	0.0567	0.0548
66	OtherTrans&Commun	0.0011	0.0022	0.0045	0.0085	0.0112	0.0215	0.0355	0.0371
67	FinanRE.&BusServ	0.023	0.0442	0.0522	0.0753	0.0741	0.0778	0.1173	0.1034
68	Educ&Health	0.0005	0.0565	0.0464	0.0449	0.0485	0.045	0.0027	0.0022
69	Pers&HHServices	0.0026	0.0154	0.0206	0.0253	0.0251	0.03177	0.0504	0.0553
70	IndirectTaxes	0	0	0	0	0	0	0	0
71	Subsidies	0	0	0	0	0	0	0	0
72	GovCurrent	0.0219	0.0162	0.0227	0.0231	0.0186	0.0193	0.0259	0.0348
73	GovCapital	0	0	0	0	0	0	0	0
74	PrivateCapital	0.0309	0.0387	0.1683	0.2549	0.1297	0.2052	0.1658	0.2986
75	Rest of World	0	0	0	0	0	0	0	0

Table A.6

EXPERIMENT 1: EXOGENOUS DEMAND IN 1980 REFLECTING SELECTIVE BUDGET
RETRENCHMENT¹ - X1 MATRIX

	71	72	73	74	75	TOTAL*
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	
1	AgPaidRur	0	0	0	0	0
2	AgPaidUrb	0	0	0	0	0
3	AgUnpaidRur	0	0	0	0	0
4	AgUnpaidUrb	0	0	0	0	0
5	ManPaidRur	0	0	0	0	0
6	ManPaidUrb	0	0	0	0	0
7	ManUnpaidRur	0	0	0	0	0
8	ManUnpaidUrb	0	0	0	0	0
9	ClerPaidRur	0	0	0	0	0
10	ClerPaidUrb	0	0	0	0	0
11	ClerUnpaidRur	0	0	0	0	0
12	ClerUnpaidUrb	0	0	0	0	0
13	ProfPaidRur	0	0	0	0	0
14	ProfPaidUrb	0	0	0	0	0
15	ProfUnpaidRur	0	0	0	0	0
16	ProfUnpaidUrb	0	0	0	0	0
17	UnincorpAgCap	0	0	0	0	0
18	UnincorpHouseCap	0	0	0	0	0
19	UnincorpOtherRurCap	0	0	0	0	0
20	UnincorpOtherUrbCap	0	0	0	0	0
21	PrivateCap	0	0	0	0	0
22	PublicCap	0	0	0	0	0
23	ForeignCap	0	0	0	0	0
24	AgEmployees	0	0	0	887	887
25	Small Farmers	0	0	0	2786	2786
26	Medium Farmers	0	0	0	2435	2435
27	Large Farmers	0	0	0	2496	2496
28	RuralNonAgLow	0	0	0	2447	2447
29	RuralNonAgHigh	0	0	0	561	561
30	UrbanLow	0	0	0	2783	2783
31	UrbanHigh	0	0	0	2260	2260
32	Companies	0	0	0	7508	7508
33	GovExpEdu&Health	0	73398	0	0	73398
34	GovExpWages&Sal	0	218056	0	0	218056
35	GovExpGoods&Sery	0	125110	0	0	125110
36	GovExpHTransfere	0	8032	0	0	8032
37	GovInvAgric	0	0	38662	0	38662
38	GovInvInd&Mines	0	0	23827	0	23827
39	GovInvEnergy	0	0	22435	0	22435
40	GovInvTransp&Tour	0	0	46439	0	46439
41	GovInvEducation	0	0	26056	0	26056
42	GovInvHealth	0	0	8696	0	8696
43	GovInvHouse&Water	0	0	9077	0	9077
44	GovInvGenService	0	0	19818	0	19818
45	GovInvOther	0	0	63531	0	63531
46	Trade&TransMarg	0	0	0	0	0
47	FoodCrops	0	0	11883	3600	15483

48	OtherCrops	0	0	0	0	0	0	5518	138231	143749
49	Livestock	0	0	0	0	0	0	10253	1355	11608
50	Forest&Wood	0	0	0	0	0	0	5535	123642	129177
51	Fishery	0	0	0	0	0	0	0	13294	13294
52	Mining	0	0	0	0	0	0	90330	1133301	1223631
53	Food Process	18696	0	0	0	0	0	2620	11917	33233
54	Textiles	0	0	0	0	0	0	3006	8968	11974
55	Paper&MetalProd	0	0	0	0	0	0	340946	10140	351086
56	Chem&Minerals	47003	0	0	0	0	0	9124	122294	178421
57	Utilities	0	0	0	0	0	0	0	0	0
58	BuildConstruction	0	0	0	0	0	0	308569	0	308569
59	PublicWorksAg	0	0	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0	0	0
63	Trade&TransServ	0	0	0	0	0	0	0	3108	3108
64	Restaurant&Hotel	0	0	0	0	0	0	0	5917	5917
65	LandTransport	0	0	0	0	0	0	0	322	322
66	OtherTrans&Commun	0	0	0	0	0	0	0	31548	31548
67	FinanRE.&BusServ	0	0	0	0	0	0	0	3075	3075
68	Educ&Health	0	0	0	0	0	0	0	7	7
69	Pers&HHServices	0	0	0	0	0	0	0	5497	5497
70	IndirectTaxes	0	0	0	0	0	0	0	0	0
71	Subsidies	0	65699	0	0	0	0	0	2232	65699
72	GovCurrent	0	0	0	0	0	0	0	136190	730909
73	GovCapital	0	206352	0	0	0	0	0	0	342542
74	PrivateCapital	0	0	0	33723	0	0	0	0	1239667
75	Rest of World	0	34262	50278	451883	0	0	0	0	1778801
	TOTAL	65699	730909	342542	1239667	1778801				

** Total of columns 71-75 for rows 1-70. Overall totals for rows 71-75 (equal to totals of columns 71-75 in this table)

1(Each individual category of government expenditures in 1980 was reduced in proportion to the selective cut in actual Repelita IV expenditures compared to planned Repelita IV expenditures; exogenous demand by private capital and rest of the world are assumed to remain at their actual 1980 base year values as in Experiment 0; in ten million Rupiah in constant 1980 prices)

Table A.7

EXPERIMENT 2: EXOGENOUS DEMAND IN 1980 REFLECTING EQUAL PROPORTIONAL BUDGET RETRENCHMENT¹ -- X2 MATRIX

	71	72	73	74	75	TOTAL*
	Subsidies GovCurrent GovCapital PrivateCapital Rest of World					
1 AgPaidRur	0	0	0	0	0	0
2 AgPaidUrb	0	0	0	0	0	0
3 AgUnpaidRur	0	0	0	0	0	0
4 AgUnpaidUrb	0	0	0	0	0	0
5 ManPaidRur	0	0	0	0	0	0
6 ManPaidUrb	0	0	0	0	0	0
7 ManUnpaidRur	0	0	0	0	0	0
8 ManUnpaidUrb	0	0	0	0	0	0
9 ClerPaidRur	0	0	0	0	0	0
10 ClerPaidUrb	0	0	0	0	0	0
11 ClerUnpaidRur	0	0	0	0	0	0
12 ClerUnpaidUrb	0	0	0	0	0	0
13 ProfPaidRur	0	0	0	0	0	0
14 ProfPaidUrb	0	0	0	0	0	0
15 ProfUnpaidRur	0	0	0	0	0	0
16 ProfUnpaidUrb	0	0	0	0	0	0
17 UnincorpAgCap	0	0	0	0	0	0
18 UnincorpHouseCap	0	0	0	0	0	0
19 UnincorpOtherRurCap	0	0	0	0	0	0
20 UnincorpOtherUrbCap	0	0	0	0	0	0
21 PrivateCap	0	0	0	0	0	0
22 PublicCap	0	0	0	0	0	0
23 ForeignCap	0	0	0	0	0	0
24 AgEmployees	0	0	0	0	887	887
25 Small Farmers	0	0	0	0	2786	2786
26 Medium Farmers	0	0	0	0	2435	2435
27 Large Farmers	0	0	0	0	2496	2496
28 RuralNonAgLow	0	0	0	0	2447	2447
29 RuralNonAgHigh	0	0	0	0	561	561
30 UrbanLow	0	0	0	0	2783	2783
31 UrbanHigh	0	0	0	0	2260	2260
32 Companies	0	0	0	0	7508	7508
33 GovExpEdu&Health	0	69416	0	0	0	69416
34 GovExpWages&Sal	0	177399	0	0	0	177399
35 GovExpGoods&Serv	0	133321	0	0	0	133321
36 GovExpHITransfer	0	6138	0	0	0	6138
37 GovInvAgric	0	0	39002	0	0	39002
38 GovInvInd&Mines	0	0	31627	0	0	31627
39 GovInvEnergy	0	0	27378	0	0	27378
40 GovInvTransp&Tour	0	0	47481	0	0	47481
41 GovInvEducation	0	0	35204	0	0	35204
42 GovInvHealth	0	0	13427	0	0	13427
43 GovInvHouse&Water	0	0	11640	0	0	11640
44 GovInvGenService	0	0	24185	0	0	24185
45 GovInvOther	0	0	73950	0	0	73950
46 Trade&TransMarg	0	0	0	11883	0	11883
47 FoodCrops	0	0	0	0	3600	15483

48	OtherCrops	0	0	0	0	5518	138231	143749
49	Livestock	0	0	0	0	10253	1355	11608
50	Forest&Wood	0	0	0	0	5535	123642	129177
51	Fishery	0	0	0	0	0	13294	13294
52	Mining	0	0	0	0	90330	1133301	1223631
53	Food Process	14145	0	0	0	2620	11917	28682
54	Textiles	0	0	0	0	3006	8968	11974
55	Paper&MetalProd	0	0	0	0	340946	10140	351086
56	Chem&Minerals	91185	0	0	0	9124	122294	222603
57	Utilities	0	0	0	0	0	0	0
58	BuildConstruction	0	0	0	0	308569	0	308569
59	PublicWorksAg	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0
63	Trade&TransServ	0	0	0	0	0	3108	3108
64	Restaurant&Hotel	0	0	0	0	0	5917	5917
65	LandTransport	0	0	0	0	0	322	322
66	OtherTrans&Commun	0	0	0	0	0	31548	31548
67	FinanRE.&BusServ	0	0	0	0	0	3075	3075
68	Educ&Health	0	0	0	0	0	7	7
69	Pers&HHServices	0	0	0	0	0	5497	5497
70	IndirectTaxes	5325	24861	19975	0	53739	45053	148953
71	Subsidies	0	105330	0	0	0	0	110655
72	GovCurrent	0	0	0	0	0	2232	791659
73	GovCapital	0	230112	0	0	0	140135	390222
74	PrivateCapital	0	0	36065	0	0	0	1306520
75	Rest of World	0	45082	30288	0	464997	0	1827799
	TOTAL	110655	791659	390222	0	1306520	1827799	

* Total of columns 71-75 for rows 1-70. Overall totals for rows 71-75 (equal to totals of columns 71-75 in this table)

1 (Each individual category of government expenditures in 1980 was reduced by the same proportion as total actual to total planned government expenditures to endogenous accounts in Repelita IV; exogenous demand by private capital and rest of the world are assumed to remain on their actual base year 1980 values; in ten million Rupiah in constant 1980 prices)

Table A.8

EXPERIMENT 3: ACTUAL EXOGENOUS DEMAND DURING REPELITA IV¹ -- X₃ MATRIX

	71	72	73	74	75	TOTAL*
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	
1	AgPaidRur	0	0	0	0	0
2	AgPaidUrb	0	0	0	0	0
3	AgUnpaidRur	0	0	0	0	0
4	AgUnpaidUrb	0	0	0	0	0
5	ManPaidRur	0	0	0	0	0
6	ManPaidUrb	0	0	0	0	0
7	ManUnpaidRur	0	0	0	0	0
8	ManUnpaidUrb	0	0	0	0	0
9	ClerPaidRur	0	0	0	0	0
10	ClerPaidUrb	0	0	0	0	0
11	ClerUnpaidRur	0	0	0	0	0
12	ClerUnpaidUrb	0	0	0	0	0
13	ProfPaidRur	0	0	0	0	0
14	ProfPaidUrb	0	0	0	0	0
15	ProfUnpaidRur	0	0	0	0	0
16	ProfUnpaidUrb	0	0	0	0	0
17	UnincorpAgCap	0	0	0	0	0
18	UnincorpHouseCap	0	0	0	0	0
19	UnincorpOtherRurCap	0	0	0	0	0
20	UnincorpOtherUrbCap	0	0	0	0	0
21	PrivateCap	0	0	0	0	0
22	PublicCap	0	0	0	0	0
23	ForeignCap	0	0	0	0	0
24	AgEmployees	0	0	0	1549	1549
25	Small Farmers	0	0	0	4864	4864
26	Medium Farmers	0	0	0	4252	4252
27	Large Farmers	0	0	0	4358	4358
28	RuralNonAgLow	0	0	0	4272	4272
29	RuralNonAgHigh	0	0	0	980	980
30	UrbanLow	0	0	0	4859	4859
31	UrbanHigh	0	0	0	3946	3946
32	Companies	0	0	0	13109	13109
33	GovExpEdu&Health	0	71975	0	0	71975
34	GovExpWages&Sal	0	351749	0	0	351749
35	GovExpGoods&Serv	0	133904	0	0	133904
36	GovExpHHTransfer	0	9066	0	0	9066
37	GovInvAgric	0	0	41265	0	41265
38	GovInvInd&Mines	0	0	35040	0	35040
39	GovInvEnergy	0	0	54239	0	54239
40	GovInvTransp&Tour	0	0	69800	0	69800
41	GovInvEducation	0	0	59653	0	59653
42	GovInvHealth	0	0	15478	0	15478
43	GovInvHouse&Water	0	0	17292	0	17292
44	GovInvGenService	0	0	19550	0	19550
45	GovInvOther	0	0	96045	0	96045
46	Trade&TransMarg	0	0	0	0	0
47	FoodCrops	0	0	11883	5706	17589

48	OtherCrops	0	0	0	0	5518	170439	175957
49	Livestock	0	0	0	0	10253	1194	11447
50	Forest&Wood	0	0	0	0	5535	274485	280020
51	Fishery	0	0	0	0	0	22095	22095
52	Mining	0	0	0	0	90330	966706	1057036
53	Food Process	342	0	0	0	2620	9593	12555
54	Textiles	0	0	0	0	3006	62337	65343
55	Paper&MetalProd	0	0	0	0	327990	16437	344427
56	Chem&Minerals	49152	0	0	0	9124	130610	188886
57	Utilities	0	0	0	0	0	0	0
58	BuildConstruction	0	0	0	0	296843	0	296843
59	PublicWorksAg	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0
63	Trade&TransServ	0	0	0	0	0	4991	4991
64	Restaurant&Hotel	0	0	0	0	0	9503	9503
65	LandTransport	0	0	0	0	0	517	517
66	OtherTrans&Commun	0	0	0	0	0	50666	50666
67	FinanRE.&BusServ	0	0	0	0	0	4939	4939
68	Educ&Health	0	0	0	0	0	11	11
69	Pers&HHServices	0	0	0	0	0	8828	8828
70	IndirectTaxes	0	0	0	0	0	0	0
71	Subsidies	0	49493	0	0	0	0	49494
72	GovCurrent	0	0	0	0	0	3897	1055225
73	GovCapital	0	283751	0	0	0	314771	598522
74	PrivateCapital	0	0	15020	0	0	0	1274015
75	Rest of World	0	155287	175140	510913	510913	0	2099914
	TOTAL	49494	1055225	598522	1274015	2099914		

* Total of columns 71-75 for rows 1-70. Overall totals for rows 71-75 (equal to totals of columns 71-75 in this table)

1(1984-85 to 1988-89, annual averages in ten million Rupiah in 1980 constant prices)

Table A.9

EXPERIMENT 4: PLANNED EXOGENOUS DEMAND DURING REPELITA IV¹ -- X4 MATRIX

	71	72	73	74	75	TOTAL*
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	
1	AgPaidRur	0	0	0	0	0
2	AgPaidUrb	0	0	0	0	0
3	AgUnpaidRur	0	0	0	0	0
4	AgUnpaidUrb	0	0	0	0	0
5	ManPaidRur	0	0	0	0	0
6	ManPaidUrb	0	0	0	0	0
7	ManUnpaidRur	0	0	0	0	0
8	ManUnpaidUrb	0	0	0	0	0
9	ClerPaidRur	0	0	0	0	0
10	ClerPaidUrb	0	0	0	0	0
11	ClerUnpaidRur	0	0	0	0	0
12	ClerUnpaidUrb	0	0	0	0	0
13	ProfPaidRur	0	0	0	0	0
14	ProfPaidUrb	0	0	0	0	0
15	ProfUnpaidRur	0	0	0	0	0
16	ProfUnpaidUrb	0	0	0	0	0
17	UnincorpAgCap	0	0	0	0	0
18	UnincorpHouseCap	0	0	0	0	0
19	UnincorpOtherRurCap	0	0	0	0	0
20	UnincorpOtherUrbCap	0	0	0	0	0
21	PrivateCap	0	0	0	0	0
22	PublicCap	0	0	0	0	0
23	ForeignCap	0	0	0	0	0
24	AgEmployees	0	0	0	0	2929
25	Small Farmers	0	0	0	2929	9199
26	Medium Farmers	0	0	0	9199	8040
27	Large Farmers	0	0	0	8040	8242
28	RuralNonAgLow	0	0	0	8242	8080
29	RuralNonAgHigh	0	0	0	8080	1852
30	UrbanLow	0	0	0	1852	9189
31	UrbanHigh	0	0	0	9189	7463
32	Companies	0	0	0	7463	24791
33	GovExpEdu&Health	0	90277	0	24791	90277
34	GovExpWages&Sal	0	383927	0	0	383927
35	GovExpGoods&Serv	0	193772	0	0	193772
36	GovExpHHTransfer	0	9240	0	0	9240
37	GovInvAgric	0	0	56495	0	56495
38	GovInvInd&Mines	0	0	65441	0	65441
39	GovInvEnergy	0	0	92335	0	92335
40	GovInvTransp&Tour	0	0	95872	0	95872
41	GovInvEducation	0	0	111239	0	111239
42	GovInvHealth	0	0	33793	0	33793
43	GovInvHouse&Water	0	0	28828	0	28828
44	GovInvGenService	0	0	34812	0	34812
45	GovInvOther	0	0	150963	0	150963
46	Trade&TransMarg	0	0	0	0	0
47	FoodCrops	0	0	0	3600	17286

48	OtherCrops	0	0	0	0	6355	190344	196699
49	Livestock	0	0	0	0	11809	1355	13164
50	Forest&Wood	0	0	0	0	6375	252230	258605
51	Fishery	0	0	0	0	0	23185	23185
52	Mining	0	0	0	0	104035	981439	1085474
53	Food Process	0	0	0	0	3017	17899	20916
54	Textiles	0	0	0	0	3462	49234	52696
55	Paper&MetalProd	0	0	0	0	392673	10140	402813
56	Chem&Minerals	127997	0	0	0	10508	178549	317054
57	Utilities	0	0	0	0	0	0	0
58	BuildConstruction	0	0	0	0	355384	0	355384
59	PublicWorksAg	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0
63	Trade&TransServ	0	0	0	0	0	5691	5691
64	Restaurant&Hotel	0	0	0	0	0	10834	10834
65	LandTransport	0	0	0	0	0	590	590
66	OtherTrans&Commun	0	0	0	0	0	57764	57764
67	FinanRE.&BusServ	0	0	0	0	0	5631	5631
68	Educ&Health	0	0	0	0	0	13	13
69	Pers&HHServices	0	0	0	0	0	10065	10065
70	IndirectTaxes	0	0	0	0	0	0	0
71	Subsidies	0	127997	0	0	0	0	127997
72	GovCurrent	0	0	0	0	0	7370	1244899
73	GovCapital	0	265684	0	0	0	520124	785808
74	PrivateCapital	0	0	20926	0	0	0	1496199
75	Rest of World	0	174002	95104	785808	588895	0	2405842
	TOTAL	127997	1244899	785808	1496199	2405842		

* Total of columns 71-75 for rows 1-70. Overall totals for rows 71-75 (equal to totals of columns 71-75 in this table)

1(1984-85 to 1988-89, annual averages in ten million Rupiah in 1980 constant prices)

Table A.10

EXPERIMENT 5: ACTUAL EXOGENOUS DEMAND DURING REPELITA IV FOR PATTERN OF GOVERNMENT EXPENDITURES COMBINED WITH PLANNED EXOGENOUS DEMAND FOR PRIVATE CAPITAL AND REST OF WORLD¹ -- X5 MATRIX

	71	72	73	74	75	TOTAL*
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	
1	AgPaidRur	0	0	0	0	0
2	AgPaidUrb	0	0	0	0	0
3	AgUnpaidRur	0	0	0	0	0
4	AgUnpaidUrb	0	0	0	0	0
5	ManPaidRur	0	0	0	0	0
6	ManPaidUrb	0	0	0	0	0
7	ManUnpaidRur	0	0	0	0	0
8	ManUnpaidUrb	0	0	0	0	0
9	ClerPaidRur	0	0	0	0	0
10	ClerPaidUrb	0	0	0	0	0
11	ClerUnpaidRur	0	0	0	0	0
12	ClerUnpaidUrb	0	0	0	0	0
13	ProfPaidRur	0	0	0	0	0
14	ProfPaidUrb	0	0	0	0	0
15	ProfUnpaidRur	0	0	0	0	0
16	ProfUnpaidUrb	0	0	0	0	0
17	UnincorpAgCap	0	0	0	0	0
18	UnincorpHouseCap	0	0	0	0	0
19	UnincorpOtherRurCap	0	0	0	0	0
20	UnincorpOtherUrbCap	0	0	0	0	0
21	PrivateCap	0	0	0	0	0
22	PublicCap	0	0	0	0	0
23	ForeignCap	0	0	0	0	0
24	AgEmployees	0	0	0	2929	2929
25	Small Farmers	0	0	0	9199	9199
26	Medium Farmers	0	0	0	8040	8040
27	Large Farmers	0	0	0	8242	8242
28	RuralNonAgLow	0	0	0	8080	8080
29	RuralNonAgHigh	0	0	0	1852	1852
30	UrbanLow	0	0	0	9189	9189
31	UrbanHigh	0	0	0	7463	7463
32	Companies	0	0	0	24791	24791
33	GovExpEdu&Health	0	71975	0	0	71975
34	GovExpWages&Sal	0	351749	0	0	351749
35	GovExpGoods&Serv	0	133904	0	0	133904
36	GovExpHITransfer	0	9066	0	0	9066
37	GovInvAgric	0	0	41265	0	41265
38	GovInvInd&Mines	0	0	35040	0	35040
39	GovInvEnergy	0	0	54239	0	54239
40	GovInvTransp&Tour	0	0	69800	0	69800
41	GovInvEducation	0	0	59653	0	59653
42	GovInvHealth	0	0	15478	0	15478
43	GovInvHouse&Water	0	0	17292	0	17292
44	GovInvGenService	0	0	19550	0	19550
45	GovInvOther	0	0	96045	0	96045
46	Trade&TransMarg	0	0	0	0	0

47	FoodCrops	0	0	0	0	0	13686	3600	17286
48	OtherCrops	0	0	0	0	0	6355	190344	196699
49	Livestock	0	0	0	0	0	11809	1355	13164
50	Forest&Wood	0	0	0	0	0	6375	252230	258605
51	Fishery	0	0	0	0	0	0	23185	23185
52	Mining	0	0	0	0	0	104035	981439	1085474
53	Food Process	342	0	0	0	0	3017	17899	21258
54	Textiles	0	0	0	0	0	3462	49234	52696
55	Paper&MetalProd	0	0	0	0	0	392673	10140	402813
56	Chem&Minerals	49152	0	0	0	0	10508	178549	238209
57	Utilities	0	0	0	0	0	0	0	0
58	BUILDConstruction	0	0	0	0	0	355384	0	355384
59	PublicWorksAg	0	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0	0
63	Trade&TransServ	0	0	0	0	0	0	5691	5691
64	Restaurant&Hotel	0	0	0	0	0	0	10834	10834
65	LandTransport	0	0	0	0	0	0	590	590
66	OtherTrans&Commun	0	0	0	0	0	0	57764	57764
67	FinanRE. &BusServ	0	0	0	0	0	0	5631	5631
68	Educ&Health	0	0	0	0	0	0	13	13
69	Pers&HHServices	0	0	0	0	0	0	10065	10065
<u>70</u>	<u>IndirectTaxes</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
71	Subsidies	0	49493	0	0	0	0	0	49494
72	GovCurrent	0	0	0	0	0	0	7370	849872
73	GovCapital	0	78398	0	0	0	0	520124	598522
74	PrivateCapital	0	0	0	15020	0	0	0	1496199
75	Rest of World	0	155287	175140	588895	0	0	0	2405842
	TOTAL	49494	849872	598522	1496199	2405842			

* Total of columns 71-75 for rows 1-70. Overall totals for rows 71-75 (equal to totals of columns 71-75 in this table)

¹(Columns 71-73 as in Experiment 3, columns 74-75 as in Experiment 4; annual averages in ten million Rupiah in 1980 constant prices)

Table A.11

EXPERIMENT 6: EXOGENOUS DEMAND DURING REPELITA IV REFLECTING EQUIPROPORTIONAL BUDGET RETRENCHMENT COMBINED WITH ACTUAL EXOGENOUS DEMAND FOR PRIVATE CAPITAL AND REST OF WORLD -- X6 MATRIX

	71	72	73	74	75	TOTAL*
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	
1	AgPaidRur	0	0	0	0	0
2	AgPaidUrb	0	0	0	0	0
3	AgUnpaidRur	0	0	0	0	0
4	AgUnpaidUrb	0	0	0	0	0
5	ManPaidRur	0	0	0	0	0
6	ManPaidUrb	0	0	0	0	0
7	ManUnpaidRur	0	0	0	0	0
8	ManUnpaidUrb	0	0	0	0	0
9	ClerPaidRur	0	0	0	0	0
10	ClerPaidUrb	0	0	0	0	0
11	ClerUnpaidRur	0	0	0	0	0
12	ClerUnpaidUrb	0	0	0	0	0
13	ProfPaidRur	0	0	0	0	0
14	ProfPaidUrb	0	0	0	0	0
15	ProfUnpaidRur	0	0	0	0	0
16	ProfUnpaidUrb	0	0	0	0	0
17	UnincorpAgCap	0	0	0	0	0
18	UnincorpHouseCap	0	0	0	0	0
19	UnincorpOtherRurCap	0	0	0	0	0
20	UnincorpOtherUrbCap	0	0	0	0	0
21	PrivateCap	0	0	0	0	0
22	PublicCap	0	0	0	0	0
23	ForeignCap	0	0	0	0	0
24	AgEmployees	0	0	0	1549	1549
25	Small Farmers	0	0	0	4864	4864
26	Medium Farmers	0	0	0	4252	4252
27	Large Farmers	0	0	0	4358	4358
28	RuralNonAgLow	0	0	0	4272	4272
29	RuralNonAgHigh	0	0	0	980	980
30	UrbanLow	0	0	0	4859	4859
31	UrbanHigh	0	0	0	3946	3946
32	Companies	0	0	0	13109	13109
33	GovExpEdu&Health	0	62706	0	0	62706
34	GovExpWages&Sal	0	266676	0	0	266676
35	GovExpGoods&Serv	0	134594	0	0	134594
36	GovExpHITransfer	0	6418	0	0	6418
37	GovInvAgric	0	0	39241	0	39241
38	GovInvInd&Mines	0	0	45455	0	45455
39	GovInvEnergy	0	0	64136	0	64136
40	GovInvTransp&Tour	0	0	66593	0	66593
41	GovInvEducation	0	0	77267	0	77267
42	GovInvHealth	0	0	23473	0	23473
43	GovInvHouse&Water	0	0	20024	0	20024
44	GovInvGenService	0	0	24180	0	24180
45	GovInvOther	0	0	104859	0	104859
46	Trade&TransMarg	0	0	0	0	0

47	FoodCrops	0	0	0	0	11883	5706	17589
48	OtherCrops	0	0	0	0	5518	170439	175957
49	Livestock	0	0	0	0	10253	1194	11447
50	Forest&Wood	0	0	0	0	5535	274485	280020
51	Fishery	0	0	0	0	0	22095	22095
52	Mining	0	0	0	0	90330	966706	1057036
53	Food Process	0	0	0	0	2620	9593	12213
54	Textiles	0	0	0	0	3006	62337	65343
55	Paper&MetalProd	0	0	0	0	327990	16437	344427
56	Chem&Minerals	88907	0	0	0	9124	130610	228641
57	Utilities	0	0	0	0	0	0	0
58	BuildConstruction	0	0	0	0	296843	0	296843
59	PublicWorksAg	0	0	0	0	0	0	0
60	PWTransp	0	0	0	0	0	0	0
61	PWUtil&Comm.	0	0	0	0	0	0	0
62	PWOther	0	0	0	0	0	0	0
63	Trade&TransServ	0	0	0	0	0	4991	4991
64	Restaurant&Hotel	0	0	0	0	0	9503	9503
65	LandTransport	0	0	0	0	0	517	517
66	OtherTrans&Commun	0	0	0	0	0	50666	50666
67	FinanRE.&BusServ	0	0	0	0	0	4939	4939
68	Educ&Health	0	0	0	0	0	11	11
69	Pers&HHServices	0	0	0	0	0	8828	8828
70	IndirectTaxes	0	0	0	0	0	0	0
71	Subsidies	0	88907	0	0	0	0	88907
72	GovCurrent	0	0	0	0	0	3897	998987
73	GovCapital	0	265684	0	0	0	314771	581258
74	PrivateCapital	0	0	20926	0	0	0	1274015
75	Rest of World	0	174002	95104	510913	0	0	2099914
	TOTAL	88907	998987	581258	1274015	2099914		

* Total of columns 71-75 for rows 1-70. Overall totals for rows 71-75 (equal to totals of columns 71-75 in this table)

¹(annual averages in ten million Rupiah in 1980 constant prices)

Table A.12

EXPERIMENT 1: SELECTIVE BUDGET RETRENCHMENT, 1980* - Y1 MATRIX

	71	72	73	74	75	TOTAL
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	y1
1	AgPaidRur	1948	13526	14853	36251	80028
2	AgPaidUrb	194	598	1677	4119	8129
3	AgUnpaidRur	6918	18202	51690	92862	215854
4	AgUnpaidUrb	203	598	1700	3053	7130
5	ManPaidRur	1934	20726	40204	32723	118435
6	ManPaidUrb	2322	22388	38931	36061	125458
7	ManUnpaidRur	1684	10288	26513	29882	83976
8	ManUnpaidUrb	956	5720	15158	15486	48266
9	ClerPaidRur	759	3164	8045	14549	72147
10	ClerPaidUrb	2352	9890	26155	42739	173567
11	ClerUnpaidRur	4019	12461	39369	54099	134901
12	ClerUnpaidUrb	3804	11970	37467	51708	130297
13	ProfPaidRur	506	2308	5670	9893	92632
14	ProfPaidUrb	983	5194	12761	18023	121601
15	ProfUnpaidRur	53	231	612	806	2470
16	ProfUnpaidUrb	111	588	1700	1700	5612
17	UnincorpAgCap	8163	26802	78706	168072	345956
18	UnincorpHouseCap	1679	7980	18876	37366	88469
19	UnincorpOtherRurCap	4640	17521	48853	64203	168688
20	UnincorpOtherUrbCap	3441	12951	37721	50660	136457
21	PrivateCap	7250	45178	114189	111558	329684
22	PublicCap	11293	43398	91343	347752	545968
23	ForeignCap	9023	36441	116451	755240	944580
24	AgEmployees	2393	14506	21623	44995	108364
25	Small Farmers	7197	24239	63588	111365	265005
26	Medium Farmers	4306	14819	40966	72134	166189
27	Large Farmers	7325	24413	69504	138495	298610
28	RuralNonAgLow	9322	49315	117549	151690	425692
29	RuralNonAgHigh	2038	8841	22713	41088	165038
30	UrbanLow	10834	54485	131905	178461	518035
31	UrbanHigh	5844	26265	68137	135610	392349
32	Companies	25429	115164	292175	1073053	1628447
33	GovExpEdu&Health	0	0	0	0	73398
34	GovExpWages&Sal	0	0	0	0	218056
35	GovExpGoods&Serv	0	0	0	0	125110
36	GovExpHTransfer	0	0	0	0	8032
37	GovInvAgric	0	38662	0	0	8032
38	GovInvInd&Mines	0	23827	0	0	38662
39	GovInvEnergy	0	22435	0	0	23827
40	GovInvTransp&Tour	0	46439	0	0	22435
41	GovInvEducation	0	26056	0	0	46439
42	GovInvHealth	0	8696	0	0	26056
43	GovInvHouse&Water	0	9077	0	0	8696
44	GovInvGenService	0	19818	0	0	9077
45	GovInvOther	0	63531	0	0	19818
46	Trade&TransMarg	21808	64457	209928	271219	63531
47	FoodCrops	16522	38473	107666	160635	673310
		105900	39473	107666	160635	424184
		100888				

48	OtherCrops	7351	46071	16970	48010	233671	352074
49	Livestock	3280	43912	13649	47149	58535	166525
50	Forest&Wood	1288	16195	27909	84858	161300	291551
51	Fishery	2258	26430	9389	22525	51654	112255
52	Mining	11027	24004	46235	151877	1222183	1455326
53	Food Process	29115	111615	40995	101437	174182	457344
54	Textiles	3997	56016	16501	46466	82714	205693
55	Paper&MetalProd	7565	130637	80108	534672	166069	919051
56	Chem&Minerals	59945	116644	120205	225605	290405	812803
57	Utilities	1095	15230	4121	10474	15927	46847
58	BuuldConstruction	601	18879	76926	315392	11930	423727
59	PublicWorksAg	46	859	38835	512	1359	41612
60	PWTransp	76	994	60101	1067	3940	66178
61	PWUtil&Comm.	66	903	30419	565	1045	32998
62	PWOther	57	774	41608	564	2500	45503
63	Trade&TransServ	18797	96013	55999	181372	241544	593724
64	Restaurant&Hotel	3882	78777	18228	43612	77114	221613
65	LandTransport	4922	46959	17726	50538	72983	193128
66	OtherTrans&Commun	2184	29756	8723	23066	69123	132851
67	FinanRE.&BusServ	6310	84813	29989	70934	140420	332466
68	Educ&Health	1632	91369	6642	17006	28146	144795
69	Pers&HHServices	3052	69667	12845	33939	66456	185959
70	IndirectTaxes	3952	25934	16611	52995	44484	143977
TOTAL		359752	3318155	1814497	4039028	7575232	

* Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_c X_1$) (in ten million Rupiah in constant 1980 prices)

Table A.13

EXPERIMENT 2: EQUIPROPORTIONAL BUDGET RETRENCHMENT, 1980* -- Y2 MATRIX

	71	72	73	74	75	Y2	
Total	Subsidies	GovCurrent	GovCapital	Private	Capital	Rest of World	
1	AgPaidRur	2081	12075	14503	14853	36251	79763
2	AgPaidUrb	216	1380	701	1677	4119	8094
3	AgUnpaidRur	7273	41361	21321	51690	92862	214507
4	AgUnpaidUrb	222	1411	701	1700	3053	7087
5	ManPaidRur	2733	18737	27130	40204	32723	121527
6	ManPaidUrb	3425	23194	26370	38931	36061	127981
7	ManUnpaidRur	2344	14630	12214	26513	29882	85582
8	ManUnpaidUrb	1348	10258	6849	15158	15486	49100
9	ClerPaidRur	1090	38253	3706	8045	14549	65642
10	ClerPaidUrb	3496	78279	11657	26155	42739	162327
11	ClerUnpaidRur	6037	23061	14757	39369	54099	137323
12	ClerUnpaidUrb	5706	23485	14174	37467	51708	132539
13	ProfPaidRur	665	63290	2705	5670	9893	82223
14	ProfPaidUrb	1422	72361	6122	12761	18023	110689
15	ProfUnpaidRur	76	720	273	612	806	2486
16	ProfUnpaidUrb	164	1426	703	1700	1700	5693
17	UnincorpAgCap	8998	57689	31602	78706	168072	345066
18	UnincorpHouseCap	2373	20524	9345	18876	37366	88483
19	UnincorpOtherRurCap	6167	30721	20718	48853	64203	170661
20	UnincorpOtherUrbCap	4807	29178	15348	37721	50660	137714
21	PrivateCap	10888	47421	53724	114189	111558	337780
22	PublicCap	18944	48035	49874	91343	347752	555948
23	ForeignCap	15899	25335	42060	116451	755240	954984
24	AgEmployees	2757	21882	16016	21623	44995	107275
25	SmFarm	8251	52460	28332	63588	111365	263996
26	MedFarm	5110	30619	17430	40966	72134	166259
27	LargeFarm	8317	52894	28736	69504	138495	297945
28	RuralNonAglow	12966	87731	58314	117549	151690	428250
29	RuralNonAghigh	2796	77261	10391	22713	41088	154249
30	UrbanLow	15778	126515	64361	131905	178461	517019
31	UrbanHigh	8729	135068	30918	68137	135610	378462
32	Companies	42094	112958	134164	292175	1073053	1654444
33	GovExpEdu&Health	0	69416	0	0	0	69416
34	GovExpWages&Sal	0	177399	0	0	0	177399
35	GovExpGoods&Serv	0	133321	0	0	0	133321
36	GovExpHHTransfer	0	6138	0	0	0	6138
37	GovInvAgric	0	0	39002	0	0	39002
38	GovInvInd&Mines	0	0	31627	0	0	31627
39	GovInvEnergy	0	0	27378	0	0	27378
40	GovInvTransp&Tour	0	0	47481	0	0	47481
41	GovInvEducation	0	0	35204	0	0	35204
42	GovInvHealth	0	0	13427	0	0	13427
43	GovInvHouse&Water	0	0	11640	0	0	11640
44	GovInvGenService	0	0	24185	0	0	24185
45	GovInvOther	0	0	73950	0	0	73950
46	Trade&TransMarg	33000	96874	76391	209928	271219	687412
47	FoodCrops	16953	90206	44884	107666	160635	420345

48	OtherCrops	7918	41427	19816	48010	233671	350842
49	Livestock	4184	39599	15968	47149	58535	165434
50	Forest&Wood	1725	15056	34309	84858	161300	297248
51	Fishery	2814	23566	10961	22525	51654	111519
52	Mining	20434	22305	52941	151877	1222183	1469740
53	FoodProcess	26980	99915	47863	101437	174182	450376
54	Textiles	5379	50768	19399	46466	82714	204726
55	PaperMetal&Manu	10658	122715	97805	534672	166069	931919
56	Chem&Minerals	111793	108176	140229	225605	290405	876207
57	Utilities	1662	14183	4852	10474	15927	47098
58	BuildConst	864	18982	99249	315392	11930	446417
59	PublicWorksAg	52	856	39208	512	1359	41986
60	PWTtransp	124	1008	63931	1067	3940	70070
61	PWUtil&Comm.	104	873	36864	565	1045	39451
62	PWOther	92	720	49780	564	2500	53657
63	Trade&TransServ	28419	87992	66355	181372	241544	605681
64	Rest&Hotel	5502	73685	21425	43612	77114	221338
65	LandTransport	7155	42387	20931	50538	72983	193995
66	OtherTrans&Commun	3231	27642	10270	23066	69123	133332
67	FinanRE.&BusServ	8918	77128	35118	70934	140420	332518
68	Educ&Health	2061	85376	7820	17006	28146	140410
69	Pers&HHServices	4330	67520	15142	33939	66456	187386
70	IndirectTaxes	10627	48759	39528	106734	89537	295185
	TOTAL	528154	3024202	2150152	4092767	7620286	

* Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_c Y_2$) (in ten million Rupiah in constant 1980 prices)

Table A.14

EXPERIMENT 3: ACTUAL REPELITA IV SCENARIO* - Y3 MATRIX

	71 Subsidies	72 GovCurrent	73 GovCapital	74 PrivateCapital	75 Rest of World y3	TOTAL
1	AgPaidRur	18257	16899	14449	50913	101080
2	AgPaidUrb	2094	919	1631	5876	10583
3	AgUnpaidRur	62824	27923	50295	134045	276985
4	AgUnpaidUrb	2143	919	1654	4438	9216
5	ManPaidRur	28214	37206	38785	46583	151925
6	ManPaidUrb	35227	36445	37575	51795	162534
7	ManUnpaidRur	20121	15820	25603	44541	107046
8	ManUnpaidUrb	14122	9097	14637	22578	60993
9	ClerPaidRur	69910	4918	7788	19184	102260
10	ClerPaidUrb	139607	15692	25302	57020	239154
11	ClerUnpaidRur	32667	19684	38065	77816	170908
12	ClerUnpaidUrb	33104	18918	36225	74182	164953
13	ProfPaidRur	106779	3578	5493	13313	129417
14	ProfPaidUrb	121440	8289	12341	23753	166430
15	ProfUnpaidRur	907	358	591	1148	3036
16	ProfUnpaidUrb	1846	938	1641	2340	6837
17	UnincorpAgCap	87036	41350	76557	250810	458351
18	UnincorpHouseCap	30287	12494	18287	47312	109367
19	UnincorpOtherRurCap	43956	27304	47231	86990	207873
20	UnincorpOtherUrbCap	41504	20483	36470	72513	172947
21	PrivateCap	66929	71663	110219	172148	425782
22	PublicCap	68334	66932	88931	352849	586283
23	ForeignCap	35795	56500	114328	680657	895322
24	AgEmployees	866	19543	20992	63680	139271
25	Small Farmers	2568	37052	61738	160947	342215
26	Medium Farmers	1687	45790	39741	104125	214209
27	Large Farmers	2543	22866	39741	203892	391374
28	RuralNonAgLow	5304	77938	113627	214136	544965
29	RuralNonAgHigh	1126	131043	13744	54230	222143
30	UrbanLow	6780	195678	127505	247670	664701
31	UrbanHigh	3847	225071	65988	165524	501975
32	Companies	20308	160004	284346	1079681	1724032
33	GovExpEdu&Health	0	71975	0	0	71975
34	GovExpWages&Sal	0	351749	0	0	351749
35	GovExpGoods&Serv	0	133904	0	0	133904
36	GovExpHHTransfer	0	9066	0	0	9066
37	GovInvAgric	0	0	41265	0	41265
38	GovInvInd&Mines	0	0	35040	0	35040
39	GovInvEnergy	0	0	54239	0	54239
40	GovInvTransp&Tour	0	0	69800	0	69800
41	GovInvEducation	0	0	59653	0	59653
42	GovInvHealth	0	0	15478	0	15478
43	GovInvHouse&Water	0	0	17292	0	17292
44	GovInvGenService	0	0	19550	0	19550
45	GovInvOther	0	0	96045	0	96045
46	Trade&TransMarg	14725	140151	202942	392328	852065
47	FoodCrops	4168	137484	104801	225577	530843

48	OtherCrops	2180	62532	26074	46747	304331	441864
49	Livestock	1538	59126	21081	46112	82285	210143
50	Forest&Wood	675	21005	44051	81957	340369	488057
51	Fishery	1001	36230	14406	21825	76432	149894
52	Mining	10699	31040	70816	149821	1064694	1327071
53	FoodProcess	4832	152208	62935	98383	238440	556798
54	Textiles	2118	75222	25746	45142	187073	335301
55	Paper&MetalProd	4423	166322	135473	514889	219698	1040804
56	Chem&Minerals	58779	151143	187509	217969	359652	975053
57	Utilities	744	19648	6488	10131	21877	58888
58	BuildConstruction	367	21829	125406	303446	15650	466698
59	PublicWorksAg	15	1022	41533	497	2064	45132
60	PWTTransp	59	1150	90505	1038	4506	97259
61	PWUtil&Comm.	48	1116	68249	547	1479	71439
62	PWOther	44	884	61995	551	2455	65929
63	Trade&TransServ	12670	126859	88536	175340	349727	753133
64	Restaurant&Hotel	2298	102417	28735	42212	104308	279969
65	LandTransport	3070	63515	27934	48887	102515	245921
66	OtherTrans&Commun	1410	38937	13758	22316	101623	178044
67	FinanRE.&BusServ	3713	113817	46951	68723	177797	411000
68	Educ&Health	747	96791	10351	16480	39754	164124
69	Pers&HHServices	1810	86220	20213	32862	90211	231316
70	IndirectTaxes	2079	34047	26253	51147	61669	175196
	TOTAL	224193	4455914	2845518	3912338	9153202	

* Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_c X_3$) (in ten million Rupiah in constant 1980 prices)

Table A.15

EXPERIMENT 4: PLANNED REPETA IV SCENARIO* - Y4 MATRIX

	71	72	73	74	75	TOTAL	
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	Y4	
1	AgPaidRur	1395	21544	25322	17106	54598	119965
2	AgPaidUrb	158	2467	1509	1932	6273	12339
3	AgUnpaidRur	4692	73962	45764	59532	142443	326393
4	AgUnpaidUrb	156	2523	1506	1958	4712	10855
5	ManPaidRur	2921	33509	61252	46304	48010	191996
6	ManPaidUrb	3840	41681	59461	44837	53767	203586
7	ManUnpaidRur	2464	24789	26328	30535	45428	129543
8	ManUnpaidUrb	1439	17395	15186	17458	23496	74973
9	ClerPaidRur	1186	77873	8047	9265	20221	116592
10	ClerPaidUrb	3950	156729	25776	30124	60408	276986
11	ClerUnpaidRur	6895	39664	32571	45342	81871	206343
12	ClerUnpaidUrb	6508	40297	31294	43151	78144	199394
13	ProfPaidRur	648	120121	5857	6530	14181	147338
14	ProfPaidUrb	1560	136982	13596	14697	25322	192157
15	ProfUnpaidRur	83	1118	592	704	1214	3711
16	ProfUnpaidUrb	185	2291	1562	1958	2480	8476
17	UnincorpAgCap	6493	102767	68229	90647	262822	530957
18	UnincorpHouseCap	2538	36183	20398	21739	50224	131082
19	UnincorpOtherRurCap	6114	52993	45154	56264	91371	251896
20	UnincorpOtherUrbCap	5072	50210	33884	43444	75987	208598
21	PrivateCap	12431	80945	118682	131513	176487	520059
22	PublicCap	23933	82632	107394	105201	370954	690114
23	ForeignCap	20876	43443	90728	134119	698024	987189
24	AgEmployees	2178	39671	30274	24904	69110	166137
25	Small Farmers	6456	94019	60608	73236	174177	408496
26	Medium Farmers	4262	54246	37628	47182	113147	256465
27	Large Farmers	6385	94178	62004	80049	217819	460435
28	RuralNonAgLow	13607	157900	128497	135383	227114	662501
29	RuralNonAgHigh	2886	147962	22570	26159	57817	257395
30	UrbanLow	17445	228884	143118	151917	264048	805411
31	UrbanHigh	9912	256266	68154	78475	177519	590326
32	Companies	52593	193622	291797	336503	1127915	2002430
33	GovExpEdu&Health	0	90277	0	0	0	90277
34	GovExpWages&Sal	0	383927	0	0	0	383927
35	GovExpGoods&Serv	0	193772	0	0	0	193772
36	GovExpHTransf	0	9240	0	0	0	9240
37	GovInvAgric	0	0	56495	0	0	56495
38	GovInvInd&Mines	0	0	65441	0	0	65441
39	GovInvEnergy	0	0	92335	0	0	92335
40	GovInvTransp&Tour	0	0	95872	0	0	95872
41	GovInvEducation	0	0	111239	0	0	111239
42	GovInvHealth	0	0	33793	0	0	33793
43	GovInvHouse&Water	0	0	28828	0	0	28828
44	GovInvGenService	0	0	34812	0	0	34812
45	GovInvOther	0	0	150963	0	0	150963
46	Trade&TransMarg	37971	168417	168807	241777	411225	1028197
47	FoodCrops	10247	161605	95988	124001	242540	634381

48	OtherCrops	5422	73902	42561	55294	335075	512254
49	Livestock	3917	70056	34463	54302	87956	250695
50	Forest&Wood	1726	25662	75952	97733	317347	518420
51	Fishery	2545	42474	23515	25943	81510	175986
52	Mining	27823	37900	112669	174919	1091696	1445007
53	Food Process	11396	179113	102732	116826	264037	674104
54	Textiles	5421	89561	42262	53515	174428	365186
55	Paper&MetalProd	11356	205440	231144	615790	224376	1288106
56	Chem&Minerals	152886	184173	304773	259832	423504	1325168
57	Utilities	1918	24045	10656	12063	23387	72069
58	BuildConstruction	942	29210	227711	363242	16650	637754
59	PublicWorksAg	38	1350	56941	589	2146	61065
60	PWTransp	154	1554	129599	1229	4532	137067
61	PWUtil&Comm.	125	1422	114445	651	1607	118251
62	PWOther	114	1083	101190	650	2542	105577
63	Trade&TransServ	32671	152725	146608	208889	367587	908480
64	Restaurant&Hotel	5902	125894	47084	50229	112017	341127
65	LandTransport	7897	75332	46051	58205	108569	296055
66	OtherTrans&Commun	3632	47524	22591	26566	111953	212266
67	FinanRE.&BusServ	9536	135976	76656	81696	188740	492604
68	Educ&Health	1902	119258	17022	19586	42586	200354
69	Pers&HHServices	4650	110206	33241	39088	96034	283219
70	IndirectTaxes	5320	41217	43199	61035	65408	216178
	TOTAL	576774	5291182	4662377	4651817	9614556	24796705

* Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_C X_4$) (in ten million Rupiah in constant 1980 prices)

47	FoodCrops	4168	137484	58813	124001	242540	567006
48	OtherCrops	2180	62532	26074	55294	335075	481155
49	Livestock	1538	59126	21081	54302	87956	224003
50	Forest&Wood	675	21005	44051	97733	317347	480811
51	Fishery	1001	36230	14406	25943	81510	159090
52	Mining	10699	31040	70816	174919	1091696	1379171
53	Food Process	4832	152208	62935	116826	264037	600838
54	Textiles	2118	75222	25746	53515	174428	331029
55	Paper&MetalProd	4423	166322	135473	615790	224376	1146384
56	Chem&Minerals	58779	151143	187509	259832	423504	1080768
57	Utilities	744	19648	6488	12063	23387	62330
58	BuildConstruction	367	21829	125406	363242	16650	527493
59	PublicWorksAg	15	1022	41533	589	2146	45306
60	PWTransp	59	1150	90505	1229	4532	97475
61	PWUtil&Comm.	48	1116	68249	651	1607	71671
62	PWOther	44	884	61995	650	2542	66115
63	Trade&TransServ	12670	126859	88536	208889	367587	804541
64	Restaurant&Hotel	2298	102417	28735	50229	112017	295696
65	LandTransport	3070	63515	27934	58205	108569	261293
66	OtherTrans&Commun	1410	38937	13758	26566	111953	192623
67	FinanRE.&BusServ	3713	113817	46951	81696	188740	434917
68	Educ&Health	747	96791	10351	19586	42586	170062
69	Pers&HHServices	1810	86220	20213	39088	96034	243365
70	IndirectTaxes	2079	34047	26253	61035	65408	188823
TOTAL		224193	4455914	2845518	4651817	9614556	

* Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_C X_5$) (in ten million Rupiah in constant 1980 prices)

Table A.17

EXPERIMENT 6: EQUIPROPORTIONAL BUDGET RETRENCHMENT IN REPELITA IV COMBINED
WITH ACTUAL PRIVATE CAPITAL AND REST OF THE WORLD EXOGENOUS DEMAND* -- Y6
MATRIX

	71	72	73	74	75	TOTAL	
	Subsidies	GovCurrent	GovCapital	PrivateCapital	Rest of World	y6	
1	AgPaidRur	969	14964	17588	14449	50913	98884
2	AgPaidUrb	109	1714	1048	1631	5876	10378
3	AgUnpaidRur	3259	51374	31788	50295	134045	270761
4	AgUnpaidUrb	108	1753	1046	1654	4438	8999
5	ManPaidRur	2029	23275	42545	38785	46583	153217
6	ManPaidUrb	2668	28951	41302	37575	51795	162291
7	ManUnpaidRur	1711	17218	18287	25603	44541	107361
8	ManUnpaidUrb	999	12083	10548	14637	22578	60845
9	ClerPaidRur	824	54091	5589	7788	19184	87475
10	ClerPaidUrb	2744	108864	17904	25302	57020	211834
11	ClerUnpaidRur	4789	27551	22624	38065	77816	170845
12	ClerUnpaidUrb	4520	27990	21737	36225	74182	164654
13	ProfPaidRur	450	83436	4069	5493	13313	106761
14	ProfPaidUrb	1084	95147	9444	12341	23753	141769
15	ProfUnpaidRur	57	777	411	591	1148	2984
16	ProfUnpaidUrb	128	1591	1085	1641	2340	6786
17	UnincorpAgCap	4510	71382	47392	76557	250810	450650
18	UnincorpHouseCap	1763	25133	14169	18287	47312	106663
19	UnincorpOtherRurCap	4247	36809	31364	47231	86990	206641
20	UnincorpOtherUrbCap	3523	34876	23536	36470	72513	170918
21	PrivateCap	8635	56224	82436	110219	172148	429662
22	PublicCap	16624	57396	74596	88931	352849	590397
23	ForeignCap	14500	30176	63019	114328	680657	902681
24	AgEmployees	1513	27556	21028	20992	63680	134768
25	Small Farmers	4485	65306	42098	61738	160947	334574
26	Medium Farmers	2961	37679	26136	39741	104125	210643
27	Large Farmers	4435	65416	43068	67535	203892	384346
28	RuralNonAgLow	9452	109678	89254	113627	214136	536147
29	RuralNonAgHigh	2004	102775	15677	22000	54230	196687
30	UrbanLow	12117	158983	99410	127505	247670	645685
31	UrbanHigh	6885	178002	47340	65988	165524	463739
32	Companies	36531	134490	202682	284346	1079681	1737731
33	GovExpEdu&Health	0	62706	0	0	0	62706
34	GovExpWages&Sal	0	266676	0	0	0	266676
35	GovExpGoods&Serv	0	134594	0	0	0	134594
36	GovExpHTransf	0	6418	0	0	0	6418
37	GovInvAgric	0	0	39241	0	0	39241
38	GovInvInd&Mines	0	0	45455	0	0	45455
39	GovInvEnergy	0	0	64136	0	0	64136
40	GovInvTransp&Tour	0	0	66593	0	0	66593
41	GovInvEducation	0	0	77267	0	0	77267
42	GovInvHealth	0	0	23473	0	0	23473
43	GovInvHouses&Water	0	0	20024	0	0	20024
44	GovInvGenService	0	0	24180	0	0	24180
45	GovInvOther	0	0	104859	0	0	104859
46	Trade&TransMarg	26374	116982	117253	202942	392328	855881

47	FoodCrops	7118	112251	66673	104801	225577	516419
48	OtherCrops	3766	51332	29563	46747	304331	435740
49	Livestock	2721	48661	23938	46112	82285	203718
50	Forest&Wood	1199	17825	52756	81957	340369	494106
51	Fishery	1768	29502	16333	21825	76432	145861
52	Mining	19326	26325	78262	149821	1064694	1338426
53	Food Process	7916	124412	71357	98383	238440	540509
54	Textiles	3765	62209	29355	45142	187073	327544
55	Paper&MetalProd	7888	142698	160553	514889	219698	1045726
56	Chem&Minerals	106195	127926	211695	217969	359652	1023437
57	Utilities	1332	16702	7402	10131	21877	57443
58	BuildConstruction	655	20289	158168	303446	15650	498208
59	PublicWorksAg	27	938	39551	497	2064	43077
60	PMTransp	107	1079	90020	1038	4506	96750
61	PMUtil&Comm.	86	988	79494	547	1479	82594
62	PMOther	79	752	70286	551	2455	74123
63	Trade&TransServ	22693	106082	101834	175340	349727	755677
64	Restaurant&Hotel	4100	87446	32705	42212	104308	270770
65	LandTransport	5485	52326	31987	48887	102515	241200
66	OtherTrans&Commun	2523	33010	15692	22316	101623	175164
67	FinanRE.&BusServ	6624	94449	53245	68723	177797	400837
68	Educ&Health	1321	82837	11823	16480	39754	152216
69	Pers&HHServices	3230	76549	23089	32862	90211	225941
70	IndirectTaxes	3695	28629	30006	51147	61669	175146
TOTAL		400627	3675255	3238487	3912338	9153202	

* Total Receipts in Indonesia as Generated by Each Type of Exogenous Demand ($M_c X_6$) (in ten million Rupiah in constant 1980 prices)