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Can Britain Measure Up To Her Undertakings?

BY PROFESSOR JOHN JEWKES, C.B.E. (OXFORD)

It is timely to ask whether we are trying to do, or promising to do, too much; whether the tasks which we are laying on our shoulders far out-strip our available, or conceivably creatable, economic means.

Let me hasten to add immediately that I do not share the view that somewhere just round the corner some frightful economic cataclysm confronts Great Britain which will decimate exports, force us to slash imports savagely, raise unemployment to unparalleled levels and leave us all hungry and cold. That is not an argument which stands the test of cool analysis. We are not, as a nation, going to die a sudden death—at least not for economic reasons.

But as against the more spectacular view of our possible economic difficulties in the future I think there are solid grounds for considering that, from the way we have set our course at present, we run another danger, almost as grave. That is that our country may not sink swiftly but founder slowly like a water-logged raft—gradually becoming poorer, a permanent burden to our friends abroad, a breaker of pledges and promises to the poorer parts of our Commonwealth and a constant disappointment to ourselves.

There are now especially strong reasons for trying to think out our likely place in the world. The first is

that, although it is already eight years since the end of the war, our real position has been partly cloaked from us by a series of non-recurring and on the whole highly favourable circumstances. The transition period is now coming to an end. Aid from the United States and Canada to this country since 1946 has totalled £2,000 million. When we speak of the loss of our pre-war income from foreign investment let us remember that our annual average help from abroad has, since 1946, been perhaps twice as large as the difference between our pre-war and our post-war income from foreign investment.

Changed Conditions

The intense and prolonged world hunger for capital goods has also played into our hands for, during the war, we expanded enormously our capacity for making engineering products of all kinds, and this we have been able to employ to meet the needs of other countries. But let us remember that the demand for capital goods is the most fluctuating of all types of demand. The industrial equipment of our two chief pre-war competitors, Germany and Japan, was severely mauled by air attack. Now that the world is settling down again these fortuitous aids will cease to be of the same importance.

The second reason why we must

scrutinise the balance between our powers and our purposes is that we have chosen this time to take up new communal economic tasks—an expanded defence programme, the creation of a welfare state, the provision of help to the backward areas of the world—the net effect of which can be put in the form of one figure—our total tax bill is about two-fifths of our net national income.

Debit Items

At first glance it might appear absurd that we propose for ourselves these new responsibilities for it is easy to paint our present economic conditions in gloomy colours. There is the size of our population. We have a larger population per square mile than any other country with the exception of Belgium, Holland and Japan. Our population density is twice as great as that of India, perhaps three or four times greater than that of China, ten times greater than that of the United States. Put in another way, if the population of the United States were as great per square mile as ours, practically the whole population of the world would be found in America. Our numbers seem destined to get larger and to consist to an increasing degree of non-workers. Nor is it certain that a reduction of our numbers would be to our advantage since large-scale emigration, even if it could be carried out, tends to draw away the most enterprising and vigorous members of the community.

Britain is relatively poor in natural resources. Coal we have, if we can mine it, but the great windfalls of the past quarter of a century have been in oil, natural gas and iron-ore and uranium and we have not been lucky in these particular lotteries. We have virtually no oil or natural gas and we

import more than half our iron-ore. We must live largely on our manufacturing industry—some 40 per cent of our national income arises in this way and that is where our greatest comparative advantage lies. (Let us not forget that the case for agricultural expansion at *increasing costs* can only be properly based upon the fatalistic assumption that a world economy cannot be re-created and that it will prove beyond the wit and the will of man to create institutions enabling rich and poor countries to engage freely in trade.)

With fifty million people in Britain with only half an acre of land per head (if we exclude rough grazing) we must live by exporting manufactured goods. Last year every person employed in British manufacturing industry was responsible, on the average, for exports of manufactured goods worth £260; that is to say, each had to produce that quantity for export before he started to produce goods for our own consumption.

Perhaps most serious of all, we are a country which has got out of the habit of saving and, therefore, of investment.

These are the debit items in the tally. Taken alone they would presage a future of genteel poverty, scrimshanking genteel poverty which we might continue for a time to conceal from ourselves and from others by living further on capital and by even more rigorous equalising of the distribution of income and capital. They certainly do not suggest that we are well equipped to provide for our own defence, to guarantee that no one at home will ever be short of adequate food, a satisfactory house and the best possible medical service available or to undertake responsibilities in raising the standards of

living abroad.

Now the truth is that however courageous our expressed intentions, our performance in these matters has, since the end of the war, given few grounds for self-congratulation. We have not provided much help yet for the backward areas since the end of the war, in fact in some ways we have accumulated in recent years very large sterling balances which they are not able to run down freely by the purchase of goods from us, since we have not been able to provide them, or by the purchase of goods from the United States, because of the restrictions imposed upon dollar expenditure. And this despite the fact that the colonies maintain a persistent dollar surplus. It is true that in recent years the increase in the balance with the colonies has been offset by a decrease in the balance with the Dominions. But it can be no consolation to the Colonies that, through the operation of the Sterling Area, these undeveloped countries are in this surely unpremeditated fashion helping to finance the Dominions.

Favourable Items

Now let us turn to the favourable items in the economic assessment. They are our stock of semi-permanent equipment, the quality of the people and the conditions which happen to rule at present in the world of technology.

On the whole I do not think it true, as is so popularly believed, that we are badly off in respect of the mass of durable goods—factories, machines, transport systems, houses and so on—which each generation inherits from the preceding one. The only figures I have seen for the pre-war years suggests that our invested capital per head was certainly no

less than that of the United States. I would hazard the view that even now our stock of durable goods is higher per head than that of any country in the world except the United States. That, after all, is not particularly surprising: stocks are created by accumulation and we have been accumulating longer than most other countries.

Next, the history of invention in the past twenty or thirty years suggests that, in the higher reaches of science and technology, the British are surpassed by no other nation.

All this seems to me to be of special importance for the kind of race we have to run. The industrial revolution has been a continuing process for the past two hundred years but its momentum, I think, is increasing. I cannot refrain from mentioning a remark made the other day by the head of one of our large industrial research organisations. He said that practically any day and as frequently as was wished he could produce a new textile fibre probably superior to all those known. (Incidentally, he went on to say that invention was no longer the problem, the problem was development, the taking of risk and the provision of capital. That is another story to which I will return.) If this is the kind of world we live in then we are well fitted to stand the pace as well, or better than others, so far as pure knowledge and technical inventiveness counts.

This, then, is the balance sheet. The question is whether, looking at the balance sheet, it would be wise for us to drop our enthusiasms, lower our sights and parochially potter about with our own affairs; or whether we shall retain our enthusiasms by doing what is necessary to turn them into something more than pipe-dreams.

Assuming the intention is to take on the more vigorous role with all its implications, what now prevents us from grasping the prizes which our qualities might well command? For those who like to think in numbers the question might be put in these forms: are there any ways in which we might get a 10 per cent increase in production without (and the proviso is crucial) without a corresponding increase in wages and salaries; or can we find means of investing, say, an additional £300-400 million per annum in industry and also create a favourable balance of £500-600 million per annum for foreign investment or for giving away abroad?

Conditions of Success

My own fear is that there is little chance of substantial economic improvement unless we can rid ourselves of some strange, pervasive, clogging influences which slow down our economic development. I find it difficult to diagnose this condition with precision. The causes seem to be everywhere and nowhere. It is much easier to talk in terms of specific cases. Take the case of Terylene. This is a new and for many purposes a highly superior textile fibre. It was discovered in Great Britain. It has been developed on both sides of the Atlantic. But it has gone into quantity production in the United States long before that point has been reached in Britain. Now why? I am sure that everyone concerned with this development realises its importance and would be found energetically pursuing his bit of the job. I am sure that one could never put a finger on one point and say, there is

the trouble. Perhaps the shortage of capital makes it necessary to go extremely carefully in investment, perhaps the high rate of taxes makes it reasonable not to plunge too heavily on big risks, perhaps the shortage of materials slows down the speed at every stage. Perhaps a set of State controls, each minor in itself, add up to substantial impediments. But as case after case of this kind is encountered, the impression becomes irresistible of leaden effort and dragging feet.

I believe that the only remedy is to try to restore in Great Britain the principal features of a free economy. If we are to be prepared to follow the lead of other countries and take our hands off the automatic controls a number of major pre-requisites would seem to be called for.

(1) After defence, the primary responsibility of the Government should be stability in the value of the currency.

(2) We should be much more critical of the virtues of large-scale administration.

(3) We should revive belief in the virtues of economic competition.

Our need is not for economic soothsayers and prophets who would have us peer even more deeply into an inscrutable future in order to pin ourselves permanently to plans based upon their foggy prognostications. On the contrary, we must search for an economic system which is most likely to keep us prepared for anything; which will encourage us to snap up chances and to scrap our mistakes ruthlessly, and which will restore a respected, and appropriately rewarded, place in our society to the innovator and the risk taker.

How Find The Savings?

BY ANTHONY CROSLAND, M.P. (LABOUR)

THE commitments envisaged in *Challenge to Britain* are, in total, very heavy.

(1) First, the next decade may witness, as the last has done, a further unfavourable movement in the terms on which manufactured goods exchange for primary products. It is not unreasonable to expect the British terms of trade to average, over the next decade, the worst figure that they reached during the 1951 commodity boom.

(2) Secondly, there is the need for a large surplus for overseas investment, particularly within the Sterling Area. I have estimated in *Britain's Economic Problem* that these two factors, taken together, might require an increase in exports of one-third over the present level, assuming a volume of imports no higher than pre-war.

(3) Thirdly, higher capital investment at home. At present we devote about 15 per cent of the national product to fixed investment, and it is urged that this should be raised as soon as possible to 20 per cent, if not 25 per cent. Certainly an increase on this scale is implicit in *Challenge to Britain*, on almost every page of which some industry or another is told that it must step up capital expenditure. In addition, heavy increases in social investment (schools, hospitals, technology, etc.) are also envisaged.

Where are the extra resources to come from?

It is possible that Labour will come to power during an American recession, in which case the whole problem will look quite different. At home

'Much more thought needs to be given to the problem of finding the savings to realise the objectives laid down in "Challenge to Britain"; says Anthony Crosland. He offers his own contribution, in advance of the Party Conference which will discuss the document this month.'

there will be unused capacity, and the level of investment will depend not on the physical resources available, but on the willingness of businessmen to employ them. On the external side, the terms of trade will be temporarily in our favour, and in any case the problem will be not of expanding exports, but of fighting to prevent a sharp decline.

Productivity Not Enough

But assuming that we come to power when the slump is over, and the world has reverted to the semi-inflationary conditions of the last few years, we shall find resources already fully utilised, and the essential task will then be to release resources for the additional exports and investment. Considering how large are the commitments in these two directions, it will be an exceedingly formidable task.

The optimists hope that it will all be miraculously accomplished by means of higher productivity. That an annual rise in productivity is essential is self-evident. But an annual rise in output will not automatically solve the whole problem. This it would only do if all the extra output went into savings, and thence

became available for home or foreign investment.

This is unlikely to occur. The higher output is naturally reflected in higher incomes, and only part of the extra income goes into savings (either into the Budget surplus via taxation, or into undistributed profits, or in higher personal savings). The remainder is spent, and the extra spending impounds some large part of the extra output due to rising productivity, leaving only a residue (though an important one) for higher exports or investment.

Even if output per man is rising at a healthy rate, new policy decisions will therefore be required to raise the proportion of the national income devoted to savings and not consumption.

Personal Savings

There are three sources of savings: personal, business, and governmental. Personal savings have been at a low ebb in recent years. They have fluctuated around one per cent. of the national income—a much lower figure than was normal a generation ago, and one insufficient to cover the present volume of personal capital formation. Individuals as a whole, so far from providing funds for industry, have thus been net borrowers from other sectors of the economy.

This decline has been mainly due to the redistribution of incomes and the growth of social security, which has diminished the need for 'precautionary' savings. Both these influences will, it is to be hoped, be even stronger under the next Labour Government than they are to-day, so that no automatic increase in the personal savings ratio is to be looked for. Yet to the extent that these savings can be encouraged, new taxation will be less necessary.

One possible measure suggests itself at once from a consideration of the motives for personal saving. Of these, one of the strongest is the desire to carry out personal capital formation, in particular the purchase of a house; twelve per cent of households already save in the form of mortgage payments.

At present this motive has only very limited play. The bulk of sitting tenants, and notably council-house tenants, have no opportunity to buy their houses. Yet the instinct to own a house is strong and natural, and it is for consideration whether the sale of council-houses to existing tenants should not be more actively encouraged. There are well known practical difficulties, but they are not insoluble.

Business Saving

Turning to business savings, we are at once met with the difficulty that any increase in private undistributed profits may have harmful effects both on industrial relations and on the distribution of wealth. Such an increase is certain to be accompanied by a rise in share values prompted by the hope, and often the certainty, of a prospective rise in dividend payments. The consequent capital gains and higher dividends will worsen the distribution of wealth, and breed discontent among wage-earners.

If it is desired, therefore, to enlarge the financial resources available to private industry for investment, it would not be right to do so by reducing the weight of profits taxation in order to raise net undistributed profits. It would be better to raise the rate of initial allowances, since this is a form of relief which is tied to actual capital expenditure, and which cannot therefore be dissipated in higher

dividends. But such a relief, although it would encourage investment by easing the *cash* position of industry, would only represent a transfer from public savings (reduction in the Budget surplus) to private savings, and by itself would do nothing to increase the total of national savings.

Public Saving and Spending

It is thus evident that most of the increase in savings must come from public savings, and we may initially require a Budget surplus larger relative to the national income than those achieved in the years 1948-50. Even given a constant rate of Government expenditure, the prospects for taxation therefore suggest an increase rather than a fall.

But in fact it is optimistic to expect that Government expenditure will remain constant. The rising average age of the population already bespeaks a rising expenditure on old-age pensions, especially now that the Party is pledged to maintain their real value year by year; while *Challenge to Britain*, for all its brave words earlier, is very free with promises of further Government spending. All health charges are to be abolished; the hospitals are to be expanded; an enormous additional expenditure on education is foreshadowed; while there are many other directions, not mentioned in the programme, where popular pressure may well combine with a strong social argument to enforce additional benefits (e.g., in family allowances and equal pay).

These advance commitments to higher benefits would, if a passive Budgetary policy were to be adopted, absorb even that important fraction of the rise in productivity which is automatically skimmed off in taxation and which, instead of going into

governmental savings, as is happily assumed in most discussions, would then be spent at once on higher social consumption. Thus to obtain any increase at all in public savings will present a formidable fiscal problem.

Inescapable Conclusions

What conclusions follow?

(1) First, there can be no question of introducing all these highly desirable new benefits at once, and this should have been made plainer in the programme. *What is required is some guide to priorities, which will enable the Party to pick and choose the few that can be afforded out of the many tempting proposals put before it.*

(2) Secondly, when the priorities come to be considered, *those which are most economical of Government expenditure in relation to the social end in view should be given precedence.* This means that 'discriminating' benefits, which accrue to particular sectional groups whom it is desired to help (the old, large families, children at school), should always be preferred to indiscriminate benefits which accrue to the whole population: and that benefits in the form of direct money payments are normally to be preferred to benefits in the form of free or subsidised goods, since the former, unlike the latter, are subject to taxation in the case of the better-off recipients. Judged by these criteria, *the abolition of health charges and the restoration of food subsidies should have a much lower priority than old-age pensions or family allowances.*

(3) Thirdly, *new sources of tax revenue must be investigated*, since it is an illusion to suppose that all one needs is an all-round increase in existing taxes. I offer four suggestions for consideration. (a) A renewed offensive against the quantitatively large volume of lavish expenditure

which is still financed out of business expense and entertainment allowances. (b) A tax on coal, for which, however politically unpopular, the economic case is irresistible. (c) An extended use of purchase tax on durable consumers' goods. (d) As suggested in a recent letter to *The Economist*, a tax on dissaving, which would carry with it the exemption from tax of savings.

* * *

All this talk of more taxation will be unpopular in the country at large, and it is essential to remind

electors of the assumptions on which it is based, lest the Labour Party be branded as having a macabre desire to raise taxation under all and any circumstances. These assumptions are that a high level of employment persists, and a consequent pressure on resources: that a spurt in both exports and investment is required in order to safeguard and ultimately raise the standard of living: and that within the total of consumption a larger share should go to social service beneficiaries, and therefore a smaller one to the rest of the community.

INSURANCE FUND ILLUSIONS

BY PAUL BAREAU

TAKING the whole scale of U.K. social services into account it can be said that in five years' time the bill will have risen by about £400 million, that is to something like £2,100 million. And in ten years' time, to give another significant figure, that part of the social services which falls on local governments will have risen automatically to a level at which, on the basis of existing rateable values, local rates will have risen by an average of 7s. 6d. in the £. Unless national income goes up we shall in five years' time be spending, not 2s. 10d. out of every £ of income on social services, but something like 3s. 6d.

In facing this increased burden, some people will argue that we can take comfort from the fact that the National Insurance fund has in hand a surplus of £1,358 million. This is the excess of income over expenditure of the National Insurance fund, an excess that has been greater than anticipated because unemployment has remained at such low figures. This however is a paper fund invested in Government securities. It is not a pool of actual resources out of which the social services can be extended. This surplus in the National Insurance Fund may gladden the hearts of actuaries; but it will not produce the schools and hospitals, the milk, the dentures, the old people's beer and tobacco, which are the essence and substance of the social services.

Let us realise that, even if the national income continues to expand at a normal rate of, say 1½ per cent per annum, this will do rather less than keep pace with the automatic increase in the cost of the social services, as at present computed. There is, therefore, little hope in this for any appreciable tax reductions other than those that can be secured through economies in defence expenditure and in administration.

Unless we meet this problem of cutting the coat of social services according to the cloth of our resources, we shall be increasingly tempted to find the easy way out—inflation. When the hard and inescapable commitments on a country's resources become too great—whether they be social services, pensions or interest on national debt—the reconciliation can always be achieved by allowing the value of money and therefore of those commitments to depreciate. Needless to say that is dishonesty practised on a national scale. But it is not only dishonest, it is self-destructive, for inflation, particularly to a country like Great Britain with its claims to be a great banking and financial nation, would be ruinous.

U.K. National Debt Commissioners: How They Operate

IT IS now possible to speak with more assured knowledge than was available four years ago of the technique and guiding principles of operations conducted by the largest of the official holders of Government debt, the National Debt Commissioners.

This is the result of the appearance of the Comptroller General of the National Debt Office—the operative officer of the National Debt Commission—before the Public Accounts Committee of the House of Commons in June 1952.

The record of questions and answers comprising this important contribution to public knowledge is available* and should take its place as required reading for anyone who wishes to fortify his understanding of the relations between official investment operations and conditions in the capital market. Two extracts therefrom may be mentioned as of special importance.

The aggregate holdings of the Commissioners—amounting to something like £4,500 m., almost wholly of Government and Government-guaranteed securities—are regarded as falling within two distinct categories. On the one hand are the funds, comprising about two-thirds of the whole, covering deposits in the savings banks. On the other are the 'trust funds', consisting almost wholly of reserves accumulated under the national insurance schemes.

*Reports and Minutes of Evidence of the Committee of Public Accounts, Session 1951-2, H.M. Stationery Office.

Categories Defined

There appear to be two grounds of distinction between these categories. For one thing, the liabilities of the savings banks are the more liquid in the sense that it is the more difficult to foresee what the balance of incomings and outgoings is likely to be, and therefore what net amount of cash may come in or be required to meet withdrawals, year by year and even month by month. The running obligations and receipts of the national insurance funds over the years to come can perhaps be more confidently foreseen, as to magnitude and timing, with the aid of actuarial calculations; hence, too, the relative importance of yield and maintenance of capital values can be more clearly envisaged. In the light of the foreseeable requirements of the funds as advised by the responsible bodies the National Debt Office determines the spread of securities appropriately to be held as constituting the reserves of the national insurance funds.

The other distinction lies in the sharing of relative responsibilities. The deposits of the savings banks, unlike the actuarial liabilities of the national insurance funds, are covered, not only by the securities held against them, but also by a Government guarantee of both principal and interest. Accordingly Government financial policy appears to carry greater weight in the allocation of savings bank resources to the various possible types of Government invest-

ment than in the utilisation of the trust funds, though here too some regard is paid to the general financial policy of the Government for the time being.

The two distinctions lead on to the practical points now to be noted.

First, the Comptroller regards incoming savings bank moneys as being in the nature of floating funds, which he may invest promptly or hold back for later investment at his discretion, whereas trust fund moneys have to be dealt with at minimum delay. Hence there is a tendency to treat the savings bank moneys as, so to speak, a trading fund by the use of which he can maintain a reservoir of investments, acquired as opportunity offers and transferable as may be required into the trust funds at current market values.

Bases of Judgement

Secondly, it is on the principles and practice of primary acquisition of investments that the evidence is perhaps of greatest interest. The Comptroller operates on the basis of his own judgment, even the inner quorum of the Commissioners not being 'spontaneously active' and being very rarely consulted. On the other hand, he is in frequent touch,

in the ordinary course of his business, with officials of the Treasury and the central bank, and regards the Treasury as 'having a very great voice' in broad policy, particularly as regards the funds of the savings banks. The combating of inflation was cited as an outstanding article of policy which it was his duty to further.

As practical evidence of co-ordination it was explained that when a new issue of Government or Government-guaranteed securities is planned the Treasury informs the Comptroller, states the proposed terms and asks how much of the issue he would be likely to take up; further, while neither the Treasury nor the Bank of England has ever 'sought in any way to interfere with [his] discretion', nevertheless 'they would obviously say what they would like [him] to take'. These extracts from the evidence are designed to give a fair and properly balanced impression of the effective relations between the National Debt Commission and the fiscal and monetary authorities; but the whole evidence should be read by anyone who wishes to assess the monetary significance of this vast integration of capital resources under concentrated control and management.

Mont-Blanc Tunnel

IF all goes well, the century-old project of a tunnel under Mont-Blanc, Europe's highest mountain, will be realised in about three years. After several years of studies and negotiations, the scheme was definitely adopted last spring with the signature of a Franco-Italian agreement on March 14, and a protocol with the Canton of Geneva.

The last step which remains to be taken is the ratification by the French and Italian Parliaments, which will, it is hoped, take place in the autumn.

The outstanding feature of the project is that the tunnel will be the first all-weather road through the Alps with the exception of the Ventimiglia route on the Mediterranean, which is situated much further south, and cannot therefore be considered as an adequate alternative. The new road will establish the shortest route between Paris and Rome.

This means that motorists coming from the British Isles, Belgium, Holland and Central and Northern France, will be able to go to Italy at any time of the year without interrupting their trip at Mont-Cenis, Simplon, etc., and loading their vehicles on to the railway for the passage through the Alps.

It is calculated that the Mont-Blanc Tunnel will be crossed in 20 to 25 minutes, whereas the present system implies a loss of time of at least one or two hours when the ordinary road passes are blocked by snow, which is the case for seven or eight months a year.

The promoters of the scheme also expect that a substantial proportion of the motor-vehicle traffic between Italy and Western and Northern Europe will pass through the new tunnel, and that the traffic itself will expand thanks to the facilities offered by the tunnel.

It is estimated that up to 150,000 motor-cars and 50,000 lorries and motor-coaches will use the tunnel every year, and that goods traffic will total some 75,000 tons—the transport of fresh Italian vegetables and fruit to Geneva and regions beyond, being mentioned in particular among prospective freight.

Transport of Current

It is also proposed to use the tunnel for the transport of electric current—estimated at up to 2,000 m. kw.h. a year—which a company with American participation contemplates producing on the Italian side by means of 14 power stations.

Mont-Blanc has been chosen for technical reasons, in preference to the two other possible alternatives, Mont-Cenis and the Great-Saint-Bernard. The length of the tunnel will be around 7.2 miles at an altitude of around 3,900 feet, whereas at the same altitude, tunnels through the Mont-Cenis or Saint-Bernard would be 10.6 miles long. Geological conditions also appear to be more favourable, as Mont-Blanc consists mostly of solid granite, so that the danger of the infiltration of water is not considered serious.

Estimated Cost £8m.

The cost of the tunnel is estimated by the promoters at around Frs. 8,000m. (£8m.). The French and Italian States will undertake to provide a grant representing approximately 40 per cent of the expenditure. The remainder will be supplied by an international company which will receive a 70-year concession for the exploitation of the tunnel, and which will be established with the participation of the Swiss authorities (who will supply Frs. 6m.) and Swiss, French and Italian private capital. At the end of the concession, the tunnel will become the property of the French and Italian States.

The international company will charge a toll on the passengers and vehicles passing through the tunnel (probably the equivalent of 10s. per car, and 3s. 3d. per passenger). Its annual receipts are expected to reach around £200,000, which would be sufficient to pay its way and amortise the capital.

French Criticism

The whole project has lately met with considerable opposition in France. Its opponents contend that (a) the final cost of the scheme will considerably exceed the estimates

and total £15m., the difference being charged to the French and Italian States, and hence to the taxpayers of the two countries. Furthermore, the necessary improvements to the road between Geneva and the tunnel are assessed by them at £2m., and in addition there will be later the huge expense of a tunnel under the Jura Mountains at the Faucille Pass, which will cost perhaps £12m.

This second tunnel will be a useful, if not necessary, complement to the Mont-Blanc scheme, since it will establish a direct short route Paris-Dijon-Geneva.

(b) The building of the Mont-Blanc Tunnel is not indispensable; it could be replaced by the improvement of car transport facilities through the Mont-Cenis railway tunnel, which would imply only an insignificant expense.

The main beneficiary of the new tunnel would be the Italian hotel industry in the Aosta Valley on the other side of Mont-Blanc.

(c) Much more urgent investments need to be made in France, especially as far as housing is concerned.

(d) Traffic at present passing via Marseilles and through the Rhone Valley would be diverted to Genoa.

U.S. PASSES 160,000,000 POPULATION

WASHINGTON, August 13, 1953.—The U.S. population has passed the 160,000,000 mark, and is increasing at the rate of about 220,000 a month.

The new figure, announced this week by the U.S. Census Bureau, is almost 9,000,000 more than the last official U.S. census of 1950. The rapid increase continues, with one birth estimated every eight seconds and one new immigrant arriving every two minutes.

Considering deaths and emigration the U.S. population has a net increase of one person every twelve seconds.

If the growth continues at about this rate, which seems likely, the U.S. population by 1960 will be at least 175,000,000, and might reach 180,000,000. This would not affect the relative U.S. population standing among nations. China leads with 450,000,000; India with 365,000,000 comes next, and then the Soviet Union with 200,000,000. The U.S. is fourth, and Japan fifth with 86,000,000.

America's Post-Korea Productivity

Goods and services total up from \$286,000m. in 1950 to \$363,000m.

BY ROBERT E. BEDINGFIELD

AFTER the outbreak of the Korean War three years ago the Truman Administration embarked on a programme to provide adequate armament in the event of full-scale war, in addition to full-scale production of civilian goods.

Now that the truce has been signed, we are up to our ears in butter and the pastures are full of bred heifers.

The 1950 programme of rearmament and capital expansion has enabled private industry to step up its rate of plant and equipment expenditures to an estimated \$28,000 million a year, compared with \$19,000 million before the outbreak of the Korean War and \$27,000 million in 1951 and 1952. Defence spending has leaped from less than \$12,000 million in fiscal 1950 to more than \$44,000 million in fiscal 1953 and gross national product—the sum of all the goods and services produced in the nation—has risen from \$286,000 million in calendar 1950 to a rate of \$363,000 million in June, this year.

Supplies of raw materials about which grave fears were expressed at the time that the North Korean forces crossed the Thirty-eighth Parallel have been ample. Labrador discoveries and better technology for using lean ores have replenished iron stocks. Aluminum today is principally a matter of electric power—which is being vastly expanded. Copper, with European recovery slackening and this country's military building programme being cut back, is becoming plentiful. One of the few trouble spots in the raw

materials field is nickel. This vital alloying metal is strictly allocated.

But the capacity of the nation's steel mills, chemical plants, petroleum refineries, machine tool factories, electric power systems, railroads and aluminum smelters are all far greater today than at any time in history—either in peace or in war. Although there are signs of some slowing here and there in civilian demand, so far the contraction is nothing more than that.

Steel capacity now is above the January 1, 1953, figure of 117,500,000 ingot tons annually, which was nearly half as much again as the 79,700,000 tons available when World War II ended. Three years ago it was 100,000,000 tons. By the end of this year it is expected to be 120,000,000 tons, more than three times as much steel as was poured last year in Russia, the second largest steel-making nation, and enough to supply every two households in the United States with three cars.

The nation's electric power plants, which had a generating capacity of 63 million kilowatts in June, 1950, now have a capability of 84 million kilowatts.

Domestic refineries now can process 7,734,000 barrels of crude oil a day, compared with 6,800,000 barrels in mid-1950. By next year they will be handling 8,100,000 barrels and the figure is expected to reach 8,400,000 barrels by December 31, 1954. That is 3,100,000 more barrels a day than in 1945 and more than four times the capacity of three decades ago.

From New York Times, August 2, 1953

An Appraisal of U.S. Demand for Fuel Oil

BY A. J. MCINTOSH (CHIEF ECONOMIST OF SORONY VACUUM) AND A. J. CABLE

U.S. consumption of distillate fuels is expected to rise by an average of 7.7 per cent a year to 1.6 million b/d in 1955, while consumption of residuals will remain virtually unchanged. In both the space-heating and industrial markets the gains which fuel oils are forecast to make will be achieved at the expense of coal consumption and despite very sharp increases in the use of natural gas. While imports are certain to continue at a high level, exports of both distillate and residual fuel oils from the U.S.A. may fall sharply.

In the highly complex and closely knit pattern of the international oil trade the U.S. market for fuel oils is a sector of the greatest importance.

The world's largest importer of residual fuels—imports last year exceeding 128 million barrels or 19 million tons—the United States consumes inland about one-and-a-half times as much residual fuels and two-and-a-half times as much distillate fuels as all other countries of the free world combined. Prices for fuel oils throughout the world, as for all other major petroleum products, are closely tied to quotations on the U.S. Gulf Coast, and are therefore determined by competitive considerations, both those within the oil industry and with other fuels, in the U.S.A. The high significance which consequently attaches to changes in the U.S. fuel oil picture lends especial interest to a new and

authoritative forecast of U.S. fuel oil demand (i.e., distillate fuel oil and residual fuel oil) setting forth the prospects for the next three years.

Illustrating the familiar tendency of petroleum forecasters to err towards underestimating future demand, the new survey puts the level of U.S. domestic consumption this year at 1.4 million b/d of distillate fuels and 1.6 million b/d of residuals, rates well above those predicted in a similar survey made by Mr McIntosh three years ago, when 1953 was expected to be at the bottom of an economic depression. Looking further ahead to 1955 Mr McIntosh foresees continued favourable conditions in the U.S. fuel oil markets, although some of the gains achieved at home may be offset by sharp declines in exports. Despite the large expansion anticipated in natural gas sales, there will be scope, he believes, for a considerable growth in the consumption of fuel oils as a whole, albeit at a somewhat slower pace than in recent years.

Domestic consumption of distillate fuels is forecast to rise to 1.6 million b/d by 1955, indicating an average annual growth of 7.7 per cent between 1952 and 1955 as compared with the unprecedentedly high average of 12 per cent attained in the past six years. Exports, on the other hand, are expected to fall sharply by 71 per cent to 27,000 b/d in 1955. The increase in domestic demand forecast for residuals is of negligible proportions, but the expected level of demand in 1955—1.6 million b/d—is

nevertheless far higher than was foreseen three years ago. Again, exports of residuals are forecast to decline, by about one-third from the high levels reached since the loss of the Abadan refinery, to 50,000 b/d in 1955.

In the East Coast region, which accounts for practically the whole of U.S. imports of residuals, domestic demand (*i.e.*, inland plus bunkers) for these fuels is expected to show a markedly different development from demand in the rest of the United States, rising by 14 per cent from the estimated 1952 rate of 752,000 b/d to 860,000 b/d in 1955. This difference arises from the distinctive make-up of demand in the East Coast region. Here, demand is predominantly industrial, although there are also considerable sales for space-heating, but deliveries to railroads and for export trade are only very small. It is in the two latter categories that, in other areas in the U.S., the growth in demand will be checked or arrested.

Natural Gas Competition

Future competition with fuel oils throughout the U.S.A. will come principally from natural gas in the space-heating and industrial markets, in which the remarkable upsurge in consumption achieved by natural gas in the past three years is expected to continue. The sheer size of the addition to U.S. energy supplies now taking place through the expansion of natural gas is underlined by a comparison between 1950 and 1955. The increase in the daily rate of natural gas consumption expected during this six-year period will be equivalent on a calorific basis to 1.3 million barrels of fuel oils, or as much as the daily consumption of distillate fuels in the U.S.A. in 1950. Between 1952 and 1955 alone an

increase by one-quarter is foreseen for natural gas use, to reach a level in the latter year equivalent to no less than 3.2 million b/d of fuel oils. However, despite the anticipated incursions of natural gas, fuel oils are expected to hold their own, advancing jointly with natural gas at the expense principally of coal.

In forecasting industrial and commercial consumption of fuel oils—as also in forecasting consumption in other sectors—the survey takes as its basic assumption a continued high level of economic activity, making no allowance for the possible impact of recent Russian peace moves. The assumed rates of industrial production, five per cent greater this year than last, followed by a decline of two per cent between 1953 and 1955, are not unduly high, and evidently make some allowance for the effects of future cut-backs in defence outlay. The consumption of all fuel oils for industrial and commercial purposes (including public utility, oil company and miscellaneous uses) is forecast on this basis to gain by nine per cent 1952-55 to average just short of one million b/d in the latter year, as compared with a forecast increase of 26 per cent for natural gas use in these fields. The upward trend of natural gas consumption by industry is, however, much sharper in comparison with fuel oils than these figures suggest. Over the longer period between 1950 and 1955 the increase expected for fuel oils is only five per cent (there having been a slight fall in the first two years of the period), whereas the gain in natural gas use is put at 63 per cent. If the forecasts for fuel oils and natural gas are realised, coal consumption in the industrial field may be expected to continue its past decline. Coal will still, however, retain a little over half

the industrial and commercial market in 1955, with natural gas supplying just short of one-third and fuel oils the remainder (16 per cent).

Underlining the close link between industry's energy consumption and industrial production the survey relies for its forecast of industry's total energy needs—put at 14,450 million million b.t.u. in 1955—upon a statistical projection of the relationship which has held between these two variables since 1935 (excluding the exceptional war years). Interestingly, industrial and commercial energy consumption in 1955 is estimated to be slightly less than in 1951 although industrial production is forecast to be two and a half per cent higher. The growing efficiency in the application of energy to industrial processes to which this is due, has made possible since 1935 an increase in U.S. industrial production by two and a half times with only a doubling of industrial and commercial energy consumption. Put in another way, for every advance by one per cent in industrial output there has been needed a rise of only 0.8 per cent in mechanical energy.

Space-Heating Demands

In contrast to the smallness of the rise foreseen for fuel oil demand in the industrial sphere, considerable gains are anticipated in space-heating uses. The consumption of distillate fuels for space-heating, mainly of private homes, is forecast to rise by 30 per cent between 1952 and 1955 to average 927,000 b/d in the latter year, while the use of residual fuels, mainly for commercial space-heating, is also expected to increase sharply by 26 per cent to average 276,000 b/d in 1955. These gains will be achieved despite a very sharp advance of natural gas in the space-

heating field, by about one-third, according to a recent P.A.D. report. Each of these forecasts of consumption for space-heating is, of course, liable to be overthrown by unpredictable, but by no means improbable, variations in temperatures. The assumption of 'normal' temperatures (*i.e.*, temperatures equal to the long-term average of previous years) is the only practicable one for such forecasts. But in both 1949 and 1952, for example, the milder-than-average weather is estimated to have reduced the consumption of heating oils (distillate, residual, kerosene and L.P.G. together) by over 100,000 b/d below the 'normal' rate.

Underlying the growth forecast in space-heating demand for both fuel oils and natural gas is an expected increase in the number of households by three and a half million in 1952-55, coupled with a continuation of the past trends in favour of these fuels against coal and fuelwood. Since 1940 some 10 million new dwelling units have been built or created by sub-division in the United States, bringing the present total to about 43 million, of which an increasing proportion, now amounting to over half the total, are equipped with central heating systems. Accompanying this trend towards central heating methods, to which both natural gas and fuel oils are particularly suited, spectacular gains—largely at the expense of coal—have been made in the space-heating consumption of both these fuels. Whereas in 1940 over 18 million or 55 per cent of all U.S. homes were heated by coal, today this total has been reduced to 13 million, and is roughly equalled by the number of homes using gas (mostly natural gas), which in 1940 had supplied only three and a half million consumers. Fuel oils, which

twelve years ago supplied less than three million homes, have likewise taken a sharply rising share of the market, the total number of consumers now approaching 11 million. Liquefied petroleum gas, a virtual newcomer to the field since 1940, has grown at an even faster pace and today heats over one million homes. The remaining principal space-heating agent, fuelwood, although like coal it has declined rapidly in importance in recent years, still, somewhat surprisingly, meets the heating requirements of about three and a half million consumers.

Bunkering and Railroads

Apart from space-heating and industrial uses (in which the consumption of residuals by electric utilities ranks high) significant forecasts are also made in the new survey for bunkering and for railroad consumption of fuel oils. The level of fuel oil consumption by vessels (inland waterway, coastal and ocean-going bunkers) is forecast to remain almost unchanged at about 350,000 b/d, the only increase expected being for diesel oil by one-eighth to 46,000 b/d in 1955. In railroad use the familiar pattern of sharply rising diesel oil consumption accompanied by a declining use of residuals is expected to

persist. Diesel consumption by the railroads is forecast to gain by a further 60,000 b/d over last year's figure of 173,000 b/d, to reach a total almost twice that of 1950. Simultaneously the railroads' demand for residuals is forecast to be halved from last year's rate to average only 57,000 b/d in 1955.

The generally favourable prospect for fuel oil demand in the United States during the next two or three years presented in Mr McIntosh's survey is, of course, dependent upon the predicted level of industrial activity assumed in arriving at his conclusions. The demand for residual fuels in particular is closely tied to industrial changes, and its susceptibility to variations in economic activity is further emphasised by the keen competition which residuals meet from other fuels. It is, however, significant that even in the U.S.A., where competition with other fuels is particularly keen and is to a considerable degree governed by price considerations (as distinct from those of relative convenience and efficiency), the inherent advantages of fuel oils over coal are forecast to ensure a continued growth in industrial demand between 1953 and 1955 despite the expectation of a slight fall in industrial production.

Canada's International Balance Sheet

Notable increases in both import and export of capital

BEFORE the war Canada was considered to be the largest international debtor in the world. It is still one of the prominent debtor countries. But the debt has been materially reduced in the last twenty years, for although there has been a notable rise in the level of foreign investment in Canada, an even greater increase has occurred in Canadian investment elsewhere.

Throughout the years of Canada's development as a nation, outside capital has come largely from the United Kingdom and the United States. Initially the British were the chief contributors. Their participation in the building of Canada's railways, for example, is legendary, and even today some 20 per cent of the total capital of the railways is held in the United Kingdom.

After the outbreak of the First World War, however, the flow of new capital from overseas shrank to negligible proportions, and in the Second World War British investments outstanding in Canada were sharply reduced in order to pay for purchases of materials and equipment. At the end of 1948 the total value of Canadian assets owned in the United Kingdom stood at a low point of \$1,600 millions, \$1,000 million less than in 1926, the earliest year for which specific figures are available. Since then, with Newfoundland having become part of Canada and also with a revived flow of British capital into this country, there has been a slight increase.

In marked contrast to this long-

term decline, the value of Canadian assets owned in the United States is now two and a half times as great as in 1926 and constitutes close to 80 per cent of the total foreign investment. Furthermore, and again in contrast to the British position, the lion's share of American investment outstanding at the end of 1952 was made up of capital in industrial and commercial companies that were effectively controlled in the United States, the amount of such capital having trebled since 1926 to reach \$4,500 million.

U.S. Dollar Invasion

This spectacular rise in the American owned portion of Canadian business is perhaps the most significant aspect of the whole field of foreign investment.

It has not been a particularly steady rate of increase, nor even a continuous one. On the contrary, it has been concentrated in two periods of rapid expansion, the second and more important of which is still under way.

Between 1926 and 1930 the value of United States investments in controlled Canadian companies rose by 42 per cent as a result mainly of new capital supplied for pulp and paper, mining and smelting, railways and telephone and insurance services. After declining somewhat in the thirties it was enlarged again during the war and early post-war years, chiefly by the retention of profits earned on the pre-war investment.

In the years 1946 to 1949 inclusive, for example, three quarters of an in-

THE CANADIAN BALANCE OF INTERNATIONAL INDEBTEDNESS

\$ Billions at end of	...	...	...	...	1926	1930	1939	1945	1952
<i>Investments in Canada</i>									
Owned in:	United States	...	...	...	3.2	4.6	4.2	5.0	8.0
	United Kingdom	...	...	...	2.6	2.8	2.5	1.7	1.8
	Elsewhere...	...	...	...	.2	.2	.3	.4	.4
Total	...	...	...	...	6.0	7.6	7.0	7.1	10.2
<i>Canada's Foreign Assets</i>									
Private Investments	...	...	...	...	1.3	1.4	1.4	1.3	1.9
Government Credits etc.	...	...	...	...	—	—	—	.7	2.3
Official Reserves	...	...	...	...	—	—	.5	1.7	1.8
Total	...	...	...	...	1.3	1.4	1.9	3.7	6.0
Net Investment Debt	...	...	...	...	4.7	6.2	5.1	3.4	4.2
Net Sundry Claims	...	...	...	...	.3*	.4	.5	.4	.6
Net International Debt	...	...	...	...	5.0	6.6	5.6	3.8	4.8
%Gross National Product	...	...	...	...	94	119	98	32	21

Source: Dominion Bureau of Statistics

*Unofficial estimate

crease of \$800 millions in the outstanding amount accrued in this fashion. Since 1949, however, the reinvestment of earnings, though still considerable, has been overshadowed in importance by the provision of new capital. Sparked by discoveries of petroleum and iron ore, the new capital inflow in the years 1950, 1951 and 1952 has amounted to nearly \$1,000 million, and the total American investment in controlled Canadian companies has risen by almost 50 per cent in this relatively short period of time.

For the most part the new capital coming into this country from the United States in the last three years has gone into the development and processing of Canada's natural resources. The petroleum industry in all its forms has received approximately 37 per cent of the total, while a similar proportion has been invested in mining enterprises, largely

the iron ore fields of Ontario and Quebec-Labrador. In addition there have been new facilities created by American companies in manufacturing, merchandising and finance.

How important is the American owned portion of Canadian business? No overall measurement is available, nor would it be particularly significant if it were. In agriculture, which is just as much a business as the manufacture of automobiles, United States ownership is negligible, whereas in the auto industry it is preponderant. An average of the two would not produce a very meaningful figure. From time to time, however, studies have been made by the Dominion Bureau of Statistics that do throw some light on the question. The latest of these refers to the end of 1950, and gives the proportion of the book value of investment (defined as equity capital plus long-term debt) owned in the United States, and in

other countries, for a broad sector of Canadian industry and commerce.

By and large the externally owned proportion of investment in the industries covered was somewhat lower in 1950 than it was before the war. The one exception is mining and petroleum development, in which the share owned in the United States rose considerably and has probably risen still further in the last two years with the already noted influx of American capital. Apart from mining and petroleum, therefore, it would seem that during the period 1939 to 1950 a greater proportion of business expansion was financed domestically than was the case in earlier years.

Degree of Control

This interesting comparison does not, however, give a very good indication of the degree of *control* carried by external ownership. Information on this point is somewhat sketchy and is far from up to date. It has been officially calculated, however, that in the petroleum industry at the end of 1951, companies which were controlled in the United States by virtue of a majority of their voting stock being held by U.S. residents represented 62 per cent of the book value of total investment in the industry (equity capital and long-term debt combined) whereas only 52 per cent of such total investment was actually owned in the U.S.A. An earlier investigation relating to 1946 revealed that, in manufacturing, companies controlled in the United States accounted for 37 per cent of the total capital investment, although American ownership in such companies was only 31 per cent of the total book value of investment in manufacturing at that time.

The percentage of control exer-

cised by U.S. residents thus seems to be somewhat greater than their percentage ownership of Canadian business investment. It might reasonably be concluded that American control of manufacturing in Canada currently exceeds a third of the book value of investment. In mining and petroleum development the proportion may be somewhat higher.

Turning for a moment from the purely business sector to the economy as a whole, there is one particular type of investment on which knowledge of the extent of external participation is not only comprehensive but also up to date. The total of all federal, provincial, municipal and corporate funded debt outstanding at the end of last year is estimated to have been \$23,000 million. Of this total, 15.2 per cent was owned by non-residents, a sharp reduction from the 35 per cent so held in 1939, but an increase over 1947 when the proportion amounted to 13 per cent. Much of the decline from 1939 to 1947 in the externally owned proportion of funded debt must be attributed to the great volume of Government of Canada securities issued during the war, nearly all of which were sold domestically. Since 1947, in consequence of new provincial, municipal and corporate issues, total funded debt has risen by \$1,500 millions, or 7 per cent, while the amount held abroad has increased by \$680 millions, or 24 per cent, to reach \$3,500 millions at the end of 1952. Four-fifths of this amount was owned by residents of the United States.

Canada's External Investments

The size and importance of the external stake in Canada as outlined above has tended to obscure the fact that the movement of investment

capital across Canada's borders, even in the post-war period, has by no means been entirely on a one-way street. Canada's assets in other countries are extensive, and have increased considerably since 1945. A major part of this increase has taken the form of governmental credits but there has also been a rise in the value of private investments, virtually all of which took place in Canadian controlled companies. For example, it may come as a surprise that Canadian capital invested in Canadian controlled companies operating in the United States has risen to a greater extent percentage-wise than the corresponding investment by Americans in Canada. Between 1945 and 1951 the former increased by

96 per cent, as against a 70 per cent increase in the latter, and at the end of 1952 may have amounted to as much as \$1,000 million. A further \$300 millions were directly invested in Canadian controlled companies operating overseas.

Canada's foreign assets, although amounting in all to some \$6,000 millions at the end of last year, are generally insignificant in relation to overall investment in individual countries and have therefore not attracted a great deal of attention. By contrast, the physical results of the foreign investment stake of over \$10,000 millions in Canada are to be seen throughout the country and are forcibly apparent to both resident and visitor.

Steel Production in British Commonwealth

	1938	1946	1951	1952	1957-58 (planned)
United Kingdom ...	10,398	12,695	15,638	16,418*	20,350
Canada ...	1,155	2,078	3,190	3,320	4,400
Australia ...	1,182	1,089	1,430	1,610	2,400
India ...	937	1,293	1,500	1,570	2,300
S. Africa ...	341	499	930	1,180	1,500
S. Rhodesia ...	—	—	30	30	50
Total ...	14,013	17,654	22,718	24,128	31,000

*53 weeks

THE countries of the British Commonwealth already produce more than one-tenth of world steel output and are likely to increase this production considerably in the next few years. Apart from the United Kingdom, the Commonwealth producers in order of importance are: Canada, Australia, India, South Africa and Southern Rhodesia.

The table presents the crude steel production during periods mentioned. All figures are in thousands of tons.

All Commonwealth producers are planning increased production and the total output of the Commonwealth may yet rise to 31 million tons in 1957-58. It is apparent from the foregoing table that the United Kingdom stands as the major producer of the Commonwealth.

Canada is the second largest Commonwealth producer. Production in the Dominion is supplemented by imports which totalled approximately 1,500,000 tons of finished steel last year, supplied

chiefly from the United States. The steel industry of Canada is mainly concentrated in the east, in the proximity of the Great Lakes and the St Lawrence.

The Australian steel industry is concentrated at Newcastle and Port Kembla on the New South Wales coast. Local coal and ample supplies of sea-borne rich ore from the deposits of South and Western Australia combine to make Australia one of the lowest-cost steel makers in the world. Owing to shortages of coal and labour, however, Australian steel production shows an increase of only little more than one-third since the pre-war era. Substantial importation is thus necessitated, of which the greater proportion (224,200 tons in 1952) is supplied by the United Kingdom.

India is similarly a low-cost producer owing to the factors of abundant coal and the iron ore deposits of Bihar and Orissa. The main centre of the industry is in the neighbourhood of Calcutta and India is an exporter of coal and manganese ore, principally to the United States and the U.K. Production, as in 1952, is insufficient for India's modest total requirements of finished steel, and the balance is therefore imported mostly from the United Kingdom. This importation totalled 62,900 tons last year.

South Africa is still dependent on imported steel to satisfy a substantial proportion of its requirements. The major supplier is the U.K. (112,700 tons in 1952) although German competition has traditionally been strong. The Union is dependent on imports mainly because of the location of her steel industry in the

Pretoria-Vereeniging district of the Transvaal. Although this area is well supplied with coal and fair quality iron ore with supplies of rich ore further north and despite the fact that manganese is exported from South Africa, the Union's steel industry is only able to supply a local market, owing to transportation costs.

Southern Rhodesia has recently developed a small steel works at Que-Que based on the large local reserves of iron and coal. Imports necessary to cover requirements, about 75 per cent, are supplied predominantly from the U.K.

Abundant Natural Resources

The Commonwealth appears to possess one-third of the world's probable iron ore reserves. These reserves total 17,650 million l.tons (world 52,880 million l.tons) and potential Commonwealth reserves which include probable reserves are assumed at 40,580 million l.tons (world 186,300 million l.tons).

The Commonwealth has in addition extensive coal resources. These are found in many Commonwealth countries to a total of 386,548 million tons against a world total of 4,456,270 million tons. Total Commonwealth hard coal production was estimated at 331 million tons in 1952 against a world production of 1,567 million in 1951, so that the Commonwealth thus accounts for about one-fifth of the world's coal production, a much higher proportion than is indicated by its share of reserves. During 1951 countries of the Commonwealth produced 2,854,000 tons of manganese ore against a world production of 7,560,000 tons.

South Africa's Growing Public Debt

BY O. P. F. HORWOOD

EARLY in 1951 I called attention to the 'alarming' increase in the Union's public debt, an increase which seemed to me to be out of all proportion to national production, and to impose an ever-growing burden upon the country's future earning power. Since then the position has, if anything, deteriorated still further.

While the Union's gross debt increased by 33 per cent between 1949 and 1951 (the latest statistics show a 44 per cent increase between 1946 and December 1952), that of the U.K. rose by less than 10 per cent. Australia's remained virtually constant (2 per cent increase), while those of Canada and the United States actually declined, by 10 per cent and 5½ per cent respectively.

In absolute terms, the increase in the Union's gross debt has been of the order of £255 millions between 1946 and 1952. Over half of this amount was expended on railway development. The South Africa Act makes no provision for the redemption of the railway debt which, in consequence, simply goes on accumulating from year to year. The question is whether the time has not arrived for the Government to do something about this rather strange state of affairs and make provision for, say, an annual sinking fund for the redemption of the railway debt. Sinking funds, at cost, were valued at about £21 millions at 31 March, 1952.

The rise in the gross debt of the Union has been accompanied by increases in both the external and the internal indebtedness. The external

debt, which stood at £106 million in 1940, was all but extinguished by 1946 (£14 million), but since 1948 it has risen steadily as the Government have been forced to seek official loan capital abroad, and now stands at some £50 million. The internally-held debt has also risen steadily, the total at 31 March, 1952, 1952, being £755 million.

A large external public debt, owed to people outside the Union, is a real burden and limitation upon the South African economy, because as a nation we are obliged to export valuable goods and services abroad to meet the interest charges and to amortise the principal. The interest charge on the external debt for the year ended 31 March, 1952, was £1,684,000.

There are burdens involved in an internally-held debt like ours, but the burdens of an internal debt are qualitatively and quantitatively different from those of an external debt. This is the first and most important consideration without which we cannot go far in understanding the economics of the public debt. The interest on our internal debt, amounting to £22,059,000 for the year ended 31/3/52, is paid by South Africans to South Africans. There is no *direct* loss of goods and services. When interest on the debt is paid out of taxation, there is no *direct* loss of disposable income.

Nevertheless, what statistical evidence there is, suggests that the people who receive interest on government bonds or stock are on the average not in the lower income

groups. Thus interest on the public debt constitutes a regressive element in our fiscal system. The idea of 'soaking the poor to pay the rich' tends to reduce purchasing power and runs counter to many modern ideas of 'equity'.

Effect of Transfers

More important is the strong likelihood that the transfer of money from one person, in his capacity as a taxpayer, to the same person, in his capacity as a bond-holder receiving interest, will impose a heavy indirect burden on the economy. This is because taxation always has some disturbing effects on economic behaviour. For some people taxation means less work, for many others it means harder work in order to maintain standards of living. Of even greater importance, perhaps, is the fact that high company and personal income taxes will often adversely affect people's willingness to invest their capital in the more risky types of enterprise. The consequences may be less technological progress, and perhaps less employment.

If it can be assumed that, in the aggregate, we all own government stock in proportion to our share of taxation, there may appear to be a 'prima facie' case for saying that these internal transfers involve no net tax burden; we are merely paying to ourselves. On further inquiry this argument is found to be fallacious. We simply do not know what the effects will be even if each individual's taxes are precisely equated with the interest paid to him.

This is because what is true for all is not true for the individual. Suppose, for simplicity, that all South Africans earn £1,350 a year in salaries or wages. Assume that each owns £5,000 in government bonds,

which at 3 per cent bring in a yield of £150 a year. To pay this interest the Government, let us say, adds 10 per cent (in addition to existing taxes) on the total income of £1,500 (1,350 + 150). Previously it was just worth my while to put in that extra effort (perhaps in overtime) to earn the last pound of my £1,500. But the Government takes another 2s. od. out of that pound. I may well decide now that it does not pay me to work so hard. By reducing my working hours by, say, one-fifth, my income is now only £1,230. The tax, imposed to pay for current charges on the public debt, has distorted national activity and production.

This is, of course, an over-simplified example. Different kinds of taxes have different effects; but, when taxes are already high, any addition due to interest on government indebtedness is just that much more onerous. So an internal debt involves an important *indirect* burden whenever new taxes have to be levied to finance the interest payments. This would be true even if the average individual were taxed by as much as his own interest receipts, but the position is aggravated by the fact that interest receivers appear to be somewhat more wealthy than the average tax-payers.

The ownership distribution of the Union's national debt is illuminating. Prior to the war the holdings of foreigners were a very important part of the total, but their share declined during the war with the large-scale retirement of the external debt. While the holdings of business and individuals increased during the war, the holdings of the banks, and hence of the money supply, increased more rapidly, so that the ratio of debt to the supply of money fell. Since the war, as we have seen, the gross debt

has continued to increase on a big scale, but the public's share, both absolute and proportionate, has fallen markedly.

A significant development is the very large increase, after 1949, in the holdings of 'Other Financial Firms' (1938 £17m.; 1946 £46m.; 1951 £127m.). No doubt this is explained by the formation of the National Finance Corporation in 1949 and its predilection for Government bonds, principally short-term Treasury bills.

An interesting survey of how Government debt is held in twenty-three countries, and a comparison between financial systems, was recently completed by the International Monetary Fund. In general, it was found that the debt of the relatively under-developed countries was held mostly by the Central Bank; in the advanced countries the bulk was held in private hands. In the light of this, those who look at the South African statistics may be puzzled at the relatively small holding of the Reserve Bank (£19 million in 1951—and as little as £3 million in 1946). They should remember to add in the considerable holding of the National Finance Corporation (£67 million at December, 1952).

The role of the National Finance Corporation in South African public finance since its inception in 1949 ought to be carefully appraised. The Corporation was formed under Act No. 33 of 1949 to promote the establishment of an active money market in the Union, and the utilisation of idle capital in the national economic interest, and to facilitate the participation of foreign capital in the development of the resources of the Union. It has the power, *inter alia*, to invest the funds at its disposal in Treasury bills, or other Union Government securities; in securities

of any local authority or public utility undertaking in the Union, or in the redeemable debentures of any mining or other industrial undertaking in the Union.

To date, it has at no time invested less than seven-eighths of its funds in Government bonds (mostly Treasury bills). Of its total assets of £71 million at 31 December, 1952, £47 million comprised Treasury bills and £20 million Government stocks; a total of £67 million. It may be said, therefore, that the Corporation has existed almost entirely in order to provide funds to the Government. The extent to which it has fulfilled its objects is another matter. As things are, the Corporation appears as a sort of foster-child of the Reserve Bank and the Treasury.

Coincident with the establishment of the National Finance Corporation there has been a most pronounced increase in the Union's temporary debt. This is undoubtedly one of the less attractive features of the Union's economy today.

The floating debt has increased four-fold since 1945 (from £38 million to £141 million at 31 March, 1953) and at present constitutes no less than 17 per cent of the gross public debt, compared with 7 per cent in 1945. The far-reaching effect which this development has had upon the post-war inflation in the Union has perhaps not had the attention it merits.

Some two years ago I called attention to the fundamental unsoundness, from the standpoint of financial policy, of allowing so large an increase in the floating debt. Some months later, the Auditor-General communicated his anxiety on this score to the Select Committee on Public Accounts. His evidence deserves the closest attention.

Floating Debt too Large

'The Auditor-General', the evidence runs, 'feels that there is a danger inherent in overloading the temporary debt portion of the Union's total debt. It is not unreasonable to surmise that a large amount of the temporary debt money is at its source derived from floating bank balances and saving-bank balances with building societies. These are balances which, in an emergency, might be called up at short notice in which case it is not clear how the Treasury would be able to meet the resulting position. . . . Another aspect is that with a temporary debt outstanding of approximately £126 million, it is evident that a large portion of the loan programme is being financed from short-term borrowings (our

italics). To use an analogy which might perhaps be stretching the point, one might say it is tantamount to financing the erection of a capital work on an overdraft account. . . . This temporary debt of approximately £126 million is being used chiefly to finance the loan account which is for capital expenditure, and at any time the Treasury might be called upon to redeem considerable sums from these short-term borrowings. . . . This position has only recently arisen in this country and I have set out the factual position which it is desired to bring to the notice of this Committee.'

That this excellent statement has had no effect is clear from the fact that since it was made, the temporary debt has risen by a further £15 million.

INDUSTRIAL DEVELOPMENT IN BRITAIN: AN UNSOLVED PROBLEM

BY PROFESSOR E. H. PHELPS BROWN (*University of London*)

It is noteworthy that the tradition has changed greatly since 1914.

Because as much as half our gross investment may be needed only to make good depreciation, it is the smaller share of the national income represented by net investment which shows how much we are really adding year by year to our resources.

Estimates now available suggest that this share, taking net investment in industrial equipment and houses at home together with net investment oversea, amounted to about 10 per cent of our national income between 1870 and 1914. From 1924 to 1938 it was probably about 5 per cent—half what it had been.

Indeed, during the inter-war years our industrial investment at home seems to have done no more than keep pace with the growth of our occupied population: between 1870 and 1914 industrial equipment a head of the occupied population about doubled, but from 1924 to 1938 it seems not to have risen at all, and this in spite of a great reduction at the same time in our investment oversea.

It is only this lower rate of accumulation through the inter-war years that we have been keeping up since the war.

The fall in the rate of accumulation may naturally be connected with the contemporary fall in the level of profits. It now appears that since the deflation after the first world war the general level of return on industrial capital, and the share of profits in national income, have hardly ever been as great as they were throughout the 50 years before.

This redistribution of income has, in one way, helped on some real social advances, but in another way it may well have hindered them. The national product, and its rate of growth, are not fixed irrespectively of how the total is shared; profits used to provide both a main incentive to invest and the main source of funds for investment, and their reduction has raised a problem for our survival which we have not yet solved.

Australia's Secondary Industries

Sixty per cent increase since 1939; but how many of the new factories can stand up to growing post-war competition?

In 1938/39 Australia had about 27,000 factories; in 1948/49 the number was a little over forty thousand. Official figures just issued show that by 1951/52 the number had increased to 45,843.

In these were employed 977,777 men and women, including 37,000 working proprietors, while the value of production added by the processes of manufacture in these factories was approximately £1,024 million.

In a nation whose total income for the same year amounted to £3,238 million, and whose total working population numbered approximately 3½ million, these forty-odd thousand Australian factories constituted a highly important part of the country's developed resources.

The proportion of Australian breadwinners engaged in manufacturing is in fact larger by far than in any other calling. For 1952, the proportion has been estimated at about 28 per cent as compared with about 15 per cent in commerce, 12½ per cent in rural industry, 9 per cent in transport, the balance being made up of smaller classes such as building and construction, government administration, mining and others. Clearly, by the measures of employment at least, Australia must be regarded as a manufacturing country.

But the conditions which fostered manufacturing in the forties have not all persisted into the fifties. The world at large is no longer so hungry for manufactured goods that all factory production is absorbed irre-

spective of its costs. The capacity of pre-war manufacturing centres in Western Europe and Japan has been largely restored, adding to the newly-created and enlarged capacities of the new world. Thus the background differs from those conditions which a few years ago favoured rapid expansion of local secondary industry and, over the past two years, first the textile and clothing group, and later engineering, building materials, food canning and paper manufacturing as well as other groups, have encountered less favourable conditions.

Ups and Downs

The number of wage and salary earners employed in Australian factories, exclusive of those engaged in selling and distribution, reached a peak of 912,300 in November 1951 after which it declined until by the following September, it had dropped to 837,300. The annual accounts for 1951/52 of a number of companies in secondary industry showed losses or reduced profits and the prospects for Australian manufacturing then appeared less favourable. They appeared worse, in fact, than they actually turned out to be, for the experience of 1952/53 was less unsatisfactory than at first seemed likely. Employment in Australian factories began to recover last September and by April of this year some 27,000 had been added to factory pay rolls bringing the total to 864,500. While some results will be unsatisfactory, the annual accounts of a number of

manufacturers, now being made up to 30 June, 1953, will show improvement on the previous year. Sales of factory products over recent months have generally been steadier, aided no doubt by import restrictions, while the heavy writing down of stocks which weighed so much against the results of many companies for 1951/52 will be less severe for 1952/53.

High Wage Costs

The difficulty most common throughout Australian factories in the past two years has been associated with the country's rising wages bill for, in the factory, the response of costs to wage changes is immediate and wages represent a high proportion of total costs in secondary industry. For example, of the £1,024 millions of value added by factories in 1951/52 some £612 millions, or sixty per cent, consisted of wages and salaries. In the face of more stable overseas costs, a rising money wages bill must, if it go too far, bring a serious reverse. Australia, its factories included, must depend upon productivity and it is the productivity of Australian factories—their outputs in relation to their real costs—which will determine their future. All aspects of factory management have an important bearing on productivity. Capital provision, cost control, labour relations, material procurement, sales and technical development, each has a contribution to make towards improvement. Yet the general standard is affected.

Australia is still a relatively young country and many of its industries are not yet freed from the handicaps associated with its early stage of development. Compared with the most advanced manufacturing countries in the world, Australian industries are on average underpowered

although there are many individual exceptions. The horse power per worker used in Australian factories is less than half that in the United States of America. Yet the sources of power are available and are in course of development. As each year goes by this handicap should become less.

The market for Australian manufactured products is also relatively small, for a high standard of living compensates only partially for the small population. Thus, the advantages of mass production can only be gained step by step and many forms of enterprise are still limited in the variety of patterns and designs which can be economically produced to cater fully for public taste.

Transport Burdens

A further difficulty encountered by Australian factories along with other forms of industry, lies in high transport costs. It has been estimated that of this country's total national expenditure on all goods and services, approximately one third is expended on transport. There are indications which suggest that the proportion is higher here than elsewhere. For example, Australia employs about 10 per cent of its non-rural wage and salary earners in the transport industries as against about 6 per cent in the United States of America and about 7 per cent in the United Kingdom.

There are indications also that this country's capital and overhead costs in transport are relatively high. Per 1,000 of population, Australia has 3.8 miles of railway track, the United States of America has about 1.5 and the United Kingdom 1.0. Some light on relative overhead costs of railway operation is also provided by the number of ton miles of freight carried per mile of track in each

country. In 1952 the figure for Australia was about 16,000 short-ton miles, for the United Kingdom 36,000, while for the United States of America in 1951 it was about 207,000.

In road transport also, this country in comparison with others appears heavily equipped, at least in vehicle numbers. In 1952 Australia had 66 commercial vehicles for every 1,000 of population while the figure for the United Kingdom was about 20.

The latest available figure for the United States of America shows that in 1950 that country possessed 55 commercial vehicles per 1,000 of population. Comparisons of domestic air freight also show a heavier incidence for Australia where 3.3 short-ton miles of air freight were recorded per head of population in 1950/51, as compared with 0.9 for the United States of America and 0.01 for the United Kingdom, both in 1951.

Frightful Poverty in Italy

A COMMITTEE of the Chamber of Deputies reports that 232,000 families, or 2 per cent of the population, live in cellars, garrets or warehouses; 92,000 families, or 0.8 per cent of the population, live in shacks or caves; 1,078,000 families, or 9.3 per cent, live in overcrowded homes with an average of more than three persons per room; and 1,391,000 families, or 12 per cent, live in homes with an average of two or three persons per room.

An investigation of what Italians eat showed that 869,000 families, or 7.5 per cent of the total, never had meat, sugar, or wine, while 1,032,000 families, or 8.9 per cent, consumed insignificant quantities.

In general, the committee found that, of the 11,592,000 families in Italy, 1,357,000, or 11.7 per cent, had an 'extremely low' standard of life, while 1,345,000 families, or 11.6 per cent, had a 'low' standard of life. A total 7,616,000 families, or 65.7 per cent, were classified as having a 'modest' standard of life, and only 1,274,000 families, or 11 per cent, as being well-to-do.

Poverty is particularly widespread in Southern Italy. Of the 1,357,000 families classified as having an 'extremely low' standard of life, 1,161,000, comprising 4,600,000 persons, live in the South; and of the 1,345,000 families classified as having a 'low' standard of life, 925,000, comprising 4,226,000 persons, live in the South.

The total population of Southern Italy is about 15,500,000.

The committee found that 67 per cent of juvenile delinquents in the province of Rome were in families whose economic conditions were classed as 'poor' or 'very poor'; that in the Province of Caltanissetta (Sicily), infantile mortality among the families of agricultural workers amounted to 106.8 per thousand, while it amounted to only 13.8 per thousand in well-to-do families; that the city of Matera had only one hospital of 130 beds for a population of 180,000; that only 70 per cent of the 11,000 million lire given by the state for relief actually reached the needy, the remaining 30 per cent being swallowed up by administrative and other expenses.

Gandhi, Keynes and the Spinning Wheel

BY S. MOOS

(Lecturer in Economics, Durham College)

FOUR out of five of India's 360 million people depend on agriculture for their living; and only a small fraction of industrial workers are employed in large-scale industry. Agricultural employment is dominated by seasons: between the harvest and the coming of the rains, that is for four to five months each year, 120 million workers in field and forest are idle.

These are, in Keynes' terminology, the 'involuntary unemployed'.

India's involuntary seasonal unemployment is beyond western imagination; but if, in terms of numbers, one could imagine Great Britain without a single man or woman employed in field, office, or factory for two whole years, one would arrive at a rough equivalent of India's staggering economic problem, and one might appreciate the spiritual misery caused by this type of unemployment. During the part of the year when the land is cultivated, about one out of three Indian peasants, that is some 35 million pairs of hands, although working on the land, are *not really needed*; the total output would be not less without them and it is only the lack of any alternative occupation which is responsible for all this economically useless activity.

Two vicious circles operate against savings. As the low incomes from rural seasonal work have to cover the year's expenditure there is very little left for saving, and without savings there is no capital available for improvements, and without improvements productivity, and therefore incomes, cannot rise.

The second vicious circle arises out of the first. To cover the period between sowing and harvest, farmers need credit. As there are not sufficient savings available to satisfy this need, high interest rates have to be paid. Thus the lack of savings leads to high interest rates, the high interest rates reduce the farmers' income, the reduced income does not allow a margin for savings, the lack of savings leads again to the high rates of interest, and so on.

The India of these vast legions of unemployed lacks an industry which could absorb the idle millions. At the same time, the villages are entirely dependent on the towns; the credit which is so scarce and for which they have to pay so excessive a price comes from the towns; the village products for which they obtain so low a price go to the towns.

Intractable Unemployment

Unemployment in India has to be considerably reduced before defences of the Keynesian type against new disaster can be built; after all, the essential feature of the Keynesian technique of boosting expenditure is that it can successfully counteract unemployment only when used on a sufficiently large scale and before unemployment spreads. Keynes assumes idle capital and a high mobility of labour, but India is short of capital and her unemployed are immovable, with no place to move to and without the energy to move even if there were such a place.

What was needed in India were methods which would help to employ

idle labour, reduce the claims for capital which was scarce, increase the standard of living by greater self-sufficiency of the villages, and finally—and for Gandhi an essential aim—lessen the dangers of violence. As nothing is more likely to lead to violence than the demand for scarce goods, preference should be given to goods with expandable supply. In Gandhian economics scarcity is the decisive consideration, not cost or efficiency.

Gandhi Economics

This attitude gains importance in the light of recent reports which suggest that India's shortages of essential commodities will remain a threat to world production, to world trade, and to full employment. According to Gandhi, it is better to rely on the bullock than on oil for moving the plough, because, once she has decided to give up her bullocks and her 40 million buffaloes, the cutting off of oil supplies would spell ruin to India.

What buffaloes, bullocks, and man meant as sources of energy for the production of food, the spinning-wheel was to mean in the provision of cloth. The textile mills depend on markets to sell and on materials which might become scarce, such as iron and steel and foreign cotton and yarn; but the supply of the material for the spinning-wheel is adjustable; the spinning-wheel represents local production and relies on local resources and local markets, and therefore the extent of fraud and speculation, of conflict, and of violence arising from conflict are reduced. And as less money has to be spent on textiles from the mills, the villages will need less credit and will free themselves from the interest burden. And, finally, the spinning-wheel will

occupy the idle hours of the unemployed and will prevent their spiritual decay.

'Little do town-dwellers know', said Gandhi in 1922, 'how the semi-starved masses of India are slowly sinking to lifelessness.' He emphasised that hand-spinning was not intended to withdraw a single able-bodied person who could otherwise find a more remunerative occupation from his work, but rather 'the whole claim advanced on behalf of the spinning-wheel is that it alone offers an immediate practicable and permanent solution of the problem or problems that confronts India, namely the enforced idleness' for nearly six months in the year of an overwhelming majority of India's population owing to lack of suitable occupation supplementary to agriculture and the chronic starvation of the masses that results therefrom. There would be no place for the spinning-wheel in the national life of India if these two factors were not there.'

Western ideas, if they are to suit Indian conditions, will have to be revised. Is it really good economics to spend scarce resources for the import or output of labour-saving machines for use in industries which can command gigantic armies of unemployed? What is the meaning of man-hours saved, where billions of man-hours are wasted in enforced idleness?

Gandhi's answer was the cottage industry. Villages would engage in home-craft, or they would produce soap, flour, and paper from local raw materials. But as these types of village industry still leave great pools of unemployed, further employment can come only from small-scale industry carried out in the villages.

When Gandhi said: 'Dead machinery must not be pitted against the

millions of living machines represented by the villagers scattered in the 700,000 villages', he implied that machines used in the villages to create employment were of a different kind from machines concentrated in towns and causing unemployment in the villages.

Experience in Switzerland and Japan goes to prove that suitable machines can be devised for cottage industries, provided inventors free themselves from their preconceived notion that large-scale machines are always preferable. They would have to apply their ingenuity to the problems of the village industry, and invent small machines of simple design with as few parts as possible and with rotational motion. Full employment in India will not be

possible without inventions of this type.

Conditions of Full Employment

Gandhi's economic thoughts were dominated by the phenomenon of mass unemployment, this, as Keynes said, 'enormous anomaly in a world full of wants'. Gandhi aimed at full employment, under conditions of a backward, under-developed sub-continent. The Keynesian unemployed were counted in millions; Gandhi's unemployed were counted in scores of millions. Keynes wanted idle wheels to turn again in urban factories; Gandhi hoped that wheels would begin to turn in India's listless and poverty-stricken villages. Perhaps in terms of the civilisation of the east Gandhi was not so unrealistic after all.

DON'T BY-PASS THE FOREMAN

BY PROFESSOR E. WIGHT BAKKE

(*Director, Labour and Management Centre, Yale University*)

It cannot be emphasised too often that in the (industrial) organisation the foreman performs a key function. He is the agent through whom much of the mutual impact of management on workers, and workers on management, must necessarily be channelled. He is the last link in the management's chain of command, their directive authority.

He is, in partnership with the union steward, the first link in the workers' demands on and control of management, their representative authority. He is the focus of management's ability to reward and penalise the workers through appraisal of their work, and of the workers' ability to reward and penalise management by the degree of their productive efforts.

But it has frequently happened in America (and doubtless elsewhere) that top management, in its desire to get into direct contact with the workers, has short-circuited the foreman, and therefore weakened his power to unite the workers and management in other aspects of organisational life.

The most competent and intelligent American management would want me to convey to you their experience that any communications system which does not strengthen the position of the foreman in that structure is bound to be disappointing in productive results.

Men react not to communications alone, but to the totality of organisational arrangements by which they are surrounded. Communications which undermine the significance and importance of the foreman by short-circuiting him are taken by the workers as admissions by management that their organisational set-up was wrong.

To the average workman the foreman always has been and is the company.

The possibility of making the foreman the primary source of communication of management to workers should not be ignored, or its importance underestimated, by those who are aware that communications are not a panacea, but merely a supporting and strengthening activity for a sound organisational system.

Management of Capital Spending

BY L. G. NORTON AND J. E. WALL
(Finance Department, Unilever Ltd)

A SPECIAL feature of capital expenditure is that it frequently involves locking up money for a fairly long period of time and in specific fixed assets which may be of little or no value elsewhere. In addition, in these days of exchange control restrictions in many countries, it may also involve locking up resources in a particular country with uncertain prospects about the remittance of profits and eventual repayment of capital.

Two general points arise from the outset. Capital expenditure is essentially a continuing flow of expenditure through time. In any dynamic concern, this flow will be continuing in good and in bad times. Naturally the rate of flow will vary, reflecting on the one hand, for example, changes in commercial prospects and plans, movements in the general level of costs, and the incidence of large projects, and on the other hand, changes in the supply and cost of financial resources available for investment in fixed assets.

Two Basic Factors

However, for various reasons it is both necessary and convenient to divide this flow of expenditure into given periods of time; e.g. there are statutory obligations upon companies to provide annual accounts. There is, moreover, the need for any firm to consider at definite intervals of time the longer term financial implications of the rate of flow of its capital expenditure. At the same time, it is necessary to recognise that to review the flow of capital expenditure for

any given period of time in the future introduces some artificial factors into the picture. A year may be at once too long and too short a period of time.

The second general point concerns the practical difficulty of estimating in advance, within a reasonable margin of error, the amount of capital expenditure. Some items can usually be estimated fairly precisely, especially when they are small and will be paid for quickly. Others raise real problems, especially when the construction of the plant or equipment is spread over a fairly long period of time. Construction costs may change; the availability of materials may vary, especially where there is the physical control by governments; the delay in providing any particular piece of equipment may hold up the entire project indefinitely; where investment takes place overseas, rates of exchange may differ during the course of construction, and, lastly, technical problems may be met during the course of construction which could not be foreseen. Moreover, technical development does not stand still—better ways of doing a job are always being found and, even within the short space of a year, some items in any capital expenditure budget may drop out and new ones be brought in.

The general aim of any system of controlling capital expenditure must be five-fold:

(a) to decide on which new fixed assets expenditure will be incurred after allowing for the unavoidable

expenditure which has to take place (e.g. essential replacements). Since potential capital expenditure will usually exceed financial resources, this stage is essentially one of determining priorities—of selecting those projects which will best achieve the commercial plans of the company. The broad system must therefore be such as to facilitate the comparison of the return upon differing projects;

(b) to provide that the fullest use is made of the expert knowledge within the concern so that the decisions of selection can be made on the basis of the best expert knowledge available;

(c) to ensure, in particular, that those projects selected will be of the highest technical standard within the financial limitations set upon them;

(d) to provide for proper financial oversight of the capital expenditure undertaken. In times of rapidly changing costs, care must be taken to ensure that the final cost of the fixed asset still bears the appropriate relationship to the value of the flow of services expected from it;

(e) to ensure that the system will operate flexibly and speedily. Provision must be made for reasonable changes in the project without too much reference back. Moreover, although it may be possible in some cases to take time about considering capital expenditure, in others the time factor may be important.

Selection of Priorities

Taking each of these five aims in turn, the first concerns the selection of those items to which the available financial resources should be devoted. In theory, those items should be selected which will yield the highest return on the money to be invested, although this is less apparent in the case of replacement items. For other items, in practice two difficulties

arise at once. First, account must be taken of 'external' factors which hinder the selection of projects solely on their expected rate of return. Second, the actual measurement of the rate of return on new capital expenditure—and for that matter of existing capital employed—is far from easy and at times is virtually impossible.

The 'external' factors may be taken first. A good deal of capital expenditure is 'unavoidable' in the sense that it is influenced largely by factors outside, or at best only partly within, the direct control of any concern. Obvious examples are the safety regulations under the Factory Acts, the host of other regulations by Central and Local Government, the general working conditions expected by organised labour, social amenities for the staff, and the like. These are, perhaps, the lesser difficulties. More important are:

(a) The activities of competitors. It may often be necessary to undertake capital expenditure to meet pressure from competing firms. The new expenditure in itself may not be relatively profitable but unless it is made the whole competitive status of the company can be impaired. The return on such expenditure must clearly be related not to the actual new fixed assets produced but to the effect on the profitability of the entire enterprise if the expenditure were not made. This is notably true of the improvements in the quality of the products sold. Firms will normally be seeking to give consumers an improved product—indeed, they must do so if sales are not to decline and the value of the existing assets thus be impaired. But the financial cost of this action may often be high.

(b) The importance of maintaining

earning power—i.e. the need to preserve the return upon, and thus the value of, existing assets. In any well-established business, it is from the existing assets that the bulk of profits must come. Much of the new expenditure must therefore be directed towards preserving the earning power of these existing assets. Frequently, therefore, new capital expenditure may have to be incurred which yields a small return in itself but does, in fact, preserve a substantial investment which would otherwise become less profitable and in some cases might even be lost. In general, in any large concern brand new projects standing on their own feet are few and far between. Much more frequent is the need to make expenditure on replacing or improving existing assets, when the new expenditure becomes inextricably mixed with the old and the return upon it can be considered only in relation to the expected yield on the total investment involved.

(c) The policies of governments. Government policy at times enforces investments which are not economic, especially where that policy reflects nationalism in the economic as well as the political sphere. For example, a government may refuse to license the import of certain products in order to force some concern to set up plant for making the products in the country itself. The return on the investment in the new factory itself may be meagre and may indeed be less than the return on the goods previously imported. There may also well be better uses for the money thus locked up. Nevertheless the investment may have to be made in order to ensure that the company's products are not excluded from the market in that country.

(d) The pace of technical development. In some fields the pace is so great that existing assets become obsolescent and must be replaced long before their proper life is run. Provided that the competitive position permits it may be possible in such cases to ensure that the rate of return on the new fixed assets covers the loss on the shortened life of the assets replaced. But this is not always possible.

(e) Errors in commercial planning. Capital expenditure is incurred in relation to commercial plans which are themselves only assessments of the likelihood of a certain volume of manufacture or of sale. If these assessments are wrong the capital expenditure itself may prove to be mis-applied. This is obviously the case when sales fall short of expectations, e.g. owing to change in the public's preference for certain products. The new fixed assets are thus insufficiently used. But it can be equally true when sales exceed expectations. In a competitive market the failure to have your product available whenever a consumer demands it may well mean a decline in the total volume of sales. In order to make sure that the consumer can always buy the product whenever he asks for it a further expansion of investment may be required. Fortunately it may be possible to spread such overheads as advertising and marketing costs over a larger sales volume and thus reduce costs, but the construction of the additional plant which was not foreseen when the original project was planned may prove to be less economic than the original plans.

Measuring Return

When we turn to the actual measurement of the return on the

new capital investment, other difficulties of a different nature are encountered.

In theory, the proper use of capital resources involves the measurement of the expected return on the new fixed assets together with any additional working capital and its comparison with the cost of the new money thus locked up (compared with current borrowing rates—if it is possible to borrow—or with its probable return if used elsewhere). Only in this way can we be sure that the marginal net productivity on capital does not fall below the prevailing long term borrowing rate and that comparisons can be made among competing projects for investment.

In practice such measurement is usually inexact and at times impossible, and at all events the required return on new investments will always be substantially in excess of the current long term borrowing rate. The substantial amounts of replacements do not permit of measurement. Nor do many additions to existing plant. In some cases, on the other hand, it is possible to make a fair estimate of the expected return on the new investment. This is especially the case with completely new projects.

In passing, it may be noted that the measurement of the return on capital employed in any long-standing concern of size and variety raises a number of issues which cannot be discussed here. Suffice it to say that the approximate nature of such measurements is widely recognised.

The next problem—of securing the best possible fixed asset for the money invested—is less difficult. Naturally the technical and other expert resources available to any

concern will vary with its size and there is no difficulty in devising a procedure to ensure that these resources are used to the full.

The financial oversight of capital expenditure is also comparatively straightforward. Procedures can be devised by the accounts and finance sections of the concern to provide for adequate progress reports on capital expenditure being undertaken. The importance of such oversight must, however, not be underestimated, especially in those concerns which have limited financial resources, including their capacity to borrow.

Lastly, whether or not a procedure will work smoothly, flexibly and speedily, is a matter of management and needs no special discussion.

* * *

These difficulties (and there are others) in devising satisfactory methods for controlling capital expenditure have been developed at some length in order to provide a background against which the procedure for control and oversight can be set.

They serve, in addition, to make one essential point. Any procedure, however carefully devised, cannot by itself provide an adequate oversight and control of capital expenditure. Procedure is no substitute for good management. Unless all levels of management are at all times fully aware of the financial implications of capital expenditure—of the fact that new expenditure locks up financial resources (quite apart from the additional working capital involved), procedural control is of little or no value. On the other hand, once management is conscious of these facts a well devised procedure can do much to sharpen up the control. This is especially true in a large and diverse concern.

ITEMS FROM

BANK FOR INTERNATIONAL SETTLEMENTS REPORT**(1) MISAPPLYING KEYNES**

ONE thing which is often forgotten in connection with Keynes's analysis in the *General Theory* is that this analysis presupposes the conditions of a 'closed economy'.

When a country is as large as the United States (and moreover has ample monetary reserves), it may not be too unrealistic to assume that these conditions are present; but if European countries were to base their thinking on the subject of investment on this assumption, it is quite certain that they would overlook very important aspects of the problem.

Thus, those who argue that a credit expansion leads either to the utilisation of 'unused economic resources' (for instance, previously unemployed persons) or, if such resources do not exist, to an inflationary rise in prices, are only too often leaving out of account one further possibility—namely, that the increase in monetary purchasing power may produce a gap in the balance of payments.

Where this happens the additional monetary purchasing power may well be drained off through the purchase from the central bank of the foreign exchange required to pay for the surplus imports, and in these circumstances there may be no rise in prices nor, in the end, any undue increase in the volume of money. If the fiduciary credit expansion is not

compensated by loans or grants received from abroad, the country's monetary reserves are bound to be reduced, as has been shown by the experience of many European countries in the years since the war.

This is only to be expected; investment, whether in buildings, plant and equipment, or in stocks, uses up both raw materials and labour; the employment of additional labour will lead to an increase in the demand for consumer goods, and neither these goods nor the raw materials needed can be made to appear just out of the blue; they have to be provided either out of that part of the current national product which is not used for current consumption (i.e. from savings in one form or another) or out of resources obtained from abroad or from reserves.

Consequently, when domestic saving is inadequate and the deficiency is not made up by foreign loans and grants, the new investment, ostensibly 'financed' by credit expansion, is in reality paid for by drafts on the monetary reserves. The country concerned has merely exchanged one type of asset for another.

Only very rarely can such a course be advisable, for the purpose of 'reserves' is, after all, that they should be kept in store to help withstand the exceptional financial strains which may occur in connection with the accumulation of commodity stocks

and to provide for unforeseen circumstances in addition to meeting the demands resulting from ordinary seasonal disequilibria.

Should the reserves be so slender that their further reduction could prove prejudicial to the maintenance of confidence in the currency or adversely affect the regular rhythm

of trade and production, then there can be no doubt that the loss in reserves will more than outweigh the advantages derived from the possession of a few more public works or whatever other investments have been built up by means of the drafts made upon them.

(2) SOURCES OF CAPITAL

In assessing the capital requirements of European countries, it must be borne in mind that in cases where these form the centre of monetary areas the metropolitan countries must be considered not in isolation but in conjunction with the other members of their respective areas.

France and the United Kingdom have both made available substantial amounts to the overseas members of their monetary areas, in the form of private capital and of government grants and loans. As a result of having thus provided resources for economic development overseas, the metropolitan countries have been forced to set limits to their own investment at home (e.g. that connected with the rationalisation of their own economies and the building of houses). On the other hand, the relatively rapid development of the overseas territories has had many useful effects, for instance, in stimulating raw-material production, an expansion of which was so urgently needed in order to overcome the shortages due to the war, and also in providing opportunities for increased emigration from the often overcrowded European countries.

There are, of course, still many promising fields for development of raw-material production and other

forms of useful investment in overseas countries; and the majority of these countries are still anxious to obtain capital from abroad, not least because they hope to improve the standard of living of their populations. However, this demand for capital will somehow or other have to be brought into line with the savings available to satisfy it, whether these savings are obtainable within the countries in question or have to be procured from outside sources. Since the amounts of funds available for export on the ordinary capital markets are relatively limited, countries in need of additional resources have been applying for loans to the International Bank for Reconstruction and Development in Washington. In 1952 this institution entered into contracts for new loans amounting altogether to \$293 million, thus bringing the total of I.B.R.D. lending of original principal over the period from the beginning of the bank's operations in 1946 until the end of 1952 up to \$1,524 million, the principal amount actually disbursed by the end of 1952 being \$997 million.

In a speech made in January 1953, the President of the I.B.R.D., Mr Eugene R. Black, discussed the part that can be played in the economic development of different countries by financial resources contributed from

outside. While recognising that in the post-1945 period 'American aid to European reconstruction has been a vital part of the total effort', he laid great stress on the fact that 'European countries themselves have financed 90 per cent of their reconstruction out of their own resources'. In this connection he referred to the resolutions adopted at the Commonwealth Economic Conference which was held in London in November-December 1952, and pointed out that 'both the advanced and the less developed members of the Commonwealth' had agreed that 'the major sources of capital to promote development must come from within each country' and that 'policies to stimulate domestic savings must be adopted', it being considered that 'capital from outside will then find a fruitful basis on which to work'.

Another difficulty to which Mr Black drew attention is the shortage, in the less developed countries, of personnel possessing the administrative, managerial and technical skills necessary for the planning and carrying-out of large and costly investment programmes; in this respect, too, assistance from abroad could make a contribution but, even so, it remains true that 'foreign aid can never be more than marginal'.

* * *

While genuine debt redemption may be a way of adding to a country's savings, there are some obvious dangers involved in relying on budget surpluses for the provision of fresh capital resources:

(i) Experience shows that it is

difficult to make accurate estimates and that even such budget surpluses as appear to be secure beyond doubt have a tendency to dwindle to vanishing point. Apart from the fact that unforeseen events of one kind or another often arise which—like the Korean conflict—call for sudden increases in expenditure, the existence of a surplus is a constant temptation to the politicians to embark upon schemes involving fresh expenditure which, even if they can be regarded as constituting outlay for capital purposes, actually divert resources from more constructive uses.

(ii) It is almost impossible nowadays to obtain a budget surplus without imposing very heavy taxation and there is thus a danger that the consequent reduction in private savings may be greater than the amount of the surplus. This is particularly the case when the additional revenue is derived from high income and profit taxes, since these may well impair private savings more than they reduce consumption. It is significant that the U.S.S.R. relies on the turnover tax as its main source of revenue and therefore largely looks to it for the provision of genuine resources to be employed for investment purposes through the budget.

There has clearly been a swing-back of opinion to greater reliance on private savings, partly because budget surpluses have proved ephemeral and partly because those countries which have pursued policies definitely encouraging a revival of private saving have been seen to have achieved remarkable success.

(3) DISCIPLINE OF CAPITAL MARKETS

Experience both of the inter-war period and of the years after 1945 has led to a fuller realisation of the vital importance of the functions per-

formed by capital markets.

(i) Firstly, the necessity of relying on capital markets forces those who embark upon investments, whether

they be local authorities, nationalised industries or private enterprises, to make sure in advance that the necessary financial resources will be forthcoming. In some countries in which effective capital markets have been in existence for a long time and are once more in operation after the interruption of the war, it has recently been found that quite modest changes in interest rates are sufficient to ensure a proper balance between supply and demand in the capital market.

The position is different if a public agency, for instance, or perhaps a privileged private enterprise, can just turn to the Treasury when in need of funds, for then it can go ahead with building and other investment activity without worrying about how it is to obtain the necessary finance—and in such a case there is no way of ensuring that investment is kept within safe limits, for, even if genuine savings are not forthcoming, the Treasury may put pressure on the banks, including the central bank, to furnish the funds needed.

(ii) Secondly, the capital market consolidates current savings into long-term funds and in that way imposes a certain limit on the amounts which may be spent at any given time. A holder can, of course, realise his assets by a sale—and individual transfers are an essential feature of the market. But, as long as the central bank does not intervene, the amounts paid to the seller of the securities come out of funds already existing in the market; if sales assume considerable proportions, the prices quoted will decline, and con-

sequently those who sell will suffer losses. Holders of Treasury bills, on the other hand, can simply demand to be paid in full when the bills mature, and if the volume of such demands increases unduly the central bank will probably have to provide the necessary funds in order to prevent a collapse of public credit.

In the absence of properly functioning capital markets, the great danger is that too much financing is likely to take place via the banking system—the procedure being that private firms and nationalised enterprises borrow from the banks in order to raise funds not only to be used as working capital but also for long-term investment purposes and that governments obtain short-term funds by placing Treasury bills with the banks instead of seeking to obtain long-term funds.

It is, of course, generally recognised that an immediate inflationary danger arises from the financing by the central bank of a government deficit or of the capital requirements of public corporations and private business enterprises. But, while it is realised that governments are adopting a very perilous mode of financing when, in emergencies, they ask for advances from the central bank, it is not always sufficiently appreciated that there is also a great danger inherent in the practice of government borrowing from the commercial banks, through sales of short-term government paper or in other forms, since the implementation of such transactions may necessitate before long the creation of new central-bank credit, which is likely to unleash a new bout of inflation.

(4) RAW MATERIAL RESOURCES

When the question of the possibility of an eventual shortage of raw materials is examined from a long-term point of view, rather than from that of the immediate market outlook, it becomes apparent that there are two sets of circumstances which seem to constitute a safeguard:

1. It has been found in recent years that the world possesses far greater resources of substitute materials than could at one time have been imagined. One-tenth of the earth's surface consists of aluminium-bearing ores, and the cost of extraction has steadily decreased. Aluminium can to some extent be used instead of iron, steel, copper and brass for many purposes. Artificial fibres have already established themselves as important industrial materials, no less than one-sixth to one-fifth of present world consumption of textile goods being accounted for by articles made from such fibres. Mention should also be made of plastics, for the chemical industry is providing the basis for a whole new range of products for the satisfaction of human needs.

2. Another important development is the reduction in the amount of raw material required per unit of finished product. This may be illustrated by means of the following table giving data relating to Swiss locomotives.

Swiss Locomotives

Year of construction	Weight of locomotive in tons	Maximum speed in kilometres per hour	Weight per horse-power in kilograms
1919	107	75	60.5
1931	123	100	37.3
1941	106	125	26.2
1946	56	125	24.3

It will be seen that from 1931 to

1946 the weight of the locomotive was reduced by one-half and that during the same period the maximum speed went up by one-quarter (from 100 to 125 kilometres per hour). The reduction of weight in relation to horse-power is even more impressive.

The relationship between the rate of expansion in industrial production and the increase in demand for industrial raw materials can be seen by studying the overall figures for the supply of such materials and the volume of industrial production in the United States.

**United States:
Supply of industrial raw materials and volume of industrial production.**

Year	Supply of industrial raw material	Volume of industrial production
	Index: 1919 = 100	
1919	100	100
1939	129	151
1950	194	290

When the data for 1939 and 1950 are compared, it is found that, while the supply of raw materials went up by only 50 per cent, industrial production nearly doubled.

These figures are on the whole reassuring and should serve to counter any pessimistic predictions of an unavoidable 'raw-materials famine' at some time in the future. On the other hand, the 'Paley Commission', basing its estimates on 'a plausible shape of things in the decade 1970-80', 'projected' that a doubling of the gross national product of the United States would necessitate an increase of 50-60 per cent in that country's supply of raw materials between 1950 and 1975

and came to the conclusion that a very extensive development programme will have to be undertaken in order to increase production of nearly all commodities used for industrial purposes.

If this is the verdict pronounced with regard to industrial raw materials, there can be no doubt that in the case of agricultural products the need for expansion is as great and urgent today as it has ever been. The conclusions set forth in the report on the Second World Food Survey, which was published by the Food and Agricultural Organisation (F.A.O.) in November 1952, are summed up by the Director General

of that organisation in the following words: 'The average food supply per person over large areas of the world, five years after the war was over, was still lower than before the war. The proportion of the world's population with inadequate food supplies has grown appreciably larger . . . and clear signs of any far-reaching changes in the countries' scale of food production, essential for the improvement of nutrition on a wide scale, are lacking. . . . The whole demographical picture, though still imperfectly understood and interpreted, adds a note of urgency to the task of expanding world food production.'

Where the Money goes in U.S. Industry

'For every dollar paid to shareholders, over three dollars was paid in direct taxes, eight dollars in direct labour costs, and eighteen dollars for purchase of materials and services.'

WHAT happened to the \$102,000 million receipts of the 100 largest corporations in 1952?

Fifty-six per cent or more than half the total receipts of the group was paid out for costs of goods and services purchased from others—representing largely payments to labour in the earlier stages of production. The second item—direct wages, salaries, and labour benefits, partly estimated—averaged about \$4,200 per worker and amounted to approximately 24 per cent of receipts. Thus the cost of purchases and of labour together took 80 per cent or

four-fifths of the sales dollar.

Of the balance remaining after the costs of labour and of purchases, taxes took more than half. Federal income and excess profits taxes totalled \$5,600 million or 5.5 per cent of sales, while other federal, state, local, and foreign taxes totalled \$5,000 million or 5.0 per cent.

Moreover, such tax figures charged as costs are exclusive of general sales taxes, and of special taxes on gasoline, oil, automobiles, tobacco, transportation, telephones, liquor, etc., collected and remitted by these companies. Figures are not available for the grand total of such additional tax collections, but for the 14 largest oil refining companies they amounted to \$2,260 million. The Bell Telephone System collected from customers \$615 million of telephone excise taxes, General Motors Cor-

poration collected \$472 million of automotive sales and excise taxes, and the six largest railroads collected an estimated \$200 million in excise taxes on freight and passenger revenues.

These countless business taxes levied all along the line of production and distribution are a major element in the prevailing high prices of goods and services, though one whose full effect it is impossible to measure. They are an important factor in both the individual's high cost of living and the corporation's high cost of living.

Disposition of Earnings

Net income of the 100 largest corporations last year amounted to \$5,661 million—which was an average of 5.5 per cent of total receipts. Profit margins varied widely among companies as a result of various factors, particularly the variation in rates of capital turnover. For example, the annual revenues of the two largest public utility systems together were only seven-tenths as large as their year-end net worth, whereas fifteen merchandising companies had sales almost five times their net worth.

To conclude the analysis of the composite statement of the 100 largest companies, 3.1 cents out of the revenue dollar was paid in dividends to preferred and common shareholders. The balance—2.4 cents—was reinvested in the business to

finance replacement, modernisation, and expansion of plant and equipment, plus building up working capital. For every \$1 paid to the corporate shareholders as a return on their capital, over \$3 was paid out in direct taxes, \$8 in direct labour costs, and \$18 for purchases of materials and services.

Contrary to opinions sometimes expressed, the widely-published operating reports of the big companies show that their huge receipts are not hoarded or stored up. Instead they are put to active use in producing goods and services for the public, buying materials and supplies, generating wages and taxes and dividends. A substantial part of the money is used to pay for the replacements and improvements needed to keep plant and equipment efficient, and to meet the demands of a nation of 160 million people, growing at the rate of two million annually. Such replacement costs today are far higher than the depreciation charges accrued at the usual rates on pre-war costs.

For these various purposes the country's 100 largest corporations in the year 1952 disbursed not only the entire \$102,000 million of their receipts, but an additional \$2,600 million which they obtained by increasing their current and long-term indebtedness.

Thus, even the million-dollar-a-day receipts of these companies were not enough to cover their entire outlays.

Britain's Nationalized Industries Lack Commercial Touch

BY

OSCAR HOBSON

In all the circumstances it is impossible to pass favourable judgement on the financial conduct of the nationalised industries.

With a labour force of some two million workers, and an aggregate capital of £2,000m., they represent almost one-tenth of total British industry. Over the five years or so average period of public ownership they have sustained an aggregate loss of some £75m., and this without counting the inadequate provisions for the replacement of assets.

This loss is just as much a charge on the purse of the nation as the loss of the groundnuts scheme, which it exceeds. If it continued at the present rate it would prove an intolerable burden. With more stable conditions it should assume more manageable proportions, but experience so far indicates that the finances of nationalised business will suffer from a permanent bias towards unsoundness.

Quite apart from faults in structure or organisation, what is most lacking in the nationalised industries is the right animated spirit for want of which the boards appear to the public and to the bulk of their employees as amorphous and soulless bureaucracies.

It is not the spirit of service that is wanting; there is in a sense too much of it. What is wanting is the commercial spirit or the commercial approach. That is nearly, though not quite, the same thing as the profit motive. The spur of competition and the insistent need to make ends meet have not been there.

These somewhat abstract and in-

tangible censures can be substantiated by more concrete criticism. Their conception of their obligation of public service has betrayed the public boards into radically false selling or price policies, while the British Transport Commission was prevented by parliamentary interference from having a price policy at all. The other boards have considered it their duty to sell their products to the public at as low a price as possible.

But that is not what the national interest requires. That interest requires that the boards should produce as efficiently and at as low a cost as they can and then sell their products at prices that will cover that cost, including replacement cost at current prices as well as interest on capital. Any other price policy involves erosion of the nation's capital. Cheap production, not cheap selling, is the criterion.

The principle of uneconomic production is not one to be glorified. It amounts to the subsidization of one section of the community by another. An occasional temporary subsidy may be justifiable to provide for a specific emergency, but not a subsidy to all the nationalised industries all the time.

Capital-Raising Privileges

Another aspect of the lack of commercial approach is the privileged position the nationalised industries enjoy in raising capital; they obtain it either by direct advance from the Exchequer (e.g., the

N.C.B.), or by borrowing from the banks, or by issue of stock under the direct guarantee of the Treasury. Their capital programmes have been sanctioned at high level, with little reference to the test of profitability under genuine commercial conditions, and there is little reason to suppose that the distribution of capital that has resulted is anything like that which would have occurred under the free choice of the market. In this planned dispensing of capital resources, electricity has fared unduly well and the railways unduly badly.

The anomalies of the Rent Restriction Act have something to do with the excessive preference for electricity. Because of the uneconomic use of available housing as a result of rent control, an enormous number of new houses had to be built by Government subsidy, and gas and electricity had to be laid on to supply them with fuel and power and feed the radiators and television sets that the housing subsidy enabled the lucky tenants to purchase. On the other hand, the excessive new demand for electricity necessitated load shedding at peak hours, with adverse effects on production. It is all a classic example of the crazy situations which can arise when we begin to 'plan' and 'control'.

High Standards of Efficiency

A more pleasant aspect of nationalisation is the fact that all the boards have attained a high standard of functional efficiency and that their claims to have achieved continuous technical advancement are well based; but in view of the large sums

of new capital employed any other result would have been positively discreditable.

Although the nationalised industries have, so far, undoubtedly achieved a good record of efficiency, that does not necessarily mean that they have proved more efficient than they would have been had they remained in private hands, except in so far as they have had larger amounts of new capital to spend.

This statement does not apply to the railways, however, and it is rather remarkable that, of all the nationalised industries, they have put up the best claim to have been more efficient in operation than they would have been under their previous private ownership. But standardisation, to which their success is mainly due, has its limits and if these are exceeded it can turn from an asset into a liability. Standardisation is the instinct of bureaucracy, and the nationalised boards are bureaucracies par excellence.

Although strenuous attempts will be made to decentralise and subdivide and reorganise them so that they may acquire something of the vitality and organic cohesiveness of the successful big firm, it is doubtful whether any of the intended changes will ever animate these monumental structures and give them a spirit above standardised service. If so, what folly to think of nationalising industries such as aircraft manufacture or the chemical industries which by their very nature cannot be standardised without grave risk of stunting if not utterly destroying them.

Europe Erasing Dollar Deficit

Michael L. Hoffman reviews new E.C.E. Bulletin

IN the first quarter of 1953, the continued flow of United States aid permitted European central banks to increase their gold and dollar reserves by about \$450 million, most of the improvement being registered by the accounts of the Bank of England.

Thus the world economy is gradually getting rid of the distortion commonly referred to as the 'dollar gap' by selling slightly more to the United States and Canada while buying very much less there.

There was a drop of \$600 million in the amount spent by Western European countries on United States and Canadian products between the first quarter of 1952 and the first quarter of 1953. Exports to the dollar area rose by just over \$100 million.

Data on Satellites

This is the first time that the Economic Commission for Europe quarterly bulletin has been able to dish up some really solid food for analysis of economic developments in the Soviet satellite countries.

In Poland, Hungary, and particularly in East Germany the bulletin traces the process of reversal that has led to concessions to consumers at the expense of heavy industry.

Czechoslovakia, however, up to the time this study was completed, reacted in a different manner. Instead of making concessions the screw was turned tighter. In carrying out 'the severest monetary reform yet carried out in a people's democracy' the Government of Czechoslovakia succeeded in drastically redistribut-

ing incomes in favour of the higher-wage and salaried groups.

The bulletin presents a table showing that whereas the monetary reform and the attendant price changes increased the real income of families in the highest income category by nearly 29 per cent, the real income of families in the lowest income category was cut to 80 per cent of its 1952 level.

There was no such drastic change in economic conditions in Western Europe during the first part of this year. What other analysts regard as a period of monetary and price stabilisation, the commission's economists look at rather as 'stagnation'.

A retrospective article on national planning by five countries of Northern Europe during the post-World War II period provides ammunition both for those who like to catch the planners making gross miscalculations and for those who maintain that such planning has its uses.

On balance the commission believes that while such planning and 'national budgeting' may be essential and reasonably reliable in a highly controlled economy where the maintenance of full employment at all costs is the controlling objective of policy, it rapidly loses significance when other objectives of policy assume importance and when the pressure of inflation is reduced.

At any rate, the study finds, reliance on quantitative predictions about what investment, prices, national incomes and other economic magnitudes will be over the coming year has practically disappeared from Western Europe.

New Books Reviewed

The Control of Raw Materials, by J. Hurstfield (History of Second World War), H.M.S.O., 35/-.

This is a competent but uninspired piece of work. The subject is not easy and it lacks glamour. After making all allowances, however, the uninformed reader will find the going heavy while the knowledgeable will have a healthy scepticism about some of the tables and the lavish use of percentages.

The complexity of modern war remains a dominant impression. The number of raw materials required by the twentieth-century war machine, changing methods of manufacture, the rapid development of the weapons themselves are but part of the story. Problems of procurement, of finding the necessary foreign exchange, of having the right kinds of ships in sufficient numbers in the right places at the right times had to be solved. All the time the background of events was also changing, often with dramatic suddenness.

A severe handicap was the lack of adequate information, both statistical and other. The national distrust of planning was reinforced by shortages of technical staff in the Services. It is to be hoped that much closer relations now exist between scientists, industry and the 'brass hats' than is revealed by the volume under review.

It is interesting to speculate how much of the lack of genuine competition in our economy is due to the decision taken between the wars to work through existing trade organisations and the need of the Government to 'consult' with different industries. The habit of 'getting round a table' was already strong in many trades and spread into others: what was necessary for one purpose was adaptable to rather different ends.

How the U.K. and the U.S.A. met the impact of war, the different methods used to mobilise the military and economic potential, the rapid proliferation of different bodies often with functions that overlapped is an interesting story in itself. It seems that the British chain of responsibility was sometimes better delivered, inter-departmental suspicions less sharp, decisions often more quickly reached. Many difficult situations arose but co-operation and goodwill were rarely lacking. Both countries showed great reluctance to move into a fully controlled economy.

When account is taken of the frame of mind that persisted, certainly until Munich,

and in many quarters right up to the commencement of war, towards facing unpleasant realities; the instinctive dislike of 'planning'; the economics imposed on the Services—the biggest potential consumers of raw materials; what seems remarkable is not that the machine creaked in many places at different times but that it worked at all.

R.W.

A Guide to Keynes, by Alvin H. Hansen, McGraw-Hill Publishing Co. Ltd., New York and London, 27/-.

An altogether admirable piece of work. Professor Hansen is justly described as 'the most prominent Keynesian in the United States', but if he is an advocate he does not indulge in idolatry. To this work he brings fine scholarship, but equally fine critical and expository gifts. The book is 'intended primarily for students majoring in economics and for first-year graduate students' in American colleges and universities, but many a student (in both senses of the term) in Britain and elsewhere will receive it with delight.

Economic Stability in a Changing World, by John H. Williams. Geoffrey Cumberlege (Oxford University Press), London, 30/-.

This collection of 'Essays in Economic Theory and Policy' is by the Harvard Professor of Political Economy. There are twelve items, divided roughly into three groups and an appendix. We say 'divided roughly' because there would seem to be something arbitrary about 'An appraisal of Keynesian economics' in one part and 'The monetary doctrines of J. M. Keynes' in another. The essays are good, but English readers who remember the author's testimony before the Senate Committee on Bretton Woods will doubtless turn with special interest to the appendix of the present book, where he presents his testimony to the Committee of Foreign Affairs in February 1948 on the Post-War Recovery Programme.

Economic Development of the United States, by John R. Craf, McGraw-Hill Book Co. Inc., New York, \$5, London, 42/6

Straightforward economic history by the head of the Economics-Commerce Department of Louisville University. Each chapter is summarised and the summaries are followed by lists of discussion questions, problems, and suggested further reading. The author has contrived to include events of 1951 in his survey.

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