THE UNION'S NATIONAL ACCOUNTS IN 1956

Tables XXXVII and XXXVIII in this *Bulletin* give preliminary estimates of capital formation and national accounts of the Union for the year 1956, and revised figures for earlier years.[1]

The Nation's Economic Budget

National accounts statistics furnish information about the income and expenditure transactions of the four main sectors which participate in the market economy, viz., consumers, business enterprises, Government Authorities, and, finally, the international sector. The interrelationship between these transactions during the year 1956 can be summarised in the so-called "Nation's Economic Budget", presented in Table 1.

The Table shows that the Nation's Economic Budget is a composite of four budgets, viz., (1) the budget of receipts and expenditure of consumers (the "personal sector"); (2) the budget of receipts and expenditure of business; (3) the budget of receipts and expenditure of the public sector, i.e. the Union and Provincial Governments and Local Authorities, and, finally, (4) the budget of receipts and expenditure on international account. The aggregate receipts and expenditure of the nation as

TABLE 1.

The Union's Economic Budget, 1956
(£ millions)

Economic Sector	Receipts (1)		Expenditure (2)		Excess of Receipts (+) or Deficit (−) (3)
A. PERSONAL SECTOR:					
1. Disposable Personal Income		1,461			
2. Expenditure on Goods and Services				1,300	
3. Personal Saving (+)					+161
B. BUSINESS SECTOR:*					
1. Corporate Saving and Depreciation Allowances		224			
2. Gross Capital Formation				336	
3. Excess of Capital Expenditure (−)					−112
C. PUBLIC SECTOR:					
(i) *Current Transcactions:*					
1. Taxes and other Current Receipts	347				
Less: Transfers and Subsidies	67				
Net Receipts		280			
2. Total Government Current Expenditure			294		
Less: Transfers and Subsidies			67		
Purchase of Goods and Services				227	
3. Current Surplus (+)					+ 53
(ii) *Capital Expenditure:*					
1. Depreciation Allowances		26			
2. Capital Expenditure				143	
3. Excess of Capital Expenditure (−)					−117
D. INTERNATIONAL SECTOR:					
1. Balance on Current Account				−15	
2. Excess of Receipts (+)					+15
TOTAL: Gross National Product (=Gross National Expenditure)		1,991		1,991	0

* Including Public Corporations.

1. A discussion of the revised figures for the period 1946-56 will appear in a forthcoming issue of this *Bulletin*.

a whole are equivalent to the Gross National Product[2] and Gross National Expenditure, respectively.

Column 1 of the Table shows the incomes accruing to the various sectors, while the second indicates the disposition of the Gross National Product. The final column shows to what extent each sector was able to finance its current or capital expenditure out of its available receipts or income, while for the economy as a whole it indicates the net additions to and absorption of saving.

The personal sector's account[3] distinguishes between receipts in the form of disposable income, i.e. personal income less personal taxes, and expenditure on consumer goods and services. The balance in the consumers' budget represents personal saving, which is either utilised directly to meet the capital goods requirements of unincorporated businesses, or is put at the disposal of other borrowers in the capital market, viz., corporate businesses and the different public authorities.

In the "Business Sector", receipts refer to (1) corporate saving in the form of undistributed profits, and (2) depreciation allowances of all business concerns, whether incorporated or unincorporated. Together they represent *gross* business saving in the form of funds retained or reserved from the year's current operations for capital expansion and replacement. Expenditure, in turn, refers to business outlays on capital goods.

A distinction is made in the Government account between this sector's current and capital transactions. Government current receipts represent taxes of all kinds plus property income, while current expenditure comprises (1) purchases of current goods and services, and (2) transfers[4] and subsidies. The second item must, however, be deducted from total Government receipts and expenditure before the latter items can be included in the Gross National Product and Expenditure totals, respectively. As stated above, these concepts relate to *production* of goods and services, while transfers and subsidies represent payments made on the general grounds of socio-economic policy, and not for the production of goods and services.

As far as the Government's capital account is concerned, capital expenditure refers to (1) "General" Government spending on such items as the construction of roads, streets, public buildings, etc., and (2) the outlay on capital assets of Government enterprises, e.g., the South African Railways, Harbours and Airways, the Department of Posts, Telegraphs and Telephones and municipal trading departments.

The International Account records the net change in the Union's financial position in relation to the rest of the world. As the Union received more goods and services from foreigners than it supplied to them, the difference represents a deficit in our dealings with the rest of the world. This deficit is offset by an "excess of receipts" in the third column.

It will be noted that the totals of columns (1) and (2) amount to £1,991 million, which is the estimated Gross National Product or Expenditure figure for the year 1956. As in respect of any past period, total saving equals total capital formation, the total of column (3) must be zero.

Recent Changes in the Disposition of the Gross National Product.

The national accounts statistics of the past few years reveal that one of the major categories of gross national expenditure, viz., gross domestic capital formation, has tended to slow down. In fact, a comparison of the preliminary 1956 and revised earlier figures indicates that for the first time since 1952,[5] *total* domestic capital formation, i.e. fixed capital formation and the net change in inventories or stocks held by business organisations, showed a downturn last year. However, having regard to such factors as the exceptionally high level of investment activity attained during the post-war period, the sensitivity of investment decisions to changes in the economic climate, and the ruling shortage of risk capital associated with the decline of the capital inflow from abroad, it would appear that the cessation of the earlier boom conditions in the Union's capital market is yet another illustration of the less

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2. This concept is the most comprehensive measure of the value of production or income resulting from the economic activity during any specific year. It is defined as the market value of all *final* goods and services produced by the nation during the given period, and can be derived by adding to the net national income (a) depreciation allowances, i.e. additions to reserves for the replacement of worn-out or obsolete capital, and (b) indirect taxes *less* subsidies. The reason for using the word "final" in the expression "final goods and services" is that not all the goods produced in the given period are included in the gross national product. *Intermediate* goods, i.e. raw materials and semi-finished goods, which are not bought for the satisfaction of current or capital requirements, are excluded, as they are used up in the production of *final* commodities.

   The concepts "gross national product" and "gross national expenditure" refer to alternative ways of measuring the market value of the output of goods and services produced. The former puts the emphasis on the production of total output, while its counterpart on the expenditure side indicates how this output is disposed of.
3. The sector "Persons" comprises not only persons in their capacity as final consumers, but also all *unincorporated* business concerns, i.e., businesses operated by individual business proprietors, families and partnerships, including farmers and professional people practising on their own account in whose case no separation is possible between the "salary" and "profit" elements in income.
4. The main item under this heading is pensions paid to aged persons, war veterans, blind and disabled persons, etc.
5. The decline in total domestic capital formation during 1952 must be ascribed solely to a net decline in inventory (not fixed) investment after the exceptionally large addition to inventory holdings during the previous year, when import control was relaxed.

rapid rate of economic expansion of the Union's economy during 1956.[6]

Nevertheless, the *level* of last year's capital expenditure was still relatively high as can be seen by comparing its proportionate share in gross national expenditure, viz., 24.1 per cent., with the corresponding ratios of 22.8 per cent. for the pre-war period, 1934-38, and 28.7 and 30.1 per cent., respectively, for 1947-48 and 1951, which are the peak years as far as gross domestic capital formation during the post-war period is concerned.

When the implications of the recent lower trend of capital expenditure are viewed in the wider context of the Union's national accounts, it is important to take note of the expansion in the Union's export production during recent years. Export production and capital formation have the same stimulating effect on the income and consumption standards of the community, and data given below indicate that the adverse effect which the decline in investment activity may have had on the level of the national income, has been offset by the expansionary influence of higher exports. In this connection, mention may be made of the important role of exports as a determinant of the level of the Union's national income in the pre-war period. Thus, for example, the pre-war ratio of exports[7] to gross national product amounted to 30.5 per cent., on the average, as compared with the lower figure of 22.8 per cent. in the case of gross domestic capital formation.

It is well-known that during the period immediately after World War II the bulk of the Union's gross national product was utilised for the satisfaction of the exceptional pent-up domestic demand for consumer and capital goods. Furthermore, the prevailing full employment conditions limited the expansion, in the short run, of the domestic supply of goods for alternative uses, and hence the proportionate share of the nation's output flowing into export channels was reduced below its normal level. Since 1949, however, import control and a variety of fiscal and monetary measures have tended to bring about a change in the disposition of the gross national product. Mention can also be made of the stimulus imparted to the Union's export trade by such factors as (1) the increase in the productive capacity, mainly as a result of the heavy post-war capital outlay, of the two traditional export industries, viz., mining and agriculture; (2) the advent of uranium; (3) the increase in exports of manufactured goods to the Federation and other African territories, and (4) the improvement in the transport situation.

The data set out in Table 2 reveal the abovementioned shift in the relationship between the alternative uses of the gross national product since 1952.

Data reflecting the expansion over the period 1952-56 of the Union's visible export trade,[8] which mainly accounts for the downward trend shown by the "Balance on Current Account" item in Table 2 are shown, together with the relevant import figures, in Table 3.

TABLE 2.

Gross National Product and its Disposition, 1952-56

Year	GROSS NATIONAL PRODUCT		GROSS NATIONAL EXPENDITURE					
	Gross National Product (1)	Net Change Col. (1) (2)	Personal and Government Consumption (3)	Net Change Col. (3) (4)	Gross Domestic Capital Formation (5)	Net Change Col. (5) (6)	Balance on Current Account (7)	Net Change Col. (7) (8)
	£ m	£ m	£ m	£ m	£ m	£ m	£ m	£ m
1952	1,410	+129	1,153	+143	331	−55*	−74	+41
1953	1,623	+213	1,263	+110	430	+99	−70	+ 4
1954	1,765	+142	1,325	+ 62	485	+55	−45	+25
1955	1,867	+102	1,414	+ 89	504	+19	−51	− 6
1956	1,991	+124	1,527	+113	479	−25	−15	+36

* See footnote 5.

6. Cf. Dr. T. W. de Jongh's "Review of Economic Conditions in the Union in 1956" in this *Bulletin*, March, 1957.

7. Including the value of the Union's net gold production.

8. The figures given in Table 3 relate to exports of merchandise and the value of the Union's net gold production. Unfortunately, however, the export and import data refer to the Union, *including* South West Africa and the Protectorates, while the gross national product and expenditure figures refer to the Union only. For technical reasons connected with the manner in which the relevant data are compiled, separate foreign trade figures for the Union only are not available. Nevertheless, the figures cited above give a general indication of the trend of the Union's foreign trade.

The "Balance on Current Account" item in Table 2 has been adjusted so as to reflect the net change in the *Union's* Balance of Payments, while this item in the Balance of Payments Table (Table XXXIX) in this *Bulletin* refers to the Union *including* South West Africa and the Protectorates.

TABLE 3.

The Union's Exports and Imports, 1952-56

Year	Exports	Year-to-Year Change	Imports	Year-to-Year Change
	£ m	£ m	£ m	£ m
1952	429		415	
1953	441	+12	423	+ 8
1954	487	+46	437	+14
1955	542	+55	485	+48
1956	599	+57	494	+ 9

The respective roles of gross domestic capital formation and exports in the Union's economy since 1952 can also be illustrated by the figures shown in Table 4.

TABLE 4.

Proportionate Shares of Gross Domestic Capital Formation and Exports in the Union's Gross National Product, 1952-56

Year	Share of Gross Domestic Capital Formation	Share of Exports
	%	%
1952	23.5	30.4
1953	26.5	27.2
1954	27.5	27.6
1955	27.0	29.0
1956	24.1	30.1

Gross Domestic Capital Formation, by Category of Expenditure, 1946-56

As a steadily growing portion of the additions made to the Union's productive capacity during the post-war investment boom is now beginning to make a contribution to the current supply of goods available for domestic and foreign use, it may be useful, for reference purposes, to list the total expenditure on new and improved tools of production since 1946 under the headings shown in Table 5 below.

It will be noted from the Table that the total investment in the principal export industries, viz., farming and mining, amounted to £937 million, which is equivalent to 37 per cent. of total private capital expenditure. The Table also shows that of the various categories of capital expenditure listed the South African Railways, Harbours and Airways and Manufacturing absorbed the largest amount of capital in the public and private sector, respectively.

Another significant aspect of the Union's total post-war capital spending is that the share of the public sector in the over-all total amounts to about one-third. This ratio had also been in force in the pre-war period (1910-39).

TABLE 5.

Gross Domestic Capital Formation, by Category of Expenditure, 1946-56.
(£ millions)

A. PUBLIC SECTOR:		
1. Transport:		
Railways, Harbours and Airways	386	
Roads and Bridges	80	
Municipal Transport	10	476
2. Electric Power:		
Escom	144	
Municipal Establishments	91	235
3. Iron and Steel, Oil from Coal and Other Projects of Public Corporations and Government Enterprises		125
4. Municipal Services (streets, drainage, sewerage, etc.)		110
5. Communications (Telephone and Telegraph Services)		80
6. Irrigation and Municipal Water Supply		81
7. Provincial Schools and Hospitals		63
8. Public Housing Schemes		51
9. All Other Public Capital Formation		63
TOTAL: PUBLIC SECTOR		1,284
B. PRIVATE SECTOR:		
1. Farming		469
2. Mining		468
3. Manufacturing		629
4. Private Residential Building		471
5. All Other Private		455
6. Transfer Costs		69
TOTAL: PRIVATE SECTOR		2,561
GRAND TOTAL		3,845

Gross Capital Formation during 1956

The capital expenditure of the three main types of organisations distinguished in Table XXXVII shows divergent trends during 1956. In the case of Public Authorities a substantial increase is noticeable, mainly on account of a rise of £10 million in the capital outlay of the South African Railways, Harbours and Airways. "Public Corporations", i.e. Escom, Iscor, Sasol and other semi-official enterprises, maintained its expenditure at the 1955 level, but the figures for the third sector, namely, private enterprises, show an appreciable decline, estimated at £43 million.

Investment activity in the private sector is of course much more subject to cyclical changes than that of public bodies. This applies especially to investment in inventories, which, according to the present estimates, accounted for about half of last year's decline in private capital formation. Furthermore, expenditure on *fixed* capital assets was on a lower level in the case of agriculture, mining, manufacturing,[9] and residential building.

9. The basic source of information is the annual *Census of Industrial Establishments*, but as the latest available figures refer to the year 1951/52, estimates for later years are based on sample data in the case of existing firms; allowance is also made for the capital outlay of new firms. The sample data show an appreciable downturn in the fixed capital formation of manufacturing firms last year.

The movements over the past three years of the capital expenditure of the above-mentioned types of organisation, and also of the three main types of assets included under total gross capital formation, are shown in Table 6.

TABLE 6.

Gross Capital Formation, by Type of Organisation and by Type of Asset, 1954-56

	1954 £ m	*1955* £ m	*1956* £ m
A. TYPE OF ORGANISATION:			
1. Public Authorities	120	125	143
2. Public Corporations	39	31	31
3. Private Enterprises	326	348	305
Total	485	504	479
B. TYPE OF ASSET:			
1. Building and Construction*	245	255	261†
2. Machinery, Plant and Equipment	214	197	189
3. Total Fixed Capital Formation*	459	452	450
4. Net Change in Inventories	26	52	29
Total	485	504	479

* Including transfer costs incurred in the case of sales of immovable property.

† Despite the recent lower trend of expenditure on all *private* construction, the total of the expenditure in question increased as a result of an appreciable increase of £15 million in the case of Public Authorities.

Total Investment Funds Available

The net changes over the past two years in the various items that comprise total investment funds are shown in Table 7.

TABLE 7.

The Financing of Domestic Capital Outlay, 1955-56

	1955 £ m	*1956* £ m
1. Personal Saving	183	161
2. Corporate Saving	74	99
3. Current Surplus of Public Authorities	60	53
4. Depreciation Allowances	136	151
5. Total Gross Domestic Saving	453	464
6. Net Foreign Borrowing and Realisation of Foreign Assets	51	15
7. Total Funds Available	504	479

According to the present estimates, private domestic saving, i.e. personal and corporate saving, remained at about the same level during the two years under discussion, but while personal saving appears to have declined somewhat, corporate saving shows a corresponding increase. The latter development is of great importance as it is a reflection of conditions currently affecting the supply side of the capital market.

It is well-known that the decline in the inflow of private overseas capital during recent years has had an adverse effect on the supply of risk capital, a portion of which is usually obtained from this source. This has put a premium on the flow of risk capital from its principal domestic source, viz., business saving out of profits. A portion of this supply is included under the heading "personal saving", which refers not only to the saving of individuals, but also to that of unincorporated businesses, e.g. farmers, family businesses and partnerships. Unfortunately, however, the absence of relevant accounting data makes it impossible to estimate this component of business saving separately.

More information is available, however, in the case of public companies. It would appear that the downward trend in the foreign capital inflow during the past four years has been accompanied by a countervailing tendency on the part of corporate saving, which is estimated to have increased from £66 million in 1953 to £104 million in 1956.[10]

This tendency towards a greater measure of financial independence from outside sources is not surprising in the case of the mining industry, as its records from the very earliest times show that it has principally relied on internal financing during periods when interest rates were high and conditions were unfavourable in overseas capital markets for the raising of large sums by means of new issues.[11]

On the basis of an analysis of the accounts of mining and associated financial and investment companies listed on the Johannesburg Stock Exchange, the retained earnings of this group of companies are estimated to have increased from about £18 million, in 1953, to £23 million in 1954, £31 million in 1955, and over £40 million in 1956. This increase, in turn, has been made possible by the substantial increase in the net income originating in this industry, which, in the case of gold mining, amounted to £118 million, £136 million and £160 million during the years 1953/54, 1954/55 and 1955/56, while the corresponding figures for "other" mining were £60 million, £65 million and £71 million.

In view of the fact that the great increase in the extent of the diversification process in the Union's economy during the past three decades has called for the application of even larger amounts of money capital in private manufacturing ventures than that required for mining development, the problem of finding adequate sources of capital supply for these new investment outlets also deserves close attention. In this connection it can be mentioned that since the pre-war period many industrial and commercial firms have adopted the corporate form of business, thus affording access to a wider circle of investors

10. i.e., before adjusting the corporate saving figures of manufacturing and commercial firms for the element of capital gain associated with the valuation of inventories at original cost during a time of rising prices.

11. Cf., in this connection, S. H. Frankel: *Capital Investment in Africa*, Chapter 3, Section II, pp. 92-105.

as far as the supply of risk capital is concerned. Accordingly, they were able to avail themselves of the boom in new issues prevailing on the Johannesburg Stock Exchange after the war. In the present investment climate, however, this potential source of supply offers very limited scope for raising new money capital, and hence it would appear that the firms in question are becoming increasingly dependent on internal financing. Thus, for example, sample data in respect of a large number of firms engaged in manufacturing, commerce and service trades show that the percentage of total profits not distributed has increased from 27 per cent. in the financial years 1952/53 and 1953/54, to about 30 per cent. in 1954/55 and more than 31 per cent. in 1955/56. As the recent trend of the net income of secondary and tertiary industries has not, however, been so strongly upward as that of mining, the rate of increase in the actual amounts of retained earnings has been correspondingly lower.

Over and above the amounts retained out of profits, still another internal source of funds is available for the financing of the gross capital expenditure of business concerns, viz., depreciation allowances. In the case of private business enterprises this is estimated to have totalled about £125 million last year.

Despite the very important role of corporate saving under present conditions, the problem still remains that this source of risk capital is only available to established concerns. Therefore, in order to meet the capital requirements of other lenders, i.e. *new* firms and public authorities, means must be found of using the other available sources of domestic capital supply to the best advantage.[12] It is well-known that one of the objectives of budgetary policy during recent years has been the creation of substantial surpluses on current account, but this, in turn, affects the size of personal saving. The latter represents the residual item in the domestic saving account, and an attempt to increase government and corporate saving, given the level of the national income, will thus tend to reduce personal saving as individuals will have to pay more in taxes, on the one hand, and receive less in the form of dividends, on the other, than would otherwise have been the case. Accordingly, the increase of personal saving depends, in the final analysis, on the presence of additional incentives to save more out of current income. Certain fiscal measures have been introduced with this end in view, e.g., the revision of the marginal tax rates applicable in the case of the higher income groups and the raising of the super tax exemption limit. In addition, the existence of a higher interest rate pattern during recent years has also affected saving propensities, especially on the part of the small saver.

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12. Mention can be made, in this connection, of the proposal to establish a new industrial finance corporation to expedite the flow of risk capital to secondary industry.