

INVESTMENT IN THE UNION, 1938-50

INTRODUCTION

No published data on investment in the Union exist for the period after 1945/46. The estimate of net investment for that year was drawn up by Professor S. H. Frankel, and published in the December, 1947, issue of the *South African Journal of Economics*. It must be pointed out, however, that Professor Frankel's net investment figures, which go back to the year 1922-23, stand in need of revision in the light of certain basic sources of information which have come to hand since he completed his computations. A notable omission from his series, for example, is investment in inventories. Although no investment statistics have been published in the Union since 1947, the National Accounts Section of the Union's Bureau of Census and Statistics has been engaged on research in connection with the national expenditure of the Union, but so far this section has only published national income figures. In view of the very important role of investment in the Union's economy, the Statistical Department of the South African Reserve Bank is now attempting to bridge the gap in our contemporary economic statistics by publishing its own investment series for the war and post-war years. (See Table XXX).

INVESTMENT TRENDS SINCE 1938

After the enforced curtailment of investment during the war years, the Union has experienced an unprecedented investment boom since 1945, although the figures indicate a slackening off of over-all investment since 1948, the peak investment year, mainly on account of the effect of import control on investment in inventories.

Comprehensive investment figures provide some of the most important data that have to be taken into account in attempting to gauge a country's rate of growth between the turning points of the business cycle. Every phase of the business cycle has its statistical counterpart in the over-all investment data, since investment is cyclically far more sensitive than the other components of national expenditure, namely current expenditure on goods and services of persons and Government Authorities, respectively. As is well-known, investment drops to low levels during depressions, and vice versa in boom periods. During wars the bulk of the resources of the economy is mobilised for the purpose of winning the war, and since expenditure by the Government on assets intended for war use is not regarded as investment, the normal investment programme of the country concerned suffers a severe setback.

Two methods may be used in estimating the investment total of a country. The one approach requires an investigation of the way in which the investment programme is financed. The financing of capital outlay is carried out by means of funds obtained from several sources, viz., sums set aside for this purpose by business enterprises, personal savings, surpluses of public authorities, foreign loans and realisation of foreign assets. The addition of these funds yields the total sum that is placed at the

disposal of the various sectors of the economy for investment purposes. The second method of measuring the size of investment within a specific period is based on an analysis of the actual expenditure of the economy on capital goods. This second method is the one used in the present calculations, but it should be borne in mind that such concepts as capital expenditure or capital formation, which are used in the text, refer to the same statistical magnitude as the one denoted by the use of the investment concept.

Capital expenditure is usually divided into two broad categories, namely gross and net investment. While net investment measures the addition to the already existing capital assets of a country, gross investment includes net investment and depreciation allowances, i.e., charges against the current receipts of the community for the ultimate replacement of the assets which are being worn out during the course of the various production processes of the economic system. Net investment can thus be calculated by setting off the relevant depreciation allowances against the total capital expenditure during the period in question. Net investment may be zero or negative, especially during depressions and wars. In the case of negative net investment the economy is living on its capital, which means that current capital expenditure is less than the amount required to cover depreciation. Table XXX shows that this situation did not arise in the Union during World War II, except in the case of private net investment in 1942 and 1943.

A further broad distinction that can be made is between fixed capital formation, on the one hand, and investment in inventories and work in progress, on the other. The latter is the most variable part of total investment, as decisions, on the part of businessmen, to increase or decrease inventories, can be implemented far more quickly than is the case with fixed capital equipment. This is borne out by the sudden and pronounced changes in the inventory figures in Table XXX, which form a strong contrast with the less violent swings disclosed by the figures relating to fixed capital expenditure.

According to Table XXX the biggest role in private fixed capital formation over most of the period 1938-50 was played by the building construction* (item No. 5) and the mining industry (item No. 6). In the case of the former, the big increase since 1945 is related to the gradual relaxation and ultimate removal of building control, while the increase in mining investment after the war is due to the new mining development in the Orange Free State and the Far West Rand. As far as manufacturing investment (item No. 8) is concerned, it should be stressed that the series shown in Table XXX refers only to additions to plant and equipment and not to new factory buildings, which are included with other building construction in the over-all private building construction series (item No. 5). The same applies to the investment figures in the case of commercial and private transport undertakings (item No. 7). If

* Public building construction is included in the over-all public investment series in Table XXX.

the investment in factory buildings which is included in item No. 5 were added to investment in manufacturing plant and equipment, the effect would be to raise the latter series by a percentage that may be as high as 25% since 1945. Capital formation in farming (item No. 9) also shows a significant increase since 1945, which can be ascribed to the sharp post-war rise in the value of imported farming implements, backed up by local production of agricultural machinery, although the imposition of import control has, since 1948, restrained further expansion in regard to implement imports.

Of special importance in relation to business cycle policy is the respective shares of public and private investment in the total investment, since private investment, being geared to the profit expectations of businessmen, is far more unstable than public investment. During wars and depressions, when private investment slumps, public investment may be used to offset the impact of this decline on total investment. According to Table XXX the quantitative importance of public investment was most pronounced in 1942 and 1943, although the relative importance of public investment in the total investment activities of the Union is very noticeable during the whole of the period under review. This is due mainly to the many capital works that are undertaken by the Union's local authorities and to the important role of the South African Railways and Harbours in the country's investment programme.

The figures shown in Table XXX are for the calendar years 1938 to 1950, and are at current prices. This means, of course, that the influence of the inflationary price trend, since 1938, has not been removed from the data, so that too much significance should not be attached to comparisons between the pecuniary volume of investment in post-war and pre-war years. The 1948 figure, for example, is roughly four times that of the pre-war year 1938, but during this ten year period wholesale prices of Union and imported consumers' and capital goods showed an increase of 75 per cent.

The figures of Table XXX refer to **domestic** investment, i.e., the total expenditure on capital goods within the Union during the period 1938-50. The net **foreign** investment of a country is defined as the net change in its international assets and liabilities, including its monetary gold stock*, arising out of current international transactions as reflected in its annual balance of payments statistics. Unfortunately, however, the balance of payments figures published in this Bulletin at present only cover the period since 1945. Nevertheless, from the data concerning the Union's gold and exchange holdings and the redemption of overseas debt it may be inferred that our net foreign investment was a positive amount during the war years. This position has been reversed since 1945. In the post-war period a big inflow of overseas capital occurred, which means that foreign investors

obtained claims against the capital assets of this country. At the same time there was a marked decline in the Union's gold and exchange holdings. The negative foreign investment which is reflected in the inflow of capital from abroad and in the disinvestment of gold and exchange assets must accordingly be deducted from the total domestic investment in order to arrive at the net addition to capital assets of the Union.

In conclusion it is important to note that the figures submitted in Table XXX, especially those for the years 1949 and 1950, must be regarded as preliminary, as there is usually a lag of two or three years before the results of the Union's main production censuses come to hand. These gaps have accordingly to be filled in by means of information gained from sample studies, so that the figures will have to be revised as and when the basic statistical data become available.

SOURCES OF THE STATISTICS OF INVESTMENT

The degree of accuracy involved in the estimates of capital expenditure in the various sectors of the economy differs greatly. By and large the sources of information on investment in the public sector are the most reliable and comprehensive. The Union Government and Provincial Authorities keep accounts that are reviewed by the Union and Provincial Auditors, respectively, so that the investigator has merely to segregate those items of expenditure in the auditors' reports that belong to the category of capital outlay. Local Authorities provide the relevant information in their returns to the Census Bureau. In the case of the South African Railways and Harbours, the expenditure on capital and betterment works provides the necessary factual material. Adjustments have to be made to the data in order to obtain calendar year figures, as the financial year of most public authorities ends on March 31st. Where auditors' reports are not yet available, the relevant information is obtained from expenditure votes submitted to Parliament and the Provincial Councils, respectively. The 1950 capital expenditure figure of Local Authorities, including Divisional Councils, is an estimate.

In the field of private investment, data on building construction do not offer many difficulties since monthly data on "buildings commenced" in the 18 principal centres are available from returns submitted to the Census Bureau. By weighting these monthly figures in accordance with the estimated time taken to complete the various types of buildings, annual figures can be obtained which reflect the approximate value of construction work done within a specific 12 month period. The figures thus obtained have further to be adjusted so as to cover all municipalities and other local authorities, and, finally, the duplication of non-private building already included in the public sector has to be eliminated.

Mining investment can be estimated by adding up the expenditures on items of a capital nature appearing in the returns rendered to the Government Mining Engineer by the mining companies. Commercial investment in equipment and fittings is obtained by applying the information obtained from a sample survey to the relevant statistics provided in the 1946/47 Distribution Census. The only data available

* An alternative way of treating gold in a country's national accounts has been put forward by R. Stone in the United Nations Memorandum "Measurements of National Income and the Construction of Social Accounts", p. 67. According to this view gold is regarded not as a financial claim, as above, but as a commodity in which case changes in gold inventories would form part of *domestic* capital formation.

from which investment in the private transport industry can be inferred, are those disclosed by the national income tables of the Bureau of Census and Statistics, so that this investment item, which fortunately is of relatively minor importance, does not rest on too a secure basis.

Manufacturing investment in fixed plant and machinery is based on the returns under this head in the consecutive issues of the annual "Census of Industrial Establishments." The latest of these figures are in respect of the year 1948/49, so that the later figures have to be obtained from a sample survey showing the investment for existing firms, whereas the investment in equipment of new firms is estimated from the value of new factories as reported in the monthly "buildings commenced" series of the Census Bureau.

Farming investment includes purchases of farming implements, which can be deduced from import and export returns and local manufacturing figures, and from expenditure on improvements, which is estimated by the Division of Economics and Markets.

Investment in commercial and manufacturing inventories is obtained by applying the results of a sample survey to the basic data provided by the Distribution Census and the financial return to the annual "Census of Industrial Establishments" of the Census Bureau, respectively. In interpreting the inventory series in Table XXX (item No. 10), it is important to bear in mind what these figures attempt to measure. The amount of investment in inventories that is included in the investment total is the "current value of the physical change in inventories"*. The reason for this approach is that there are two different factors that may cause a change in the value of inventories as reflected in the accounts of the business sector, viz., an increase or decrease during a particular year in the **quantity** of goods or materials in stock or, secondly, an increase or decrease in the unit value of the goods or materials in stock. The change in the value of inventories brought about by the first-mentioned factor form a part of over-all investment, whereas the change in inventory values caused by the second factor represents an inventory profit or loss arising through the effect of a price rise or fall on the goods in stock. This inventory profit or loss must be excluded in the calculation of inventory investment as the investment total of a country only measures the expenditure on newly produced capital goods, in accordance with the definition given above, and not the appreciation or depreciation in the value of goods already in existence

* The method of calculation used is in accordance with the method outlined in the United Nations Memorandum: "Measurement of National Income and the Construction of Social Accounts", p. 106 et seq.

on account of price changes. The influence of this latter element in the change of inventory values is eliminated from the original data by valuing the closing stocks in the Union's economy during the period under review at the **same** set of prices (base: 1938=100). The change in the real values of inventories between consecutive years in this adjusted inventory series is then revalued at the average price level of each year from 1938 to 1950. The inventory figures obtained after the various adjustments mentioned above have been carried out are shown as item 10 in Table XXX.

Livestock changes are calculated by the Division of Economics and Markets, and investment or disinvestment in the inventories of the Marketing Boards is confined to changes in the inventories of the Mealie and Wheat Boards, as the inventories of the other Marketing Boards are insignificant.

Depreciation charges for the economy as a whole present great difficulties to investigators in all countries, on account of the lack of information. In the case of the Union's manufacturing concerns, the figures are based on the returns of manufacturing concerns to the Census Bureau. The depreciation allowances of the South African Railways and Harbours are reflected in the amounts contributed annually to the Renewals Fund. Mining depreciation poses many problems, as the mines are allowed to write off an arbitrarily fixed percentage of their capital outlay against working profit. The depreciation allowances as reported by the mines to the Government Mining Engineer have been used for the purpose of the present calculations, but this procedure involves an understatement of the true depreciation figure. Depreciation charges on the capital assets of Local Authorities have been taken as the equivalent of their contributions to their Renewals and Sinking Funds, and those of the Provincial and Union Governments as the annual amounts voted for the redemption of debt.* Depreciation on private buildings is estimated by applying a 2 per cent percentage on the value of rateable improvements (i.e., excluding site value). The latter figure is obtained from the returns submitted by Local Authorities to the Census Bureau. The 2 per cent depreciation charge is based on the assumption that the life cycle of buildings amounts to 50 years.

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* As Public Authorities do not make proper provision for depreciation or renewals, the method used here corresponds to that of British investigators who take payments to sinking and redemption funds as a measure of the sums that have to be deducted from gross capital formation in lieu of depreciation allowances.

BELEGGING IN DIE UNIE, 1938-50

INLEIDING

Geen gepubliseerde syfers i.v.m. belegging in die Unie is vir die periode na 1945/46 beskikbaar nie. Die netto beleggingsyfer vir dié jaar is deur professor S. H. Frankel beraam, en is in die Desember 1947-uitgawe van die *Suid-Afrikaanse Tydskrif vir Ekonomie* gepubliseer. Dit is egter nodig om daarop te wys dat professor Frankel se netto beleggingsyfers, wat tot die jaar 1922/23 teruggaan, hersien moet word op grond van inligting wat beskikbaar geword het sedert hy sy berekenings voltooi het. Belegging in voorrade is byvoorbeeld 'n belangrike ontbrekende item in sy syfers. Alhoewel geen beleggingstatistiek sedert 1947 in die Unie gepubliseer is nie, is die Nasionale Rekening-Afdeling van die Unie se Buro van Sensus en Statistiek besig met navorsing t.o.v. die nasionale uitgawe van die Unie, maar tot dusver het hierdie Afdeling nog slegs volksinkomstesyfers gepubliseer. Vanweë die baie belangrike rol wat belegging in die Unie se ekonomie speel, wend die Statistiese Afdeling van die Suid-Afrikaanse Reserwebank tans 'n poging aan om die gaping in ons huidige ekonomiese statistiek te oorbrug deur sy eie beleggingsyfers vir die oorlogs- en na-oorlogse jare te publiseer. (Sien Tabel XXX.)

BELEGGINGSNEIGINGS SEDERT 1938

Na die gedwonge inkorting van belegging gedurende die oorlogsjare, het die Unie 'n ongeëwenaarde beleggingsopblœi sedert 1945 beleef, alhoewel die syfers 'n verslapping van die totale belegging sedert 1948, toe belegging sy toppunt bereik het, aandui, hoogsaklik as gevolg van die uitwerking van invoerbeheer op belegging in voorrade.

Omvattende beleggingsyfers verskaf sommige van die belangrikste gegewens wat in ag geneem moet word indien daar gepoog word om 'n land se groeikoers tussen die draai-punte van die konjunkturgolf te bepaal. 'n Statistiese weergawe van elke fase van die konjunkturgolf word in die totale beleggingsyfers aangetref, aangesien belegging veel meer konjunkturgevoelig is as die ander onderdele van volksuitgawe, naamlik lopende uitgawes aan goedere en dienste van persone en overheidsliggeme, onderskeidelik. Dit is welbekend dat belegging skerp daal gedurende depressies, en omgekeerd in tye van hoogkonjunktuur. Gedurende oorloë word die aanwending van die oorgrote deel van die land se bronne oorheers deur die strewe om die oorlog te wen, en aangesien uitgawes van die staat op oorlogsbates nie as belegging beskou word nie, ondervind die normale beleggingsprogram van die betrokke land 'n ernstige terugslag.

Twee metodes kan gebruik word om die beleggingstotaal van 'n land te bereken. Die een metode vereis 'n ondersoek na die manier waarop die beleggingsprogram gefinansier word. Vir die finansiering van kapitaaluitgawes word fondse gebruik wat van verskillende bronne afkomstig is, nl. fondse wat vir hierdie doel deur die besigheidssektor opsy gesit is, persoonlike besparings, overheidsurplusse, buitelandse lenings, en die realisering van buitelandse bates. Die som van hierdie fondse verteenwoordig die totale bedrag wat vir beleggings-

doeleindes tot die beskikking van die verskillende vertakkings van die ekonomie gestel word. Die tweede metode om die beleggingsomvang binne 'n bepaalde periode te meet bestaan uit 'n ontleiding van die werklike uitgawe van die volkshuishouding op kapitaalgoedere. In die huidige berekenings word van hierdie tweede metode gebruik gemaak, maar dit moet onthou word dat sulke begrippe soos kapitaaluitgawe en kapitaalvorming wat in die bespreking gebruik word, op dieselfde statistiese grootheid betrekking het as die een wat deur die gebruik van die beleggingsbegrip aangedui word.

Kapitaaluitgawe word gewoonlik in twee breë klasse, te wete bruto en netto belegging, ingedeel. Terwyl netto belegging die byvoeging tot die reeds bestaande kapitaalbates van 'n land aandui, omvat bruto belegging netto belegging sowel as waardeverminderningsbedrae, d.w.s. bedrae wat van die lopende inkomste van die gemeenskap afgetrek word met die oog op die uiteindelike vervanging van bates wat aan slytasie gedurende die verskillende produksieprosesse van die ekonomiese stelsel blootgestel is. Netto belegging kan dus bereken word deur die betrokke waardeverminderningsbedrae van die totale kapitaaluitgawe gedurende 'n bepaalde periode af te trek. Netto belegging mag nul of negatief wees, veral gedurende depressies en oorloë. In die geval van negatiewe netto belegging teen die volkshuishouding op sy kapitaal deurdat lopende kapitaaluitgawes minder is as die bedrag wat nodig is om slytasie te dek. Volgens Tabel XXX het hierdie toestand nie gedurende die Tweede Wêreldoorlog in die Unie voorgekom nie, behalwe in die geval van private netto belegging gedurende 1942 en 1943.

'n Verdere breë skeidslyn kan tussen vaste kapitaalvorming, enersyds, en belegging in voorrade en in onvoltooide werk, andersyds, getrek word. Laasgenoemde is die mees veranderlike deel van totale belegging, aangesien besluite van sakemanne om hul voorrade uit te brei of in te krimp veel gouer ten uitvoer gebring kan word as in die geval van vaste kapitaaluitrusting. Dit word bevestig deur die skielike en omvangryke veranderinge in die voorraadsyfers in Tabel XXX, in teenstelling met die minder skerp skommelinge wat in die vaste kapitaaluitgawesyfers te sien is.

Volgens Tabel XXX het die boubedryf* (pos. nr. 5) en mynwese (pos nr. 6) die vernamste rol in private vaste kapitaalvorming gedurende die grootste deel van die periode 1938-50 gespeel. In die geval van eersgenoemde staan die groot toename sedert 1945 in verband met die geleidelike verslapping en uiteindelike afskaffing van boubeheer, terwyl die toename in die belegging in die mynbedryf aan die nuwe mynontwikkeling in die Oranje Vrystaat en op die Verre Wesrand toe te skryf is. Wat belegging in die nywerheid (pos nr. 8) betref, moet daarop gewys word dat die syfers in Tabel XXX slegs op toevoegings tot bedryfsuitrusting betrekking het, en nie op nuwe nywerheidsgeboue nie, aangesien laasgenoemde saam met die ander bouwerk in

* Openbare bouwerk is in die totaalsyfers t.o.v. openbare belegging in Tabel XXX ingesluit.

die totale private bousyfers ingesluit is. Dieselfde geld vir die beleggingsyfers van handels- en private vervoerondernemings (pos nr. 7). As die belegging in nywerheidsgeboue wat in pos nr. 8 ingesluit is, by die belegging in die bedryfsuitrusting van die nywerhede ingevoeg word, sal dit die beleggingsyfers verhoog met 'n persentasie wat sedert 1945 so veel as 25 persent kan bedra. Kapitaalvorming in die boerdery (pos nr. 9) het ook 'n aanmerklike stygging sedert 1945 ondergaan, wat aan die skerp na-oorlogse stygging in die waarde van ingevoerde landboumasjinerie, aangevol deur plaaslike produksie van landboumasjinerie, toegeskryf moet word, alhoewel die instelling van invoerbeheer sedert 1948 verdere uitbreiding t.o.v. implementinvoere gestrem het.

Van besonder belang vir konjunktuurbeleid is die aandeel in totale belegging van openbare en private belegging, onderskeidelik, aangesien private belegging, wat deur winsverwagtings van sakemanne bepaal word, baie meer onstabiel as openbare belegging is. Openbare belegging kan gebruik word om die uitwerking op totale belegging van die daling in private belegging gedurende oorloë en depressies teen te gaan. Volgens Tabel XXX was die kwantitatiewe betekenis van openbare belegging veral oppallend in 1942 en 1943, alhoewel die betreklike rol van openbare belegging in die totale beleggingsbedrywigheede van die Unie gedurende die hele tydperk onder bespreking ooglopend was. Dit is hoofsaaklik aan die baie kapitaalwerke wat deur die Unie se plaaslike owerhede onderneem word, sowel as aan die belangrike rol van die Suid-Afrikaanse Spoorweë en Hawens in die land se beleggingsprogram, toe te skryf.

Die syfers in Tabel XXX het betrekking op die kalenderjare vanaf 1938 tot 1950, en die berekenings is in terme van heersende pryse. Dit beteken natuurlik dat die invloed van die inflasioneistiese prysbeweging sedert 1938 nie uit die gegewens verwyder is nie, sodat daar nie te veel waarde aan vergelykings tussen die in gelduitgedrukte omvang van belegging in na-oorlogse en voor-oorlogse jare geheg moet word nie. Die 1948-syfer is byvoorbeeld nagenoeg 4 keer hoër as dié vir die voor-oorlogse jaar 1938, maar gedurende hierdie periode van tien jaar het die groothandelspryspeil van Unie- en ingevoerde verbruiks- en kapitaalgoedere met 75 persent gestyg.

Die syfers in Tabel XXX het betrekking op binnelandse belegging, d.w.s. die totale uitgawe aan kapitaalgoedere binne die Unie gedurende die periode 1938-50. Die netto buitelandse belegging van 'n land word gedefinieer as die netto verandering in sy internasionale bates en laste, insluitende sy monetêre goudbesit*, wat voortvloeи uit lopende internasionale transaksies soos weerspieël in die jaarlikse betalingsbalansstatistiek. Ongelukkig word

slegs die periode na 1945 deur die betalingsbalansyfers wat in hiér die Kwartaalblad gepubliseer word, gedek. Nietemin kan dit van die gegewens i.v.m. die Unie se goud- en valutabesit en die terugbetaling van buitelandse skuld afgelei word dat ons netto buitelandse belegging 'n positiewe bedrag gedurende die oorlogsjaar was. Hierdie toestand het sedert 1945 'n ommekeer ondergaan. In die na-oorlogse periode het veel buitelandse kapitaal die Unie binnekomaan, wat beteken dat buitelandse beleggers aansprake op kapitaalbates van hierdie land verkry het. Terselfdertyd het die Unie se goud- en valutabesit afgeneem. Die negatiewe buitelandse belegging wat in die kapitaaltoevloei vanuit die buiteland en in die intering op goud- en valutabates weerspieël word, moet derhalwe van die totale binnelandse belegging afgetrek word om die netto toevloeging tot die kapitaalbates van die Unie te vind.

Ten slotte is dit van belang om daarop te wys dat die syfers wat in Tabel XXX aangebied word, veral dié vir 1949 en 1950, as voorlopig beskou moet word, aangesien daar gewoonlik 'n tydsloering van 2 tot 3 jaar is voor die resultate van die Unie se vernaamste produksiesensus beskikbaar word. Hierdie gapings moet derhalwe gevul word deur middel van inligting verkry uit monsterstudies, maar die syfers sal hersien moet word na gelang die basiese statistiese bronne beskikbaar word.

BRONNE VIR DIE STATISTIEK OOR BELEGGING

Die mate van akkuraatheid in die berekenings van kapitaaluitgawes verskil grootliks tussen die verskillende vertakkings van die volkshuishouding. Algemeen gespreek is die inligtingsbronne t.o.v. belegging in die openbare sektor meer betroubaar en omvattend. Die Unie-regering en die Provinciale Administrasies se rekeninge word deur die Unie- en Provinciale Ouditeure, onderskeidelik, aangesien, sodat vir berekeningsdoeleindes dit slegs nodig is om daardie poste in die ouditeursverslae wat op kapitaaluitgawe betrekking het, uit te trek. Plaaslike Owerhede voorsien die benodigde inligting in hul opgawes aan die Sensusburo. Wat die Suid-Afrikaanse Spoorweë en Hawens betref, verskaf die staat van uitgawe aan kapitaal- en verbeteringswerke die nodige feite-materiaal. Aansuiwerings t.o.v. die gegewens is nodig om kalenderjaarsyfers te kry, aangesien die finansiële jaar van die meeste openbare liggame op 31 Maart eindig. Waar ouditeursverslae nog nie beskikbaar is nie, word die benodigde inligting uit die begroete uitgawe, soos voorgelê aan die Parlement en die Provinciale Rade, onderskeidelik, verkry. Die 1950-kapitaaluitgawesyfer vir Plaaslike Owerhede, insluitende Afdelingsrade, is 'n skatting.

In die berekenings i.v.m. private belegging verskaf die gegewens oor bouwerk nie baie moeilikhede nie, aangesien maandelikse gegewens t.o.v. „geboue begin“ in die 18 hoofsentrumms uit opgawes verstrek aan die Sensusburo beskikbaar is. Deur hierdie maandgegewens te weeg volgens die geskakte tyd wat dit neem om die verskillende tipes van geboue te voltooi, kan jaarsyfers t.o.v. die benaderde waarde van konstruksiewerk wat in 'n spesifieke periode van 12 maande verrig is, opgestel word. Die syfers wat

* 'n Alternatiewe manier om goud in die nasionale rekening van 'n land in te sluit word deur R. Stone in die Verenigde Volke se Memorandum „Measurement of National Income and the Construction of Social Accounts“ (p. 67) uiteengesit. Volgens hierdie beskouing word goud as 'n handelsartikel behandel, en nie soos hierbo, as 'n pos in die internationale rekening nie, sodat veranderings in die goudvoorraad gevoldig 'n deel van binnelandse kapitaalvorming uitmaak.

op hierdie wyse verkry word, moet nog aangesuiwer word om vir alle munisipaliteite en ander plaaslike owerhede voorsiening te maak, terwyl boonop die duplikasie van nie-private bouwerk wat alreeds in die openbare sektor ingesluit is, uitgeskakel moet word.

Belegging in die mynwese kan geskat word deur die uitgawes op kapitaalposte in die opgawes verstrek aan die Staatsmyningenieur deur die mynmaatskappye saam te voeg. Belegging in handelsuitrusting en ameubelment word bereken deur die inligting verkry uit 'n monsterstudie op die betrokke syfers vervat in die 1946/47 Distribusiesensus toe te pas. Die enigste gegewens waaruit belegging in die private vervoerwese afgelei kan word is dié wat in die volksinkomstetabelle van die Buro van Sensus en Statistiek voorkom, sodat hierdie beleggingspos, wat gelukkig van betreklik geringe betekenis is, nie huis statisties goed gefundueer is nie.

Die belegging van die nywerheidswese in vaste uitrusting en masjinerie is op die opgawes i.v.m. hierdie pos in die agtereenvolgende nommers van die jaarlikse „Sensus van Nywerheidsinrigtings“ gebaseer. Die jongste van hierdie syfers is vir die jaar 1948/49, sodat jonger syfers gebaseer moes word op 'n monsterstudie waaruit die belegging van bestaande firmas blyk, aangevol met 'n raming van die belegging in uitrusting van nuwe firmas op grond van die waarde van nuwe fabrieksgeboue soos vervat in die maandelikse „geboue begin“-tydreeks van die Sensusburo.

Boerderybelegging sluit die aankope van boerderygereedskap wat van die invoer- en uitvoerstatistiek en plaaslike nywerheidsproduksie afgelei kan word, in, sowel as die uitgawe aan verbeterings wat deur die Afdeling Ekonomie en Marke bereken word.

Belegging in handels- en nywerheidsvoorraade word bereken deur die inligting ingewin deur middel van 'n monsterstudie op die basiese gegewens verskaf deur die Distribusiesensus, en die meegaande finansiële opgaaf by die jaarlikse „Sensus van Nywerheidsinrigtings“ van die Sensusburo, onderskeidelik, toe te pas.

Wanneer die voorraadsyfers in Tabel XXX (pos nr. 10) nagegaan word, is dit belangrik dat daar duidelikheid moet wees oor wat hierdie syfers probeer meet. Die bedrag verteenwoordigende belegging in voorrade wat in die beleggingstotal ingesluit word, is die „heersende waarde van die fisiese verandering in voorrade“.* Die rede hiervoor is dat daar twee verskillende faktore is wat 'n verandering in die waarde van voorrade, soos weerspieël in die rekenings van die besigheidsektor, mag teweegbring, nl. 'n toename of afname in die hoeveelheid van goedere en grondstowwe in voorraad gedurende 'n bepaalde jaargang, of, tweedens, 'n toename of afname in die waarde per eenheid van goedere en grondstowwe in voorraad. Die verandering in die waarde van voorrade wat uit eersgenoemde faktor spruit, vorm 'n deel van totale belegging, terwyl die verandering in die waarde van voorrade wat deur die tweede faktor veroorsaak word, aan 'n voorraadwins of -verlies vanweë die

* Die metode van berekening wat hier gevolg word stem ooreen met dié uiteengesit in die Verenigde Volke se Memorandum „Measurement of National Income and the Construction of Social Accounts“, p. 106 et seq.

uitwerking van 'n prysstyging of -daling op goedere in voorraad, gelykstaan. Hierdie voorraadwins of -verlies moet in die berekening van belegging in voorrade uitgesluit word, aangesien 'n land se beleggingstotal, volgens die definisie hierbo verskaf, slegs die uitgawe aan nuut-geproduseerde kapitaalgoedere meet, en nie die vermeerdering of vermindering as gevolg van prysveranderings in die waarde van goedere wat alreeds bestaan nie. Die invloed van laasgenoemde element in die verandering in voorraadwaardes word uit die oorspronklike gegewens uitgeskakel deur die eindvoorraad in die Unie se ekonomie gedurende die periode onder bespreking teen dieselfde pryspeil (basis: 1938 = 100) te waardeer. Die verandering in die reële waardes van voorrade tussen agtereenvolgende jare in hierdie aangesuiwerde voorraadreeks word dan teen die gemiddelde pryspeil vir elke jaar vanaf 1938 tot 1950 herwaardeer. Die voorraadsyfers wat verkry word nadat die verskillende aansuiwerings hierbo genoem ten uitvoer gebring is, word as pos nr. 10 in Tabel XXX getoon.

Veranderings in die veestapel word deur die Afdeling Ekonomie en Marke bereken, en belegging of intering op voorrade van die Bemarkingsrade word tot veranderings in die voorrade van die Mielie- en Koringrade beperk, aangesien die voorrade van die ander Bemarkingsrade onbeduidend is.

Waardevermindering vir die ekonomie as geheel besorg hoofbrekens aan navorsers in alle lande aangesien inligting skraal is. In die geval van die Unie se nywerheidsinrigtings is die syfers gebaseer op opgawes deur hulle aan die Sensusburo verstrek. Die waardeverminderingbedrae van die Suid-Afrikaanse Spoorweë en Hawens staan gelyk aan die jaarlikse stortings in die Hernuwingsfonds. Waardevermindering in die mynbedryf lewer moeilikhede op aangesien die myne toegelaat is om 'n arbitrêr-vasgepnde persentasie van hul kapitaaluitgawe teen bedryfsinkomste in vermindering te bring. Die waardeverminderingbedrae wat in die mynogpawes aan die Staatsmyningenieur voorkom is in die huidige berekenings gebruik maar hierdie metode impliseer 'n onderskatting van die ware waardeverminderingbedrae. Die waardeverminderingbedrae t.o.v. die kapitale bates van Plaaslike Owerhede is as gelykstaande aan hul stortings in hul Hernuwings- en Delginsfondse bekhou, en dié van die Provinciale en Unie-regerings as die jaarlikse bedrae wat vir skuldaflossing gestem is.* Waardevermindering t.o.v. private geboue is bereken deur 'n 2 persent-persentasie op die waarde van belasbare verbeterings (d.w.s. grondwaarde uitgenome) toe te pas. Laasgenoemde syfer is verkry uit die opgawes wat deur Plaaslike Owerhede aan die Sensusburo verstrek is. Die 2 persent-waardevermindering-persentasie is gebaseer op die aanname dat die leeftyd van geboue op 50 jaar te staan kom.

D. G. Franzsen.

* Aangesien Owerheidsinstellings nie behoorlik voorsiening vir waardevermindering of vervanging maak nie, is die metode gevolg deur Britse navorsers hier gebruik, nl. om stortings in delgings- en aflossingsfondse as maatskaf te gebruik vir die bedrae wat van bruto kapitaalvorming in die plek van waardeverminderingbedrae afgetrek moet word.