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**FINANCING ECONOMIC DEVELOPMENT IN INDONESIA:  
A SUGGESTED PROGRAM**

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I do not belong to the school of pessimists who consider that impoverished and underdeveloped countries such as Indonesia are necessarily hampered by an absolute shortage of domestic, fiscal and financial resources for development. Nor do I believe that large scale capital inflows in the form of foreign investment or foreign aid must provide the bulk of financial resources to support a domestic development program. Compared to many underdeveloped countries, Indonesia has extensive natural resources and unutilized factors of production which could be combined to increase output if mobilization of financial resources to provide the complementary capital could be accomplished. It is indeed true that the present rate of capital formation in Indonesia is relatively low, although not nearly so low as we have been led to believe. The thesis which I wish to develop is that latent financial resources do exist, and given proper institutional evolution and an aggressive program of action, these domestic resources could be mobilized to contribute to a fruitful development plan.

Repeatedly economists have been frustrated by their wrong prognostications for the potentiality of economic development. Frequently these prognostications are made on the basis of observed rates of savings and investment. The observed rates seem so low that substantial increases in investment necessary to maintain per capita income, much less increasing it, seems to be an impossible objective. Recent experience in countries where violence has been done to traditional institutional structures which stood in the way of mobilizing existent and potential resources demonstrates that the financial factor in the quantitative sense is not necessarily a major obstacle to development. I would wish to refer in particular to the recent experience of China. When the inflow of foreign capital came to a virtual standstill during the late 1920's, economic observers found that net disinvestment was taking place in China as a whole. In other words, the rate of investment was believed to be negative. It was felt that it would be impossible for China to produce a substantial rate of positive investment in light of its serious population pressure on resources.

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Under the Communist regime, however, the observed negative rate of investment has been reversed and significant levels of net investment—perhaps as high as 10 to 12 percent of net national income<sup>1</sup>—have been achieved. This is not meant to suggest that authoritarian methods are condoned or should be employed to mobilize potentially existent financial resources. However, it is intended to suggest that given changes in institutional, political and social structure, developmental investment in underdeveloped economies (even those with the adverse population-resources ratio which exists in China) can be significantly increased. The problem therefore does not seem to lie in the absolute deficiency of financial resources. Rather, it appears to lie in the institutional, social and political obstacles to mobilizing these resources for diversion to a concerted development effort. If this hypothesis is correct, it means that major attention should be given to the locus of hidden financial resources and the means of overcoming current obstacles which tend to prevent available resources being converted into positive investment necessary for economic growth.

It is believed that these erroneous prognostications have been made on the basis of two common errors of observation. In the first place, it appears that underdeveloped economies ordinarily perform a higher level of annual savings and investment than that usually ascribed to them. Although such investment may not flow into channels leading to growth prior to the beginning of a development program, it nevertheless represents the existence of resources which could conceivably be diverted to developmental investment without great reductions in the level of current consumption.

Secondly, I believe that observers tend to exaggerate at least the quantitative problems involved in increasing the rate of net investment. On the basis of my research in Indonesia, it appears that strategic changes in the tax system could reduce the average level of consumption to provide new resources for investment out of

1. This estimate varies somewhat with the amount of depreciation assumed. It is believed that the figures given here approximate the rough order of magnitude of investment realized in 1954. They are indeed more favorable than the estimate of gross investment for 1952 presented in W. W. Rostow and Others, The Prospects for Communist China, p. 279, (12 percent of Gross National Product). The higher estimates presented here are hypothesized on the basis of (1) decreased military strain on the economy following the end of Korean military action, and (2) the extension and increased effectiveness of state devices to extract and invest savings from the economy.

More exact estimates of the size of Chinese domestic investment will eventually emerge from a study now being undertaken at the Center for International Studies. This study will attempt to compare Communist China's recent economic progress with that of India.

current economic product. There appear to be margins of taxable capacity in particular sectors of the economy which could be reached to provide real savings from the present patterns of output and consumption.<sup>2</sup> Moreover, it is clear that both idle and underemployed resources exist within the present economic framework. Although the effective combination of these factors appears to be a formidable problem, their existence should be recognized as an eventual resource pool for accelerating the rate of investment as a development program gets under way.

The main thesis that I would like to develop is that substantial financial resources are presently and potentially available for an Indonesian development program. If these are matched against present estimates of capital requirements necessary to produce a significant level of growth of per capita consumption, it appears that Indonesia can make substantial economic progress on the basis of resources now available but not now mobilized for concrete objectives. However, a steady flow of foreign investment and/or foreign aid is required to complement domestic financial efforts to alleviate the foreign exchange problems inherent in a development program.

Unfortunately there is little analysis available which would lead us to reliable estimates of the amounts of capital required to achieve given economic objectives. Dr. Eugene Grasberg has done pioneering research in this area in his recent paper on Indonesia's investment requirements.<sup>3</sup> Dr. Grasberg has utilized the data made available by Dr. Neumark's national income study to estimate the order of magnitude of annual investment required to meet conservative economic objectives. These objectives include elimination of the 1952 Balance of Payments deficit (4.85 billion rupiah), maintenance of per capita consumption at 1952 levels and reduction of food imports by 50 percent. If the realization of these objectives were spread over a ten year period, Grasberg estimates that annual investment of approximately Rp. 10 billion would be required. These requirements, however, appear to be relatively high since they are based on a Balance of Payments deficit greatly exceeding the 1953 deficit (2.75 billion rupiah)<sup>4</sup> and the anticipated 1954 deficit. Moreover, they are

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2. This point will be developed below. See also my article, "The Tax Burden and Economic Development in Indonesia", Ekonomi Dan Keuangan Indonesia, September, 1954.

3. Eugene Grasberg, "Indonesia's Investment Requirements", Center for International Studies, Document Control #C/54-9.

4. This figure is comparable to Dr. Grasberg's estimate of the Balance of Payments deficit for 1952 since it is calculated on the same basis. Thus it includes items 1 through 8A in the standard Indonesian Balance of Payments (i.e., all items in Current Account except donations) plus the total of export duties. Grasberg's 1952 figure is taken from

based on Neumark's estimate of net investment in 1952 (Rp. 600 million) which is, in my opinion, far too low to be employed in realistic estimates.

In more recent research, Dr. Grasberg has estimated that a lump sum investment in any one given year of 30 billion rupiah would be required to achieve the above objectives in addition to providing a 2 percent increase in annual per capita consumption. It is agreed, however, that the investment required to meet these objectives need not take place in any given year. If proper thought were given to devising an investment program spread over a number of years, it is believed that annual investment of approximately 12 to 15 billion rupiah could provide per capita consumption increases of approximately one to two percent per annum.<sup>5</sup>

I would now like to turn to the question of mobilizing the financial resources for a development program of roughly this order of magnitude. My research has led me to believe that a substantial amount of the financial resources to meet these capital requirements could be found domestically. But it is also my belief that these resources should be mobilized through the tax system and hence should represent abstinence from current consumption rather than net additions to the income stream in the form of newly created money. To establish these propositions, let us consider briefly the three potential areas through which financial resources for development could conceivably be mobilized.

First of all, we might consider the balance of payments as a device to provide capital for Indonesian economic development. The

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item 17, Net Borrowing From Abroad from Table III of Neumark's National Income Study (The National Income of Indonesia, Ekonomi dan Keuangan Indonesia, June, 1954). Neumark defines this item as "equal to items I to 8A of the Balance of Payments less export taxes". What Neumark actually means is that the value of export duties should be subtracted from the value of merchandise exports, or alternatively (as we have done) added to the deficit on current account.

For my estimate of the 1953 deficit, the Balance of Payments figure is taken from the 1953-1954 Bank Indonesia Report, pp. 80-81, and the value of export duties is taken from the National Planning Bureau's, "Indonesia's Economic Developments in 1953", Ekonomi dan Keuangan Indonesia, July, 1954, Table 48, p. 450.

5. These estimates will soon be more carefully calculated and presented by Dr. Grasberg.

Balance of Payments could provide an effective channel if it would be possible to provide a surplus in the current account to finance the import of capital into Indonesia. This would of course necessitate the use of further devices to insure that the capital thus developed could be channeled into the kind of investment which the Indonesian development program would call for. However, analysis of Indonesia's recent Balance of Payments indicates that prospects for mobilizing financial resources through this medium are not very bright, at least in the immediate future. An important characteristic of post-independence Balance of Payments has been the high level of liabilities in the invisible account. These items comprise relatively fixed obligations which cannot be reduced in any given year or even during a period of years in the near future. The main items have been transfers representing income on investment and costs of foreign technicians (including pensions for previous civil servants) of which a substantial part has been set in treaty agreements with Holland. A survey of the 1953 Balance of Payments will emphasize the nature of the problem. In 1953 the reported value of commodity exports amounted to approximately Rp. 7.7 billion. Imports of goods amounted to about Rp. 7.2 billion, thus providing a slim margin of one-half billion rupiah on commodity account. If proceeds from export duties are deducted from the value of commodity exports, however, commodity account would show a deficit of one-half billion rupiah. On the other hand, the deficit on the invisibles account amounted to Rp. 2 billion and the debit balance of long-term capital items approximated one-fourth billion rupiah. Thus the total Balance of Payments deficit was equal to approximately two and three-fourths billion rupiah. Hence, if capital were to be mobilized through the Balance of Payments, a commodity export surplus would have to be produced to overcome what appears to be a relatively permanent deficit in the invisibles account. The other alternative, of course, would be further reductions in the level of imports; here again, prospects appear to be rather dubious. Indonesia has already followed a strictly enforced policy of import controls, reducing imports to what I believe is a minimum level consistent with the present level of production in the economy. It appears that in 1954 imports will consist mainly of food and other necessities, raw materials to maintain Indonesian production and capital goods to provide maintenance of Indonesia's productive resources intact.

However, in the longer run there may be some hope of achieving a level of exports adequate to induce some inflow of capital. During the last three months of this year, prices of rubber and other agricultural exports have been rising and it is probable that export earnings will exceed the 1953 level by Rp. 800 million. Since imports have been cut even below the 1953 level the effective 1954 Balance of Payments deficit will be rather small. These results have been achieved by a rather broad export promotional policy which has significantly increased the volume of exports over the 1951 and 1952 levels. In the longer run there is no question but that a development

program will add to Indonesia's capacity to earn through exporting. However, it should be emphasized that significantly increased export earnings will depend on technological improvements providing for, among other things, industrial processing of agricultural raw materials. Such improvements can only be obtained by increased investment in this particular sector. The results of this investment will appear after a rather lengthy gestation period and will be hampered by rather high capital-output ratios. Thus in the short run, financing of Indonesian economic growth of the required magnitude will have to come from other sources.

In the second place, we might consider the possibility of financing Indonesian development through public or private mobilization of voluntary savings, a channel which has been effectively used elsewhere.<sup>6</sup> In this particular case, I would like to emphasize some rather special problems which jeopardize not only this kind of financing of Indonesian development but the financing of economic growth in Indonesia generally. The problem to which I refer is the fact that in recent years the Indonesian economy has witnessed a growth of large, inactive balances, withdrawn from previous income streams for precautionary or speculative motives. At the present, these balances amount to rather volatile hoards (held primarily as cash) which could be released in the face of inflationary tendencies and which would be apt to frustrate the development program. It is generally agreed by observers of the Indonesian economy that substantial parts of the new additions to Indonesia's income stream (resulting from budgetary deficits) end up as these monetary hoards. Thus any effort to mobilize this type of savings from past income for development purposes would be tantamount to creation of new money, since the velocity of money now in circulation would be increased. If this type of financing were employed on a large scale it would inevitably induce substantial pressures on the level of prices and the Balance of Payments. As prices began to rise there would be great danger of releasing the presently inactive balances as demand for commodities. If price rises became a reality and further rises were expected, there is no question but that a good part of these balances would be converted into commodities which in periods of rising prices are a more favorable means of holding on to one's economic resources. Before inflationary financing of any type is employed in Indonesia, it is extremely important that the precise relationship between addition of new money to the income stream and these monetary hoards be examined rather closely. It has been suggested, for example, that even the

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6. For elaboration on this method of financing economic development see my paper, "Financing Economic Development in Indonesia: Public and Private Mobilization of Voluntary Savings", Center for International Studies, Document Control #C/55-2.

limited amount of deficit financing which the Indonesian government has undertaken recently may have very close correlation to the growth of these inactive but highly liquid balances. Thus the precise relationship between deficit financing, idle balances, and the pressures on price levels and the balance of payments should be investigated. On the other hand, it might be well to experiment with this type of financing on a limited scale in order to engender the habit of converting savings into investment through banking or public channels. The Ministry of Finance is now considering the issue of a new flotation of government bonds (about 300 million rupiah) with new features designed to attract idle funds. If this issue is successful, this device might be employed to mop up these highly liquid but inactive balances under a policy aimed specifically at neutralization of these hoards, rather than financing of development

The launching of a development program in the conditions of this monetary overhang implies that inflationary financing must be restricted if economic stability is to be maintained. Hence, it is argued that during the first years of development financing should come mainly from reductions in current consumption. It should be recognized, however, that even this type of provision for developmental investment may have inflationary aspects. This is true since the monetary stream itself will not be contracting, while the flow of funds for consumption purposes will be reduced as a greater share of current resources are devoted to production of investment goods. On the other hand, it is generally recognized that the output increases that will eventually emerge from developmental investment will not appear immediately. The gestation period will vary from project to project, but in any case there will be considerable delay in output responses to investment. An inflationary gap will exist until the supply of consumption goods reaches (and exceeds) its original level. The inflationary consequences could be reduced by successively taxing away this gap in each economic period. It is also possible that the gap might disappear through reduction in the propensity to consume among the higher income groups if the imported (primarily luxuries and semi-luxuries) goods upon which these groups were accustomed to spend a part of their incomes became totally unavailable. As output increases result from the development program, the decision concerning allocation of these results between resources for an increased rate of investment and provision for increased consumption will have to be made.

From our review of the potentialities of financing development from the Balance of Payments or by mobilization of voluntary savings, it appears that any substantial increases in investment without inflationary consequences will require major reliance on the central and local fiscal processes. The level of net investment now being performed by the economy through both public and private channels provides a useful starting point for a development program thus financed. The existence of these investment resources per se, however, does not



imply that their present employment will lead to realization of the economic objectives for which capital requirements are estimated. Hence, some redirection of investment now carried out by public means may be required to eventually meet the objectives of raising per capita consumption.

Before turning to the search for new investment resources, we present a rough estimate of the present level of net investment accomplished by the economy as a whole. On the basis of the present observer's experience, the Neumark estimate of investment performed by the Indonesian economy in 1952 should be discarded as unrealistically low. Although Neumark found gross investment approximating 4 1/2 billion rupiah in this particular year, he estimated net investment at only 600 million rupiah. This is far below the level which appears to emerge from a study based on the year 1953. On the basis of materials that could be assembled for 1953, it was estimated that the level of gross investment was approximately 10 percent of Indonesian gross national product. Employing the usual depreciation rates for the economy as a whole and correcting for somewhat lower depreciation of governmental facilities, it appears that the level of net investment in 1953 was approximately Rp. 4.7 billion. However, even this estimate does not take account of what I observed to be a substantial amount of investment carried out at the local levels of government and not subsidized by the central government.<sup>7</sup> My estimate for this component of net investment was placed at one billion rupiah for 1953. With this correction we arrive at a total level of net investment in 1953 amounting to Rp. 5.7 billion. To this estimate of net investment we can now add our further estimates of resources which could be mobilized through the tax system and employed for investment purposes by the central and local governments.

My earlier study of the tax burden in Indonesia<sup>8</sup> and empirical investigation in Indonesia suggest that there are areas of taxable capacity which could be exploited without harmful effects on either economic incentives or levels of consumption in the lower income groups. On the basis of what material is available on Indonesian national income and from my analysis of the Indonesian tax structure, I have concluded that income has been rising in the rural sector of the economy relative to the urban sector.<sup>9</sup> On the other hand, it was

7. The estimate above includes only local investment directly subsidized by the Ministry of Interior.

8. Douglas S. Paauw, op. cit.

9. Ibid.

clear that in recent years the burden of taxation has significantly shifted from the rural sector to the urban sector, thus indicating that financial resources for taxation lie primarily in the rural sector. It also appears that the burden on most economic functions in the urban sector is now near the maximum consistent with economic incentives. Further observation of the rural sector of the economy and discussions with local officials in many areas of Indonesia indicated that there were margins in this sector which could be reached by new tax levies. However, it is also clear that these margins of taxable capacity are found primarily among upper income groups (traders and landlords), although it is also true that in some geographic areas there have been relatively general increases in income not reached by new tax levies. Thus I am suggesting that these increases and shifts in income be reached by new tax devices or stricter enforcement of present taxation. Some of these could be reached through central taxation while others could be reached most efficiently through taxes enforced through local levels of government.

Representatives of the central fiscal offices in localities in most areas of Indonesia estimated that stricter enforcement and more adequate administration of two important revenue producers--the company tax and the income tax--could double the yield of these levies, at current rates. Approximately Rp. 1.7 billion in new revenues could thus be added to central government tax collections, if 1953 results are taken as typical of present yields. If the level of current central government expenditures could be reduced and held to the line indicated below, these expanded central tax collections could be devoted to financing the development program. Central fiscal offices emphasized, however, that revenues from these major taxes could be increased only if the tax structure as a whole were simplified. Abandonment of taxes unimportant as revenue producers but complex in terms of administration is an essential aspect of maximizing the proceeds from potentially lucrative sources of revenue.<sup>10</sup> The new yields from these taxes would come primarily from the upper income groups in the rural sector, now escaping the central tax administration. There would be problems of enforcing the new tax bites as actual reductions in consumption among these groups since these are the classes which characteristically hold inactive but highly liquid cash balances. Hence it would be possible for these groups, at least in part, to replace tax withdrawals from current income by activating balances residual from past incomes unless governmental policy intervened.

I would now like to turn to the search for new fiscal resources at the local levels of government. On the basis of my personal observations of fiscal processes at this level, I have estimated that

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10. Douglas S. Paauw, "The Role of Local Finance in Indonesian Economic Development", Center for International Studies, Document Control #C/54-25, pp. 9-12.

the amount of net investment now being performed by all levels of local government would approximate one and one quarter billion rupiah.<sup>11</sup> From local officials generally I gathered the impression that if proper allocation of tax bases were worked out between the central government and local government this amount of local investment could be approximately doubled. However, it should be emphasized that this amount of new local investment could be expected only if the Nasrun recommendations for inter-governmental division of fiscal function is successful in tying local benefit to local sacrifice through taxation. Fiscal officials in all areas which I visited indicated that collection of local type taxes such as the rural income tax through the central fiscal system tends to minimize the proceeds of such taxation because the link between local sacrifice and local benefit becomes blurred.

It is my recommendation that revenue bases which lie close to the levels of local administration should be allocated to the localities to provide revenues for their developmental and current expenditures. In particular, it was generally suggested by local officials that assigning the rural income to the localities would provide much greater yields from this revenue source than are now being collected for central government account. On the basis of my discussions, it seems realistic to assume that the transfer of this and similar revenue bases to localities would provide local resources to meet the greater part of current expenditures as well as the higher level of local investment called for here. In 1953 subsidies to localities amounted to Rp. 1.9 billion. Increased local fiscal autonomy could probably reduce the level of government subsidy to less than Rp. 1 billion, allowing for regional differences in the ability to increase local revenues from the tax bases which should ideally be transferred to localities.

In short, we conclude that if local benefit is clearly linked with local sacrifice in the form of taxation, extension of taxation at this level and increased popular cooperation would significantly increase total resources for development. Thus if this principle were carried out by an ambitious reorganization of the entire tax structure, we could add another 1 1/4 billion rupiah to total tax resources for development as well as planning reduced central expenditures for subsidy of approximately Rp. 1 billion.

Finally, the search for new investment resources may be extended to the government budget itself, specifically on the expenditure side. Recent students of the Indonesian budget have suggested that strenuous economy efforts in the items of current expenditure might eventuate in reductions of Rp. 2 billion, while the efficiency of administration could be maintained. In addition, we have estimated that government subsidies to provinces could be reduced by Rp. 1 billion if localities were allowed to exploit revenue bases within their purview. Hence, the

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11. Ibid., p. 15.

level of current government expenditures might be cut by Rp. 3 billion below the 1953 amounts, upon which these studies are based. However, even at this level of expenditures, the central government was operating at a deficit of approximately Rp. 2 billion. Hence, some thought should be given to whether the funds made available from reductions in current governmental expenditures should be employed to eliminate the deficit or to provide a limited inflationary ingredient to total financing of the development program. It is believed that the 1953 level of deficit financing (Rp. 2 billion) could be continued without more serious pressures on prices or the Balance of Payments than were felt in 1953, inflationary financing of this amount might be retained. It appears that the monetary effect of this scale of deficit financing was offset by the increase of inactive balances. If it is demonstrated that these balances are in danger of jeopardizing either economic stability or the development program, the inflationary ingredient of development financing would best be eliminated, and consideration might be given to the merits of employing some of the savings from reduced current expenditures to neutralize the monetary impact of inactive hoards.

We are now in a position to put together a total estimate of investment resources now available to the economy plus those which may be mobilized by a more effective fiscal process. This estimate may then be compared with our estimates of capital required to produce specified rates of economic growth. The results of our analysis are presented in Table I.

TABLE I

Total Investment Resources (Domestic)  
(In billions of rupiah)

Estimated Actual Investment: (1953)

Gross:	9.0
Depreciation:	<u>4.3</u>
Net Investment	4.7
Correction (Local Investment)	<u>1.0</u>
Total Net Investment	<u>5.7</u>

Additional Government Investment Resources:

Increased Central Taxation	1.7
Increased Local Investment	1.25
Reduced Current Expenditures	<u>3.0</u>
	<u>11.65</u>

We have estimated that the current level of net investment now being accomplished by the economy is approximately Rp. 5.7 billion. To this we have added Rp. 1.7 billion from increased central tax revenues and Rp. 1.25 billion as new investment resources made available at the local levels of government. Finally, we have added Rp. 3 billion which would result from reducing the present level of current expenditure undertaken by the central government. This would give us a maximum level of present and potential investment resources totalling Rp. 11.65 billion. Whether or not the total of the new governmental resources (Rp. 5.95 billion) should be devoted to investment depends on assessment of the inflationary tendencies in the economy as the development program gets underway.

The total of these resources obviously comes very close to our estimates of the capital required to achieve eventual annual growth rates of 1 to 2 percent in per capita consumption. On the basis of these estimates, an inflow of foreign capital of approximately Rp. 1 to 5 billion<sup>12</sup> (about \$90 million to \$450 million) would be required to achieve the specified growth objectives. The public or foreign component of developmental investment required to meet specified growth rates might be reduced by the expansion of domestic private investment. It is reasonable to expect that private investment would increase in the atmosphere of expansion created by the government development program. New profit opportunities should arise as external economies, industrial raw materials and an increasingly skilled labor force emerge. It would be hoped that the expansion of private investment could be financed by mobilization of voluntary savings from current income through private banking channels; in fact, government policy should be aimed at developing the Indonesian banking system to assume this role in the financing of Indonesian economic development.<sup>13</sup>

Although the role assigned to foreign capital in the suggested pattern of developmental financing is not dominant, it is indeed critical. We have pointed out that the level of capital imports cannot be greatly expanded in the short run on the basis of Indonesia's own resources. Thus it is clear that an increased flow of capital goods to meet the needs of the development program would have to be financed largely by external resources.

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12. Depending on the exact size of estimated capital requirements, the growth in per capita consumption aimed at, and whether or not all the investment resources described here are devoted to investment.

13. This point is expanded in my paper, "Financing Economic Development in Indonesia: Public and Private Mobilization of Voluntary Savings", Center for International Studies, Document Control #C/55-2.

The foreign trade ingredient of the Indonesian development program may be roughly estimated on the basis of experience elsewhere. Conservative estimates place the ratio of imported capital goods to total (gross) domestic investment at 20 to 25 percent, depending on the sectoral allocation of investment resources. If requirements for raw material imports are added to this figure, this ratio would rise to 25 to 35 percent of the total outlay for investment.<sup>14</sup> These requirements are higher in the early years of a development program when provision for depreciation is largely on the basis of old investment. As the depreciation rate falls with the increasing importance of new investment relative to total capital stock, the foreign capital requirement in the development program will fall pari passu.

In 1953, the year employed as the basis of the present estimates, imports of capital goods (exclusive of the oil companies) totaled Rp. 1.44 billion (16 percent of estimated gross domestic investment). Imports of raw materials and capital goods totaled about Rp. 4 billion (44 percent of estimated gross domestic investment). However, Indonesia is heavily dependent on import of raw materials for its limited industrial output; hence, it is doubtful whether capital good imports could be substituted for raw materials in the short run, if the 1953 level of domestic industrial output were maintained.

If the required foreign capital component is assumed to be 22.5 percent of total gross investment, capital imports would have to be expanded to Rp. 3.38 billion to meet the requirements of the program outlined here. On the basis of 1953 figures, foreign aid and investment would have to be increased by Rp. 1.94 billion (U. S. \$170 million) annually to meet this requirement if all the investment resources (providing for gross investment of about Rp. 15 billion) outlined here were employed. This would require that new foreign financing provide about 15 percent of the total net capital requirements suggested above (Rp. 1.94 billion out of Rp. 12.6 billion). Statistics recording Indonesia's capital imports in 1954 are not yet available, but it appears that there will be no significant change in their value.

It is problematical whether foreign capital in the form of new foreign investment and foreign aid of this magnitude (Rp. 1.94 billion) would be forthcoming in present political and economic realities in Indonesia, although this figure is not outside the range of possibility. It is gratifying that new tendencies to extend substantially greater foreign aid to Indonesia are apparent in the United States as well as in Western Europe. A further problem relates to the limiting nature (from the domestic development point of view) of direct investment which is largely the form in which investments have been undertaken in Indonesia in recent years. The capital imports financed by such

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14. See for example the estimates made by Rostow and Others, for Communist China, op.cit., pp. 265-266.

investment remain outside the purview of developmental planning and may not be usable in the sectors in which the development plan would seek to utilize them. However, it should be recognized that direct investment, whether related to the development plan or not, would contribute to raising per capita income (and consumption) by employing labor more productively than in its old pursuits within the confines of the underdeveloped economy. It follows that a substantially increased flow of direct investment might contribute to realizing the capital requirements necessary to reach desired economic objectives. If direct investments are allocated in accord with geographic location of resources, it appears that there will be no short-run conflict with the development plan with regard to competition for the economy's basic economic resources--land and labor, which are still abundant (in aggregative terms) relative to the economy's demands upon them.

In the past Indonesia has absorbed large capital inflows, exported primarily from Holland. If the years of the Great Depression (1931-1939), which had a deleterious economic effect upon both Holland and Indonesia, are considered to be untypical, we must go back to the pre-1930 period for relevant data. During the years 1925-1930, foreign investment (reinvested profits of foreign firms, plus new long-term investment) averaged 3 1/3 percent of net national income. Foreign investment in the stricter sense (new long-term investment) averaged 1.9 percent of net national income.<sup>15</sup> If new foreign investment of this order of magnitude relative to Indonesian national income could be provided today, it would approximate Rp. 1.6 to Rp. 1.7 billion and would go far toward meeting the foreign capital requirements (estimated to be Rp. 1.9 billion) of a program designed to raise domestic per capita consumption.

The impressively large capital inflows during the colonial period did not produce significant results in raising per capita standards of living or diversifying the structure of the Indonesian economy. This was true for three fairly obvious reasons: (1) the income increases resulting from this investment was largely transferred abroad rather than re-invested,<sup>16</sup> (2) the pattern of investment was limited to industries with export significance rather than those producing for the domestic market and (3) the foreign financed investment activity was not complemented by a larger domestic investment program such as that called for here. These observations underline the need for domestic sacrifice to provide the bulk of the resources for a program of economic development.

We have sought to establish the thesis that a program of development leading to eventual increases in per capita consumption could be

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15. J. J. Polak, The National Income of the Netherlands Indies, 1921-1939. The ratios of new long-term foreign investment for individual years was as follows: 1925, 1.6; 1926, .9; 1927, .7; 1928, 2.0; 1929, 1.2; 1930, 5.3.

16. Ibid., Table 14.1.

financed largely from domestic resources. We have argued that these resources should be mobilized through devices which will limit the short-run inflationary consequences of diverting current resources to production of capital goods. Rough estimates of the order of magnitude have been assigned to the capital needs of the economy and the investment resources which might be mobilized by the suggested devices to meet these needs. These estimates should be regarded as extremely tentative; detailed studies on both sides of the economic ledger are suggested before planning be undertaken on the basis of the preliminary studies to which we now have access.

Finally it might be well to emphasize a few implications of this program of financing economic development in Indonesia. It is suggested that the financing come mainly from a reduction in consumption. In fact, this is the only justification for recommending that strenuous efforts be made to mobilize resources through the fiscal system. As we have intimated above, there is indeed some question as to whether or not it is realistic to assume that tax financing will be effective in reducing consumption. To the extent that the tax bite were applied to upper income groups, it is entirely possible that what is intended as reduction in consumption expenditures may eventuate as addition of new money to the income stream. Within these groups, funds which are originally withdrawn by taxation may be replaced from the existing monetary hoards from past incomes. Hence the level of consumption expenditures could very well be maintained among these groups which possess substantial idle balances, in spite of higher tax payments. If governmental policy is specifically aimed at reducing the level of consumption through this financing program, it may therefore be necessary to attempt some type of rationing to enforce the reductions in consumption. I realize that serious administrative problems would accompany the introduction of rationing in a country such as Indonesia. However, some type of selective rationing might be feasible. It might be relatively simple, for example, to restrict consumption of luxuries and semi-luxuries which are largely consumed by the upper income groups.

A second implication of the pattern of financing outlined here is that mobilization of investment resources and the administration of development investment itself would be carried out by local governments as well as by the central government. Over 40 percent of the new tax resources for development would come from the local governments, according to my estimates. However, only 30 percent of the total investment program would be prosecuted at this level of government. To the extent that local governments participate in the investment program, a program of decentralization of economic development in Indonesia is implied. The question then occurs as to whether or not local administrative facilities are available to carry out investment at these levels of government. My own impression is that a reservoir of competent officials, not fully utilized under the present system of inter-governmental division of functions, exists at this level. A



more serious economic question is whether or not the resources made available at the local level could be integrated into a general development program aimed at increasing production. The problem is that resources mobilized at this level appear to be highly localized. However, it is my opinion that Indonesia's development program will have to concentrate in part on providing basic local facilities such as irrigation works, transportation facilities and small-scale, state-operated productive enterprises. It appears that local investment resources can most easily be mobilized in the outlying islands where these facilities are most lacking. In my experience, local governments already assign high priority to productive projects and allocate resources on the basis of estimates of the productivity of alternate uses.<sup>17</sup> Thus it appears that diversion of local financial resources to projects related to the country's economic growth is not an insurmountable problem.

There are also important publicity aspects of the program recommended here. The program is obviously one of austerity since it implies generally reduced levels of consumption, particularly among the upper income groups. Yet, it is emphasized that by tying local benefit to sacrifice it might become clear to the Indonesian people that eventual increased output will result from the government program and that today's sacrifice would be tomorrow's gain. Thus the local aspect of financing the program may well be a blessing in disguise. Finally, this program may well tend to allay some of the existing political objections to foreign participation in the financing of Indonesian economic development. Recognition of the fact that domestic financing of investment entails sacrifice in the way of reduced consumption may well add to the attractiveness of foreign capital. Again, the fact that the program outlined here calls for substantial domestic financing implies that the domestically owned sector will be rapidly expanded. New productive facilities will be primarily Indonesian owned and the scope of foreign ownership will be circumscribed by the program itself. If it is clear that the indigenous role will be the dominant one in development, fear of foreign domination in the modern sector may be considerably reduced and foreign capital may be welcomed as a complement in the total program for Indonesia's economic progress.

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17. In fact, in one area I found rather sophisticated use of capital-output ratios to establish investment criteria.