SAVINGS: CONCEPT AND SOME EVIDENCE FROM SUB-SAHARAN AFRICA

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INTRODUCTION

This paper has a limited objective: it attempts to conceptualise savings, identify their components, and present some evidence. Accordingly, the second and third sections of the paper present the concept of savings and evidence from sub-Saharan Africa, while the fourth section discusses problems of resource transfer.

DEFINITION AND COMPONENTS OF SAVINGS

Keynes (1936) defined saving as "the excess of income over what is spent on consumption." Saving can also be viewed in terms of the inter-temporal choice between present and future consumption and between production for current and future uses.

All economic agents are expected to decide how to divide their expenditures in some proportion between present and future consumption. Thus, that part of income, which is kept aside for future consumption (or use), is termed as "savings" (Todaro 1992). Consequently, the allocation of resources between present and future consumption (i.e., savings) is one of the most fundamental economic choices facing any country (Gillis et. al. 1996). And this choice is assumed to affect not only the rate of economic growth a country can enjoy but also the standards of living of the future generations.

The total supply of a country's available savings (S) is the sum of domestic savings (S_d) and foreign savings (S_f). Domestic savings consist of government savings (\mathbb{S}_{g}) and private domestic savings (\mathbb{S}_{p}). Government savings are primarily budgetary savings that arise from any excess of current government revenues over current government expenditures. In addition, in some instances savings of government owned enterprises are observed as a part of public-sector savings.

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Private domestic savings may arise from two sources, corporate savings and household savings. On the other hand, foreign savings are also of two forms: official foreign savings (S_{fo}) (or foreign aid) and private foreign savings (S_{fp}). Private foreign savings in turn consist of external commercial borrowing (or debt finance), where both the principal and interest are repaid on scheduled time, and direct investment, which represents equity finance (Todaro 1992; Gillis et al. 1996).

In summary, the major components of total available savings may be viewed as:

$$S = S_d + S_f$$

$$S = (S_g + S_p) + (S_{fo} + S_{fp})$$

Similarly, but more broadly, the structure of saving is divided into three components; namely, government, corporate and non-corporate (which comprises non-corporate farm and non-farm enterprises and the purely personal sector). This classification is based on the difference in saving behaviour of economic agents (Bhatt 1989; Todaro 1992).

In general, variations are observed in the sources of savings among developing countries, mainly depending on factors such as the level of per capita income, natural resource endowments, sectoral composition of GDP, and the types of saving mobilisation policies adopted by governments (Gillis et al. 1996). The next subsections present the components of domestic and foreign savings.

Government Savings

Government savings arise mainly from the excess of total tax revenues over government consumption expenditure. And, government consumption represents expenditures on food subsidies, meeting recurrent costs (such as salaries for all public employees), purchasing stationery, fuel, arms, etc. Also, governments spend on the maintenance of roads and bridges and on interest payments on national debt (Gillis et. Al. 1996).

It has to be noted that budget expenditures include both recurrent and capital outlays, and investment that represent uses of public savings. Furthermore, the other component of government savings, i.e., savings by government enterprises, is found to contribute little to aggregate government savings. Because government enterprises have lost ground resulting from structural adjustment programs which pressurise governments to withdraw from the economy. Thus, the emphasis of this section would be only on budgetary savings.

In the 1950s and 1960s, the rise in the share of government savings in GDP was considered as the typical development strategy for the expansion of investment required for sustained income growth. It was also widely believed that the share of private savings in GDP could not be increased for it was inherently affected by low per capita incomes, which allows a much smaller margin for taxation after subsistence needs are met, and high private consumption propensities among the wealthy families (Gillis et al. 1996).

It was also believed that this goal could be achieved only by raising the ratio of tax collection to GNP (or tax ratio) through either tax structure reform or increases in existing tax rates. Here, the underlying assumption was that the government's marginal propensity to consume (MPC) out of increased taxes was substantially less than the private sector's propensity to consume out of marginal income.

Many foreign aid donors that used high tax ratios and tax effort indices as prime indicators of commitment to development efforts in recipient countries also reinforced the above view.

However, it is not easy to increase tax collections in developing countries for the mere reason that their per capita incomes are low. But despite the difficulties involved, the mobilisation of domestic resources through the government budget has been impressive in many low-income and middle-income countries (Bhatt 1989). In this regard, a study of a group of 47 developing countries showed small advances in the average tax ratio since 1950. The average tax ratio of these countries was about 11 percent in the 1950s, and had risen to 16 percent by 1972 to 1976.

This ratio has fluctuated about that level ever since, increasing to nearly 18 percent in the early eighties and decreasing to about 15 percent in the late eighties. Thus, while the typical tax ratio for developing countries in 1992 ranged between 14% and 16% of GNP, it averaged about 27 percent of GNP in the richest countries (Gills et al. 1996).

Nevertheless, the rising public revenues have not sparked a systematic rise in public and aggregate savings, for the government sector savings cannot go beyond a certain level. Because as tax and other current revenues rise, the government's current developmental expenditures on social services such as education, health and social welfare tend to increase (Bhatt 1989). Contrary to widely held beliefs, evidences indicate that for most developing countries, government's MPC out of taxes is much higher than the MPC of the private sector (Gillis et al. 1996).

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As a result, it is difficult to find strong empirical ground for the assertion that public saving mobilisations, achieved through budget surpluses, have been a major source of investment finance in most developing countries.

Private Domestic Savings

Private domestic savings arise from two sources: corporate savings and household savings. Corporate savings are the retained earnings of corporate enterprises, whereas household savings include the unspent part of the household income as well as those from non-corporate enterprises (single proprietorship, partnership and other non-corporate forms of business enterprises) (Todaro 1992; Gillis et. al. 1996).

Until recently, private savings were considered to be a secondary source of investment finance compared to public savings and foreign aid. However, evidence shows the major role being played by private savings in the capital formation process of many developing countries. In this connection, the World Bank data indicate that many developing countries have been able to increase the pool of private savings by reducing the growth of the share of private consumption in GDP over long periods.

Foreign Savings

Most developing countries seek resources from other countries because they are unable to, generate sufficient domestic savings to finance their economic growth. Also, many believe that foreign savings is an important ingredient of a country's development effort for it relaxes the saving constraint and the foreign-exchange constraint (Meier 1989). But beyond this claim of its importance, there is wide controversy in its appropriateness.

Foreign saving consists of official saving and private saving. Most official saving (commonly known as official development assistance or foreign aid) tends to focus on long-term development and comes in different forms: as grants (outright gifts) or as "soft" loans, with low interest rates and long payment periods (Gillis et. al. 1996). In this regard, recent years saw considerable decline in the flow of ODA due to changes in the policies of major donors. For example, per capita flows of ODA to Ethiopia dropped from U.S. \$ 21 in 1990 to \$11 in 1997. At the same time, the ratio of ODA to GNP declined from 15.8% to 10.1 % (see Table 1).

Foreign aid can further be divided into bilateral aid (given directly by one government to another), multilateral aid (given to recipient countries through international agencies like the World Bank), technical assistance (provision of skilled personnel to augment national human resources) and capital assistance (supply of finance and commodities for different purposes).

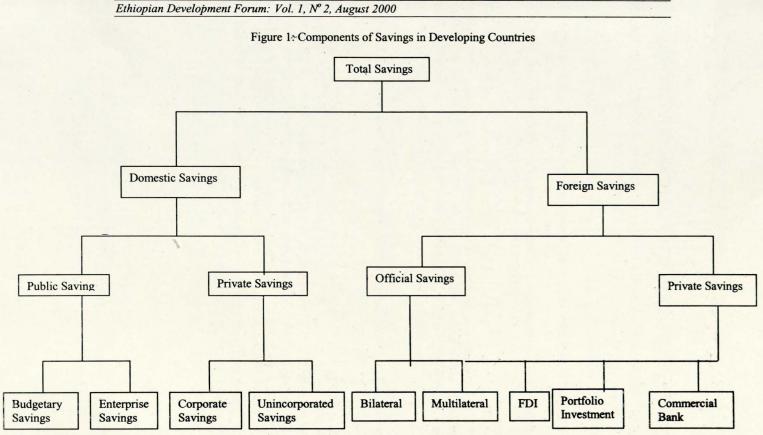
Foreign private lenders who are largely governed by capital market conditions and characterised by a shorter-term perspective provide private foreign savings. The component of foreign saving also consists of four elements (Todaro 1992). These are: 1) Foreign direct investment which is made by rion-residents (mainly by Multinational Corporations) in enterprises located in host countries, with full or partial control of the enterprise; 2) Portfolio investment which refers to the purchase of host country bonds or stocks by foreigners, without managerial control; 3) Commercial bank lending is a system that makes available foreign savings to developing country governments and enterprises through banks; and 4) export credits which are provided by exporting firms, their commercial banks and official banks to importing countries as a way of promoting sales by permitting delayed payments for the imports.

Private capital flows into Ethiopia, which used to be negative at the turn of the last decade, stood at 28 million US Dollars in 1997. On the other hand, the burden of external debt has grown as suggested by the debt-GNP ratio, which was 131 percent in 1997 (Table 1).

Variables	1990	1997
Net private capital flows (mill. \$)	45	28
Total external debt (mill. \$)	8,634	10,078
External debt (% of GNP)	-	131
Official development assistance (Dollars per capita)	21	11
Official development assistance (% of GNP)	15.8	10.1

Table 1: Ethiopia: Aid and Financial Flows

Source: The World Bank World Development Report 1999/2000



THE RESOURCE GAP IN SUB-SAHARAN AFRICA (SSA)

The fundamental relationship between a developing economy's resource gap and its foreign exchange gap can be expressed as follows (Meier 1989):

$$(I+G) - (S+T) = (M-X)$$

As long as developing countries are spending more on investment (I) and government expenditure (G) than their earning from domestic resources released through private savings (S) and taxation (T), there will be a domestic resource gap that will spill over into the balance of payments, with imports (M) greater than exports (X).

This follows from national income analysis in which the uses of national income (C+I+G+X-M) must equal the disposal of national income (C+S+T). The internal imbalance in the resource gap is translated into the external imbalance of the foreign exchange gap. The foreign exchange gap must be bridged by a capital inflow from abroad through official development assistance, commercial bank loans, or direct foreign investment.

In short, the resource gap can be defined as the difference between gross domestic investment and gross domestic saving.

Sub-Saharan Africa is well known for its low level of development in general and of savings in particular, as indicated in Table 2. Between 1987 and 1997 GNP per capita declined at an annual rate of 0.8 percent, while population increased by about 2.7 percent. Gross domestic saving, as a proportion of GDP, in SSA dropped from 11.1 percent in late 1980s to 4.3 percent in mid-1990s. Regarding Ethiopia, this ratio stagnated at 5.5 percent over the same period. The resource gap for SSA stood at -5 percent in mid 1990s. For Ethiopia, this gap has been wider (-8.8%). Africa needs substantial inflows of finance to bridge the widening resource gap prevailing in its economies.

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Table a. Out Sana an Antea and Ethopia, Dasit Indicators	Table 2: Sub-Saharan	Africa and Ethio	pia: Basic Indicators
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Indicators	SSA*	Ethiopia
GNP per capital, av. Annual % growth, 1987-97		0.5
Life expectancy, 1996 (years)		49
Population growth rate (mid 1990s)		3.0
Gross Domestic savings as % of GDP, annual av. 1985-89		5.5
Gross Domestic savings as % of GDP, annual av. (mid 1990s)		5.5
Gross national savings as % of GDP, annual av. 1985-89		7.8
Gross national savings as % of GDP, annual av. (mid 1990s)	0.4	9.9
Resource balance as % of GDP (mid 1990s)	-5.0	-8.8

*Excluding Nigeria and South Africa

Source: The World Bank, African Development Indicators 1998/99

PROBLEMS OF RESOURCE TRANSFER

Some of the fundamental issues pertaining to capital accumulation and investment include i) how to generate adequate savings at the initial phase of economic development (prior to the takeoff period)? ii) Which section of society or institution should play a primary role in generating and channelling the economic surplus towards productive investment ventures? iii) What mechanisms should be utilised to transfer resources from the resource surplus sector to the resource-deficit sector? iv) What pre-requisites enable a sector transfer resources to other sectors? v) What role should the state play in mobilising domestic and external savings?

The case of agriculture can be used to illustrate the importance of these questions. Assuming that in a predominantly agrarian economy the traditional sector should generate sufficient economic surplus for investment in the industrial sector, one can identify two possible mechanisms for the transfer of capital to the non-agricultural sector. These are the free market transfer and the government-mediated transfer. Historically, Britain can be taken as a classic case of capital transfer through the market, whereas the former Soviet Union is most often mentioned as an outstanding case of capital transfer

through state-mediated mechanisms like taxes and compulsory deliveries of agricultural surpluses. Countries like Japan used both mechanisms to bring about industrialisation at the expense of agriculture. At one time, agricultural land tax in Japan accounted for as much as 80 percent of the total tax revenue.

The question of incentives lies at the heart of both mechanisms for the transfer of capital. The free market transfer mechanism works only if the rate of returns in the industrial sector is considerably greater than the rate of returns in the agricultural sector. In addition, financial intermediaries should be in place to facilitate the transfer of capital. It is also important to raise the important role that capital market plays in mobilising resources for investment. In Ethiopia, where the effective demand for industrial products is quite limited and where the banking system is underdeveloped, it is unlikely that the free market transfer mechanism operates as desired.

Regarding transfer through government intervention, we can argue that the Ethiopian experience has abundantly demonstrated that both the direct method of transfer (taxes and compulsory deliveries of agricultural products through the Agricultural Marketing Corporation, AMC) and the indirect methods (overvaluation of foreign exchange rate, price control, indirect taxes) are of limited use due to disincentive problems. Perhaps, very few people doubt the disincentive structures that these mechanisms have created among farmers.

Going back to the question of free market transfer, we propose that three conditions should be met to make this mechanism workable. These pre-requisites are: i) there should be sufficient and permanent marketed agricultural surplus; ii) there should be agricultural income growth, or savings in agriculture (purchase from non-agricultural sector should be less than total value of marketed surplus); iii) agriculture must have balance of payment surplus with the rest of the economy (savings in agriculture should be greater than investment in agriculture); iv) there should be a saving class or there should be effective mechanism to mobilise and channel the economic surplus into productive activities. In Ethiopia, we do not have any evidence to argue that these prerequisites have ever been in place. Ethiopian Development Forum: Vol. 1, Nº 2, August 2000

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