



OECD DEVELOPMENT CENTRE

Working Paper No. 11
(Formerly Technical Paper No. 11)

MACROECONOMIC ASPECTS,
FOREIGN FLOWS AND DOMESTIC
SAVINGS PERFORMANCE
IN DEVELOPING COUNTRIES:
A "STATE OF THE ART" REPORT

by

Anand Chandavarkar

Research programme on:
Adjustment Programmes and Equitable Growth



TABLE OF CONTENTS

Summary	7
Preface	9
I. Introduction and Plan of Study	11
II. Rationale and Criteria of Savings Policies: The Aggregative Propensity to Undersave	12
III. Savings Behavior in Developing Countries: More Theory and Less Evidence?	14
IV. Fiscal Policies and National Savings	18
1. Government savings: a statistical construct or a policy variable	18
2. Tax incentives for personal saving: how relevant	20
3. Supply-side tax policies: how relevant for developing countries	22
4. Scope for reduced public expenditure and increased tax reliefs	23
5. Fiscal reforms and savings	24
V. Monetary Policies	25
1. Financial repression and inflationary finance as contributory factors to capital flight and low domestic savings	25
2. Financial liberalization: its implications for savings and investment	25
3. Linkages between formal and informal finance sectors	26
VI. Financial Policies and External Flows	28
1. Foreign and domestic savings: Complementary or substitutable?	28
2. Leakages from domestic savings: capital flight (causes and correctives) ..	29
3. Strategic and catalytic roles of external resource flows and participation in domestic financial systems	30
4. Implications of liberalization of capital account	31
5. Project aid flows and domestic savings	32

VII. Central Bank Policies and Attitudes	33
1. Developmental role	33
2. Regulatory role	34
3. Prudential role: Safety and solvency of the financial system	35
4. Attitudes to the informal sector	38
VIII. Macroeconomic Policies, Mobilization and Allocation of Savings	39
1. Matching instruments and targets: lack of a central institutional entity	39
2. Consistency of instruments and targets	40
IX. An Agenda for Research	41
1. Research hypotheses	41
2. Methodological framework for case studies	42

LIST OF TABLES

1. Ratios of Gross National Savings to GNP, 1965 to 1986	46
2. Cross-Country Regression Results: Income groups	47
3. Consumption, Investment, and Saving, Selected Years, 1965 to 1987	48
4. Saving and Growth in Developing Countries, 1965 to 1987	50
5. Average Sectoral Surpluses in Fourteen Developing Countries, Selected Years	51
6. Tax Deductions and Exemptions for Promotion of Personal Savings	52
7. Schedule of Personal Tax Deductions and Tax-Exempt Incomes in Selected Countries	54
8. Wealth Taxes on Individuals in Developing Countries	57
9. Capital Importing Developing Countries: Selected Economic Indicators, 1975-85	58
10. Three Bank Concentration Ratios for Selected Developing Countries	59
11. Capital Importing Developing Countries: Summary Estimates of Capital Outflows and Capital Flight, 1975-85	60
12. Government Lending as Percentage of GDP in Selected Countries, 1979	61
Bibliography	63

SUMMARY

This paper is a state-of-the-art report on the scope and efficacy of macroeconomic policies, both demand-management and supply-side, in relation to the level and composition of aggregate domestic savings (household, corporate, and government) performance in developing countries. Its central focus is on the extent to which macroeconomic policies help or hinder the optimal mobilisation and allocation of voluntary and contractual savings. It analyses: the impact of fiscal policies (fiscal balance, taxation, tax incentives); fiscal reforms and savings; and the interaction between Government and private savings; the financial repression and inflationary finance as contributory factors to low domestic savings; implications of financial liberalisation for savings and investment; the linkages between formal and informal finance; the regulatory, prudential, and developmental role of central banks; exchange rate and external finance policies and their bearing on capital flight and inflows of external resources. In the light of the analysis and evidence the paper draws the relevant policy and institutional inferences for the matching of instruments and targets and also presents an agenda for further research on the domestic savings performance of developing countries to extend and improve the data base for domestic savings policies.

RÉSUMÉ

Le présent ouvrage fait le point des connaissances sur la portée et l'efficacité des politiques macroéconomiques (politiques de régulation à la fois de l'offre et de la demande) au regard du niveau et de la composition de l'épargne intérieure globale (ménages, sociétés et administrations publiques) dans les pays en développement. Il étudie essentiellement la mesure dans laquelle ces politiques contribuent ou font obstacle à la mobilisation et à l'affectation optimales de l'épargne volontaire et contractuelle. Il analyse : l'incidence des politiques budgétaires (équilibre budgétaire, imposition, incitations fiscales); les réformes fiscales et l'épargne; l'interaction entre épargne publique et épargne privée; la "répression" financière et le financement par l'inflation en tant que facteurs contribuant au faible niveau de l'épargne intérieure; les conséquences de la libéralisation financière sur l'épargne et l'investissement; les liens entre financement formel et financement informel; le rôle régulateur des banques centrales, agent de prudence et de développement; les politiques de taux de change et de financement extérieur et leur incidence sur la fuite des capitaux et les apports de ressources extérieures. S'appuyant sur l'analyse et les éléments d'information disponibles, l'auteur du document formule, sur les plans politique et institutionnel, des conclusions pouvant faciliter l'adaptation des instruments aux objectifs et présente aussi de grandes orientations pour l'approfondissement des recherches sur la situation de l'épargne intérieure dans les pays en développement afin d'étoffer et d'améliorer la base de données nécessaire à la formulation des politiques nationales d'épargne.

PREFACE

The crucial role of optimal mobilisation and allocation of domestic savings has now acquired a heightened significance in the context of both domestic adjustment as well as long-term developmental policies of developing countries, who have necessarily to depend on domestic savings to finance the bulk of their investment programs. In this context the contribution of appropriate macroeconomic policies, fiscal, monetary, and exchange rate, is particularly significant in providing a congenial environment for domestic savings. But such policies have to be internally and externally consistent in regard to targets, instruments, institutions, and markets.

In this contribution to the programme, Anand Chandavarkar has prepared an exhaustive state-of-the-art report on the scope and efficacy of macroeconomic policies, both demand-and-supply oriented, in relation to the aggregate domestic savings performance of developing countries. It is intended, among others, to provide answers to critical policy questions such as: how financial repression in the form of below-market rates of interest and unrealistic rates of exchange contributes to financial disintermediation, low domestic savings and capital flight; what is the role and appropriate phasing of financial liberalisation?; is financial liberalisation feasible if institutions and markets are semi-monopolistic in ownership and operations?; how significant are tax incentives and credit subsidies for savings and investment and what is the scope for fiscal reforms?; how to reconcile the regulatory, prudential and developmental roles of the central bank? The maintenance of a stable macroeconomic climate is seen as crucial to domestic savings policies, which also require structural measures to promote the widening and deepening of financial intermediation. The study draws the relevant policy inferences in the light of comparative country experiences and also presents an agenda for research and a methodological framework for case studies to further improve the data base for savings policies.

Louis Emmerij
President of the OECD Development Centre
December 1989

MACROECONOMIC ASPECTS, FOREIGN FLOWS AND DOMESTIC SAVINGS PERFORMANCE IN DEVELOPING COUNTRIES: A "STATE OF THE ART" REPORT

1. INTRODUCTION AND PLAN OF STUDY

This study attempts to review and analyze the scope and potential of macroeconomic policies as they affect the level and composition of aggregate domestic savings in developing countries. It is based on the published literature as well as the data and unpublished material of international agencies like the International Monetary Fund (IMF), the World Bank (WB), the United Nations (UN), the International Savings Banks Institute (ISBI), and central banks. It also draws on the author's field experience as head of IMF country missions for Article IV consultations and technical assistance for review and reform of financial systems as well as a consultant to World Bank financial sector missions.

Macroeconomic policies may be broadly classified into those which affect the size and composition of aggregate demand (demand management policies) and aggregate supply (supply-side policies), and as such they may be viewed as instruments of short and medium adjustment and stabilization as well as long-term growth and development. The principal instruments for controlling aggregate demand are fiscal policy (taxation, expenditure, and borrowing), monetary policy (to regulate cost and availability of credit and the money supply through variation of reserve ratios, open market operations, selective credit controls, interest rate changes, moral suasion), exchange rate policies (which affect the composition of absorption and production between tradable and nontradable goods) and external finance policies (which affect capital flows). Supply-side policies comprise structural policies to improve efficiency and allocation of resources and to expand long-term productive capacity through investment, financial sector reforms, etc.

This study focuses on the basic issue, namely, the extent to which macroeconomic policies of governments and central banks are consistent with the optimal mobilization and allocation of domestic savings (personal, corporate, and government). It examines, among others, the impact on domestic savings performance of fiscal policies; how the fiscal balance reflecting public expenditure and taxation, can improve domestic savings performance, scope for reduction in public expenditure and increased tax receipts; the relevance of tax incentives; interrelation between government and private savings; monetary policies (impact on savings incentives of financial repression such as below-market interest rates, excessive minimum reserve requirements, and inflation); financial deregulation and liberalization; central banks' developmental, regulatory, and prudential roles and their attitudes toward autonomy of savings and development banks and the informal financial sector; exchange rate and external finance policies (e.g., liberalization of capital account; their bearing on capital flight and inflows of foreign savings and whether easy access to foreign resources depresses domestic savings mobilization, implications of project aid for savings mobilization). In the light of the analysis and evidence, the study draws up an agenda

for further research on the domestic savings performance of developing countries. The emphasis in this report is throughout on the voluntary and contractual savings components of domestic savings as the targets amenable to policy instruments. Compulsory savings are not taken into account as being essentially one-shot quasi-political measures which are invariably abolished after a while (Prest, 1969).

II. RATIONALE AND CRITERIA OF SAVINGS POLICIES: THE AGGREGATIVE PROPENSITY TO UNDERSAVE

At the outset it is important to understand why purposive savings policies are necessary. The transformation of domestic savings into additional income in the future via the accumulation of capital is no doubt a significant factor in economic growth and development. Even so the oft-quoted observation of Arthur Lewis (1954, p. 155) that the "central problem in the theory of economic development is to understand the process by which a community which was previously saving 4-5 percent of its national income or less, converts itself into an economy where voluntary saving is running at about 12-15 percent of national income or more," sounds much less plausible with the passage of time for a variety of reasons (Angus Deaton, 1989). It has been argued that there is at best only a very weak cross-country relationship between savings and growth since there are in fact now many LDCs with very high savings rates which are not reflected in corresponding rates of growth. For instance, during 1980-81, India's gross national saving was 23 percent of GNP, Indonesia's 25 percent, Mexico's 22 percent, Cameroon 18 percent, Algeria's 35 percent, and Yugoslavia's 39 percent (see Tables 1, 3, & 4). Analytically too, the link between savings and growth has been questioned since Solow's pioneering (1956) model which does not generate any long-run relationship between them, although savings will generate increases in growth as a transition that may be very long-lived. More recently, the "increasing returns" growth models reviewed in Romer (1986), particularly those of Lucas (1984), emphasize the greater role of human capital formation in growth relatively to saving. According to this school of thought there is no causal relationship between the rate of physical capital accumulation and economic growth and nor is it possible to establish whether causality runs from savings to growth or from growth to savings.

However, these findings are controverted by a recent systematic empirical study of the determinants of long-term growth in developing countries for the period 1970-85 (Otani and Villanueva, 1988) covering a sample of 55 developing countries (13 from Africa, 12 from Asia, 6 each from Europe and the Middle East and 18 from the Western Hemisphere) grouped by average per capita GNP income levels (low-income group of countries with US\$560 or below; middle-income group of more than US\$560 but less than US\$1,100; and the high-income group of US\$1,100 or above).

The estimated model in this study which incorporates the domestic savings ratio (sum of gross capital formation and external current account balance), export performance, expenditures on human capital development, the growth of population, and the real interest rate on external debt, explains the growth performance of these countries remarkably well. The regression results using the ordinary least squares method show a high degree of explanatory power of the reduced-form equation and its variant (Table 2). The estimated coefficient of the domestic savings ratio was highly significant and its size suggests that a 10 percentage points increase in the domestic saving ratio increases the long-term growth rate of per capita output by one percentage point for an average economy. This implies that for an average economy the domestic savings ratio would have to increase from the actual 19 percent to almost 29 percent in order to raise the steady-state per capita output growth by one percentage point a year.

This as a more updated version of Lewis' argument prescribes the magnitude of the savings mobilization program for an average developing economy. The beta coefficients indicate that the domestic saving ratio was a more significant contributory factor for the middle- and high-income groups than for the low-income group. Although the reasons for this difference are not wholly clear, it may arguably reflect the relatively underdeveloped character of the financial system so that the saving-investment-growth nexus is not well-established. It may also be due to the fact that many middle- and high-income countries have greater access to foreign sources than the low-income countries, so that some of the real output produced by the capital stock financed by foreign borrowing may be attributable to that part of the capital stock financed by domestic savings. The impact of the domestic saving ratio on the growth of per capita income is estimated to be about twice or thrice as great for the middle-income countries than for high-income countries. This may be possibly explained by the fact that middle-income countries might have reached the "take off" point, while the high-income group countries have passed that stage. This implies that, the productivity of capital in middle-income group countries (and consequently the contribution of domestic saving to the growth of per capita income) may be much higher than in high-income countries. While the contribution of export performance to growth is more powerful and systematic (beta coefficient of 0.65 percent) than the domestic saving ratio (0.40). This should, however, not underestimate the overall role of domestic savings which are also crucial for financing investment in the export sector. The interrelationships among exports, saving, and investment would, however, change over the different stages of economic development.

Although the relevant empirical evidence is unavoidably ambiguous, the basic rationale for positive savings policies derives from the fact that developing countries typically tend to "undersave" because of a combination of externalities, financial repression, and market failures, reflecting institutional and behavioral factors, notably the "Isolation Paradox," i.e., individuals acting in isolation cannot capture for their own descendants the full benefits of the capital they bequeath (Sen, 1967). But the passage from the "isolation paradox" to the policy prescription is not clear cut insofar as official policies to compensate shortfalls of private savings may be undone by private savers whose previously optimal savings may be seen now as too high (Warr and Wright, 1981). The solution may not necessarily be additional public sector saving so much as greater incentives to private saving such as higher marginal returns. The second reason for undersaving in developing countries is the difficulty of optimal intertemporal choice under uncertainty, which is greater than in the developed countries. Thirdly, official "financial repression" in the form of artificially low ceilings on interest rates, and intervention in financial intermediation through reserve requirements, selective credit controls and subsidies, etc may also lead to sub-optimal domestic saving for which the solution is financial liberalization (McKinnon and Shaw, 1973). But savings may not necessarily respond positively to market-determined rates of interest and even the maximum feasible financial liberalization may not by itself help to reduce the uncertainty which exists independently of the degree of financial repression and therefore undermines the long-term propensity to save in developing countries. Thus, the cumulative effect of financial repression, market failures, the all-pervasive uncertainty, and the "Isolation Paradox" is to reduce aggregate savings in developing countries to suboptimal levels. Savings are essentially an instrumental variable and their level and composition have always to be judged in relation to the ultimate use of savings to promote the growth of national productivity and income, and the overall development of the economy. There are, however, no a priori criteria to measure and determine the optimal ratio of national saving to national income, because, among others, the choice of the optimum rate of saving involves issues of intergenerational equity which cannot be resolved without recourse to value judgments (Amartya Sen, 1961). Consequently,

policymakers in developing countries lack any quantitative yardstick for formulating and implementing aggregative savings policies which have therefore to be viewed in a judgmental and empirical perspective.

The rationale for a positive savings policy lies not so much at the aggregative level of aiming at specific ratios of savings to GNP as in promoting savings in the right forms that can be transformed into productive assets through widening and deepening of financial intermediation. In fact the maximization of aggregate savings per se seldom figures as the objective of macroeconomic policies in the same way as balancing of aggregate demand and aggregate supply or maximizing the rate of growth. Thus, the revenue needs of government are given priority over the promotion of savings as evidenced by the fact that no country has introduced a value-added tax to replace an income tax. Of the 90 odd countries surveyed in Coopers and Lybrand's *International Tax Summaries* (1988) only three had well-developed sales tax in lieu of taxes on income. The scope for efficacious macroeconomic policies in improving savings performance in terms of both stock and flow of savings lies more in very specific areas like financial liberalization, prudential supervision and regulation of financial institutions, tax incentives for saving, plugging the flight of capital, and, above all, the maintenance of realistic rates of taxes, interest and exchange. Positive savings policies are very much in the spirit of the dictum that policies are more important than resources. The importance of attaining optimal levels and composition of domestic savings as an integral part of both adjustment and development progress is well evidenced by the emphasis on adequate mobilization of domestic resources in the IMF programs for member countries with stand-by and extended Fund facility arrangements and the structural adjustment loans of the World Bank.

III. SAVINGS BEHAVIOR IN DEVELOPING COUNTRIES: MORE THEORY AND LESS EVIDENCE?

A purposive savings policy requires an adequate and meaningful data base, which, however, still seems to be deficient after nearly three decades of research. Admittedly, "no other characteristic of an economy is at the same time so important, so elusive of measurement and so difficult to explain as the private savings rate" (T. King, 1971) and "saving is more difficult to measure in LDCs than in advanced economies, whether at the level of the individual household, or as a macroeconomic aggregate" (Angus Deaton, 1989). Even so this does not explain why the findings of the earliest authoritative surveys of savings behavior in developing countries (Mikesell and Zinser, 1973) that the "study of household saving in the developing countries is at its best in its infancy" (Snyder, 1974, p. 150) are faithfully echoed in the latest survey, which concluded that "empirical knowledge about savings seems to lag behind the theory, so that most of the implications of the theories remain untested...very simply put savings is a difficult variable to measure...a lot of effort is needed to improve the data base on saving so that further progress can be made through "econometric analysis (M. Gersovitz, 1988, pp. 418-19 and Angus Deaton, 1989, pp. 4-7). In fact the 'state of art' on the subject presents a striking contrast to the early warning of Tjalling Koopmans (1947) against "Measurement Without Theory" and now reiterated by Robert Eisner (1988). Research on savings behavior in developing countries seems to be still afflicted by the opposite syndrome--lag of measurement behind theory!

The basic problem, but by no means the only one, is that saving is not measured directly (either there are no survey data or the statisticians distrust them) but is derived from national savings by deducting corporate and government savings (i.e., government revenues minus current government expenditure, excluding outlays for net

additions to and replacements of physical capital), so that errors in the latter two magnitudes are reflected in this ultimate residual. Consequently, household saving figures typically as a residual among residuals in the national accounts. Surveys of household savings are also subject to some major limitations: (1) Their accuracy and usefulness are dependent on the period of observation, leading to under-reporting of surveys in the same country with similar methodologies but at different dates; (2) selectivity and simultaneous equation bias; (3) under-reporting of income particularly non-labor income, relative to consumption and national accounts; (4) problems of imputation of non-monetized consumption and investment (Chandavarkar, 1977), treatment of consumer durables, incomplete enumeration of assets and liabilities; (5) errors due to random and seasonal factors and in respondents' answers; (6) problems of inflation accounting in the treatment of components of savings (Visaria, 1980, pp. 21-31 and Berry, 1985, pp. 347-349, discuss checks for internal consistency and for consistency with other data and apply these tests to several surveys). No econometric study attempts to allow for these problems in correcting its data base, and nor is there much analysis of whether the appropriate dependent variable is personal, private or domestic saving. In addition to shortcomings of data, the scope of the surveys too has a major limitation. To date household surveys have relied on partial equilibrium models addressed to some specific policy issue (e.g., marketed surplus, price and income responsiveness, crop substitutability, etc.) which do not cover savings behavior except to some extent possibly for Farokh Iqbal's study (1986) of panel data for India. On balance, these limitations suggest that savings, especially private savings, which are calculated as a residual may be understated, possibly to an extent that varies with the level of development (Gersovitz, 1988, p. 415 and Kuznets, 1960, pp. 24-25).

The general sense of the research on savings behavior in developing countries is the notion of permanent or lifetime income as an appropriate determinant of saving rather than current income. The analyses of cross-national data on the saving ratio have focussed on the effects of the growth rate and age structure and the level and distribution of income. The two primary studies (Leff, 1969, using the aggregate domestic saving ratio and Modigliani, 1970, using the ratio of private saving to private income) using cross-country aggregate data provide support for the propositions that:

- (1) Aggregate saving is influenced by demographic variables (population growth rate, age structure, dependency rate, i.e., proportion of economically dependent population), but there is no one-to-one relationship between these variables.
- (2) The rate of growth of per capita income affects the savings rate but the level of per capita income does not have an independent effect if the growth of per capita income and/or the dependency variables are also included.

These findings have been elaborated and sometimes qualified by those of Adams (1971), Gupta (1971, 1975), Leff (1971, 1973, 1979), Goldberger (1973), Singh (1975), Bilsborrow (1979b), Ram (1982) and Fry and Mason (1982). Broadly, these papers suggest some instability in the statistical significance of the dependency rate as an explanatory variable, and Ram's study provides the most robust evidence that per capita income is a significant determinant of the rate of saving. Rossi (1989) concludes that the empirical evidence, with the exception of Southern Europe, does not permit any definite conclusions on the linkage between the dependency rate and the savings rate. Growth and demography, two of the most important determinants of the savings rate in the life-cycle hypothesis, seem to explain much of the diversity of savings behavior during 1960-85 across eight Asian countries--India, Indonesia, the Republic of Korea, Malaysia, the Philippines, Singapore, Sri Lanka, and Thailand--and over time, while inflation and movements in the terms of trade are two additional factors that depress the

propensity to save (Lahiri, 1989). Japan's high household savings rate (15 to 23 percent of real disposable income during 1965-83) reflects the positive influence of rapid economic growth, leading to a prolonged retirement period through the wealth and life-expectancy effects of an income change, which has initially outweighed the combined negative effects of improvements in public pension benefits and the aging of the population (Hiroshi Shibuya, 1987). This study projects that Japan's savings rate will decline substantially in coming decades with the acceleration of the negative influences. The distribution of income seems to have no statistically significant effect on savings in low-income countries, although there is some support for the hypothesis that increases in inequality increase savings in higher-income countries (Della Valle and Oguchi, 1976, Musgrove, 1980), subject to the qualification that measures of distribution of income in developing countries are highly prone to error (Berry, 1985).

Evidence on the interest elasticity of savings is difficult to obtain using microeconomic data because rates of interest are aggregative variables that do not vary in cross-sections and nor is there any consensus on the basis of aggregate time series (Balassa, 1988). Although cross-sectional results fail to reveal any strong interest sensitivity of savings (Giovanini, 1983, 1985, Ravallion and Sen, 1986), the inflation sensitivity of savings may be interpreted as weak partial evidence of the responsiveness of savings to variations in the interest rate (Lahiri, 1989, p. 249). The effects of changes in interest rates on saving are indeterminate because the income effects, (i.e., higher rates may reduce the amount of saving needed to provide a target future income), and substitution effects (i.e., higher rates may increase saving by enabling the saver to buy more future consumption on terms of current consumption foregone), work in opposite directions. The positive effect of the real interest on private saving is thus not very strong. There have, however, been cases where the introduction of positive real interest rates has been associated with significant increases in the personal rate of saving, e.g., as in Taiwan (1949-71) and the Republic of Korea (1965-71) (see Chandavarkar, 1971, and McKinnon, 1974). However, financial savings in developing countries have been strongly responsive to the real deposit rates of interest (see cross-country analysis by Lanyi and Saracoglu, 1983, p. 29 and *World Development Report*, 1987, p. 118).

Research on the effect of social security on savings reveals that for developing countries the retirement effect and the wealth-substitution effect approximately offset each other (Kopits and Gotur, 1980, p. 186). This means that while the assurance of a certain minimum retirement income tends to reduce the need for planned savings, social security may lead to a reduction in the retirement age and the need for a larger stock of savings for retirement. A study of Asian experience also found that savings through social security were not neutralized by voluntary dissavings (Datta and Shome, 1981). The extent to which social security and other contractual savings generate net savings depends also on their financing pattern and the investment policy of the savings institutions (Wallich, 1983).

There is as yet no evidence available on the effects on savings of exogenous variables that influence nutrition, health, life expectancy, education, family structure, bequests, and availability of investment opportunities and the linkage between savings and credit. Equally, one should not overlook the importance and relevance of cultural and institutional determinants of household savings considering that the cross-country variance in savings ratios is not fully explained by a country's income status, or trends and changes in it. One of the very few models of household savings emphasizing its cultural and social determinants, which covered saving behavior in Western countries and Japan, concluded "that institutional and cultural characteristics of a society largely shape the uses and functions of saving and thereby its motivational makeup" (Burkhard Strumpel, 1975, p. 216). Altogether saving is best regarded as instrumental for

households in achieving a variety of goals or ends, which is also in accordance with the notion that utility is linked not so much to a good as to its characteristics as related to the underlying household goals.

The foregoing discussion clearly shows that savings behavior in developing countries is a function of several complex and interdependent socio-demographic variables (size and structure of family, dependency ratios, life expectancy, education, motivational makeup, etc.) as well as economic variables (level and distribution of income, both current and life time, wealth, interest rates, price level, etc.). Clearly, the latter set of variables are the ones which are more amenable to influence through macroeconomic policies, which is also borne out by the experience of both OECD countries and developing countries which show high correlation between savings and investment rates (Feldstein and Horioka, 1980, and Dooley et al, 1987). The strong association of saving and investment for developing countries as a group is evidenced by the fact that domestic savings financed about 90 percent of their investment during 1963-83 (World Bank, *World Development Report*, 1985, p. 4). Only the low-income countries in Africa were able to sustain an excess of investment over savings of about 10 percent of GNP through the 1980s because of foreign aid. From the policy point of view, it is therefore important to aim at an income elasticity of saving in excess of unity (i.e., a rising marginal propensity to save) so as to provide an enduring basis for self-sustaining growth.

Business (Corporate) Savings: A Veil?

The bulk of domestic savings in developing countries is accounted for by households (Table 5) which also comprise unincorporated household enterprises, including cottage shop manufacturing which still accounts for over half of manufacturing employment in the poorer countries (Little, et al, 1987, pp. 229-30). This explains the small share and role of corporate savings, i.e., the difference between private savings and personal savings reflected in the retained earnings of the corporate sector. The corporation is termed a "veil" if households treat retained earnings as part of their current incomes on a par with income distributed to them by corporations in the form of dividends. If so, then households will decide their savings on the basis of income inclusive of corporate retained earnings. Likewise, other things being equal, if corporations increase their retained earnings, individuals will arguably decrease their own savings to maintain a constant relationship between total (private) saving and their incomes inclusive of retained earnings. But the view that the corporation is a veil is not always valid, as for instance, when an individual may own part of a corporation whose shares are not widely traded (Gersovitz, 1988, p. 412). If this person suffers from borrowing constraints, he may find that a decision by the corporation to retain earnings impels him to decrease his consumption if he is saving nothing, or if he is saving to meet a future consumption target. To date the few available studies for developed countries show conflicting results on whether savers view the corporation as a veil (David and Scadding, 1974, Feldstein, 1973, Feldstein and Fane, 1973, and Bhatia, 1979). But these issues have not been tested for developing countries, which therefore suggests a potentially fruitful area of research.

IV. FISCAL POLICIES AND NATIONAL SAVINGS

1. *Government savings: a statistical construct or a policy variable?*

Fiscal policy can influence the level of national savings in two ways. First, it can do so directly by seeking to achieve a given level of government savings (defined as the difference between government revenues and its expenditure on current goods and services) through variation of taxation and current expenditure. While the government can aim directly at the level of its own savings, a change in this variable does not imply a one-for-one change in domestic saving. Secondly, it can indirectly affect household and corporate savings through its influence on the savings incentives and savings decisions of households and corporations. Thus, the target of raising domestic saving is assignable to the instrument of aggregative fiscal policy, geared toward reducing the (current account) budget deficit. Consequently, the contention that "government saving" is nothing but a statistical construct that not all governments consider of sufficient importance to provide as part of the budget" (Polak, 1989, p. 92) is not valid. It is in fact an instrumental variable of fiscal policy in relation to the target of aggregate savings performance.

These propositions have to be carefully examined in the context of the developing countries. To begin with, it is useful to enter the caveat that fiscal policy, particularly taxation has other objectives besides promoting savings, such as fiscal equity and economic efficiency to maintain stability and promote growth. There is no a priori optimum ratio of either government savings or of taxes to GNP, which will necessarily vary between countries and over time depending on the desired size and objectives of the public sector and fiscal policy. Secondly, the desired level of government savings may not be attained if the marginal propensity to spend of governments out of increased tax revenues is high, so that net result may well be reduced government saving, the so-called "Please Effect" (S. Please, 1967). Governments find it politically difficult to run budget surpluses aimed at raising domestic savings because such surpluses invariably generate pressures for lower taxes and/or increased government expenditure. An important test case in this regard is how governments will use the growing surpluses in social security funds. For instance, some countries, like Singapore, have harnessed them for financing of home-ownership by their participants. The hypothesis of increased government savings being absorbed by subsequent expenditure is supported by some studies (e.g., Landau, 1971, p. 127) and refuted by others (e.g., E.G. Morss, 1968). This, however, is essentially an empirical issue on which no generalizations are possible.

Assuming that government savings are generated and maintained, the relevant question is how they affect private savings behavior. On the extreme assumption of Ricardian equivalence, there would be automatic and complete neutralization of any variation in government savings by opposite movements in private savings (Barro, 1974). For instance, empirical tests for the United States suggest behavior close to zero equivalence (Ebrill and Evans, 1988). If Ricardian equivalence holds aggregate saving would remain unchanged in the face of increased government (public) savings. For developed countries this proposition has been supported by some studies (Barro, 1978, Kochin 1974, Kormendi, 1983, Seater and Mariano, 1985, and Tanner, 1979), whereas other studies (Blinder and Deaton, 1985, Feldstein, 1982, Modigliani, 1987, and Reid, 1985) have provided evidence against equivalence. The evidence is inconclusive because no attempts have been made to incorporate explicitly anticipated fiscal variables or expectations behavior into the estimating model. Recent studies by Haque and Monteil (1987), Rossi (1988), and Haque (1988) conclude that Ricardian equivalence may not hold in developing economies, primarily because of liquidity

constraints on account of low-income levels and imperfections in the capital market. This result was derived from estimates of a representative sample of sixteen countries over the period 1965-85 consisting of: Algeria, Morocco, India, Indonesia, Cote d'Ivoire, Jamaica, Kenya, the Republic of Korea, Malaysia, Nigeria, Peru, the Philippines, Portugal, Thailand and Turkey (Haque, 1987). Such constraints, which prevent optimal consumption-savings decisions from being realized, make present taxation less desirable to households than future taxation.

Another study for Asian countries shows that differences in national savings rates across countries are related to the differences in direct surplus generation by governments, which therefore suggests that government initiatives in generating savings on its own account can lead to a substantial increase in the national savings rate in developing countries (Lahiri, 1989). But these studies do not explain or measure how private savers take the government's saving or dissaving into account in making their own savings decisions. Nevertheless, on the whole, there is strong evidence to substantiate the role of fiscal policy in overall savings policy through the generation of government savings, which is not to deny that government expenditure items should be assessed on their merits without "any preconceived notion that expenditures that can be classified as 'capital' have any innate superiority over those that cannot claim that distinction" (Polak, 1989, p. 92). More importantly, the extent to which developing countries can exploit their taxable capacities also depends on their revenue needs, i.e., expenditure claims. But surprisingly, none of the studies of tax potential have taken into account public expenditure as an independent variable.

In examining the effects of fiscal policy on government and national savings it is equally important to assess the impact of macroeconomic policies on the level of taxation and the fiscal balance in developing countries (Tanzi, 1988). In recent years the level of taxation of many developing countries has experienced considerable fluctuations over short periods and for the majority of them the ratio of taxation to GDP has ranged between 10 percent (a few are even below this limit) and 30 percent with an overall average of about 18 percent, and a substantial proportion in the 15-25 percent range (Tanzi, 1987). (For the OECD countries, the average (1980-85) was between 35-37 percent of GDP and for some it exceeded (in 1985) 45 percent of GDP (Belgium, Denmark, France, the Netherlands, Norway, Sweden; see OECD, 1987.) While such ratios are based on statistical determinants (per capita income, degree of urbanization, monetization, ratio of foreign trade to GDP, size of the country, etc.) and institutional determinants (quality of tax administration and compliance, income distribution, etc.) may explain potential or long-run levels of taxation they do not explain more than a small fraction of the short-run variation of tax levels in empirical cross-section studies. For these we have to turn to macroeconomic policies which can affect tax revenues through variations in: (a) the real exchange rate; (b) rate of inflation; (c) level of interest rates; (d) level of public debt; (e) degree of import restrictions, etc. (Tanzi, 1988).

The association of fiscal deficits with current account deficits cannot automatically be regarded as indicative of causation (Corden, 1988). The notion that in most developing countries the fiscal deficit is the essential cause of the current account deficit and therefore of balance of payments adjustment problem is based on casual empiricism and on particular cases. For instance, an analysis of IMF programs (1971-80) concluded that "...(i) external imbalances in years prior to program years tended to be associated with large fiscal imbalances, and (ii) that reductions and increases (relative to gross national product (GNP) in the current account/overall balance of payments deficit in the year of Fund programs tended to be associated with reductions and increases (relative to GNP) in the overall government deficit/domestically financed government deficit" (Kelly, 1982). This issue still merits systematic substantiation.

2. Tax incentives for personal saving: how relevant?

The typical common fiscal instrument to promote personal saving is the offer of tax incentives through exemptions, deductions, credits, special low rates, bonuses, which have the dual purpose of encouraging "small savings" and directing savings into preferred end-uses such as home ownership, specific financial assets, approved government securities, long-term social security schemes, pioneering industries, etc. (see Tables 6 and 7). Although such incentives are widespread and have been operative over long periods of time, there have been very few critical evaluations, on the lines of Byrne (1976), Blejer and Cheasty (1986), of their real costs and benefits and their micro- and macro- economic impact on overall savings performance. Too often such incentives reflect the acceptance of conventional wisdom and the inertia of the fiscal bureaucracy. It is therefore important to analyze carefully the overall costs and benefits of savings incentives.

Ideally, if the tax system were to be wholly biased in favor of saving it would involve replacement of the income tax by a general expenditure tax (i.e., direct consumption tax) on the lines recommended by Kaldor (1956). An expenditure tax of a limited character has so far been tried in only two developing countries, namely, India (1957) and Sri Lanka (1959) and was discarded after one fiscal year because of administrative and political problems. Even in a highly developed country like Sweden, a governmental committee rejected an expenditure tax on grounds of serious transitional problems. Consequently, developing countries have to rely essentially on savings incentives (for stocks and flows of savings) grafted onto the income, wealth, and property taxes. The absence of taxes on bequests (death duties) and net wealth (see Table 8) in most developing countries does however serve as an incentive to bequeath tax-free stocks of savings to succeeding generations.

Admittedly, the data to show the effects of tax incentives on personal and household savings are very rarely available. Consequently, a formal and applied analysis of such effects is very problematic. Further research would be worthwhile only when adequate data-sets become available to enable estimation of the responsiveness of savings to taxes. But it is not the data constraints which are the decisive factor so much as the far more basic consideration that even if such incentives did augment savings the resultant costs and distortions might be even more detrimental to economic efficiency and welfare than heavier taxes.

The rationale of tax incentives for personal savings is by no means self-evident. Although subject to individual ceilings, these are difficult to monitor and enforce. Similarly, while they are aimed at the small saver, in practice their benefits accrue to the higher-income groups, who thereby obtain a substantial tax-free income by widespread splitting of ownership of tax-exempt savings instruments as in India. These are the very groups who would save even in the absence of such incentives and who therefore do not need any special incentives. This consequently leads to an avoidable loss of tax revenue. There are also strong behavioral reasons why tax incentives may not necessarily enlarge savings because they have opposite effects. Thus while a reduction in the relative cost of saving may induce individuals to save more than before, it also raises their interest income. The consequent increase in their income may also stimulate their marginal propensity to consume more than before the tax cut. The net impact of tax incentives for savings (measured by the uncompensated interest-elasticity of savings) has been shown to be more or less neutral, or even negative in many low- and middle-income countries (Blejer and Cheasty, 1986).

Typically, such incentives do more harm in eroding the tax base and in creating horizontal inequities than they do good by generating a high rate of net saving. This is especially the case with regard to small savers who are the target group for such

incentives, and who are either below the exemption level of income tax or those whose marginal rate of tax is very low. Moreover the value of tax reduction given through the exemption of interest which rises with income and is determined by the tax payers marginal rate poses additional problems of fiscal equity. Such problems could be possibly avoided by allowing a credit rather than a deduction but even then the alternative policy of encouraging saving by taxation of luxury consumption would seem more desirable and feasible. At best income tax incentives to saving may divert (rather than increase) savings from the informal to the formal sector. The impact of inflation upon the real rate of interest on saving is also far more likely to outweigh the effects of tax incentives for saving (Richard Musgrave, 1987). Among the typical examples of the distortion of tax incentives would be that the removal of interest income from the personal tax base would encourage businesses to finance expansion through issue of debt bonds and thereby distort the debt-equity-ratio unless dividends were also exempted from income tax. The tax exemption of capital gains may create a distortion insofar as it mainly raises the rate of return on corporate income rather than income of other institutions, which may thereby change the institutional structure of the economy. Moreover, tax incentives to save may lead to a less progressive tax structure since the higher income groups have also a higher marginal propensity to save than the lower income groups.

The administrative costs of a complex and highly differentiated tax structure with numerous exemptions and deductions are also necessarily much higher than that of a uniform tax system with minimal exemptions. Tax incentives generally involve less of actual and potential tax revenues, and eventually necessitate either an increase in other sources of government revenue and/or a commensurate cut in government expenditure. It, however, does not follow that even if these tax incentives are significant, the consequent loss of tax revenues might result in budget imbalances as has been argued by some writers (Blejer and Cheasty, 1986, p. 18). The magnitude of these incentives and the resultant loss of tax revenues is seldom such as to lead by itself to fiscal imbalances, which in any event reflect the net effect of total taxation and expenditure. Furthermore, the quantitative significance of income and wealth taxes in developing countries being low, the saving incentives effect of any tax incentives is also correspondingly low. Income taxes on individuals account for only about 1.94 percent of GDP and 10.25 percent of taxes; and wealth taxes for only 0.4 percent of GDP and 2.5 percent of taxes (Tanzi, 1987). More importantly, the distortionary effect of financial repression on savings is far higher than the distortion of interest income by taxation. Neither the theory of savings behavior nor the empirical evidence on the responsiveness of savings to changes in its rate of return, whether pre- or post-tax, are supportive of the case for the use of tax incentives to encourage personal savings. Also such tax incentives create economic distortions which may leave the economy worse off relatively to a system of uniform taxes. A more appropriate objective for fiscal policy would therefore be to use it directly to prevent or control inflation, instead of attempting to compensate for inflation indirectly by tax incentives which have the imprecise effect of indexing some selected few forms of savings to inflation. In sum, the problem of generating a higher rate of personal and household saving is more a function of realistic rates of return, of adequate and efficient financial intermediation, and, above all, of controlling inflation rather than a matter of tax incentives.

While the foregoing assessment is generally applicable to all *discretionary* saving by households, it has to be qualified somewhat in regard to *contractual* saving through participation in pensions, provident funds, and insurance schemes. Given the growing importance and potential of such savings the tax deductions for contributions to such schemes are well merited as also the tax-exempt status of the pension and social security funds and their investment income. A more difficult issue is whether retirement benefits like pensions and commutations should also be tax-exempt (e.g., as in Sri

Lanka). This, however, is perhaps more an issue of fiscal equity rather than of economic efficiency, except insofar as the prospect of earning a tax-exempt retirement benefit might improve the incentive to participate in contractual savings and thereby generate a higher rate of current saving.

3. *Supply-side tax policies: how relevant for developing countries?*

The transformation of savings into productive investment being an equally important issue, we have to examine the relevance of supply-side tax policies for developing countries (for a comprehensive review of the IMF research project on this subject see Gandhi, et al, 1987). In general supply-siders emphasize the removal or minimizing of distortions in market-determined relative prices resulting from controls, regulations, subsidies, and high marginal rates of income and corporate taxes, and believe that the reduction of such distortions would stimulate savings and investment by facilitating the unimpeded operation of the economic incentives of a free market.

Distortions of relative prices can arise because of a variety of factors, such as: the nature of the tax base; the impact of tax rules and provisions on the supplies of labor, savings and investment; height and the degree of progression of nominal tax rates; and the interaction of inflation, the tax base and tax liabilities. The supply-side fiscal agenda would seek to reform all these aspects of a tax structure.

It is noteworthy that the broad conclusion of the IMF research project was that the supply-side tax policy which focuses on marginal income tax rates alone is of limited relevance to many developing countries, especially the low-income countries. Of greater consequence for such countries is the broadening of the tax base and the removal of all tax-related distortions. Recent income tax reforms in Indonesia, India, the Philippines, Jamaica and a few other developing countries reflect this strategy. The IMF research project established that the bearing of the tax system for the saving-investment potential in developing countries depends on a combination of factors such as: the extent of reliance on income-related taxes; the interaction between the tax base, tax rates, specific tax incentives for savings and capital formation, the tax administrative capacity as they each affect savers and income earners; the rate of inflation and the degree of inflation-indexation of depreciation and such other provisions which determine the effective tax burdens and after-tax rewards of producers and income earners; the interaction between tax and other macroeconomic policies as they affect the prices of capital, labor, and foreign exchange; and the level of development and the degree of imperfection in the markets for labor, credit, capital, and foreign exchange. Given the inflationary situations in many developing countries, the disincentive effects of high rates of taxes and provisions other than individual income taxes, such as export duties, historic cost depreciation, first-in-first-out basis of inventory valuation, etc. are far greater than those of high marginal income tax rates.

There is, however, no conclusive answer in the literature to the question of the optimal tax treatment of financial savings which depends critically on the degree of financial repression which varies over time and across countries. If financial repression is large, and if it cannot be removed, a subsidy rather than a tax may be more appropriate and if subsidies are precluded, then consumption rather than income is more appropriate as a tax base (see Ebrill, 1987, p. 106). As regards encouraging investment, the reductions of income and corporate tax rates alone should be resisted and more attention should be paid to specific tax reforms such as indexation of depreciation allowances, and inventory valuation, taxing corporations on a cash flow basis (i.e., disallowing deductibility of interest on debt and full expensing of all investment). While there is a strong case for the abolition of double taxation of dividends (Gandhi, 1987, Chapter 9), tax incentives for investment should be restricted

only to the efficiency-oriented areas such as that encourage risk taking, savings, research and development, and under certain circumstances, and the regional distribution of economic activity (Sanchez Ugarte, 1987).

It is more important, in the interests of tax neutrality and removal of distortions in the use of savings, for developing countries not to rely on highly-differentiated narrowly based taxes on productive wealth (e.g., agricultural land, financial assets, capital equipment), while taxing unproductive assets such as jewelry, precious metals, land and real estate for speculative purposes (to control negative externalities) and the transfers of wealth through gifts and bequests (on grounds of intergenerational equity). There are of course, administrative and compliance problems in the taxation of unproductive wealth (Gandhi, 1987, Chapter 9). Finally, the IMF research project concludes that, given the heterogeneity of individual country economies and tax systems, the supply-side and efficiency-oriented tax reform packages in conjunction with very substantial macroeconomic reforms in policies relating to interest, wages, exchange rates, and agricultural prices, need to be highly country-specific. But the project does not sufficiently emphasize that the efficacy of tax policies is also contingent on the indexation of the tax system as a whole to inflation rather than selective indexation of individual elements like depreciation allowances.

Surprisingly, the supply-side discussions of economic policies in the developing countries neglect what some policymakers have rightly highlighted as a major concern at the macro level, namely, the high incremental capital-output ratio (ICOR) which now stands at around 4.70 in India (Malhotra, Governor, Reserve Bank of India, 1988, p. 31). The prevalence of high ICORs in the developing countries, which reflects a combination of factors such as low-productivity of capital, cost and time over-runs, managerial and technological deficiencies, etc., is indicative of the considerable scope for improvement in the efficiency of investment, i.e., the end-use of savings. A glaring example of high ICORs is the perennial underutilization of irrigation capacity and the imbalance between electric power generation and the distribution system in India. A substantial reduction in the ICOR, which explains the divergence between savings and investment performance in many developing countries, would reduce the need for new savings to achieve a given rate of growth.

4. *Scope for reduced public expenditure and increased tax reliefs*

Large budget deficits have been a primary source of macroeconomic instability and external disequilibria in many developing countries. Therefore a major objective of adjustment has been to reduce the budget deficit. But because of the difficulties of short-run tax measures and concerns about undue expansion of the public sector and crowding out of private investment, countries tend to rely more on reduction in public expenditures particularly recurrent expenditures. The bulk of the adjustment has been achieved by reductions in public expenditure with little change in public revenue as a share of GDP up to 1985 (World Bank Evaluation of Adjustment Lending, 1988, p. 38). However, the reduction in the fiscal deficit has been reversed in a number of countries since 1985 because of worsening terms of trade (e.g., Malawi, Mexico, Zambia) which reduced revenues and also on account of increased international interest rates, devaluations, takeovers of private debt (Chile) and increases in domestic borrowing (Brazil, Turkey, Pakistan, and Malaysia). The structural adjustment loans of the World Bank rarely contain targets for overall recurrent expenditures (exceptions are SAL I for Ghana and SAL II for the Philippines). More often the targets relate to specific components such as subsidies, maintenance, and social outlays. The general emphasis is on the impact of recurrent expenditure on public savings and investment. Equally, the high returns to expenditures on human capital formation are increasingly being recognized. The focus of fiscal conditionality (in IMF programs) has been on the

reduction of overall budget deficits with much less attention to the composition of cuts and the effects on growth. There has also been some rationalization of public investment through the World Bank's investment reviews. But there has much less progress in reallocating current expenditure and in reforming taxes. The World Bank has also been cognizant of the social costs of adjustment and expenditure reductions on the poor, which, however, need not be adverse if delivery efficiency increases through better targeting of social expenditures toward the poor (as in Chile). In the Cote d'Ivoire changes in institutions necessitated by World Bank adjustment programs are expected on balance to help the poorest groups through increases in real farmgate prices on cash crops and removal of export taxes on rubber, palm oil, cotton and pineapple.

5. Fiscal reforms and savings

The primary impact of fiscal reform in the sense of new taxes and more effective fiscal management depends on the extent to which it can contribute to an increase in government saving through reduction of the fiscal deficit. This in turn by reducing government borrowing could be expected to reduce the crowding-out of private savings and investment. However, the improvement of government fiscal management is essential to effective fiscal policies which explains why fiscal reform is a major objective of the IMF structural adjustment facility (SAF) programs, which provide concessional finance assistance over a three-year period to low-income developing countries undertaking structural reform. The typical fiscal reform measures in the IMF SAF programs cover public expenditure planning and review, budgetary structure and process, budget implementation, government accounting and financial reporting, and rationalization and restructuring of public enterprises (including privatization) (see Wipada Huyser, *IMF Survey*, June 1988, p. 202). Because of the urgency of reducing fiscal deficits, short-term revenue measures have dominated tax policy in most developing countries in recent years with the exception of Indonesia, Mexico and Turkey which have had major overhauls of their tax systems. In other countries, typically trade and excise taxes have often been raised (e.g., Argentina, Bangladesh, Malawi, Morocco, the Philippines and Thailand). Because of revenue needs and the inability and unwillingness to raise compensating revenues through other taxes, trade liberalization has faltered in countries which rely on foreign trade taxes for a substantial portion of their revenues. There is not much scope for new taxation except perhaps for the value-added tax (VAT), now used in one form or another in more than 30 developing countries, which "offers promise for rationalizing domestic indirect taxation, and for generating revenue even in the short run" (World Bank, *Adjustment Lending Experience*, 1988, p. 40). However, this statement has to be suitably qualified. Although VAT contributes about 8-38 percent of tax revenue in developing countries, it has not been an important agent in the growth of the public sector. Revenues from income tax and social security contributions has grown faster and has been more important in financing the growth of public expenditure than VAT (A. Tait, 1986). It is significant that an authoritative study "draws no general conclusions on the suitability of the VAT for developing countries, because these countries differ so widely" (Shoup, 1988, p. 152). Progress in reforming personal and corporate income taxation has been limited, but the potential revenue and equity gains from effective enforcement and rationalization through indexation of tax brackets are likely to be far more substantial. Equally, one has to be mindful of the economic and political limits to taxation (Goode, 1980).

V. MONETARY POLICIES

1. Financial repression and inflationary finance as contributory factors to capital flight and low domestic savings

The term "financial repression" refers to all the losses incurred by savers and asset holders due to all types of distortions imposed by official regulations and intervention in the financial system as a result of which savers earn below market rates of return on their savings. It is a syndrome which reflects the cumulative repressive effects of macro- and microeconomic factors such as interest rate ceilings, bank reserve requirements, restrictions on licensing and branching of banks, credit controls, and credit subsidies which together interact to reduce and misallocate savings. But not all its constituent elements are equally repressive in intent and substance. For instance, while interest rate ceilings generate low or negative rates of return on savings, reserve ratio requirements cannot be regarded as wholly repressive except to the extent that they are noninterest-bearing or do not earn market-related rates of interest. Moreover, the variation of reserve ratios serves both as a monetary policy instrument as well as a promotional device (e.g., for promoting regional spread of banking or of development activities through differential reserve ratios). Inflation acts as a tax on fixed rate of return on financial assets and thereby discourages savings. The combination of financial repression, (negative domestic real rates and differential in favor of foreign assets), inflation, exchange depreciation and unrealistic rates of exchange, contributes to the low domestic savings performance as well as the flight of capital (Table 9). Financial repression and high inflation create an environment where asset holders seek protection by holding dollar-denominated assets available to residents, if that is possible ("dollarization") or else move their assets abroad ("flight of capital"). There is strong evidence that real interest rates and inflation have a significant effect on financial savings and that financial savings and the rate at which they are lent are positively related to economic growth (see Chapter 2, World Development Report, 1989, Table 2, 3, p. 31).

2. Financial liberalization: its implications for savings and investment

The movement during the past decade toward financial liberalization in a number of developing countries is a response to the recognition of the deleterious effects of financial repression on savings and growth. Interest rates have been liberalized in Argentina, Chile, Ghana, Indonesia, the Republic of Korea, Malaysia, Nigeria, the Philippines, Sri Lanka, Turkey, and Uruguay. In some countries, such as Thailand and Yugoslavia, interest ceilings have been managed more flexibly than before, whereas interest rate subsidies have been either reduced or abolished in the Republic of Korea and the Philippines. Some countries (Argentina, Chile, Greece, Mexico, Pakistan, Portugal, Tunisia and Turkey) have reduced their directed (i.e., subsidized) credit programs, and several countries (the Republic of Korea and Chile) have privatized their commercial banks. In sub-Saharan Africa financial reforms are in place or underway in several countries including Cote d'Ivoire, Ghana, Guinea, Madagascar, Mozambique, Nigeria and Tanzania.

However, the effects of liberalization on savings, investment and growth have to be interpreted with caution. Complete liberalization of interest rates in countries with high and variable rates of inflation can lead to high real interest rates and wide spreads between deposit and lending rates. In unstable economies it has proved difficult to keep interest rates in line with the productivity of the real sector or to prevent excessive appreciation of the real exchange rate. But countries with reasonable macroeconomic

stability have been able to avoid the hazards of high real interest rates, fluctuations in real exchange rate, and insolvency among banks and prices. While financial liberalization is desirable, its modality, design and phasing are no less important and it should follow and not precede liberalization of the real sector (Cho and Khatkhate, 1989). Trade restrictions should be liberalized first and capital movements later. Latin American experience confirms the undesirability of liberalizing them simultaneously. "An important lesson is that direct intervention in finance must be replaced by an adequate, if less invasive, system of laws and regulations" (World Development Report, 1989, p. 127). There is, however, general consensus that financial liberalization can have optimal impact on savings and investment only with macroeconomic stability based on balanced budgets, realistic exchange rates, and a favorable investment climate. Even the utmost liberalization and deregulation of the financial system will not automatically ensure the creation of a competitive market-oriented regime if there is a tendency to concentration of ownership of banks and financial institutions. Most banking systems in developing countries are oligopolistic, with a few large banks accounting for the bulk of the banking business (see Table 10). In such a system a collusive cartel can emerge even with formal deregulation. For instance, the level and structure of interest rates in Malaysia and Singapore does not seem to have changed materially after deregulation. If a banking system is dominated by government-owned banks (e.g., India, Indonesia, Pakistan and Bangladesh) interbank competition may not be feasible unless these banks enjoy complete autonomy in their operations and, more importantly, do not have recourse to the government budget in the event of making losses. By far the greatest and most difficult challenge to bank regulators and central banks is the maintenance of a genuinely competitive financial system under oligopolistic conditions of few large and government-owned banks. This aspect has been virtually neglected in the literature. Another conspicuous gap in the literature, including the World Development Report, 1989, which otherwise deals exhaustively with all aspects of financial liberalization, is the lack of any analysis of the scope and role of monetary policy in a liberalized financial system, which will call for more reliance on market-oriented instruments like open market operations (e.g., as in Indonesia and the Philippines) supplemented by variable reserve ratios.

3. *Linkages between formal and informal financial sectors*

Given the fungibility of finance, the informal financial sector is part of a continuum with the formal financial sector with varying combinations in space and time of formal and informal transactions. The links between the two sectors exhibit multiple competitive and complementary relationships (see Chandavarkar, 1985, 1987, 1988). Consequently, it is misleading to view them uncritically as segmented non-competing markets. The linkages occur both on the lending and borrowing sides, since money lenders, indigenous bankers, and rotating savings and credit associations (ROSCAS) deposit surplus funds with formal financial institutions (FFIs) and have also lines of credit with them. Similarly, customers of FFIs may have lines of credit with the informal sector which they tend to use after their borrowing limits with the formal sector have been exhausted. For instance, a pioneering econometric study of a flex-price model of informal credit markets in India (1951-77) concluded that the crucial link between the formal and informal financial sectors was the spill-over of excess demand from the formal to the informal credit market (Acharya and Madhur Srinivasa, 1983 and 1984). In India, changes in monetary policy have had a significant effect in the same direction both on the availability and cost of credit in the informal sector. A contractionary credit policy has been observed to raise interest rates in the informal sector even as an expansionary policy lowers it. In the Republic of Korea, informal credit markets were said to have facilitated the working of monetary policy by transmitting signals and funds quickly and mitigating the more arbitrary and disruptive consequences of credit controls

in the formal sector and have been a major contributory factor in maintaining high growth rates by giving the financial system adequate flexibility to meet the needs of a high-pressure, tightly managed and tightly priced economy (David Cole and Yung Chul Park, 1983). Although similar data are not available for other developing countries, there is a strong presumption that Indian and Korean experience is fairly typical. The formal sector's excess demand for credit spills over into the informal sector because of credit controls in the formal sector or else because borrowers have exhausted their ability to provide collateral.

The foregoing analysis is more relevant for the informal urban curb market. However, the ROSCAS and other elements of the informal sector do not create credit because their transactions are cash and they do not maintain fractional reserves for credit creation. They largely recycle existing savings generated by households and other sources. The Philippines showed that nearly three-fourths of the funds handled by informal lenders originated from cash sales of merchandise while credits from formal and informal sources accounted for about 9 percent (Yotopoulos and Floro, 1988).

There are also demonstrable linkages on the "savings" side, as distinct from the credit side, between the formal and informal sectors. For instance, in Thailand, substantial flows of savings into the informal sector have been observed from time to time because of the higher rates of interest on chit funds, pyramid schemes, etc. In contrast, both in Taiwan (China) and the Republic of Korea, an increase in interest rates after the financial reforms in the 1950s and 1960s induced an inflow of savings from the informal sector. Thus, the informal sector functions as a vehicle of disintermediation by stimulating borrowing or lending outside the formal sector. But this role may increasingly atrophy with the growing deregulation and liberalization of the formal sector which would progressively narrow the differentials between the formal and informal sector. While this would be true of the "reactive" component of the informal sector (i.e., the sector which is largely a reaction to the controls over the formal financial sector), the "autonomous" segment of the informal financial sector (like the ROSCAS) would continue to operate even with the maximum liberalization of the formal sector insofar as it meets the retail credit requirements of the small-scale businesses which cannot be met by the formal sector. Since small-scale enterprises do not always remain in the micro-sector but grow in size their credit requirements cannot be met by the informal sector after a certain size and scale threshold, at which point they have to necessarily rely on the formal sector. This has also been the experience of the Grameen Bank in Bangladesh.

The informal financial sector functions primarily as a supplier of small-scale credit and cannot cope with the demands of dynamic increases in the scale of trade and production credit. Its very nature and size precludes maturity-transformation (because of the predominance of cash transactions) and therefore constrains efficient financial intermediation. But even with the utmost liberalization of the formal sector, the autonomous informal sector will always remain, albeit on a smaller scale, to meet requirements which the formal sector is unable or unwilling to meet. This in fact constitutes the basic economic rationale of the informal financial sector for a positive attitude toward it on the part of the central banks in developing countries (see 7.4).

VI. FINANCIAL POLICIES AND EXTERNAL FLOWS

1. *Foreign savings and domestic savings: complementary or substitutable?*

The issue of whether foreign savings are a substitute for supplement to domestic savings and how the supply of foreign savings affects the supply of domestic savings has attracted considerable attention in the literature as well as from policymakers. Since foreign savings, domestic savings and investment are interlinked through national account definitions they cannot be treated as independent variables. This consequently invalidates the conventional statistical correlations in which the ratio of foreign savings to GDP is used to explain the domestic savings ratio or to prove the small or non-existent benefits of foreign capital or aid. There seems to be a distinct polarity of views on this question. Thus, Chenery and Strout (1966) view all capital inflows as net additions to a developing country's stock, whereas Weinskopf (1972) viewed such inflows as a substitute for domestic savings. Gupta and Islam (1983) found after decomposing aggregate capital inflows that foreign aid had a more negative impact on savings than foreign investment--although these effects never appeared to be very large--but domestic savings emerged as the most important determinant of domestic investment. The investigations of Papanek (1972, 1973) support an intermediate position. A typical assumption in the use of the Harrod-Dornar growth model in the 1950s was that domestic savings were behaviorally independent of aid inflows except in the sense that fiscal policy was to be geared to raising the domestic saving rate. While this evidence, which is persistent to an excess, is based on conceptually weak foundations, there is some ground for our worrying now that the aid process may, in certain cases, harm rather than help the domestic effort at raising the saving ratio" (Bhagwati, 1984, p. 32). Similarly, food aid was assumed to assist the recipients' development programs by increasing their resource availability but it may have created a disincentive effect on the recipients' agricultural production.

There are several instances where excessive borrowing by some countries in the late 1970s had a negative impact on domestic saving by enabling "many governments...to postpone adjustment at home" (World Development Report, 1985, p. 65). In Latin America, large external borrowings led to increased investment till about 1975, but thereafter which investment declined borrowing still increased and consequently "foreign credits were used to maintain domestic consumption" (Enders and Mattione, 1984, p. 7). The fact that large budget deficits could easily be financed abroad facilitated lax domestic financial policies, even though these mitigated the inflationary impact of such policies.

On the other hand, there is evidence that some African countries achieved high growth rates on the basis of both high per capita aid inflows and rising tax effort, while other recipients of large aid had falling tax efforts and low growth rates (Mosley, 1980, pp. 86-88).

The dual-gap analysis, which differentiates between the domestic savings gap and the foreign exchange gap (Chenery, McKinnon, Henry Burton) recognizes foreign exchange as a resource and the lack of substitutability between domestic and foreign resources purchasable only with foreign exchange. The role of foreign borrowing is not only to supplement domestic saving but also to supplement foreign exchange if that is the dominant constraint (e.g., Thirlwall, 1979, 1982a, 1982b).

The foregoing analysis shows that it is difficult to generalize over time or between countries about the interrelationships between domestic and foreign savings since many factors may influence them in opposite directions without suggesting any causal connection between the two saving streams. The relaxation of a given supply

constraint, whether it is food aid, budget aid, suppliers' credit, commercial bank credit, may have negative effect on domestic savings and growth in one country and a positive effect in another, depending on the domestic policy stance of the recipient country and the terms on which foreign savings are made available. Papanek (1983, p. 177) concluded, on the basis of the experience of India and Pakistan, that the impact of aid seems to depend less on the quantity of aid provided or on the projects financed by aid donors than how the recipient government used the aid. If a country uses foreign savings wisely, it needs less of them eventually and its own savings increase. The negative correlation between domestic and foreign saving over time proves nothing about any response mechanism that induces a country to save less in any particular year if it received more foreign capital or aid in that year. Similarly, if donors allocate on the basis of need measured by poverty, and if poverty is attributable partly to a low domestic saving ratio, cross-country data might show a negative correlation between foreign aid and savings without proving anything about country responses to variations in aid. Then again there are factors which simultaneously affect a country's domestic saving ratio and the extent to which it has access to foreign savings (aid or credit) or makes use of its own foreign reserves.

2. *Leakages from domestic savings: capital flight (causes and correctives)*

A major problem for developing countries is to plug leakages from domestic savings through the flight of private non-business capital which leads to a net real resource transfer from the country, with a consequent reduction in domestic investment, loss of foreign reserves, and erosion of the tax base. Even if the returns from such financial investment are repatriated, the country still loses the possible additional benefits, such as profits, additional wages, taxes, that would have accrued if the same capital had been productively invested at home. Capital flight has also serious redistributive consequences, insofar as the simultaneous assumption of foreign debt and acquisition of foreign assets by private residents brings about substantial unintended redistribution of wealth and income as their debt is serviced and as the national currency depreciates. Such tendencies have been accentuated with the government assumption of liability for private foreign debt and provision of subsidized foreign exchange for the service of private debt (Rodriguez, 1987, pp. 129-144). Paradoxically, the phenomenon of capital flight seems to afflict most of those countries which are also heavy foreign borrowers. It induces some borrowing countries to venture on to increasingly risky recourse to foreign borrowing and has been a major contributory factor to the debt crisis.

It is extremely difficult to measure with any degree of precision the flight of capital. First it is difficult to define what categories of non-official capital exports are to be regarded as not made for normal business reasons. Second, by its very nature it takes place with the utmost secrecy. Third, the poor quality of balance of payments statistics precludes any reasonable estimates which are usually based on the untenable assumption that the residual item "errors and omissions" reflects predominantly the flight of capital even though the systematic underinvoicing of exports and overinvoicing of imports is a common channel for such illicit exports of capital. Moreover, one has also to look at subsequent inflows of residents' capital to get a correct picture of the capital account. Given these problems there is a plethora of estimates of capital flight made on different bases. (For summary estimates, see Table 10).

The flight of capital is the result of both structural and conjunctural factors. Among the structural factors are: the much higher "expropriation risk" on domestic assets, i.e., the greater possibility of expropriation by the government relatively to similar assets held abroad (Khan and Nadeem ul Haque, 1985, p. 608); the nature of the tax system (Lessard and Williamson, 1987, pp. 311-332); the deterioration of the

fiscal position which enhances the risk for investors in domestic currency claims (e.g., as shown in the model for Mexico developed by Ize and Ortiz, 1987, pp. 311-332). But the most operative causes of capital flight are the conjunctural ones such as persistent overvaluation of the real exchange rate, unrealistic domestic interest rates, high and variable inflation rates, general financial instability and so forth. The principal impetus to capital flight is the expectation in an inflationary conjuncture of a future devaluation. "The rules under which many countries choose to operate [i.e., overvalued exchange rates and interest control in the face of inflation] are often quite sufficient to explain the capital exports which take place" (Alexandre Kafka, 1967, p. 214-15). Cuddington (1986) too lists overvalued exchange rates and low interest rates as primary explanations of capital flight. These conjunctural explanations suggest that they are also precisely those elements which are eminently tractable to the prudent macroeconomic policies such as control of inflation, and maintenance of realistic rates of exchange and interest coupled with adequate tax incentives. Exchange controls on capital movements are unlikely to be successful in preventing the flight of capital when exchange rates are overvalued and interest rates are kept well below equilibrium levels. It is noteworthy that countries that have not experienced serious capital flight (Brazil, Chile and Colombia) have had most of the time, sufficiently high real interest rates while avoiding overvalued exchange rates, although in the case of Brazil there seems to have been a revival of capital flight particularly since the 1986 cruzado plan abolished most of the indexation of financial assets. Nevertheless, appropriate macroeconomic policies can, as a minimum, prevent and minimize the flight of capital and ensure the maintenance of the stock of domestic savings. Equally, one has to recognize that even with such policies in place capital flight may still occur due to non-economic factors such as lack of confidence in the political and social stability of the country on the part of holders of domestic assets. The anecdotal evidence like the large scale acquisition of real estate and financial assets in U.S.A. (particularly in Florida and California) and Europe (Spain, Switzerland) by investors from developing countries points to this aspect of capital flight.

3. Strategic and catalytic roles of external resource flows and participation in domestic financial systems

External resource flows have a strategic and catalytic role to play only insofar as they supplement and not substitute domestic savings and also, concomitantly, help to bring in essential technology, or access to foreign markets, promote export earnings, import-substitution, and greater efficiency and competition in the domestic economy. Outward oriented strategies need to be supported by appropriate tax, foreign exchange policies, and macroeconomic stability. Singapore is a good example of a country which treats foreign investment on a par with domestic investments. This policy has attracted large flows of foreign capital, which along with domestic investment in a stable macroeconomic environment, has contributed to economic growth. Investor surveys shows that growth and stability of the host economy are key factors in attracting foreign investment, which is, partly, because equity investment being relatively illiquid, it often requires lengthy periods of gestation before earning remunerative rates of return. During the 1980s, foreign direct investment in developing countries has been relatively stable at about \$10-15 billion a year (about 10-15 percent of total capital inflows).

But the problem really is that over the past fifteen years developing countries have relied "too much on external borrowing and too little on domestic resources" (World Development Report, 1989, p. 23). In a sample of thirty-eight developing countries for which data are available, external debt at the end of 1986 exceeded domestic debt by more than 50 percent, and in the case of Latin America, it was on average two-and-a-half times greater than domestic bank liabilities. It is significant that

countries with relatively deep domestic financial systems like India and Thailand have been able to limit recourse to external financing in contrast to countries with shallow domestic financial systems (e.g., Cote d'Ivoire and the Philippines) whose external liabilities are about two to five times greater than domestic bank liabilities.

To the extent countries have a choice between direct foreign investment and borrowing, it is pertinent to bear in mind that foreign direct investment has also to be serviced in the long run through profit remittances and it may be a more expensive source of foreign finance than borrowing even though it avoids the rigidity of debt. But provided that foreign direct investment facilitates access to improved technology, to international markets and promotes greater domestic competition, it should be fostered by developing countries. A welcome development is foreign participation in domestic securities markets of many developing countries through closed-end funds.

The maximization of the benefits of foreign entry into the domestic financial system presupposes the liberalization of the domestic financial system and the establishment of a competitive financial environment. Where there are artificially low rates of interest, and other barriers to competition, such as directed credit, foreign financial institutions will only appropriate monopoly rents rather than promote competition and efficiency. Premature financial liberalization and free entry of foreign institutions may well lead to the disintermediation of high-cost domestic banks. Moreover, rapid internationalization may also undermine the autonomy of domestic monetary and financial policy unless reserve requirements and costs of intermediation are in line with those abroad.

4. *Implications of liberalization of capital account*

Controls on capital flows have been generally relaxed in many developing countries (e.g., Argentina, Chile, Indonesia, Malaysia, Mexico, the Philippines, Thailand, Uruguay, Francophone Africa), with the result that capital movements to and from the developing countries are already substantial. The developing countries' outstanding foreign debt was very substantial--\$1,176 billion at the end of which more than half was lent by commercial sources. The recorded amount of foreign bank deposits held by residents of developing countries was \$290 billion (1987), which understates the real amount of capital held abroad. The fact that residents of developing countries have been borrowing and depositing more abroad than in their own banks largely reflects the avoidance of the repressed yields of domestic financial systems. It also partly reflects the national/international diversification of portfolios. From this it may be inferred that financial liberalization may curb the outflow of domestic capital to a considerable extent. However, many developing countries continue to restrict (a) outward capital flows in order to direct more domestic savings to domestic investment; and (b) inward capital flows for fear of foreign control over domestic firms.

It has been rightly said that "in sequencing the removal of exchange controls, trade transactions should be liberalized first and capital movements later" (World Development Report, 1989, p. 128). The experience of Latin America underscores the undesirability of simultaneous liberalization of trade, exchange, and capital controls because the speed of adjustment in the capital market is much greater than in the goods market. An excessive inflow of capital can undermine trade liberalization by leading to an appreciation of the exchange rate. It will be necessary therefore to maintain capital controls until macroeconomic stability has been established and the domestic financial system has been liberalized and deepened. Even in countries with already open capital accounts the authorities should accord priority to maintaining macroeconomic stability to avoid destabilizing capital flows.

While the capital account should not be liberalized prematurely, freer capital movements will eventually increase the availability of foreign funds and facilitate risk diversification of portfolios with better alignment of domestic and foreign interest rates. An interesting aspect of this policy debate is the suggestion that in countries with unrestricted capital inflows and outflows, conditionality (as in World Bank loans and IMF arrangements) should focus on reducing the import-content of government expenditure rather than the amount of public sector borrowing abroad. In countries with capital controls on private external borrowing fiscal targets should limit the amount of public sector borrowing rather than attempting to shift the composition of government spending (Jose M. Vinals and John Cuddington, 1988).

5. Project aid flows and domestic savings

Project aid comprises all forms of aid which contribute to a specific capital asset, or to technical assistance, in contrast to program aid which makes a cash sum available for the entire economy or a sector. But even an authoritative study stated "definitive conclusions about the effectiveness of project aid are difficult to reach" for a variety of reasons (Robert Cassen and Associates, 1986, p. 104). First, little is known about how projects are sustained after the initial phase and the majority of evaluation reports are not strictly *ex post*. Second, there is no single well-developed evaluation methodology, and the criteria range from costs, disbursement periods, impact on growth and distribution of incomes. Thirdly, *ex post* evaluations invariably raise sensitive issues. Fourth, the assumption what would have happened in the absence of the project, which is crucial for cost-benefit analysis, cannot really be ascertained. "Indeed one of the surprises for the authors of this report was to discover how little had been done by the donors collecting to assess their own experience" (Robert Cassen, p. 107), barring the Annual Review of Project Performance Audit Results of the World Bank and the OECD-sponsored examination of donors' experience with irrigation projects. There has been no attempt to evaluate its impact on domestic savings, presumably because of lack of a clearcut relationship between a micro-magnitude like project-aid and a macro-magnitude like domestic savings, and even the exhaustive study by Cassen did not go into this issue.

The argument for project finance has largely been based on the ground that along with capital, it permits the transfer of skills, organizational procedures, and technology. The counterargument is: "(1) because money is fungible, aid has the effect of freeing resources for other projects (see Singer, 1965 for the classic statement of the dilemma); and (2) the macroeconomic environment affects the returns on individual projects to such an extent that aid used to improve that environment might have a much higher productivity than if it simply increased the infrastructure within a framework of inadequate policies, and program aid may be more effective than project aid for this purpose. These issues cannot be easily resolved. On the one hand, even with project finance, donors may be able to influence the policies of recipients. On the other hand, no government will abandon all its domestic policies to the dictates of foreign donors, and the extent to which program aid permits policy influence will vary. In practice, the mix of project and program aid that most improves the welfare of recipients' nationals probably depends, on the degree to which donor and recipient objectives coincide, the responsiveness of the government to policy advice, the appropriateness of existing policies, and a recipient's stage of development. As a country's savings rate rises and its creditworthiness improves, the productivity of foreign aid will depend increasingly on the extent to which it supports policy reform" (Anne Krueger, 1986, p. 69).

On the financial side, a growing number of aid agencies extend lines of credit to development banks but seldom do they use financing techniques suited to grass-roots

organizations (Lecomte, 1986, p. 122). One of the exceptions is the large-scale pilot scheme of the Inter-American Development Bank which employs the concept that loan management should be assigned to supporting grass-roots organizations.

It is, however, instructive to evaluate the experience of Development Finance Corporations (DFCs), which have been the main vehicle for the swift transfer of aid resources and potential catalysts for attracting resources from the international capital markets. Among their problems have been excessive dependence on donor agencies which often protected them from exchange risks and afforded no incentive to become more competitive in raising resources from elsewhere. Interest rate and other financial policies were often such as not to give DFCs the incentive to deploy their resources in an efficient manner. DFCs, even those in the private sector, are inclined to be too formal and bureaucratic to penetrate the small-scale sector (Robert Cassen, 1986, p. 136). Provision of finance through DFCs to the small-scale sector has not been particularly effective. On the other hand, the same study significantly concluded that there is seldom a need for financial subsidies. "The critical issue facing the typical start-up or small firm is that of *access* to credit (or other facilities) and not price. In the absence of access in the formal sector, the alternative is the bazaar money at very high rates. Consequently, mechanisms must be constructed that both in style and substance are properly suited to the needs of the entrepreneur" (Ibid, p. 139). It is significant that the International Conference on Microenterprises in Developing Countries (sponsored by the World Bank and other donor agencies in June 1986) came more or less to the same conclusions and also emphasized the importance of nonfinancial aid, particularly technical assistance and training (Levitsky, ed., 1989). This Conference showed a virtual consensus that microenterprises did not need subsidized credit at levels lower than the prevailing commercial interest rate but greater access to institutional finance (Ibid., p. xxiv).

One of the more promising and effective modality for lending to the small-scale and medium-enterprises is the format adopted by the Netherlands Development Finance Company (FMC) which works with a local development bank as a minority shareholder to establish a new entity which then charges market rates of interest. They aim to draw in the commercial banks to finance normal working capital to their clients. The Swedish and Canadian aid programs are also reported to have produced positive results.

To conclude, it is more productive to use foreign aid for small and medium enterprises for provision of technical assistance rather than seed or working capital which is only waiting to be mobilized in the developing countries.

VII. CENTRAL BANK POLICIES AND ATTITUDES

1. *Developmental role*

The central bank's developmental and promotional role derives from the need to correct market failures in the financial system which are more common in developing countries (Chandavarkar, 1988). It involves a coherent strategy of widening and deepening of financial intermediation, promoting greater maturity transformation, enlargement of the portfolio choices of savers and investors, the reduction of information and transaction costs and the redress of regional and sectoral imbalances, which are all contributory to the more effective mobilization and allocation of savings. The externalities of the financial structure cannot be generated by the unaided efforts of the private sector.

The central bank can also be viewed as an appropriate agency for administering the "grant" element in the financial system, i.e., essential credit subsidies, reflecting the accepted principle of cross-subsidization of weaker by stronger groups. Central banks in developing countries have adopted a variety of developmental techniques which involve basically participation in capital and management of development institutions, allocation of central bank profits, preferential interest and discount rates, refinance facilities, repurchase agreements, open market operations, portfolio targets and ceilings for priority sectors and rural branches, differential reserve requirements, credit guarantee and insurance schemes, and savings policy units. These techniques are essentially instruments for ensuring the allocation of savings to priority sectors like housing, exports, agriculture, small- and medium-scale businesses, etc. rather than means of mobilizing savings and for filling the gaps in the financial structure in respect of institutions, instruments, and markets.

Government intervention in credit allocation has been very substantial, as in India (one-half of assets in reserve requirements, or government bonds, and 40 percent of balance to priority sectors); Brazil (70 percent of total credit in 1987); Pakistan (70 percent of new lending by national banks in 1986, although this proportion was reduced substantially by 1988); and Yugoslavia (58 percent of short-term loans in 1986). In Turkey, government allocations of credit accounted for about three-quarters of total credit in the early 1980s, but this proportion had fallen substantially to about 35 percent in September 1987. In Malaysia and Indonesia directed credit still accounts for about 30 percent of bank portfolios. But subsidized credit often fails to reach its intended target groups. Although individual sectors benefit from subsidized credit, its overall effect on growth is hard to assess, and quite often subsidized credits tend to become nonperforming loans (World Development Report, 1989, p. 60). Subsidized credit has been quite substantial, ranging from about 3 percent of GDP in Mexico to about 4-8 percent of GDP in Brazil. Surprisingly, government credit, i.e., subsidized credit, in developing countries does not seem to be excessive as compared with developed countries (Table 12). This, however, is no defence of subsidized credit, per se, whose costs and benefits have to be evaluated carefully.

Central Banks have been too uncritical in their use with the result that the implicit and explicit subsidies for credit tend to become open-ended. More importantly, credit subsidies whether financed by the central bank or charged to the government budget "have compromised efforts at monetary or fiscal restraint" (World Development Report, 1989, p. 59). Their rationale is further undermined by the fact that borrowers in the informed sector seem to be able and willing to pay the going market (usurious) rates. Direct participation of central banks in the seed capital of development finance institutions through the allocation of central bank profits (which are not genuine savings) can be inflationary in the long run. It is important that eventually the central bank's share in these institutions should be "privatized" so as to absorb the genuine savings of the household sector. In other words, a central bank's developmental role has to be that of a catalyst and promoter rather than of a permanent participant in the capital and management of development institutions. But the maintenance of a congenial macroeconomic climate through the control of inflation by appropriate monetary policy is the most crucial contribution that a central bank can make to the effective mobilization and allocation of savings.

2. Regulatory role

The prudential functions of a central bank presupposes an adequate regulatory framework covering both balance sheet and off-balance sheet items, such as minimum capital and liquidity ratios, limits on bank exposure on loans to shareholders, bank personnel and interdependent groups of companies, open-position limits on foreign

exchange exposure, contingent liabilities, etc. The major deficiencies in prudential regulations of many developing countries, which have contributed to banking problems and crises, concern capital adequacy guidelines, regulations regarding loan classification, provisioning, and interest accrual. The lack of adequate capital and an unrealistic valuation of assets, leading to the declaration of unrealistic profits and dividends, has meant that banks have lacked adequate reserves to absorb loan losses.

Capital adequacy is expressed in many countries as a percentage of total assets or of total deposits and these percentages tend to be very low in relation to the actual and contingent risks of banks. In most cases total assets exclude off-balance sheet items which are increasingly important with financial innovation. Capital adequacy expressed as a percentage of deposits does not include risks that have to be covered by capital. Since losses are the consequence of risk, the capital needed to protect depositors from risk should be expressed in terms of risk. This is the rationale behind the guidelines of an international group of bank supervisors who recommended a risk-weighted capital adequacy ratio ("International Convergence of Capital Measurement and Capital Standards," Committee on Banking Regulations and Supervisory Practices, Bank for International Settlements (BIS), Basle, July 1988). These guidelines recommend primary capital (paid-up share capital and reserves) to be equal to 8 percent of risk-weighted assets, including off-balance sheet items, but the only category of risks included is that of counterparty failure, i.e., risks of non-fulfillment of obligations by a borrowing customer. But there are other risks such as interest rate risk, concentration risk, open foreign exchange position risk, which should also be included in the capital adequacy regulations. "The smaller the amount of shareholder capital at stake, the more willing bankers will be to 'bet the bank' by financing risky projects" (World Development Report, 1989, p. 79). This underscores the regulatory and prudential importance of capital adequacy. However, even the most comprehensive capital adequacy regulations cover only the general risks of banking. The specific risks, i.e., identifiable potential losses, have to be covered by minimum provisioning regulations and policies, rules on accrual of interest on nonperforming assets, etc.

The most important gaps in general financial and banking legislation in many developing countries relate to dilatory procedures for realization of collateral in the event of default, unclear norms for reporting liquidity and solvency requirements of banks, the lack of adequate range of intervention and enforcement options, including mergers and liquidation. The laws tend to be excessively detailed and do not allow enough flexibility to the authorities to adapt the regulations to changing circumstances, which is a particularly important consideration in financial sector reform programs.

3. Prudential role: safety and solvency of the financial system

a) Rationale and limitations of deposit insurance

The case for deposit insurance is based on grounds of both economic efficiency and equity (Ian McCarthy, 1980). The efficiency argument derives from the contribution it is supposed to make in creating and maintaining confidence in individual banks and the financial system as a whole and thereby forestalling the adverse macroeconomic consequences of runs on banks and bank failures. It is said to foster effective interbank competition without fear of jeopardizing their safety and solvency. Its basic purpose, as stated by a former Chairman of the pioneering Federal Deposit Insurance Cooperation of the U.S.A., is to protect the banking system against destructive runs on deposits (Robert K. Barnett, 1976, p. 1). However, deposit insurance does not by itself remove the potential for or risk of panic runs on banks since it is not really a vehicle of

prudential control. The economic merits of deposit insurance are in fact attributable to the concomitant examination and supervision procedures (e.g., as in the United States system which has been copied in the countries) which are quite unrelated to and independent of insurance per se and can be strengthened and improved without establishing formal deposit insurance. It is noteworthy that all the developing countries which have deposit insurance make independent legal provision for bank inspection and supervision. By its very nature, deposit insurance is essentially an instrument of equity, i.e., of protecting the savings of the small depositor in the even of bank failures, which accounts for the relatively low limits of deposit insurance in both industrial and developing countries (e.g., US\$100,000 per depositor in the U.S. and Rs.30,000 in India). Deposit insurance may be viewed at best as an ex post protection for the small saver and depositor, whereas effective and timely examination and supervision of banks is an ex ante protection for all depositors and for the institution, and eventually, for the system as a whole. It is therefore not surprising that only a few developing countries have instituted formal deposit insurance (Argentina, Chile, the Gambia, Guinea, Honduras, India, Kenya, Lebanon, Lesotho, Madagascar, the Philippines, Trinidad and Tobago, Turkey, Venezuela and Zambia). It is significant that, although Thailand has an enabling provision for establishing deposit insurance (Royal Decree B.E. 2485, 1979), it has not yet implemented this provision. It has been rightly said that "despite the difficulties of the 1980s, in only a handful of countries have depositors lost money. Implicit deposit insurance averted bank runs, but in doing so it removed the discipline associated with that threat" (World Development Report, 1989, p. 76). In view of these considerations and the actual practice of the majority of developing countries, the absence of formal deposit insurance should not in any way be regarded as a lacuna in the macroeconomic framework for effective mobilization of savings. Its introduction would only add to the costs of financial intermediation through the imposition of insurance premia on financial institutions.

On the other hand, there is a good case for introducing and encouraging comprehensive fidelity insurance in banks and financial institutions through policies, known as 'fidelity blanket bonds' issued by security companies and similar insurers, which are designed to insure banks against losses due to fraud, embezzlement, and such other dishonest actions on the part of the staff. Since such cases of insider abuse and malfeasance are a major cause of bank failures, such 'fidelity' insurance should be made obligatory by the central bank for all banks and nonbank financial institutions.

b) Examination and supervision of banks

Given the limitations of deposit insurance, which is basically a means of protecting the small saver, the onus of ensuring the safety and solvency of banks and financial institutions rests primarily on effective and timely on-site examination and off-site supervision of banks under the aegis of the central bank and on the implementation of banking legislation designed to ensure minimum capital and liquidity requirements of all financial institutions and compliance with sound banking regulations.

The objectives of bank supervision are to "achieve an appropriate balance between: "promoting and assuring the safety and soundness of the national banking component of the financial system while requiring a high level of compliance with law; and promoting the competitiveness, efficiency and integrity and stability of the financial market place" (Comptroller of the Currency, *Strategic Plan 1981*, Washington, D.C., 1981). The need for promoting and assuring the liquidity, solvency and stability of banks and the banking system from the unique role of banks in the money supply process as creators of money, as administrators of the payments system, as channels for implementing monetary policy, and as intermediaries between savings and investments. Furthermore, problems in one bank are, much more than in other sectors,

rapidly transmitted through the entire financial system. Bank failures can have adverse systemic consequences and lead to disintermediation thereby impairing the mobilization and allocation of savings.

The rationale of bank supervision derives from the fact that market discipline by itself is not sufficient to ensure the safety and solvency of the financial system. Market discipline is only a welcome complement, but not an alternative, to formal regulatory supervision of banks through periodic *on-site* inspection and examination and their *off-site* supervision under the aegis of a single supervisory authority, preferably the central bank, rather than the Ministry of Finance, because of its close continuous contacts with the financial system and special responsibilities as controller and lender of last resort to the banking system. The responsibilities of bank supervision will increase in proportion to the deregulation and liberalization of the financial system and the greater scope for competition.

The main problems and solutions in bank supervision in developing countries are typically as follows:

- (1) The fragmentation of supervisory jurisdiction between different authorities (e.g., between the Bank Indonesia for commercial banks and the Ministry of Finance for nonbank financial intermediaries) hampers an effective integrated approach to the surveillance of the financial system which, given the fungibility of finance, and the competition between banks and other financial institutions, has to be viewed as a single entity. Consequently, the unitary approach of centralizing the examination and supervision of all financial institutions (e.g., in Malaysia, Singapore, and Thailand) in the central bank has much to commend it.
- (2) The efficacy of bank supervision depends ultimately on the adequacy and efficiency of supervisory personnel because "in the end supervisory policies are only as good as the people who administer those policies. Achieving that needed blend of technical skills, professionalism, and good old common sense was never easy but has never been more important" (Gerald Corrigan, President, Federal Reserve Bank of New York, *Federal Reserve Bank Quarterly Review*, Winter 1985/86, p. 5). But most developing countries suffer from shortages of efficient and motivated bank examiners. Their training and adequate remuneration should be accorded high priority particularly to facilitate the change-over from surveillance of controlled to competitive financial systems in developing countries.
- (3) It is also important to give complete legal immunity to bank examiners in course of their duties in order to avoid the risks of vexatious litigation by interested parties as borne out by the recent experience of the Central Bank of the Philippines, which has been faced with a spate of suits from aggrieved parties. Secondly, no charges for supervision ought to be levied on the inspected banks and any costs of supervision should legitimately be borne out by the supervising authority.
- (4) In turn this also presupposes improvements in the efficiency and integrity of personnel and management in banks and financial institutions considering that the most major cause of problem and failed banks and financial institutions in developing countries has been weak or dishonest management, rather than excessive risk taking, which is also the experience of the U.S.A. (Sankey, 1979, and Dolerty, 1987).
- (5) In many developing countries, off-site supervision is limited to the control of compliance with monetary and prudential policy regulations, and

therefore needs to be supplemented by detailed analysis of bank returns (and related information) to evaluate developments in key financial magnitudes in order to identify and correct problems at an early stage. Off-site supervision is frequently not well coordinated by on-site inspection of banks, which is also often hampered by lack of adequate and up-to-date inspection manuals, little or no cooperation between supervisors and external auditors of banks, absence of a credit risks and information bureau, and generally from quality of accounting and financial information, particularly on off-balance sheet items. The effectiveness of bank supervision and examination as "an instrument to reassure and attract savers is uneven" because of the widely varying standards used and uneven enforcement (Brimmer, 1971, p. 784). Bank supervision can contribute to increased competition through licensing and branching policies, through nondiscriminatory prudential regulations as between banks and other financial institutions, and insistence on maximum public disclosure of the financial condition of banks, including off-balance sheet items. Bank supervision in itself is ineffective unless it can enforce banking regulations adequately and expeditiously through warnings, penalties, intervention, mergers, delicensing, and liquidation.

- (6) Central banks in developing countries could also revamp inspection and supervision procedures to give them a developmental orientation as in Indonesia where supervision has also been "directed toward the development of a sound and effective banking system to support the national development objective" (Bank Indonesia, *Report for the Financial Year 1983/84*, p. 30). Equally, central banks as lenders of last resort should intervene in time to prevent liquidity crises from being transformed into solvency crises. Even central banks in developed countries have found it necessary to bail-out troubled banking firms, as in U.S.A. (Franklin National (1974), see First 1984, Continental, Illinois, 1984). It has been rightly said "the nation's central bank has a major responsibility in the containment of these types of risks which threaten to disrupt the fabric of the financial system. This responsibility extends well beyond the more narrowly defined tasks of controlling the growth rates of the monetary aggregates or influencing the level and structure of interest rates" (Brimmer, 1989, p. 15). The central bank has to provide a safety net for the financial system while monitoring the operations of all financial intermediaries to ensure that they do not transgress the limits of financial prudence and pose systemic risks.

4. Attitudes to the Informal Sector

The central bank as the supreme monetary authority acts as the controller and lender of last resort to the formal financial sector in all economies. But its role and attitude in relation to the informal sector is at best one of ambiguous "benign neglect" or even hostility and prejudice because it is equated (mistakenly) with the illegal or underground economy which is beyond the control of the central bank. It is seen more as an adjunct of the formal sector in circumventing the central bank's powers and influence. This explains why virtually no central bank has any special unit or department dealing with the informal sector. The Special Assignment Division of the Department of Financial Institutions Supervision and Examination in the Bank of Thailand is concerned with the surveillance of illegal and fraudulent practices by the nonbank financial intermediaries rather than assisting the informal sector in a positive way.

While central bank surveillance of the informal sector is a legitimate function, it is equally important for a central bank to adopt a more positive policy and attitude toward the informal sector through appropriate rediscount and refinance facilities for credit instruments originating from the informal sector (like the 'cek putih' in Indonesia or the hundi in India). These could be subject to a guarantee by commercial banks and/or authorized brokers to ensure that the credit is in accordance with the central bank's policies, so as to obviate any risks that an uncritical extension of central bank rediscount and refinance facilities may accentuate inflationary pressures. Among the possible mechanisms are the creation of a panel of guarantee brokers (e.g., like the 'compradores' of commercial banks in South East Asia) attached to each commercial bank on a salary-cum-commission basis to guarantee credit to customers in the informal sector. For this purpose, ROSCAS could be treated as borrowing units with powers to borrow from the formal sector on the basis of group guarantee of credit. Each central bank should therefore consider the creation of special units or cells to research, monitor, and refinance the informal sector.

However, central banks should desist from attempts to regulate the informal sector. Such measures are more likely to be counterproductive since the very rationale of the informal sector derives from its informality and immunity from official regulation. Moreover, such regulation, which would be inconsistent with the growing trend toward liberalization of the formal sector itself, may only lead to the attribution of informal finance without necessarily generating adequate alternative institutional or formal sources of credit. For instance, in India the Kerala Chitties Act, 1985, which was aimed at the organizers of informal credit associations, led to a decline in the number and activity of these funds. Nevertheless, there is a case for judicious surveillance of the informal financial sector by the central bank to obviate any systemic risks for the financial sector as a whole arising from the operations of the informal sector. For instance, the closure of three finance companies in Thailand on December 16, 1983, "triggered not only a gradual decline in the system's borrowing from the public, but also liquidity shortages in a number of companies especially those which were not bank affiliates. To help alleviate the problem, a liquidity fund [of B5,000 million] under the management of the government-owned Krung Thai Bank was set up by the Bank of Thailand and the Ministry of Finance with the cooperation of the Thai commercial banks" (Bank of Thailand Annual Economic Report, Bangkok, 1983, p. 84). The consequential amendment of the Act relating to the undertaking of Finance, Securities, and Credit Finance Business B.T., 2522 provided the authorities with more supervisory power and increased the penalties for violators (Ibid., p. 156).

To sum up, the most feasible policy stance for a central bank vis-a-vis the informal sector would be to combine prudential vigilance with judicious provision for rediscount and refinance facilities. The creation of special units in central banks to deal with the informal sector should be accorded priority as an important organizational and policy agenda item.

VIII. MACROECONOMIC POLICIES, MOBILIZATION AND ALLOCATION OF SAVINGS

1. Matching Instruments and targets: lack of a central institutional entity

We may now assess, in the light of the foregoing analysis and evidence, the consistency or otherwise of macroeconomic policy instruments in the developing countries with the target of efficient mobilization and allocation of savings. Typically, instruments are usually scarce relative to targets even in developed countries, and the

rule of one instrument for each target is hard to satisfy. Quite often targets may be competing alternatives, or even rivals as to, for instance, in the case of fiscal policy instruments which have to reconcile the requirements of revenue and equity with the objective of efficiency in the mobilization and allocation of domestic savings. Nor is fiscal or monetary marksmanship always infallible even given the availability of instruments. Thus tax potential may not be fully exploited because of defects in administration and compliance. More importantly, the efficacy of savings mobilization depends not only on the matching of targets and instruments but also on the variety and efficiency of institutions and markets. There is also the problem that the overall mobilization and allocation of savings seldom figures as a target of macroeconomic policy in market-oriented economies. Even when development plans specify savings targets, the policy and institutional measures to achieve them are not spelt out, which also reflects the fact that there is no central institutional entity to formulate and implement a coherent national savings strategy.

The responsibility for savings policies in developing countries is usually fragmented between the Ministry of Finance (e.g., tax incentives), central bank (interest rates), planning agency (institutional measures). The savings policy units in some central banks (e.g., the Philippines) and the National Savings Committee (e.g., India) are more in the nature of research or advisory units rather than policy-making entities. There is therefore a pressing need for a central entity which could be located in the Ministry of Finance or the central bank with representatives of both as well as the development agency and of the public so as to help evolve and implement an integrated savings policy. The research and back-up work could be modelled on that of the Office of Saver and Consumer Affairs of the U.S. Federal Reserve System.

2. Consistency of instruments and targets

From the point of view of effective mobilization and allocation of domestic savings, the following are the main areas of inconsistency and gaps in the policy framework. But apart from consistency, problems of phasing and timing of reforms are also equally important. First, macroeconomic policies have not been sufficiently supportive of liberalization and have been often inconsistent with exchange rate-based stabilization program, as in Argentina, Chile and Uruguay (Corbo and de Melo, 1987). Chile's overvalued exchange rate in the 1980s greatly favored the nontradable sector and led to overinvestment in real estate to the detriment of domestic financial savings. Exchange rate realignments and reforms in trade, labor and public enterprise policies should proceed, or at least be concurrent with financial liberalization (World Development Report, 1989). The evidence suggests a good correlation between the removal of price distortions and growth in developing countries (Agarwala, 1983). Second, financial liberalization against an unstable macroeconomic background is destabilizing for savings and investment. For instance, complete liberalization of interest rates with high and variable rates of inflation has led to high real rates of interest and excessive spreads between deposit and lending rates. Similarly, the removal of capital controls by facilitating volatile capital inflows tends to and undermine monetary control. By far the most glaring inconsistency in financial liberalization is the failure to scale down the volume of government and subsidized credit which is often the most prolific source of bad debts and distorts the optimal allocation of domestic savings.

Third, although financial liberalization is desirable, its modalities, design, and phasing are no less important as shown by the experience of five Asian countries, the Republic of Korea, Malaysia, and Sri Lanka, have been relatively successful, the Philippines has not been satisfactory, and Indonesia has a mixed result (Cho and Khatkhate, 1989). Although, it is hazardous to generalize, the most desirable macroeconomic sequence for mobilizing savings and ensuring optimal allocation,

according to one view, would seem to be on the following lines, starting with getting the fiscal deficit under control and establishing macroeconomic stability, liberalization of trade and industry, and improving the foundations of finance, i.e., accounting and legal systems, disclosure requirements, and effective prudential regulation and supervision. Thereafter, directed and subsidized credit should be scaled down and the level and pattern of interest rates should be aligned with market forces, coupled with greater autonomy for financial institutions (World Development Report, 1989, p. 127). But the effectiveness of the mobilization and allocation of savings depends not only on macroeconomic conjunctural policies but also on structural policies to improve the payments mechanism and the financial system.

IX. AN AGENDA FOR RESEARCH

This agenda presents a list of what may be regarded as the most relevant and pressing items of research in the light of the identified gaps in the state of the art and research hypotheses and a methodological framework for typical case studies.

1. *Research hypotheses*

The formulation of meaningful research hypotheses depends critically on further improvements in the data base of domestic savings (real and financial). Given the serious errors and omissions in the national accounts data where household savings are derived as a residual, it is imperative to develop a system of household surveys, stratified according to sectors and income groups, to track down savings and investment flows within households, and also ascertain attitudes to savings among households. These could be combined, if necessary for reasons of economy, with family budget surveys for updating consumer price indices. This approach will involve joint working groups of national income accountants and survey statisticians. Further research needs to be extended on the lines of the models developed by the Food Research Institute, Stanford University and the World Bank, which combine producer and consumer behavior in a theoretically consistent fashion and provide a framework for empirical testing of the policy implications of the approach to such issues as marketed surplus, foreign exchange, etc (Inderjit Singh, Lyn Squire, and John Strauss, 1986). Such models could be further refined to include savings behavior as an explanatory variable. There is also a clear need for comprehensive and systematic studies of savings behavior in the developing countries on the lines of Kotlikoff's study of "What Determines Savings" (1989) for the U.S.A.

The data on government savings are readily available and can be refined more easily than the other components of domestic savings (household and corporate). Corporate savings can be estimated provided there are adequate periodic surveys of the published balance sheets and profit and loss accounts of public joint-stock companies on the lines of the studies published in the Reserve Bank of India Bulletin. The feasibility of such studies in the developing countries should be explored.

Alongside the improvements in the data base of savings, there are a number of research hypotheses on savings behavior in developing countries which merit systematic empirical testing using time-series or cross-section data like the following:

- 1) The significance of non-economic variables (e.g., size and composition of families, demographic variables like age, expectancy of life, cultural factors, literacy rates, attitudes to savings, etc.) as determinants of savings;

- 2) In the fiscal area, the following are among the possible hypotheses:
 - a) Cost-benefit analysis of tax incentives for household and corporate savings;
 - b) Implications of taxation of financial intermediaries for efficiency of financial intermediation;
 - c) The possible crowding-out effect of government saving-investment on private savings-investment;
- 3) Financial intermediation and liberalization:
 - a) Costs and spreads (between deposit and lending rates) of financial intermediation in developing countries;
 - b) Interest-elasticity of savings following financial liberalization. The comparative response of savings to market-oriented rates of interest before and after liberalization;
 - c) The elasticity of substitution between different savings instruments;
 - d) The extent of financial concentration (ownership and control of financial institutions) and autonomy of financial institutions. Its implications for financial liberalization and the maintenance of adequately competitive conditions in the financial system;
 - e) Cost-benefit analysis of liberalizing entry of foreign institutions in banking and financial systems;
 - f) The nature and extent of financial deepening and its implications for the financialization of savings.
 - g) Catalytic role of foreign resources (direct and portfolio, investment, loans, and grants) in savings mobilization.
- 4) The nature and extent of linkages between the formal and informal financial sector.
- 5) The linkages between the macro- and microeconomic aspects of savings and investment behavior.
- 6) The scope for contractual savings (social security, provident funds, pensions, insurance), as a means of increasing aggregate household savings. What is the net impact of contractual savings on domestic savings?

2. Methodological framework for case studies

The choice of countries for case studies should be governed by the extent to which they are typical from the point of view of the region and of the degree of financial liberalization or repression. A fairly representative sample would be as follows:

Asia: Indonesia, the Republic of Korea, Malaysia, India, Pakistan and the Philippines

Africa: Cote d'Ivoire, Ghana, Kenya, Nigeria, and Morocco

Latin America: Argentina, Brazil, Chile, Costa Rica, and Mexico

For each country case study, the methodological framework could be more or less on the following lines:

Review of sources and methods of savings data: The structure and composition of domestic savings (government, corporate, household) size and composition of financial savings. The institutional framework of savings. The relative roles of fiscal, monetary, and external resources policies in savings mobilization. Tax incentives for saving. The relative scope of discretionary (voluntary) savings and contractual savings in savings mobilization. Nature and extent of financial liberalization and financial deepening, including linkages between formal and informal finances. Interest-elasticity of savings. Elasticity of substitution between different types of savings instruments. The capital account (i.e., openness of the economy) and domestic savings. Evidence of capital flight. Overall assessment of savings performance and policies. Suggestions for improvements in policies, instruments, institutions, and markets.