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ECONOMIC POLICY RESEARCH BULLETIN

Nature and Determinants of Domestic Savings in Uganda

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Nature and determinants of domestic savings in Uganda[1]

Marios B. Obwona
John Ddumba-Ssentamu

Executive summary

Adequate saving is an essential pre-condition for sustained economic growth. A higher rate of saving means less consumption now in return for increased wealth and future consumption. The increased wealth will reflect reduced foreign liabilities; and where concerns about foreign indebtedness are constraining economic growth, increased domestic savings will mean more domestic investment.

An open economy like that of Uganda can attract foreign savings to help finance growth, but risk and other considerations limit the extent to which domestic investment can proceed independently of domestic savings. The close correlation between levels of investment and rates of domestic saving across countries provides evidence of imperfect substitutability between domestic and foreign savings (see, for example, Dooley et al., 1987; Hartley, 1986).

Although there is lack of accurate data on private savings, the private saving ratio in the last two years have improved. This is most likely due to the transfer of private capital into the economy and the increased receipts from coffee. The reduction of inflation rates and appropriate financial policies have greatly improved the savings climate, although the still weak financial sector limits the extent to which savings can be mobilized by the financial sector.

This development has been assisted by improvement in public sector savings. In 1991/92, public sector saving/GDP ratio was minus 5.3%, improving to minus 0.8% in 1993/94 to plus 0.7% of GDP for 1994/95 (Background to the Budget 1995/96, Ministry of Finance and Economic Planning). The positive savings in 1994/95 reflect some of the benefits of the reforms in the fiscal area and the prudent management of the budget.

We do, however, need to look critically at the extent to which increases in public-saving are offset by lower private saving. For example, responses from households suggest that lower government spending on health and education has tended to 'squeeze' household savings rather than other forms of consumption.

High income tax rates too can have pervasive social and economic ramifications (eg., for work incentives, wage demands and tax avoidance) which need to be avoided as far as possible. There are also social and economic constraints to reductions in government outlays. Moreover, heavy reliance on public savings to finance investment could have long term implications for the structure of investment and ownership in Uganda as well as for the operations of the monetary authorities.

[1] We are very grateful for the valuable comments and suggestions made by anonymous referees and the participants during the presentation of this paper at the Workshop held on 13th December 1995, at the Economic Policy Research Centre, Makerere University Campus.

Similarly, Government should realize that borrowings from abroad, that is, foreign savings, to finance domestic investments are costly and involve additional risks in the long run. More reliance on domestic savings especially household savings should be emphasized. There is therefore an urgent need to mobilize household savings.

Main findings

Total domestic savings

Total domestic savings comprise three sources:

(a) households and unincorporated enterprises;
(b) corporate sector; and
(c) public sector. The public sector savings are raised mainly through government tax revenues or reduction in public expenditures.

- Initially, Uganda's gross domestic saving rates like say, in the 1960s, were quite competitive compared with other African countries. Now, the saving ratio in Uganda is one of the lowest in Sub-Saharan Africa (see Table 2).

- For the last 10 years, public savings in Uganda have been negative. Only in 1994/95 did public sector savings become positive, accounting for 0.7 percent of GDP.

- The corporate sector in Uganda is small and its contribution to aggregate national savings is negligible. This is not unique to Uganda. For example, in India where the saving ratio is as high as 25 percent, the corporate sector which is relatively well developed, contributes less than 0.4 per cent.

- Empirical findings show that total domestic savings are determined by the level of national income, growth rate, tax revenues and foreign capital inflows. Transfers of foreign capital into the economy is shown to have a negative impact on total domestic savings.

Household savings

The household sector constitutes the main source of domestic savings worldwide. In developed countries, where savings ratios are at a constant high level of 15 to 20 percent, the household sector contributes 10 to 15 percent. On the other hand, in Asian countries where domestic saving ratios are at the level of 25 to 30 percent, the sector contributes between 20 to 25 percent. Uganda is not an exception and therefore to raise the level of savings, we have to target household sector mainly.

- The study found that banking culture is not prevalent among households in Uganda. However, households are increasingly becoming optimistic about the future and this situation could be exploited to encourage them to save.

- The main factors that eroded the household saving habits in Uganda were identified as:

  - Hyper inflation and negative real interest rates of the late 1970s and 1980s led to a fall of confidence in the financial system and acted as a disincentive to savings in financial assets. The public preferred to save in tangible assets rather than bank deposits.

- The weakness and inconsistent macro-economic policy framework of the 1970s and 1980s characterized by price and exchange controls and excessive dependence on ways and means to finance budget deficit resulted in distortions and led to pessimism among potential savers about prospects for stability and eroded public confidence in the domestic currency as a store of value.

- Deterioration of contractual savings, such as provident funds, pension funds, insurance schemes, government saving bonds etc.

- The nature of business in the 1970s and early 1980s were characterized by 'magendo' and shady deals. 'Brief case' businessmen chose to hoard cash at their premises in order to move swiftly whenever they identified a business deal.

- During the 1970s and 1980s, financial institutions had no motivation to mobilize savings because the opportunities to lend the funds generated were limited.

  In the absence of a growing and viable private sector during this period, banks were less willing to mobilize household savings.

- Insecurity of persons and property as a result of a string of 'liberation' wars did not help encourage the population to save. Savers saw no justification to sacrifice current consumption for future investment or consumption in such circumstance.

- The experience during 1987 currency reform in which two zeros were knocked off and a 30% conversion tax imposed on cash savings still lingers on. Those who had invested in real estate and/or in other fixed assets went off 'Scot free'.

- The study identified three important factors that influence the saving behaviour of households. The **ability** to save, **propensity** or willingness to save and **opportunity** to save. The ability to save depends on disposable income and household expenditure which in turn is influenced by several other factors, the most important of which is the family size or number of dependents. Propensity to save is influenced by social, cultural and economic factors, for example, family obligations such as education of children, old age, marriage, etc. Finally, the returns on savings was identified as an important economic consideration influencing the saving household behaviour.

- Access to financial institutions, the type of saving instruments and the return on savings were found to determine the decision on the form in which savings were held be it in non-financial tangible assets such as crop produce, livestock etc. or financial assets like cash, bank deposits, government saving bonds etc.

- Non-cash form saving is more popular especially among rural community for reasons that include:

  - Cultural habits, for example, the Karimojong with the cattle.

  - The returns can be much higher than the interests one would earn from bank deposits.

- Main reasons advanced by people who do not save at all are:
  - Low levels of income;
  - High dependency ratio; and
  - High cost of living especially that of education and health.

Factors behind poor performance of financial institutions in mobilizing household savings

- Commercial banks dominate the financial sector in Uganda and account for over 90% o the assets. They have a network of 146 branches and 42 agencies today. However, thes banks have generally not performed well in mobilizing savings especially in rural areas. Ou study found some of the reasons for this failure as follows:
  - Most banks are concentrated in major urban centers and prefer to serve well established clients leaving agriculture along with the informal sector outside th purview of the banking sector.
  - Poor bank customer service, lack of confidentiality, bribery, limited access to credit: slow loan processing and disbursement procedures, etc.
  - The minimum balances required to open and maintain savings accounts with banks ar usually too high e.g. Stanbic requires 500,000 UgShs. for opening a savings accou and 200,000 UgShs as a minimum balance.
  - The real interest rates on deposits are quite low (has been negative until recently).
  - Lack of public awareness on bank services especially in rural areas.

Concluding remarks

- The Ugandan economy is still dominated by subsistence agricultural production and tl informal sector. Consequently, most of the savings exist in kind such as land, crop produc livestock, etc. The monetization of the economy and financial deepening are crucial f mobilizing savings in financial assets. Therefore, a mechanism for integrating the rural sect (where about 90% of Uganda's population live and work) into the banking system must l developed.
- The prospects of significantly increasing the saving rate by the government and corpora sector to finance economic development is not bright. Efforts to increase domestic savin in Uganda must, therefore, be directed towards mobilization of savings from the househc sector.
- That there is need for pro-saving campaigns. The thriftiness or banking habit of the pub has been grossly undermined and therefore requires urgent Government attention.
- The need to provide rural-oriented banking intermediaries to the rural community. At t moment bank services are not easily accessible to the rural populace.
- The inadequacy of domestic savings has meant that the modest growth in investment sir mid 1980s has been donor-driven, using external savings. This is obviously not sustainab There is therefore an urgent need to devise and implement cost-effective measures mobilizing domestic resources if Uganda is to scale down her current over dependence foreign savings for financing investments.

I Background

Since 1987, notable success has been achieved by Uganda Government in reforming and stabilizing the economy and in implementing structural reforms. Some of these reforms have had positive outcome. For example, in containing internal and external disequilibria, reducing inflation, deregulating markets, including the market for foreign exchange where the premium of the parallel market exchange rate over the official rate has virtually been eliminated. Real GDP grew by an average of 5.4% per annum from 1987 to 1993 (Background to the Budget 1994/95, Ministry of Finance and Economic Planning).

Despite these improvements in economic performance, Uganda continues to be confronted with a number of constraints. Among the constraints are the levels of savings and investments which are too low to support self-sustained growth and this has caused a lot of concern in government and academic circles about the sustainability of the achievements so far realized.

According to the World Bank, the level of domestic savings and investments is inadequate to fuel the growth needed to alleviate poverty and raise the living standards as well as generate sufficient productive employment. Because of the low level of domestic savings, the level of private investment is also very low and this has resulted in a considerable imbalance between private and public investment. The latter is estimated at 18% of GDP. The reliance on the public sector to maintain current levels of investment in the economy is not sustainable in the long run since it is largely financed by external borrowing and donor assistance.

While domestic saving has stagnated at an extremely low level by any standard (estimated at 3% of GDP - Rehabilitation and Development Plan, 1993/94 - 1995/96), private sector investments have been on the rise - from a mere 7% in 1987 to 12% in 1991. This reflects the role of foreign savings in domestic investments as an 'engine' of economic growth apart from the informal sector interplay.

Adequate saving is an essential pre-condition for sustained economic growth . A higher rate of saving means less consumption now in return for increased wealth and future consumption. The increased wealth will reflect reduced foreign liabilities (larger foreign assets); and where concerns about foreign indebtedness are constraining economic growth like in Uganda case, increased domestic saving will mean more domestic investment.

To the extent that domestic saving is considered too low, whether because of some 'distortions' in private saving incentives or because of inappropriate fiscal settings, one solution would appear to raise public saving (including by increased taxation, if necessary). From this viewpoint, some might argue that private saving behaviour is only of secondary interest for macro policy. After all, fiscal policy provides strong leverage over aggregate saving.

Indeed, it is arguable that the restraint in government outlays projected for the next few years provides an opportunity for correcting Uganda's external problem without relying on major contribution from private saving. However, beyond a certain point, there can be costs in relying solely on fiscal policy as a means of raising underlying domestic savings. For example, high marginal tax rates can have pervasive social and economic ramifications (for example, for work incentives, wage demands and tax avoidance and evasion) which need to be avoided as far as possible. There are also social and economic constraints to reductions in government outlays. Moreover, heavy reliance on public savings to finance investment could have long-term implications for the structure of investments and ownership as well as for the operations of the monetary authorities.

Although an open economy like that of Uganda can attract foreign savings to help finance growth, risk, policy uncertainty and other considerations limit the extent to which domestic investment can proceed independently of domestic savings (Rodrik, 1991). The close correlation between levels of investments and rates of domestic savings across countries provides evidence of imperfect substitutability between domestic and foreign savings, although cyclical factors are also involved (see, for example, Dooley et al., 1987 and Hartely, 1986). Indeed, Uganda's continuing external deficit problem is generally viewed as a symptom of inadequate domestic savings.

Foreign capital inflows are not only inadequate but also very sensitive to political factors. For example, of late, some developed countries have decided to tie foreign assistance to a 'Good Human Rights Record' of a particular country. In addition, the available foreign assistance is normally project-tied and this implies inadequate financial resources to the private sector.

External resources may facilitate production and savings or discourage them. In the initial stages of development, external resources are needed to set up productive facilities and economic infrastructure. The foreign savings in this respect, are supposed to supplement domestic efforts and to permit structural adjustment and not to act as a substitute for domestic resources (Kasekende, 1992). Many projects have failed because of lack of resources for creating continuity when the external resources are reduced. This is where domestic resources could play an important role in ensuring sustainable development.

The experience of countries like Singapore, Taiwan and South Korea, which have recently attained substantial economic development, has shown that no matter how substantial the contribution of foreign capital, its role is essentially a supplementary one. In fact, locally mobilized funds have financed the main proportion of the cost of development projects, and external finance itself, has depended very significantly for its effectiveness, on the availability of sufficient local resources.

On the other hand, foreign capital may hinder the developing countries' attempts to mobilize their own resources. "Cheap" loans from international lenders have interfered with internal savings mobilization with detrimental consequences resulting from debt servicing and so forth.

The emergency of the debt crisis, economic stagnation in the industrial countries, slow disbursements and reduced net inflow of external financial resources have led most Sub-Saharan African countries to recognize the need to mobilize domestic resources.

As indicated in Table 1, there is a serious domestic resource mobilization problem in Uganda. The table shows that Uganda has increasingly relied on external resource inflows that have been used for the rehabilitation and development programmes, import support and balance of payments support for the period 1981-1992. It has increasingly relied on external resources to finance its capital formation. The gross domestic savings as a percentage of gross domestic product increased from 3.9 per cent in 1983 to 8.4 per cent in 1986 and since then, it has fallen to -0.5 per cent. On the contrary, the ratio of external resources to gross domestic product has been high at an average of about 12 per cent in the period 1981-1992, reaching the peak at 22.8 per cent in 1991.

A big portion of the budget deficit is being financed by external resources[2] especially after 1987. The external support which is mainly provided by multilateral institutions and bilateral donors, greatly

[2] Note that (G-T) = (S-I) + (M-X) where (G-T) is budget deficit and denotes the demand for loanable funds; (S-I) is net domestic savings; and (M-X) is current account deficit. The left hand side constitutes the supply of loanable funds. As such, the fiscal deficit must be financed by net private domestic saving plus the current account deficit.

expanded after 1987. The total donor support increased from US $ 155.3 million in 1987 to US $ 532.01 million in 1988, an increase of 242 per cent. The greatest external assistance of US $ 621.32 million was in 1989.

Excessive reliance on external resources has resulted into high debt service ratios. The debt service ratio increased from about 24.8 per cent in 1983 to about 140 per cent by 1991. The high rates of total debt stock to gross domestic product shown in Table 1 are quite alarming and indicate the unsustainability of the debt burden. It is quite obvious that over the medium term, Uganda will be unable to meet its debt service commitments, and there-fore expanding reliance on foreign capital inflows is unacceptable in the long-run.

Table 1. Uganda's external resource dependence

Year	Gross Domestic Savings as per cent of GDP	External Resources as percent of GDP	Total debt stock as percent of GDP	Percent of budget deficit financed by external resources
1981	3.1	7.9	24.7	6.5
1982	3.8	6.1	18.2	21.4
1983	3.9	11.2	67.0	13.6
1984	6.2	5.0	50.0	21.3
1985	7.8	6.2	62.2	29.0
1986	8.4	4.9	42.1	15.5
1987	6.1	4.4	55.2	10.1
1988	0.8	13.4	50.1	89.0
1989	-0.2	20.7	73.7	128.0
1990	-0.7	20.2	92.1	84.5
1991	-2.6	22.8	89.7	70.1
1992	-0.5	13.6	90.0	76.5

Sources
(i) UNDP/World Bank (1992), *African Development Indicators.*
(ii) Bank of Uganda, *Quarterly Economic Reports,* 1990-1993
(iii) Ministry of Finance and Economic Planning, *Background to the Budgets,* 1989-1992.

II Statement of the problem

The slow pace of economic development in Uganda is largely due to the lack of domestic resources. The shortage of internal resources has made Uganda to excessively depend on external resources to finance her development. One of the serious economic imbalances the country has been experiencing since 1970 is the saving-investment imbalance. Domestic savings have always been inadequate in view of optimal investment levels, required for development. This has meant that the country has increasingly relied upon foreign savings to finance the saving-investment gap. However, foreign savings are associated with various problems which are virtually exogenous and beyond the control of the recipient country. First, the savings are inadequate in volume. Secondly, they are basically determined by many non-economic factors that are determined almost entirely by the donor

community. As such foreign savings are associated with various conditionalities and other strings or performance criteria that must be fulfilled by the recipient country if the inflow has to be sustained. Third, most of the inflows of the savings come in the form of loans or credits, thus adding to the external indebtedness of the recipient country.

Thus, the supply of foreign savings tends to be not only inadequate but also erratic and shrouded in various controversies and strings. The importance of raising domestic savings mobilization in any developing country like Uganda cannot therefore be over-emphasized.

III Objective and policy significance of the study

The primary objective of this study is to provide empirical evidence on the nature and determinants of domestic savings in Uganda. Drawing on the empirical findings, the study then suggests policy measures that can be adopted to **mobilize domestic savings to fuel sustained economic growth in Uganda.**

Given that Uganda has just emerged from the era of mostly rehabilitation and stabilization, and now moving into the era of growth, it is important that the nature and determinants of capital accumulation in the country are fully investigated. Continued reliance on external resources can be futile as genuine economic development should in fact be based on domestic resources. External resources, although very important, are always inadequate and subject to political and other strings.

Since Hyuha's (1980) study that covered the 1950 - 1976 period, no comprehensive study has been carried out on savings determinants in Uganda. Given the formidable political and economic turbulances the country has gone through since the early seventies, a new assessment of the nature and determinants of savings in the country is appropriate and timely. If the savings rate has to be increased after the rehabilitation and recovery period, what are the important policy variables to be manipulated? Is the real interest rate one of such variables? What is the impact of inflation in general on different types of components of savings (private vs public, agricultural or rural vs non - agricultural savings, total vs domestic savings, etc.)? These and similar questions are very important from a macroeconomic policy stance. In the proposed study, answers to some of these questions will be hopefully provided empirically.

The study focuses on the determinants of domestic savings in Uganda. Aspects that are examined include the following:

(a) Sources of domestic savings in Uganda;
(b) The nature and determinants of domestic savings in Uganda;
(c) Role of interest rates in savings mobilization;
(d) The impact of inflation on savings mobilization;
(e) Financial intermediation and savings mobilization;
(f) Role of income and other variables in savings mobilization; and
(g) The role of government in managing domestic savings and the assessment of options for for improving domestic saving incentives.

Thus, a comprehensive study of the nature and the determinants of savings in Uganda needs to be undertaken. The significance of the proposed study lies in the policy implications alluded to above. That is, apart from extending our frontiers of knowledge on the nature and determinants of savings in Uganda beyond Hyuha's (1980) study, the proposed study will enable policy makers to formulate

more appropriate policies on capital accumulation for the development of Uganda. Having achieved reasonable levels of recovery and rehabilitation, Uganda is now turning its attention to development projects. The proposed study on the determinants of capital accumulation in the country will therefore be very timely.

IV Review of the literature

A lot of literature on economic development has focused considerable attention on determinants of saving (see, for example, Duesenberry, 1949; Modigliani and Ando, 1963; Gupta, 1971; Mikesell and Zinser, 1973; Deaton, 1989). The theoretical determinants of savings started with the classical economists, who according to them, the saving function is an increasing function of the interest rate. Although the studies on interest rates as a determinant of saving are many for both LDCs and MDCs, the effect of this variable on saving is largely undermined (Kessler and Strauss-Kahn, 1984).

In the empirical studies, the effect has been both insignificant and contradictory. Mikesell and Zinser (1973) reviewed a number of studies and observed that some of them conclude that there is a positive relationship between saving and the rate of interest and others to a negative one. Gupta (1984) found a significant positive coefficient for the real deposit rate for the majority of the seven Asian countries.

There are a number of empirical studies in Africa that examine the link between total savings and interest rates. For example, in Senegal, Ghana and Cote d' Ivoire, Frimpong-Ansah (1987) found a positive correlation between financial savings and interest rates. The African Centre for Monetary Studies (1985) based on 14 African countries for the period 1972-1982, generally found a weak correlation between total savings and interest rates. In case of Tanzania, Lipumba et al. (1990) observed that there was hardly any evidence of real interest rate to influence total savings while Chepeta et al. (1986) observed a strong relationship in the Malawi case.

The Keynesian theory of saving which is known as the Absolute Income Hypothesis stresses that saving would increase with absolute income (disposable income) other factors being constant. Keynes postulated a consumption function in which the amount of aggregate consumption is mainly dependent on the amount of aggregate income. Consumption increases at a decreasing rate as income increases (Keynes, 1936). The consumption function can be written as:

$$C = \alpha + \beta Y \quad \ldots\ldots(1)$$

where α is autonomous consumption and β is the marginal propensity to consume (MPC). If the definition of saving is $S = Y - C$, then the saving function is

$$S = \alpha + (1 - \beta)Y \quad \ldots\ldots(2)$$

The negative constant reflects dissaving and the coefficient $(1 - \beta)$ is the marginal propensity to save (MPS). The Keynesian saving function, in its most commonly used form, is linear with a constant MPS, that is,

$$S = \alpha_0 + \alpha_1 Y \quad \ldots\ldots(3)$$

where α_1 is the constant MPS. It is assumed that $\alpha_0 < 0$ and $0 < \alpha_1 < 1$ such that as the level of income rises, average propensity to save (APS) will also increase.

Most studies both in the developed countries and in the less developed countries have emphasized the dominant role that income plays as one of the determinants of savings. At the same time, studies in the period up to the 1960s indicated that the average propensity to save out of income tended to remain stable over time. The marginal propensity to save showed greater sensitivity to incremental income (Blyth, 1969).

Umo (1981) carried out a comprehensive study for 19 African countries in an attempt to determine the MPS during the period 1960 - 1974. He concluded that for most countries in the sample, the MPS from the linear function was positively significant and below unity. He also found out that the countries in his sample exhibited a non-linear saving function with savings increasing at a decreasing rate with incomes.

Frimpong-Ansah (1987) concluded that for the African countries, the majority of them validated the basic Keynesian saving hypotheses that saving is expected to increase with income.

The post-Keynesian saving hypotheses arose because the Keynesian absolute income hypothesis was regarded as too weak to explain the long run saving behaviour. There were contradictions between absolute income hypothesis predictions and the empirical research, and therefore theories were developed to overcome these contradictions. For instance, Mikesell and Zinser (1973) put together the results of studies on saving behaviour in LDCs made during the 1950s and 1960s and concluded that time-series analysis showed evidence that MPS is greater than average propensity to save (APS).

The post Keynesian savings hypotheses include Friedman's
Permanent income hypothesis, Duesenberrg's relative income hypothesis, and Ando-Modigliani-Brumberg life-cycle hypothesis.

The permanent income hypothesis, which relates permanent saving to permanent income assumes a rational household that maximizes utility through consumption decisions. Friedman (1957) postulated that the household's consumption (C_t) at time t depends on its permanent income Y^P. In its most simple form, the saving function is linear

$$S = \alpha_o + \alpha_1 Y^P + \alpha_2 Y^T \quad \text{.....(4)}$$

where Y^P is permanent income, Y^T is transitory income, α_2 is the propensity to save out of transitory income. Permanent income may be defined in terms of a long run expectation over a planning period. It is the income which a household may expect to earn on average, in the long run. However, Friedman defines it as the amount a consumer unit could consume while maintaining its wealth unchanged.

Studies reviewed by Mikesell and Zinser (1973) confirm that the estimates for α_2 exceed those of α_1. Gupta (1984) ran a regression of the aggregate saving function for twelve Asian countries. In nine cases, the coefficients were statistically significant. In six of these, the coefficient of transitory income exceeded that of permanent income, and in three cases the coefficient of permanent income exceeded that of transitory income.

The permanent income hypothesis may be used to explain the saving behaviour of different income groups. For example, self-employed persons have a greater transitory component in their income than wage and salary workers, and therefore they are likely to show a higher ratio of saving to observed income (Karel, 1987).

The Life-Cycle income hypothesis associated with the writings of Modiglian, Brumberg and Ando postulates that individuals adopt a planning horizon for their life-time consumption. It is assumed that individuals plan no net life time saving but attempt to spread their life time consumption evenly over their lives by accumulating enough saving during their earnings years to maintain the consumption standard during retirement (Mikesell and Zinser, 1973). This leads to the conclusion that saving behaviour is dependent on age. During the income-earning period of life, assets are accumulated and upon retirement dissaving takes place.

A number of studies have been carried out in response to the life-cycle income hypothesis. Musgrove (1978) using data of ten Latin American cities observed that there is a higher marginal propensity to consume among younger families than older ones. Llurch et al. (1977) concluded that there is some tendency for the marginal propensity to save to increase with age in a number of developing countries. The saving patterns are however not consistent with the retirement motive that underlies the life-cycle income hypothesis. Left (1969) observed that the high birth rates and extended family systems in developing countries result in high dependency ratios. The dependent age groups add to consumption needs and do not contribute to production, and therefore there is less scope for saving. He concluded this with a sample of 47 developing countries.

According to the Duesenberry's Relative Income hypothesis, the fraction of income devoted to consumption will be the same at the higher level of absolute income as it is with a lower level. The fraction of a family's income spent depends on the level of its income relative to the incomes of the neighbours. An individual is assumed to make a psychological estimation of his real income falling below that of the community. He would then adjust his consumption to the average consumption in society by consuming more of his disposable income even to the extent of dissaving. On the other hand, if the individual's real disposable income rose higher than that of the community, an individual would save more from the surplus.

It is further assumed that an individual's consumption behaviour will be influenced by his habitual consumption. An individual who has already attained a certain standard of living will not cut his consumption as his real disposable income fell below his previous peak income. On the contrary, he will instead attempt to regain his previous consumption level by spending more from this disposable income even to the extent of dissaving. If an individual's income rose higher than his peak income, it is assumed he will not aspire for a higher standard of living than the one already attained and his saving ration will thus increase. The theoretical argument concerning wealth as a determinant of saving is derived from the relative income hypothesis and the demonstration effect of wealth. It is argued that the saving income ratio would tend to fall as household current incomes increase. The empirical tests of this hypothesis are scanty because data on changes in household wealth are almost impossible to assemble in developing countries (Frimpong - Ansah, 1987). However, Snyder (1971) obtained empirical results for Sierra Leone that showed wealth as a significant but negative determinant of savings.

Savings are also influenced by prices. Thirlwall (1974) suggested two mechanisms through which inflation can stimulate savings; income redistribution towards profits and the inflation on money holdings. The empirical evidence tend to support the hypothesis that savings increase with inflation. The explanations that have been offered for this observation are that people attempt to increase their real balances in periods of inflation. This phenomenon has been observed in African countries that have high inflation and expanding informal markets for goods and currencies. The holding of cash outside banks in these countries has increased in order to take advantage of informal business opportunities (Frimpong - Ansah, 1987).

Wealth is usually a key determinant of consumption or saving in theoretical models of intertemporal optimization. Of course, permanent income can be viewed as the stream of income from total wealth, but a narrower definition of wealth would be the assets that can be exchanged for current consumption. Components of private wealth would include, among others, land, dwellings, domestically owned business capital and loans to government.

Theory unambiguously predicts that greater wealth would reduce saving out of current income. Schmidt-Hebbel (1987) uses five alternative measures of total wealth in an empirical intertemporal consumption model for Chile, based on different assumptions regarding expectation formation. Behrman and Sussangkarn (1989) use household-level data on wealth and saving in Thailand. In both studies, wealth has a strong negative effect on saving.

Foreign capital inflows also affect savings. An increase in the inflow of foreign capital has a negative effect on domestic savings. Griffin (1970) suggested a number of ways in which this could happen. Financial intermediation enhances saving. A number of studies have supported this argument (see, for example, Goldsmith, 1969; Gurley and Shaw, 1960; Patrick, 1966; Tun Wai, 1957). Hyuha (1980) showed that financial intermediation plays an important role in encouraging saving-investment process in case of Uganda.

Theoretical and empirical studies (see, for example, Mikesell and Zinser (1973) and Karel) have shown that the main determinants of savings can be specified as:

$$S = f(RGDP, W, i_d, FCI, TAX, L, FI, D, p, SS, U) \quad (5)$$

where

S	=	Domestic Savings
GDP	=	Gross Domestic Product
GDPGR	=	GDP growth rate
RGDP	=	Real GDP level
W	=	Real wealth
i_d	=	Nominal deposit rate
FCI	=	Foreign capital inflow
TAX	=	Real tax revenue
L	=	Position on the life cycle, that is, age
FI	=	Degree of financial development or intermediation
D	=	Dependency ratio[3] (that is, degree of dependency)
p	=	inflation rate
SS	=	Social status or class of the saver
U	=	Other economic and non-economic factors

In theory, S varies directly with RGDP, W, FCI, TAX and FI and inversely with D and SS (the dummy for 'keeping up the status quo'). S varies directly with L if L represents the earning part of life and inversely with L if L is the period before that part of life or after retirement. Recent evidence appears to show that the relationship between S and i_d and p may not be determined a priori.

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[3] Defined broadly as the proportion of the population in the 0-14 and 60+ age groups

V Research hypotheses

Hypotheses formulated and tested included the following:-

(a) Income and interest rates have a positive effect on savings. On the other hand, wealth has negative effect on saving.
(b) There is a negative relationship between savings and inflation.
(c) Saving rates depend negatively on the dependency ratio
(d) The potential for increased savings mobilization exists in the rural areas. For example, the possibility of converting non-monetary savings like livestock into financial assets.
(e) Various government financial sector reforms have impacted on the level of savings in Uganda.
(f) Reduction in income tax rates or a shift from income tax to consumption tax system would boost domestic savings considerably.
(g) More favourable tax treatment of property income (wealth) should also encourage more private savings.

VI Methodology

The study employed both primary and secondary data.

The primary data were collected on household savings in both rural and urban areas of the selected districts.

Sample selection and areas covered

The sampling frame consisted of households from urban and rural areas in the districts of Masaka, Mbarara, Mbale, Lira and Kampala.

Sample design

Multi-stage sampling scheme was employed. In a selected district, counties were first randomly chosen. In each selected county, sub-counties were randomly selected. In each of these subcounties, parishes then RC1s were also randomly selected. Finally, a random selection of households within a selected RC1 was undertaken.

Methods of data collection

Data collection was by a face to face personal interview method. Each respondent was visited by a trained interviewer. The interviewers helped the respondent understand the questions by interpreting them in the respondents' local languages.

Both open-ended and close-ended questions were employed. The close-ended questions were those questions in which all possible answers were pre-specified and the respondent was to make the choice from the answers provided. The open-ended questions allowed the respondents to give their own views.

VII Presentation and discussion of the empirical results

Total domestic savings

Table 2 shows that in the 1960s, total domestic saving pattern in Uganda was quite competitive compared to other African countries. Although it was in declining trend in the 1970s, they were nevertheless positive until 1988 when it turned negative.

Table 2: Cross-country comparison of gross domestic saving rates (as % of GDP), 1960-93

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Kenya	17.1	-16.8	16.5	16.0	17.4	15.1	20.1	19.3	20.2	20.2	23.6	17.4
Nigeria	5.5	6.5	6.9	8.0	8.7	12.0	11.3	9.4	8.4	10.2	12.8	16.7
Tanzania	18.8	15.1	11.9	15.5	17.4	15.5	17.1	18.2	15.2	15.8	20.5	21.7
Ghana	17.1	9.8	12.9	12.5	15.5	8.3	7.9	7.8	10.6	11.2	12.8	9.6
Uganda	**16.1**	**12.6**	**13.5**	**16.9**	**18.5**	**12.3**	**11.8**	**14.3**	**14.4**	**15.2**	**16.4**	**11.3**
Zambia	39.6	37.3	33.1	33.3	36.1	40.0	44.4	40.4	40.5	51.0	45.1	35.0
Zimbabwe	21.3	23.1	22.7	21.0	19.6	22.7	19.2	29.0	19.5	21.5	21.4	20.7

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Kenya	24.5	18.5	13.5	20.9	27.0	20.0	16.6	18.7	19.5	18.3	20.1	22.1
Nigeria	24.1	30.4	22.7	26.9	26.0	21.1	25.3	29.5	18.2	10.9	8.9	8.0
Tanzania	14.9	7.4	8.6	20.7	22.8	10.0	13.3	9.8	12.1	10.9	7.4	7.9
Ghana	14.4	9.6	13.7	8.5	10.0	4.0	6.6	4.9	4.0	3.7	0.6	6.6
Uganda	**11.4**	**10.4**	**5.5**	**7.4**	**6.8**	**6.1**	**6.6**	**4.6**	**0.9**	**3.8**	**3.9**	**6.2**
Zambia	45.0	46.1	21.0	28.8	22.1	20.5	23.1	19.3	6.8	8.0	12.6	18.5
Zimbabwe	27.4	27.0	25.1	21.8	21.5	15.4	12.5	15.8	15.8	15.3	12.9	17.9

	1985	1986	1987	1988	1989	1990	1991	1992	1993
Kenya	24.9	21.9	19.2	19.8	18.8	19.1	20.0	17.6	21.1
Nigeria	10.8	7.4	16.9	14.8	21.0	22.5	22.7	29.5	---
Tanzania	7.1	5.5	-11.5	-4.8	2.7	11.5	4.4	4.6	---
Ghana	7.6	8.0	7.2	8.3	7.9	5.8	7.9	1.8	-1.2
Uganda	**7.8**	**8.4**	**6.1**	**0.8**	**-0.2**	**-0.7**	**-0.5**	**-0.6**	**-0.4**
Zambia	15.4	22.6	18.0	18.7	3.5	17.0	17.9	10.8	9.5
Zimbabwe	22.3	23.7	23.2	24.6	21.4	19.4	21.0	13.4	21.3

Source: STARS, 1994-95: African Development Indicators and African Economic and Financial Series, The World Bank

Table 3: Private investment performance (as % of GDP)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Private investment	9.9	3.2	4.9	6.0	6.9	4.8	5.0	7.1	12.0	12.7	13.8

Source: Ministry of Finance and Economic Planning: Background to the Budget, 1995-96, STARS, 1994-95, World Bank MFEP.

As a consequence of the low domestic saving effort (see Table 2), Uganda has had to rely to a large extent on foreign savings to help finance domestic investment and growth. Although not shown in above Table 3, the growth in total investment has been largely due to public sector investment. The very low public savings (negative for many years except in 1994/95) and the high levels of public investment were also financed largely by foreign savings in the form of grants or borrowing.

Even if there were many opportunities for securing external financial resources, cautions still need to be exercised in borrowing from commercial sector abroad.

First, we have to attach more importance to the fact that borrowing, ordinarily, is in foreign currencies; a fact that places on us some additional constraint. The debt has to be paid, not in domestic currency but in hard currencies. For successful repayment, the mere fact that the corporation is profitable or that the government sector is in surplus is not enough. Either the corporation should be earning foreign currency through the export of its products or the country should have sufficient foreign currency reserves to run down.

Secondly, for private enterprises, it is difficult to make a judgement as to whether a new project is worth taking up, because a comparison of expected returns with borrowing cost is hard to estimate with interest rates floating over the borrowing period. Further, the interest rate varies, following the monetary policy of the country whose currency you have borrowed. If one exaggerates a little, the interest that you are to pay is decided in a place where you have little influence to exert.

Thirdly, the recipients of the loans may not know whether the bank which is extending the loans is a good bank. They may be lending without thoroughly examining whether you are a good borrower, that is, without examining fully your future ability to pay.

Thus, borrowings from abroad are costly and involve additional risks. A country should therefore rely on domestic savings as much as possible.

Empirical results on the determinants of total domestic savings

The following total domestic savings equation was specified and estimated for the period 1984-1993:

$$S/GDP = \alpha_0 + \alpha_1 RGDP + \alpha_2 GDPGR + \alpha_3 FCI/GDP + \alpha_4 (i_d - p) + \alpha_5 TAX + \varepsilon$$

where

S/GDP	=	Domestic Savings as ratio of GDP
RGDP	=	Level of real GDP
GDPGR	=	Growth rate of real GDP
FCI/GDP	=	Foreign Capital Inflows as a ratio of GDP
i_d	=	Nominal deposit rate
TAX	=	Tax Revenues (1987 prices)
p	=	Inflation Rate (in percentages)

The estimated model:

Variable	Coefficient	t-ratio
RGDP	0.06063**	1.97945
GDPGR	0.80569**	-4.03811
FCI/GDP	-0.21538**	-2.97908
$(i_d - p)$	-0.00132	-1.03646
TAX	0.67501**	4.47459
CONSTANT	0.18340	1.84582

Adjusted R-Squared	=	0.91379
F-Statistics	=	16.89970
Durbin-Watson	=	2.04445

** Significant at 5 percent

The imated regression fits the data well, as can be seen in the adjusted R-squared. The dete...nants explain about 91 percent of domestic savings behaviour. As expected, both the real GDP level and the growth rate have a strong positive impact on domestic savings.

The response of savings to real interest rate changes is very limited. The above empirical results suggest that interest rates do not have a significant impact on domestic savings. This seems not to be surprising. In Uganda, those who bank do it in order to secure safe custody for their financial assets rather than seeking to earn interest. And in the rural communities, where people's acquaintance with the banks is limited, people prefer to hold their assets in physical forms such as livestock.

This finding on the impotence of interest rates in savings mobilization corroborates what others concluded earlier about the response of savings to interest rate changes in developing countries (see for example, Desai and Mellow, 1993; Hyuha, 1995; Ghosh, 1986; Deaton, 1989). That response of savings to interest rates is very limited, while on the other hand, the demand for loans responds to changes in interest rates.

If access to foreign borrowing at international interest rates is unlimited, foreign saving passively fills the gap between domestic investment and national saving. In this case, foreign saving (or borrowing from abroad) is simply the result of national saving decisions and not one of its determinants. If foreign borrowing is rationed, however, by the lenders, then domestic savers (and investors) are constrained in their intertemporal choices by the amount of available finance, and the foreign saving becomes a determinant of domestic saving.

In the above results, we find the effect of foreign savings on domestic saving is significant and negative (see also Fry, 1978, 1980; Giovannini, 1985).

Household characteristics and saving behaviour

Survey results

(a) Sources of household income

About 80% of households interviewed earn their income through wage employment, crop production or informal trade. The rural households depend mainly on agricultural production while the urban households depend on wage employment and informal trade (see Appendix, Table 1A).

(b) Income from wage or salary employment

Out of a total of 1481 respondents, 53% were either unemployed or self-employed. Tables 2A and 3A in the Appendix show the income groups and savings of only those who are employed in the formal sector.

About 70% of these employed respondents earn a monthly income of not more than Shs 100,000. Over 50% either do not save at all or save less than 10,000 per month on average.

(c) Self employment

50% of the both urban and rural household heads who are self-employed earn more than Shs 100,000 in a year.

However, the state of savings among them is not any better. 55% of them do not either save at all or save less than Shs 10,000 in a year.

(d) Forms of cash savings

Out of a total of 1481 respondents, 43% do not save in cash forms.

Over one third of rural households keep their savings in form of cash hoarding at home because of inaccessibility of banks and low confidence in banks. The majority of the respondents who keep their cash savings in banks do so mainly because their salaries are paid through the bank.

(e) Forms of non-cash savings

57% of households keep their savings in non-cash forms.

Most rural households keep livestock and hoard food as their main forms of non-cash savings. Generally, these forms of savings tend to be more profitable compared to the interest rates banks would usually offer on cash deposits. Moreover, these items can easily be sold off whenever the owners want money.

(f) Reasons for saving in cash forms

It is clear that the majority of households save their cash in banks, not with an intention of earning interest, but either because their salary is paid through the banks or just for safe custody. That is, mainly to keep aside school fees for their children.

(g) Purpose of saving in cash form

Cash savings to meet children's education is the main purpose for which over one third of households keep their savings. Emergencies, establishing family businesses and building a house are other important reasons.

(h) Reasons for not saving

The main factor that restrains about 50% of the respondents from saving is the low level of income that they receive. This is true for both urban and rural households.

Other constraints to savings are the high cost of living and social responsibility.

(i) What households think about savings

50% of households interviewed believe that there are benefits in saving. However, only 16.5% of households think of saving as a sacrifice that one has to make.

below some policy prescriptions that aim at raising domestic savings in Uganda. Some of these measures are also being implemented in other countries facing similar problem of low domestic savings rates.

PO1: Bank of Uganda to play a leading role in financial sector reforms and development of security markets

Bank of Uganda must;

- revisit some of the archaic sections of the banking laws in the country;
- be more supportive to financial intermediaries that are taking steps to mobilize rural savings and to implement rural credit programs;
- closely coordinate and sequence financial sector reforms with broader macroeconomic reform measures;
- promote diverse financial institutions, saving institutions, financing companies, mutual funds, unit trusts, rural financial institutions, etc. to provide a range of financial services for different categories of saving population. Since these financial institutions will function outside the prudent banking regulations, the Bank of Uganda as the central monetary authority should consider regulatory framework including a deposit insurance scheme to safeguard the interest of depositors;
- spearhead the development of security markets for various types of negotiable instruments such as bonds, unit trusts, saving certificates etc. The number of negotiable instruments and their acceptability should be increased and current efforts to reduce the cheque clearing period be intensified; and to promote this;
- establish private sector companies which can accept directly fixed deposits of say 1 to 5 years maturity at slightly below cost of funds compared to market lending rates.

PO2: Commercial banks to adopt an aggressive and dynamic policy to encourage savings

Our study shows that households interviewed consider banks as having failed in mobilizing savings mainly because of inefficiency, negative real interest rates, poor customer service and not being innovative.

Therefore to encourage savings banks can do the following:

(a) enhance public confidence in the banking system by
   - ensuring liquidity, professional management, capital adequacy and transparent policies; and
   - cooperating in devising and implementing strategies for prevention and detection of fraud by both insiders and outsiders.

(b) provision of positive real interest rates for savings deposits.

(c) cost-effective schemes for small depositors such as recurrent deposit, children education schemes, pensioners deposit schemes, etc.

(d) introduction of innovative term deposit schemes with attractive interest rate structure and different maturity periods.

(e) improvement of quality of customer services both in terms of speed and accuracy by adopting cost-effective automation.

They should reduce unnecessary red tape and foster simplified lending and deposit procedures. Banks must be seen by the public to concerned not only with balancing their books, but also with promoting the people's welfare and prosperity.

PO3: Government to sensitize the public on the importance of savings

Rural people who make up the majority of the population are often viewed as incapable of saving because of their low incomes. This in fact is not true. In fact, a recent World Bank households country studies in Sub-Saharan Africa showed that rural households in Africa have a higher average and marginal propensity to save. For example, India which has one of the lowest per capita income has one of the highest saving ratio in the world.

Another important aspect which influences the savings behaviour of rural population is that agricultural production is seasonal because the periods of income flows and expenditure are different. The intervals between income and expenditures and funds available to carry over from one period to the next provides good potential for mobilization of savings in rural areas.

Savings behaviour is a fundamental aspect of human survival, particularly in rural areas where incomes are unsecured. The rural sector in Uganda is therefore not an exception. Uganda can learn from the experience of successful Asian and African countries which have managed to develop a strategy for mobilizing and institutionalizing rural savings.

To encourage the rural community to save, we first need to sensitize and train the public to develop saving and banking habits. Ugandans' saving culture of the 1960s needs to be reactivated. Our way of thinking towards savings has to change. Saving should be looked at more-or-less as a virtue, a **sacrifice** one has to make. Public sensitization aimed at encouraging savings and undertaking moral suasion, campaigns to restore people's confidence in financial institutions and sponsoring various movements to increase household savings is necessary.

Our findings reveal that there is a considerable amount of non-cash savings being held by households. Unfortunately, such savings cannot be readily channelled to productive investments through the banking system. Households should therefore be encouraged to monetize some of these non-cash savings and diversify their investments. It should be emphasized that it is risky to put all eggs in one basket. For example, if people in Northern and North-Eastern Uganda had their savings not mainly in livestock, the extent and impact of cattle rustling would not have been so devastating.

PO4: Government to strengthen and promote self-help informal financial intermediaries in mobilizing rural savings[4]

Uganda's biggest source of savings is rural based. However, our study shows that formal banking system is not well suited for mobilizing rural savings which are usually of high frequency but very small amounts.

We suggest therefore that self-help groups which are voluntary associations of people at the grass root level should be encouraged to become informal financial intermediaries. The members may be united by a common objective of addressing economic or non-economic problems affecting their well-being. For the purposes of mobilizing rural savings, the self-help groups may be in different forms, for example, rotating savings and credits associations, women groups, social clubs, credit unions, owned, operated and controlled by the people themselves. In this respect, the recent programme of the Uganda Cooperative Savings and Credit Union of establishing self-managed community savings and credit associations in poor rural areas should be highly commended.

After organizing and establishing themselves as viable groups, some of these organizations can link up with banks to develop access to formal financial resources.

This type of establishment is a major and popular form of informal financial institution which is identified across Africa too. It is called *esusu, susu, adashi, sanduk, tontines* and *hangbad* in Nigeria, Ghana, Chad, Sudan, Cameroon and Somalia, respectively. For example, *susu* collectors in Ghana perform a significant intermediary role between savers and the banking system and other borrowers. The *susu* collectors usually have four options when deciding what to do with deposits mobilized from say market vendors and others. These are:

- deposit them with a bank (usually a demand deposit);
- keep in strong iron boxes in their houses;
- invest in their own business, if possible; and
- lend to others.

The importance of these roles lie in the several attributes of the roles themselves. These are:

- The cost effectiveness in mobilizing rural savings since the collectors would use bicycles or better still by foot;
- The sheer magnitude of savings mobilized in this manner and therefore the enhanced opportunities for formal intermediation;
- The advantages of the savings habit that it helps to develop in the system's clients;
- The reduction in the mobilization costs of formal banks since they pay nothing for the service performed on their behalf by the *susu* collectors, and the reduction in the number of people queuing up at banks to make deposits and withdrawals; and
- The peasants need not incur transport costs travelling from rural areas to formal banking institutions located in urban areas.

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[4] Recognizing the importance of developing a viable and sustainable rural financial system, the Government in 1994 commissioned, through the Agricultural Secretariat, a comprehensive Rapid Appraisal of Rural Finance in Uganda. The study recommended that since it is not viable for the commercial banks to open branches in rural areas to undertake financial intermediation functions in the near future, the existing rural intermediaries which have close rapport with the rural people be upgraded to serve as viable rural financial intermediaries. We are happy to note that Government has

PO5: Government to promote the formation of an appropriate rural financial institution, for example, like the People's Bank in Nigeria, to provide safe and easily accessible facilities for savings

A localized rural oriented financial institution to be established for the purpose of providing simple banking facilities for the rural community in which it is located. It is to be owned, managed and patronized by the people in its catchment area. To accompany this, we need appropriate saving instruments and procedures tailored to the needs of rural people, in terms of simplicity, convenience, flexibility, safety and liquidity.

A link between savings and credit should also be established, since savings and credit are two sides of the same coin. Both are important not only for to ensure the viability and sustainability of rural financial intermediaries but also to develop banking habits, customer relationship, etc.

PO6: Government to allow commercial banks use savings incentive schemes or instruments, for example, tax deductible savings on long term deposits, tax free saving accounts, etc.

Use of 'Japanese style' incentives to reduce anti-saving effects of income taxation. The system of **tax-free savings accounts** operating until recently in Japan, the so called 'Maruyu' accounts, as a key to that country's high saving rate. But social attitudes, a low aged pension, the age structure of the population and lack of residential space are also likely factors.

PO7: Government to tax consumption instead of earned income

Most households interviewed complain of low disposable income as one of the constraints to saving. The question is why tax income which in fact is already low anyway? We feel that raising income tax threshold does not really make things any better. Moreover, the determination of income tax threshold level is often arbitrary and does not reflect realities.

We therefore suggest that rather than taxing earned income, Government should tax consumption instead. Economists have long argued that taxes on effort and enterprise are inefficient and act as a 'drag' on the economy. Indirect taxes - taxes on consumption - are much to be preferred. People can then decide whether to pay that tax or not by deciding whether to consume the product or not.

A good tax system is meant to correct distortions in the market. Because of the imbalance between savings and consumption, a tax should therefore be levied on consumption instead of earned income. An elimination of marginal income tax rates financed by a consumption tax and neutral taxes (for example, tax on rents, natural resource use, etc.) would increase the incentive to postpone consumption for the typical consumer. Private wealth would be unchanged in real terms, but the tax burden on savings would be reduced. The impact on saving would also depend on income distribution effects, but it seems clear that such a move would be unambiguously pro-saving.

Time series evidence on the potential size of the pro-saving effect is limited, but some idea can be obtained from illustrative simulations with simple macro models. One such exercise (Kotlikoff, 1984) looked at the effect for the US economy of replacing a 15% income tax by a consumption tax. Net domestic saving increased from 4 to 5% of GDP as a result.

PO8: Government to use 'command and control' approach by introducing forced savings schemes

It may not be easy to persuade individuals to change their non-saving habits. The only alternative left may be is to force individuals to save. One possible way is to introduce a **compulsory national pension scheme** where every able-bodied person must pay. Whether employed or not. This could, for example, be built into the graduated tax package in a manner similar to the CTL. Say, additional 2 to 5 percent of the graduated tax is to be paid as the compulsory pension scheme with, for example, a five year life span. That is, after five years, one can withdraw the whole of it.

Alternatively, the Government could introduce a **save-as-you-earn** scheme where money is put aside as savings by having an amount deducted regularly from one's income. The implementation could be done in a manner similar to the present pay-as-you-earn (PAYE) tax scheme.

IX Institutional framework for implementation

A body charged with the implementation of the above suggested policy options could be set up by the government. Government could form a National Saving Authority (NSA). Alternatively, the present the Uganda Investment Authority (UIA) could be expanded and become **Uganda Savings and Investment Authority (USIA)**. USIA would work hand in hand with other bodies like the Uganda Manufacturers Association, Uganda Farmers Association, Uganda Small-Scale Industries Association, NGOs and other relevant organs of line government ministries. The aim is to see how the savings that are mobilized could be channelled to productive investments.

X Concluding remarks

With one of the lowest saving and investment ratios in Sub-Saharan Africa, Uganda has an uphill task of devising ways and means of increasing these ratios. The study has shown the major role and potential of the household sector in savings mobilization in Uganda.

The existence of financial intermediaries in an economy plays an important role in development by providing a solution to these problems by mobilizing savings and credit, thereby stimulating economic activity and growth. The benefits of mobilizing rural savings are obvious.

At the household level, even the smallest amounts can make a notable impact in living standards, thus giving people a measure of independence and control over their lives and future. Savings can result into capital which can be used to maintain or increase agricultural production, for example, through the purchase of seeds, fertilizers, livestock, tools, etc. or investment in small income generating projects. They can help to free people from reliance on local money lenders, who charge interest rates, often too high for the poor, thus leading to mounting debts. In Zimbabwe, for example, savings clubs have had a positive impact on the lives of many rural women. For most women, participation in the savings clubs has provided an opportunity to accumulate savings separate from the household savings which are frequently controlled by men. Thus reducing their dependence on their spouses and contributing to national development.

At a broader group or community level, an effective savings programme would provide resources to finance collective projects such as building of roads, village centres, health clinics, etc.

At national level, there is undoubtedly an urgent need to put more policy emphasis on raising savings capacity of the country to sustain economic growth, despite the considerable efforts being made in winding back public sector deficits. There is a need for a more positive attitude to savings generally in the community, and for a closer consideration of the contribution which public policy can make to achieving this.

Finally, successful structural adjustment and growth policies are the most effective ways to raise household savings. Reforming the incentive structure to spur growth will feed back into higher household and, hence, national saving, thus allowing for even more economic growth. Structural reforms that move an economy beyond its initial conditions of low resource mobilization and income growth give rise to a virtuous cycle of mutually reinforcing saving and growth efforts.

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Appendix A

Table 1A Sources of household income

Response category	*Frequency*	*Percent*
Salary or wage employment	564	38.1
Agriculture - Crop production	349	23.6
Animal husbandry e.g cattle, etc.	47	3.2
Fishery and forestry e.g. fishing, etc.	10	0.7
Cottage industry e.g tailoring, etc.	54	3.6
Construction	54	3.6
Grain processing e.g. milling, etc.	26	1.8
Informal trades and retailing, etc.	237	16.0
Services e.g. mechanic, hair saloon, etc.	86	5.8
Remittances e.g. from towns, etc.	9	0.6
Others e.g. landlord, etc.	45	3.0
Total	*1481*	*100.0*

Table 2A Monthly income groups

Groups	*Frequency*	*Percent*
Less than 10,000	2	0.3
10,000 - 50,000	224	32.3
51,000 - 100,000	258	37.2
101,000 - 150,000	66	9.5
151,000 - 200,0000	64	9.2
201,000 - 250,000	30	4.3
Over 250,000	50	7.2
Total	*694*	*100.0*

Table 3A Monthly income savings

Groups	*Frequency*	*Percent*
Less than 5,000	228	32.9
6,000 - 10,000	171	24.6
11,000 - 30,000	170	24.5
31,000 - 50,000	69	9.9
51,000 - 70,000	16	2.3
71,000 - 80,000	9	1.3
Over 80,000	31	4.5
Total	*694*	*100.0*

Table 4A: Self-employed: Annual income

Groups	*Frequency*	*Percent*
Less than 20,000	377	25.4
21,000 - 40,000	60	4.1
41,000 - 60,000	97	6.5
61,000 - 80,000	93	6.3
81,000 - 100,000	133	9.0
Over 100,000	721	48.7
Total	*1481*	*100.0*

Table 5A Self-employed: Annual savings

Groups	*Frequency*	*Percent*
No savings	675	45.6
Less than 5,000	49	3.3
6,000 - 10,000	103	7.0
10,000 - 20,000	85	5.7
21,000 - 30,000	46	3.1
31,000 - 40,000	39	2.6
Over 40,000	484	32.7
Total	*1481*	*100.0*

Table 6A Main form of cash savings

Response category	*Frequency*	*Percent*
Cash hoarding at home	203	24.2
Banks	561	66.9
Post Office savings	14	1.7
Co-operative Credit Unions	31	3.7
Loans to friends, relatives, etc.	17	2.0
Others e.g. pension schemes, etc.	13	1.5
Total	*839*	*100.0*

Table 7A Main forms of non-cash savings

Response category	*Frequency*	*Percent*
Food hoarding e.g. maize, millet, etc.	189	22.3
Animals e.g. cattle, goats, pigs, etc.	256	30.2
Real estates e.g. land, building, etc.	179	21.1
Investments in family businesses	203	23.9
Others	21	2.5
Total	*848*	*100.0*

Table 8A: Main factor which motivated cash form savings

Response category	*Frequency*	*Percent*
Salary or wage paid through bank	197	23.6
Lack of other savings facilities	55	6.6
Stay near bank	16	1.9
Advice through radio programs, etc.	21	2.5
For safe custody	251	30.1
To earn interest	72	8.6
To acquire a loan	61	7.3
Good client-bank relationship	12	1.4
Others	150	18.0
Total	*835*	*100.0*

Table 9A Main factors which motivated non-cash form savings

Response category	*Frequency*	*Percent*
No cash savings facilities around	40	4.7
No faith or confidence in financial institutions	18	2.1
Minimum deposit requirement too high	53	6.3
Bank interest rates too low	209	24.8
Difficult to secure bank loans	57	6.8
Poor customer services at banks	48	5.7
Banking hours are too restrictive	27	3.2
Others eg. cultural practices	391	46.4
Total	*843*	*100.0*

Table 10A Reasons for saving in cash forms

Response category	*Frequency*	*Percent*
For children's education	310	37.1
To buy land	55	6.6
To build a house	94	11.3
To buy a vehicle	17	2.0
To establish some family business	120	14.4
To pay rent	6	0.7
To pay dowry	10	1.2
For retirement or old age	17	2.0
For emergencies e.g. sickness, etc.	185	22.2
Other reasons	21	2.5
Total	*835*	*100.0*

Table 11A: Main factors that restrains cash form savings

Response category	*Frequency*	*Percent*
Low income	322	49.7
High cost of living	128	19.8
Social responsibility e.g. extended family	107	16.5
Low bank interest rates	53	8.2
Social habits	10	1.5
Others	28	4.3
Total	*648*	*100.0*

Table 12A Attitude towards savings

Response category	*Frequency*	*Percent*
Saving is a sacrifice	244	16.5
Saving is only for the rich	80	5.4
Savings should be done after all other needs	360	24.3
Saving is not necessary	3	0.2
There are no benefits in saving	35	2.4
There are benefits in saving	741	50.0
Others	18	1.2
Total	*1481*	*100.0*

Table 13A What households would do if they had more income

Response category	*Frequency*	*Percent*
Put it in the bank	283	19.1
Invest in real estates e.g. land, etc.	899	60.7
Buy livestock	143	9.7
Pay off loans, debts from friends, etc	22	1.5
Others	134	9.0
Total	*1481*	*100.0*

Table 14A What households think about their current cash savings

Response category	*Frequency*	*Percent*
Saving a lot	47	3.2
Saving a little	846	57.1
Managing to make ends meet	428	28.9
Having to draw on our savings	29	2.0
Running into debts	121	8.2
Others	10	0.7
Total	*1481*	*100.0*

Table 15A: Likelihood of income increase

Response category	*Frequency*	*Percent*
Very likely	236	15.9
Fairly likely	611	41.3
Fairly unlikely	123	8.3
Very unlikely	299	20.2
Don't know	212	14.3
Total	*1481*	*100.0*

Table 16A Likelihood of spending cuts

Response category	*Frequency*	*Percent*
Very likely	115	7.8
Fairly likely	243	16.4
Fairly unlikely	311	21.0
Very unlikely	701	47.3
Don't know	111	7.5
Total	*1481*	*100.0*

Table 17A Likelihood of saving

Response category	*Frequency*	*Percent*
Very likely	162	10.9
Fairly likely	436	29.4
Fairly unlikely	200	13.5
Very unlikely	475	32.1
Don't know	208	14.0
Total	*1481*	*100.0*

Table 18A Attitude towards prevailing economic environment

Response category	*Frequency*	*Percent*
A very good time to save	180	12.2
Quite a good time to save	458	30.9
Quite a difficult time to save	655	44.2
An impossible time to save	151	10.2
Don't know	37	2.5
Total	*1481*	*100.0*

Table 19A: Opinions on the performance of banks in mobilizing savings

Response category	*Frequency*	*Percent*
Poor	569	38.4
Fair	442	29.8
Very fair	46	3.1
Good	114	7.7
Very good	9	0.6
Excellent	4	0.3
Don't know	297	20.1
Total	*1481*	*100.0*

Do the poor actually save?

Ben Paul Mungyereza[1]

I Introduction

One of the categories of people that are difficult to understand are the poor - in particular the 'core poor'. Most of the poor in developing countries earn their living from agriculture, they earn a pittance for their labour and spend more than half of their meagre income on food. They live a subsistence life but in extreme cases, they even fail to subsist. The economics of being poor is a very important area of economics yet very few people understand it. It is the poor themselves who know how they survive and how they mobilise their savings to guard against any future economic problems. According to Schultz (1980), people who are rich, find it difficult to understand the behaviour of the poor; they find it difficult to comprehend the preferences and scarcity constraints that determine the choices that poor people make. He argues that economists are no exception, they too do not understand the poor. One important issue to note is that the poor may be more concerned about improving their lot, and that of their children compared to the rich. However, given their income level, they find it difficult to save enough. They only save in small bits. They, in some instances, forego necessary consumption to invest in productive assets such as cows, goats, chicken, land, etc., which tend to appreciate over time. The savings of the poor therefore are difficult to differentiate from their investment.

Literature on savings postulates that the poor have a lower marginal propensity to save compared to rich people. Much as this may be true, it should not be taken for granted. The poor are usually in a situation of 'a fear of remaining poor' in the long run much as the rich are in 'a fear of descending into poverty'. The poor people by trying to minimise the risk of remaining poor tend to save in small bits but overall, it can accumulate to substantial amount.

II 'Informal' saving by the poor

The perceptions of the poor about the income and saving capacity of fellow poor people would clearly show whether the poor save or not. Formal financial lending institutions are usually regarded as the major savings mobilisation mechanism. However, 'informal saving' is quite significant and common among the poor. For example, a survey carried out on market women in Accra, Kumasi and Takoradi in Ghana indicated that the bank savings facility was not attracting this category of people. The majority opted for saving with the *Susu* club as shown below.

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Table 1: **Types of savings facilities utilized by urban market women in Ghana survey of Accra, Kumasi and Takoradi (N=795)**

Name of Facility	Respondents saving **solely** with facility (%)	Respondents saving with this and with other facilities (%)
Home	0.4	36.7
Bank	1.8	36.4
Credit Union	0.0	0.2
Susu Club	30.0	77.0
Other Facility	0.0	0.4

Source: Extracted from **Arnest Aryeetey and Fritz Gockel(1991):** Mobilising Domestic Resources for Capital Formation in Ghana - The Role of Informal Financial Sectors, *AERC Research Paper 3*; Page 37

Formal financial institutions are usually concentrated in urban areas leaving the rural areas with almost no savings mobilisation mechanism. It should be noted that most rural people, because of lack of knowledge, find it difficult to save in the formal financial institutions even where they exist. The rural people therefore find themselves in a dilemma. Either there are no financial institutions where to keep the savings or where they exist, they don't use or they simply do not quite well appreciate the importance of saving in these financial institutions. For example, by 1992, there were 190 UCB branches and 24 Cooperative Bank branches which were dominated by the less profitable, inefficient rural branches. However, these were maintained because they were government owned. Because of their poor services, customer confidence was eroded and rural people opted for keeping money either in cash form in their houses or in asset form (Obwona and Ddumba-Ssentamu, 1995). Such savings are difficult to measure and they may lead to underestimation of rural savings (World Bank, 1993).

The major issue is that the rural people known to be poor have some level of savings but they are difficult to monitor. May be the use of rapid, relaxed and participatory rural appraisal methods to assess the saving capacity would form a good starting point (Chambers, 1992). Mobilisation of rural savings could be the problem. For example, savings and credit societies have been instrumental in delivering credit to the rural poor in Uganda (Matovu and Okumu, 1996). The resources which form the basis of these societies are pooled from the poor themselves.

Coupled with these societies are group based rotating savings and farmer-to-farmer loans (Hunt, 1975). For group based savings, every period funds are deposited with the group and every period these savings are allocated to one member of the group or a group-determined project. Farmer-to-farmer lending also supports productive investments as well as consumption among the farmers in a given community. These clearly show that the savings exist among the poor mostly the rural poor and if they were well tapped, they could be significant.

III Fluctuations in the savings of the rural and urban poor

Low savings and poverty are closely linked. Factors which lead people into poverty such as low incomes, few productive assets or little access to markets also impact on the savings levels. It should be noted that much as poverty is dynamic, the savings level is also dynamic (World Bank, 1995). Households and people could save in one period and fail to save in another period or even in different

seasons, the savings level may be different. However, an increase in income may not necessarily mean an increase in savings. For example with liberalisation, the domestic terms of trade for cash crops improved. This increased people's incomes. However, like what happened in Kenya during the 1976-77 Coffee boom, this windfall income rather increased the consumption to achieve the consumption norms that were not originally reached due to household austerity measures aimed at saving. This contention makes various authors believe that the poor have a relatively low marginal propensity to save.

Another dimension of saving by the poor relates rural to urban poor households. Whereas poor rural households receive relatively lower wages for their labour, they are basically subsistence in nature. On the other hand, their urban counterparts who receive higher wages depend almost wholly on purchased items. Given that expenditure on food constitutes the biggest share of consumption expenditure for the poor, it becomes apparently clear that even though the rural poor are taken to be more vulnerable than the urban poor, the former have an advantage of own produced food[2]. There may therefore be no significant difference between the savings of the poor in the rural set-up compared to their counterparts in the urban set-up.

IV Concluding Remark

In conclusion, therefore, the problems associated with facts relating to savings of the poor blur their saving capacity. If it were possible to constantly interact with the poor to assess their situation, it would be possible to appreciate that the poor actually *save* but mainly in non-financial forms so that their savings and investments cannot be distinguished from one another. To borrow the words of Wole Soyinka, 'the monkey sweats but it is the outside hair which deceives the World'.

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[2] According to World Bank (1995), 46.6% of urban total spending is on food while the corresponding figure for the rural total spending is 28.2%. Also the rural households have more food in kind than urban households - 5.9% for urban compared with 39% for rural.

Are the orthodox saving theories applicable to developing countries?

Marios B. Obwona

I Introduction

There are many reasons why one would be interested in studying the saving behaviour of households in developing countries. For example, we may want to find out if there is any link between saving and growth or between saving and economic development itself. Although economists are still far from generally accepting and understanding the process of development, saving plays an important role in all the theoretical accounts and the data show a strong positive correlation between saving and growth, both over time in individual countries and in international comparisons across countries.

The second reason for examining household saving is to understand how people deal with fluctuations in their incomes. The majority of people in poor countries are engaged in agriculture, and their livelihoods are often subject to great uncertainty, from weather and natural calamities, from sickness, and from fluctuations in prices of their crops. Individuals close to subsistence need to free consumption from income, so that they are driven to extremities simply because their incomes are temporarily low. These smoothing or insurance mechanisms can take a number of forms, of which saving is one. By laying aside some income in good times, people can accumulate balances for use in bad times.

Our concern in this paper is to assess the applicability of the orthodox saving theories to developing countries. The rest of the paper is structured as follows. First, we describe the four main savings theories in the next section. The assessment as to the applicability of these theories in the context of developing countries is discussed in section III. The final sector contains some concluding remarks.

II Saving theories

The Keynesian saving theory

Keynes postulated a consumption function in which the amount of aggregate consumption is mainly dependent on the amount of aggregate income, that is,

$$C = \alpha_0 + \alpha_1 Y.$$

Together with the definition of saving as $S = Y - C$, this leads to the following saving function:

$$S = -\alpha_0 + (1 - \alpha_1)Y.$$

The negative constant may be seen as reflecting some assumed level of subsistence consumption. The coefficient $(1 - \alpha_1)$ is the marginal propensity to save (MPS) which, because of the negative value of the constant α_0, is greater than the average propensity to save (APS), defined as S/Y.

The Permanent Income Hypothesis

The Permanent Income Hypothesis (PIH) assumes a rational household that maximizes utility through consumption decisions. Friedman (1957) postulated a household whose consumption at time t, C_t, depends on its permanent income Y^P,

$$C_t = aY^P$$

Permanent income may be loosely defined as the income which a household may expect to earn, on average, in the long run. More strictly, it is defined as 'the amount a consumer unit could consume (or believes that it could) while maintaining its wealth intact' (Friedman, 1957, pp 10-11). Under this definition,

$$Y^P = rW$$

where

r	=	the long-run rate of interest and
W	=	total of human and non-human wealth.

The propensity to consume out of permanent income depends on the long-run rate of interest and on the other factors, such as the ratio of human to total wealth, but such factors would change only little over time. Observed income is made up of permanent and transitory income, that is,

$$Y = Y^P + Y^T,$$

in which transitory income Y^T may be negative. The main hypothesis of PIH is that the ratio C/Y^P is independent of the level of income. The differences observed in the consumption ratio C/Y (and thus in S/Y) of various income groups are to be explained by the fact that higher income groups have a higher share of transitory income. The assumption is that transitory income Y^T is fully saved. This strict assumption could be relaxed, allowing for some consumption out of transitory income, without affecting the overall conclusions of the PIH very much.

These assumptions enable the PIH to explain (a) the long-run constancy of the APS, (b) the observed differences in the APS of various income groups and (c) the short-run fluctuations of the APS; all phenomena observed in the United States (Evans, 1969).

When it comes to empirical testing of the PIH, the main problem lies in finding an estimate of Y^P. Usually this is done by taking a weighted average of past values of observed income Y. After a Koyck-transformation, this results typically in an equation with following form:

$$C_t = \alpha_1 C_{t-1} + \alpha_2 Y_t$$

This general form, in which consumption in the current period is dependent on the level of consumption in the previous period, is consistent with other approaches to the explanation of consumption and saving.

Empirical tests of the PIH have often taken the form of running a regression like the following on time-series data:

$$S = \alpha_0 + \alpha_1 Y^P + \alpha_2 Y^T$$

in the expectation that the propensity to save out of transitory income will be greater than that out of permanent income. In theory, α_2 could even be equal to one. Studies reviewed by Mikesell and Zinser (1973) tend to confirm that the estimate for α_2 exceed those for α_1, but not that $\alpha_2 = 1$. Gupta (1984) ran a regression of the aggregate saving function for the twelve Asian countries. In nine cases the coefficients were statistically significant; in six of these the coefficient of transitory income exceeded that of permanent income; in three cases the reverse held.

An interesting aspect of the PIH is that it may help to explain the saving behaviour of different income groups. Self-employed persons, for example, generally have a greater transitory component in their income than wage and salary workers, and hence they are likely to show a higher ratio of savings to observed income.

An interesting application of this aspect of the PIH is made by Knudsen and Parnes (1975) who argued that export producers in LDCs face unstable weather and world market conditions, and thus relatively unstable incomes or a relatively large share of transitory income. In a sample of developing countries, they found a significant positive relationship between the degree of export instability and the domestic propensity to save. That is, countries with higher instabilities in export earnings tend to have a higher rate of savings.

Life-Cycle Hypothesis

The Life-Cycle Hypothesis (LCH) is based on the assumption that consumers set their lifetime patterns of consumption and saving so as to maximize utility subject to a lifetime budget constraint. The underlying idea is that people want to spread consumption more evenly over their lifetime than their income will be spread. This leads to the conclusion that saving behaviour is dependent on age: during the income-earning period of life, assets are accumulated (that is, saving), and upon retirement dissaving takes place.

The LCH is clearly designed for industrialised economies where the following three assumptions may hold:

(a) Most individuals engage in wage labour;

(b) there is a perfect labour market where human capital (accumulated through both education and work experience) influences productivity, and thus income, and plays an important role in determining the pattern of income over the lifetime. The typical pattern of the age-earning profile shows an increase in annual earnings from the start of the working life till somewhere around middle age, due to accumulating work experience. Later a decline sets in as productivity falls with old age. Income falls off upon retirement (see, for example, Evans, 1969, p. 47); and

(c) It is assumed that on the basis of a utility function, individuals prefer to spread their consumptions more equally over their lifetime than their income. An assumed capital market would enable them to do so.

Neo-Keynesian saving theory

The neo-Keynesian growth models include a saving function which goes back to the classical economists. There is a separation of households into wage earners, who consume all the income they

receive, and entrepreneurs, who earn profits which are saved and re-invested. The saving propensity out of profit income is thus much larger than that out of wage income. This hypothesis contrasts sharply with the expectations formulated by the LCH, where it is possible that the propensity to consume out of the property income exceeds that out of labour income. This difference arises from the totally different theoretical perspectives of the two approaches.

According to the LCH, an individual household receives both current labour income and property income from previously accumulated assets. These assets are accumulated to spread consumption equally over the life cycle and to ensure income after retirement. It is thus possible that there is substantial consumption out of property income, because the main purpose of asset accumulation is to look after consumption needs. In the neo-Keynesian approach, property income is received by entrepreneurial households and constitutes a return on past productive investment. A large part of it is saved to satisfy further investment needs of the firm. In short, in the LCH perspective the share of property income to total income is determined by consumption decisions, and in the neo-Keynesian models the profit share is determined by investment decisions.

III Are these saving theories applicable to developing countries?

The simple Keynesian saving function linking the level of saving with level of income is not very meaningful. In virtually all theories of saving, one would expect the level of saving to depend on income. Forms that attempt to explain the saving ratio S/Y are therefore more meaningful. Attempts to relate the savings ratio to the level of per capita income led to significant results in cross-country studies but not in time-series analysis (see, for example, Mikesell and Zinser, 1973; Thirlwall, 1974). This may be because the increase in the saving ratio is not determined so much by the increase in income as by the long-term structural changes in the economy that occur with economic development. Such changes include the proletariatisation of the labour force, the modernisation of agriculture, the growing share of the corporate sector and the changing role of government. Houthaker (1965) using 1950s data, concluded, for example, that household savings are proportional to household income and that the higher share of corporate savings seems to be responsible for the higher overall savings ratio in rich countries. On the other hand, government savings tended to be somewhat higher in developing countries. The impact of these processes of structural change on overall savings ratio will be felt only in the long term and may be only weakly related to changes in per capita income. In fact some processes of structural change may have opposite effects on the overall savings ratio.

At first sight, the LCH appears to be of little relevance to LDCs, as in these countries employment conditions tend to be quite different. In most of these countries a large part of labour force is not wage employment, but is self-employed and mostly engaged in farming. In these activities, human capital considerations may not play an important role: all farmers have in principle, access to same technology, and there tends to be little variation between age groups in per capital income. More importantly, the separation of the childhood, working life and retirement periods is far less sharp. Young children may work on the family farm or in the family business as long as they can. The age-earning profile is quite different in that it is determined by the production capacity of the entire household and not only by that of its head. The per capita income of the household tends to go down up to the middle age of its head since the production capacity is reduced by the need for child care. Later, as children become adult, this need declines and children start to contribute to production and income, and the per capita income of the household rises. It may decline again at an older age when children establish their own independent households.

The LCH assumption of a rational household is rather strong, especially in the case of households in developing countries. As Marglin (1984) observed, households are assumed to maximise utility

over their lifetime. However, over that period there is little scope to learn from experience, by trial and error, as there may be on daily markets. Hence the formation and adjustment of preferences (the utility function) is difficult. At the same time, lifetime earnings can be foreseen only imperfectly, hence the budget constraint is also uncertain. With unstable utility functions and uncertain budget constraints, the maximising household finds itself standing in quicksand. Needless to say, these circumstances, which already apply in full force in advanced countries, will apply even more in rapidly developing countries.

Furthermore, the LCH is based on a Western model of the household where the head of the household has to look after his old age and where assets can be freely acquired to serve that purpose. Even in that context, the introduction of social security and pension funds has complicated the model. Attempts to include such institutions in the LCH have led to quite complex modifications (see, for example, Modigliani and Hemming, 1983). But the nature of the household in the LDCs and the income profile over the lifetime is quite different: there is no retirement, people work as long as they can; children contribute to household income after a certain age and often look after their parents in old age. Capital markets are also far from perfect in LDCs and often hardly accessible. Is it realistic in such circumstances, to assume that the household can decide on an optimal saving-consumption pattern over time?

In sum, the PIH down plays the effects of age and family composition to focus on the way in which consumption responds to new information, and the LCH abstracts from uncertainty in order to derive simple forms for age-profile of consumption and saving. Each of these simplifications is potentially useful, the permanent income theory for thinking about fluctuations in seasonal or annual incomes, and the life-cycle for examining relationships between saving and age. However, there are important cases that are covered by neither one, perhaps the most important is behaviour when there is uncertainty.

The neo-Kenesian theories discussed above are not really theories of saving: they are growth theories based on particular assumptions with respect to saving behaviour. The contrast with LCH is sharp. In the LCH, it is assumed that the propensity to save out of labour income may be greater than that out of property income, because property is accumulated with consumption needs in mind. In the neo-Keynesian approach, the inverse is held, because property income is seen as the income of capitalists who have a great urge to reinvest their income. As such, this seems to be an easy empirical matter to settle, but the statistical problems involved are great and no satisfactory conclusion has been reached.

The very sharp distinction between labour and property income may be unrealistic in most developing countries, where many households receive income from various sources. But it may be assumed that households that receive a relatively large proportion of their income from own enterprises have different opportunities and incentives to save than households depending more on wage income (see, for example, Bhalla, 1978).

IV Concluding remarks

The theories of saving and the empirical evidence in the literature seem not to have contributed much to better understanding of saving behaviour in LDCs. It is possible that the failure to explain aggregate savings is due to the fact that aggregate savings are made up of a number of components (savings by households and unincorporated enterprises, by corporations, and by government) which are

relatively independent, which means that changes in one component may be cancelled out by changes in another. It is always difficult to understand an aggregate if one does not understand the component parts. The aggregate savings in an economy are made up of the savings from many individual economic units. Each unit is likely to face quite different conditions, and its saving behaviour may be determined by quite different factors.

In the LCH theory, an economic unit receives current labour income and property income. In the neo-Keynesian theory, the two types of income are, in principle, received by different types of economic units: wage earners and entrepreneurs. In industrialized countries there may be a considerable overlap in the breakdowns by type of income and by institution, with corporation earning profit income and households predominantly wage income. But in LDCs the worker/capitalist distinction is less pervasive because much of the labour force is still in self-employment. The household sector there contains a large component of unincorporated firms that earn profits.

The saving theories discussed in section II analyse saving behaviour as a choice between consumption and saving. However, a significant share of total savings originates from economic units that hardly at all engage in consumption, that is, the corporations. The neoclassical saving theories normally look at total private savings (taking households and corporations together) as they assume that households own shares in the corporations and that corporations decide on profit retention and investment so as to maximise the utility of the owners. In the end, therefore, when the utility-maximising household decides on consumption and saving, it incorporates all forms of current income, wealth and expected incomes into its considerations. In such a perspective, the saving decisions of households and corporations are closely related and offer no scope for separate analysis.

In LDCs, however, the ownership of corporate shares is generally less anonymous and the separation of ownership and management is less advanced. A relatively small number of wealthy families may own and manage most of the corporate sector. This in itself would suggest that there is less scope for separating the household from the corporate sector. But on the other hand, this small number of families would hardly be representative for a large majority of households, nor would it necessarily generate most of the household savings, as the savings made by their corporations are retained in the corporate sector. Most households in LDCs are engaged in production on their own farms or in their own firms in the unincorporated sector of the economy.

The profits of unincorporated household firms should not be simply added to the profits of large corporations, as is done in the LCH. The conditions under which production takes place and profits are earned differ vastly between small household firms and large corporations. The household firms are small; they rely on the exploitation of family labour; and they are price takers on both input and output markets. The large corporations have price setting powers and can, therefore, influence the size of their surplus. One may thus say that the Keynesian argument that investment determines savings, applies to the corporate sector but not to household firms. For the latter category, the level of investment that can be undertaken depends on the available savings.

The condition under which the corporations and the household firms earn their incomes are thus vastly different and it is likely that these differences also affect their saving behaviour. There are thus good analytical and statistical reasons to separate the household from the corporate sector in the analysis of saving behaviour in LDCs.

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Notes for Contribution

Aims and Scope

The Economic Policy Research Bulletin is intended as a means of communication between researchers and officials involved in the process of economic policy management. It is especially interested in the interface between economic policy analysis and the institutional process through which policy is formulated and implemented.

It is expected that issues and questions that emerge for further research by economists, public administration specialists, sociologists, political scientists and others, will stimulate a more informed and productive relationship between policy administrators and researchers.

To achieve this aim, it is intended to select one topic or theme for each issue of the Bulletin. Contributors will be requested to draw the attention of those from different occupations and disciplines than their own, to aspect of the topic which are important from an institutional or, more generally, from economic policy management standpoint. The hope is that this format will generate a creative and interactive relationship which will advance the practice and study of economic policy formulation and analysis.

Length and Style

Contributions to the Bulletin are expected to be no longer than 15 typed pages. Contributors should aim to isolate for description, conceptualisation and analysis particular aspects of the policy issue under review in each issue of the Bulletin. All contextual material should be strictly eliminated unless essential for focussing the attention of readers on the primary points that are being made.

Contributors should have in mind that in most instances the editor will wish to present two or more statements which by giving differing perceptions highlight the nature of the conflicting judgements and facilitate the identification of the institutional issues involved. Thus a somewhat didactic and controversial style rather than a fully balanced and consensual presentation will often be desirable.

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Moreover, because it is intended that the Bulletin should contribute substantively to the intellectual discussion of policy management issues, it might be necessary on some issues to request contributors to meet jointly as a study-group with the editor to determine the precise content and form of publication. Expenses incurred in attending such meetings will be catered for.

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