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FINANCING CAPITAL FORMATION IN THE U.A.R.

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INTRODUCTION

THIS paper is an exercise in the analysis of the saving-investment account and the national financial accounts of the U.A.R. The objective of the study is to investigate the pattern of financing fixed capital formation. Two issues are discussed. Part I investigates the ultimate sources of financing fixed capital formation. An analysis of the saving-investment account has been undertaken in this part. Part II investigates the mechanism of financing capital formation, i.e. how savings are channelled to finance fixed capital formation. This part is based on an examination of the national financial accounts.

I. THE SOURCES OF FINANCE

The first issue which requires investigation is: what are the sources of financing fixed capital formation in the U.A.R.? The answer is well known. Capital is financed from two sources: domestic savings and foreign lending.

The identity of savings and investment is unquestionable. But there are two questions which have certain significance, from the point of view of economic development:

1. What is the relative importance of domestic savings as a source of finance?
2. What is the relative importance of institutional savings, as compared with household savings?

The answer to these two questions is provided by the saving-investment account. The system of national accounts used in the U.A.R. does not show this account explicitly, but records the savings and investment of the different sectors in their capital accounts. Using revised estimates of savings and investment, we have compiled a saving-investment account for the U.A.R. for 1958. The results are shown in Table I.

The account shows that total investments in 1958 amounted to £E135·5 million, out of which £E133·5 million were accounted

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TABLE I

Saving–Investment Account, 1958

(£E million)

Savings		*Investments*	
Households	12·5	Households	15·0
Non-financial business:		Non-financial business:	
Private	59·0	Private	80·0
Public	15·4	Public	17·3
Financial institutions	25·0	Financial institutions	2·6
Public administration	3·5	Public administration	18·6
Total savings	115·4	Total fixed capital formation	133·5
Foreign lending	20·1	Changes in stocks	2·0
Total	135·5	Total investment	135·5

for by fixed capital formation and £E2 million by the increase in stocks. These investments were financed as follows:

	£E
Domestic savings	115·4 million
Foreign lending	20·1 million

These figures indicate that the U.A.R. economy depends mainly on domestic savings for financing capital formation. About 85 per cent of total investments are financed from this source. The saving-income ratio was about 11 per cent, which compared with saving-income ratios of other developing countries appears to be reasonable.

An analysis of the composition of domestic savings reveals some important characteristics of the savings patterns of the economy. Of the total domestic savings, household saving amounted to £E12·5 million or 10·8 per cent and institutional savings (including the budget surplus) amounted to £E102·9 million.

A similar pattern is exhibited by the saving-investment account in 1959–60, the base year for the Five-Year Development Plan. This account is given in Table II. Total investment amounted to £E203·9 million, out of which £E11·1 million were invested in increased inventories and £E. 192·8 million in fixed capital formation. These investments were financed through domestic savings amounting to £E181 million and foreign loans amounting to £E22·9 million. The rate of domestic savings was 13 per cent of the national income which is comparatively higher than that of other developing countries. The major contributors to this relatively large magnitude of domestic savings were the business and public administration sectors. The household sector had a disposable income of £R10·14 million, out of which it saved £E22·7 million or about 2·2 per cent. On the other hand, the savings realized in the business and public administration sectors amounted to £E158 million, i.e. about 87 per cent of total domestic savings. The major part of the savings of these two sectors was generated in the business sector as can be seen from the figures below:

	£E
Corporate savings	71 million
Non-corporate business savings	25 million
Pensions and insurance reserves	16 million
Total	112 million

Corporate business was able to realize that amount of savings because of the legal restrictions on the distribution of profits at that time.[1] The law required private enterprises established before 1958 to distribute profits at a maximum of 120 per cent of the profits distributed in 1958. The enterprises established after 1958 were allowed to distribute profits to a maximum of 10 per cent of their paid-up capital. The law did not apply to public enterprises.

An analysis of business profits shows that more than 65 per cent of net profits were retained in the corporate business sector. On the other hand, non-corporate enterprises reinvested only about 5 per cent of their profits. The smaller rate of reinvestment in the non-corporate enterprises is explained by the fact that a majority of the non-corporate enterprises consisted of small farms which did not require much investment.

Savings in the public administration sector depend upon the budgetary policy of the Government. The pattern of their behaviour changes from year to year.

The findings in this part of the study lead us to formulate certain propositions about the financing of capital formation in the developing countries. It is usually maintained that the deficiency of capital in these countries is one of the major bottlenecks which impede accelerated economic growth. These low

[1] These restrictions were relaxed in 1961.

TABLE II

Saving–Investment Account, 1959–60

(£E million)

Savings		*Investments*	
Households	22·7	Households	9·0
Corporate and non-corporate business	95·6	Corporate and non-corporate business	103·7
Pensions and insurance	16·4	Public administration	80·1
Public administration	46·3		
Total domestic savings	181·0	Total fixed capital formation	192·8
Foreign loans	22·9	Changes in stocks	11·1
Total	203·9	Total	203·9

rates of savings provide a justification for economic aid from highly-developed countries. The example of the U.A.R. suggests that though foreign capital is needed, its importance is exaggerated. Another important result which emerges from this study is that the savings effected in the household and noncorporate sectors are relatively lower than in the corporate business sector. It should be possible for the developing countries to raise their ability to save not only by raising their *per capita* incomes but also by introducing institutional reforms in the business sector. By transforming the noncorporate sector into a corporate sector, they can shift the power of taking decisions to save from individuals to institutions. In many cases, however, where agriculture predominates in the economy the introduction of this reform may not be possible because corporations are an unusual type of organization in this sector. In other sectors, like industry and trade, the corporate form of business can replace non-corporate enterprises.

II. THE MECHANISM OF FINANCE

The second issue which requires investigation is how available financial resources are mobilized and channelled to finance fixed capital formation. A detailed examination of national financial accounts has been undertaken for this purpose.

The Financial Accounts

The work of constructing financial accounts has only recently started in U.A.R. As a beginning an experimental account was constructed for 1957. Later, a more elaborate account was constructed for 1958. For later years, the accounts have not yet been constructed[1].

These accounts were designed to emphasize the role of financial institutions as intermediaries between lending and borrowing sectors. For this purpose, financial institutions were segregated from other types of businesses. The financial sector was further divided into sub-sectors to allow the financial operations of different financial institutions to appear in the account. The degree of detail was determined by two factors:

(*a*) The structure of the financial system, and
(*b*) the role of the accounts in economic analysis.

For the purpose of analysing the sources of financing capital formation, the following sectoring of the financial system was found to be a convenient one.

1. The Treasury.
2. The banking system.
3. Pension and assurance funds and insurance companies.
4. Post Office Saving Fund.
5. Public organizations.

The non-financial sector was the same as in the national income accounts, with the qualification that the business sector excluded financial institutions. It was thought advisable to make a distinction within the business sector between corporate business and non-corporate business. From the point of view of economic analysis, this distinction is important; but because of the lack of data it was found difficult to distinguish btweeen the financial transactions of the two types of business. Thus, the non-financial sector consisted of the following:

1. Households.
2. Private enterprises.
3. Public enterprises.
4. Public administration.
5. Rest of the world.

Within this structure of the economy, four types of financial transactions take place:

[1] Those accounts will be constructed as a part of a research programme on 'Credit Budgeting' to be undertaken at the Institute of National Planning.

1. Changes in the claims of non-financial sectors on financial institutions.
2. Changes in the claims of financial institutions on non-financial sectors.
3. Financial transactions within the non-financial sectors.
4. Financial transactions within the financial sectors.

The Aggregate Financial Account records these four types of transactions, and these financial accounts are intergrated with the savings-investment account.

As a result of the financial activities and saving and investment activities the cash sector gets funds from three sources: (*a*) sale of financial assests, (*b*) indebtedness, (*c*) saving. These funds are used for (*a*) purchase of financial assets, (*b*) repayments of debts, (*c*) capital formation.

Complete information on the financial operations of the non-financial sector is not directly available. But information on the operations of financial institutions is available in their balance sheets. The changes in assets and liabilities of these institutions are recorded in the accounts. In cases where direct information was not available, the sectoral breakdown was estimated by using some hypotheses about the relations between the financial and non-financial sectors. In spite of the weaknesses inherent in the use of an indirect method, the results so far obtained have been of considerable help in getting an idea about the pattern of financing capital formation in the country.

The Pattern of Finance

The financial accounts record two types of financial transactions: (*a*) methods of financing capital formation, and (*b*) changes in the forms of the financial assets held by different sectors. In spite of analytical requirements, it is not always possible to distinguish between these two types of transactions without the help of certain hypotheses.

The pattern of financing fixed capital formation in 1958 is shown in Table III. The total fixed capital formation amounted to £E133·5 million. More than one-half of it was self-financed. The significance of this finding is that the different sectors were more dependent on their own savings than on the resources borrowed from the capital and money markets.

The loans given to the non-financial units by the financial

TABLE III

The pattern of financing Fixed Capital Formation in the U.A.R., 1958

(£E million)

Types of financing \ Sector	House-holds	Private enter-prises	Public enter-prises	Public adminis-stration	Rest of the world	Financial institu-tions	Total
Self-financed	9·2	54·0	—	3·5	—	2·6	69·3
Banking loans and advances	—	3·8	—	—	—	—	3·8
Sale of securities	0·9	15·6	—	—	—	—	16·5
New capital issues	—	0·7	—	—	—	—	0·7
Long-term loans	3·6	2·1	4·7	—	—	—	10·4
Transfers from the Treasury	—	—	12·4	14·9	—	—	27·3
Foreign loans	—	1·5	—	—	—	—	1·5
Errors and omissions	1·3	2·3	0·2	0·2	—	—	4·0
Total	15·0	80·0	17·3	18·6	—	2·6	133·5

system, amounting to about £E64·2 million, took mainly the following forms:

1. Capital transfers from the Treasury amounting to £E27·3 million.
2. Sale of securities amounting to £E16·5 million.
3. Bank loans and advances, amounting to £E3·8 million.
4. Long-term loans and new capital issues amounting to about £E11·1 million.
5. Foreign loans amounting to £E1·5 million.

The total fixed capital formation in the household sector amounted to £E15 million, as against savings of £E12·5 million. There is evidence that the household sector had added a part of its savings to saving and time deposits with the Post Office Saving Account. The counterpart of the increase in the saving and time deposits with banks was probably the decrease in cash balances. On this assumption, it is probable that savings were used as follows:

	£E
Saving and time deposits	3·3 million
Self-financing of investment	9·2 million.

Hence the most probable pattern of financing fixed capital formation in the household sector was the following:

	£E
Self-financing	9·2 million
Long-term loans	3·6 million
Sale of securities	0·9 million
Errors and omissions	1·3 million
Total:	£E15·0 million

About 60 per cent of fixed capital formation was self-financed. The household sector is usually more dependent on its own resources than on the capital market for financing its investments.

TABLE IV

Financial Operations of the Household Sector, 1958

(£E million)

	Sources	*Uses*
Changes in assets		
Currency	3·0	
Current deposits	3·9	
Saving and time deposits		10·7
Securities:		
Government	0·7	
Business securities	0·2	
Changes in liabilities		
Long-term loans	3·6	
Saving-investment account		
Household savings	12·5	
Fixed capital formation		15·0
Errors and omissions	1·8	
Total	25·7	25·7

In analysing the financing of fixed capital formation in the business (non-financial) sector a distinction should be made between private and public enterprises. Table V shows the financial operations of private enterprises. The savings of private enterprises amounted to £E59 million. Besides their own savings, private enterprises had access to financial resources by two other types of transactions. First, they liquidated their financial assets by an amount of £E12·5 million. The two main types of assets liquidated were cash balances (£E5·6 million) and Government securities (£E6·8 million). Second, they increased their liabilities to the financial institutions by an amount of £E36·8 million. This increase in the liabilities of private enterprises was the result of three main types of transactions: loans and advances from the banking system (£E22 million), long-term loans from non-banking financial institutions (£E2·1 million) and the sale of private business securities (£E12 million). The increase in the liabilities of private enterprises to the world amounted to only £E1·5 million.

TABLE V

The Financial Operations of Private Enterprises, 1958

(£E million)

	Sources	*Uses*
Changes in assets		
Currency	2·9	
Current deposits	2·7	
Time deposits		2·2
Claims in foreign exchange		12·1
Government securities	6·8	
Other securities	0·1	
Long-term contractual loans		3·3
Changes in liabilities		
Loans and advances	22·0	
New capital issues	0·7	
Non-financial business securities	12·0	
Long-term loans from financial institutions	2·1	
Capital transfers from the rest of the world	1·5	
Saving–investment account		
Corporate savings	32·0	
Non-corporate business savings	27·0	
Fixed capital formation		80·0
Changes in stocks		10·0
Errors and omissions		2·2
	109·8	109·8

It is possible that private enterprises had obtained funds by increasing their liabilities to other non-financial sectors. But available data indicate only a negligible amount of £E0·4 million paid by the household sector to buy new capital issues. The funds obtained by private enterprises, either by saving or borrowing or liquiditation of assets were mainly used for the purchase of two types of assets, physical assets (£E20 millions) and financial assets (£E17·6 millions).

The evidence given in this account, supported by available information on the types of transactions undertaken, suggests that private enterprises did not use their own savings for the purchase of financial assets. These purchases were financed by reducing cash balances and increasing liabilities. On the basis of this information, all the savings of the private enterprises were used to finance directly the purchases of physical assets. A break-down of the assets purchased by private enterprises is given below.

	£E
Fixed physical assets	80 million
Increase in stocks	10 million

There is no information on how the increase in stocks was financed. In the absence of such information, one has to resort to some hypothesis about the probable means of financing these stocks. The hypothesis is that the stocks net of security banking loans and advances were self-financed and the security loans were financed by borrowing from the banking system. According to this hypothesis, about £E4·9 million of the increase in stocks was financed by loans from the banking system. The rest, amounting to £E5·1 million was self-financed.[1]

Thus, that part of fixed capital formation which was self-financed is estimated at about £E54 million. The rest of fixed capital formation, amounting to about £E26 million was financed by borrowing and liquidating financial assets. That is to say, about 67·5 per cent of fixed capital formation was financed by equity capital and 32·5 per cent was financed by borrowed capital. This finding has some significance from the point of view of the development of the economy. The relatively high proportion of self-financing is a reflection of the fact that the major part of fixed capital formation was used for expanding the productive capacity of existing enterprises. It is also probable that a part of the borrowed capital was used for the same purpose, and was not used for the establishment of new enterprises.

The pattern of financing fixed capital formation in public enterprises is fundamentally different from that of financing fixed capital formation in private enterprises. All fixed capital formation in public enterprises was financed by funds borrowed from the financial system, and the transactions between public enterprises and the financial system were very simple. Table VI

[1] Self-financing of the increase in stocks may be overestimated, since a part of the increase may be financed by loans not secured by merchandise.

gives an account of the financial operations of public enterprises in 1958.

Public enterprises obtained funds from three main sources:

	£E
1. Corporate savings	15·4 million
2. Liquidation of inventories	8·1 million
3. Long-term loans and capital transfers from the financial system	17·1 million

These funds were used as follows:

	£E
Fixed capital formation	17·3 million
Increase in cash balances	16·1 million
Reduction of short-term liabilities	8·1 million

Available information indicates that the counterpart of the reduction of short-term liabilities was the decrease in stocks.

According to the financial practices applied in 1958 in public enterprises, retained profits which were not used directly for financing investment were kept in cash. On the other hand, the Treasury transferred capital funds to those enterprises whose savings were not sufficient to finance investment. In the light of these practices, corporate savings of public enterprises were wholly used to accumulate cash balances. Fixed capital forma-

TABLE VI

Financial Operations of Public Enterprises, 1958

(£E million)

	Sources	*Uses*
Changes in assets		
Current deposits		14·6
Saving and time deposits		1·5
Changes in liabilities		
Short-term liabilities		8·1
Long-term loans	4·7	
Capital transfers from the Treasury	12·4	
Saving – investment account		
Retained profits	15·4	
Fixed capital formation		17·3
Changes in stocks	8·1	
Errors and omissions	0·9	
Total	41·5	41·5

tion was financed by capital transfers from the Treasury (£E12·4 million) and long-term loans from pensions and assurance funds (£E4·7 million).

In public administration, the financing of fixed capital formation is determined by the budgeting procedures. A part of capital formation is self-financed by the surplus of the current budget; the rest being financed by capital transfers from the Treasury. Table VII gives the financial operations of the public administration sector. The surplus in the current budget is estimated at £E3·5 million and capital transfers amounted to £E14·9 million. Funds obtained from these two sources were used for financing fixed capital formation which amounted to £E18·6 million.

TABLE VII

Financial Operations of Public Administration, 1958

(£E million)

	Sources	*Uses*
Changes in liabilities		
Transfers from the Treasury	14·9	
Saving – investment account		
Budget surplus	3·5	
Fixed capital formation		18·6
Errors and omissions	0·2	
	18·6	18·6

For the public sector as a whole (public enterprises and public administration), the Treasury acts as the major financier. It has no sources of its own, but it acts as intermediary between the public sector and other financial institutions. The total capital transfers from the Treasury amounted to £E27·3 million. Table VIII shows that this was financed mainly by borrowing from the banking system, and the liquidation of the Treasury balances with the Agricultural Bank.

There is evidence that there has been close co-operation between the financial operations of the Treasury and the banking system. This integration of the fiscal and monetary policies has been an important factor in shaping the pattern of financing fixed capital formation. The close co-operation between the Treasury and the banking system may well lead to a decrease in the relative importance of self-financing, and an increase in the relative importance of borrowing from the capital and money

TABLE VIII

The Financial Operations of the Treasury, 1958

(£E million)

	Sources	Uses
Changes in liabilities		
Currency		0·1
Treasury bills	10·0	
Government securities	4·0	
Advances from banks	3·9	
Changes in assets		
Claims on the business sector	8·1	
Capital transfers to the public sector		27·3
Errors and omissions	1·4	
Total	27·4	27·4

markets. This requires the reorganization of the financial system and the reformation of both the budgeting techniques and the credit appropriation technique in order to ensure efficient mobilization of financial resources and channelling of capital to planned investments.

TABLE IX

The Financial Operations of the Banking System, 1958

(£E million)

	Sources	Uses
Changes in liabilities		
Currency		5·9
Current deposits	11·5	
Time and savings deposits	13·4	
Clearing and other accounts	6·5	
Credits opened in foreign currencies	12·1	
Banking securities	1·4	
Changes in assets		
Government securities		8·1
Treasury bills		10·0
Other claims on the Treasury		3·9
Loans and advances		30·0
Other investments		0·3
Foreign exchange holdings	10·6	
Gold	5·1	
Saving – investment account		
Corporate savings	3·2	
Fixed capital formation		1·8
Errors and omissions		3·8
Total	63·8	63·8

TABLE X

The Financial Operations of the Pension and Insurance Sector, 1958

(£E million)

	Sources	Uses
Changes in assets		
Current deposits		2·0
Savings deposits		1·3
Government securities		2·6
Other securities		0·8
Long-term loans		10·2
Saving – investment account		
Increase in reserves	19·8	
Fixed capital formation		0·7
Errors and omissions		2·2
Total	19·8	19·8

TABLE XI

The Financial Operations of the Post-Office Savings Fund, 1958

(£E million)

	Sources	Uses
Changes in liabilities		
Savings deposits	3·3	
Changes in assets		
Current deposits		1·4
Time deposits		1·0
Government securities		0·8
Others securities		0·3
Saving – investment account	0·4	
Errors and omissions		0·2
Total	3·7	3·7