

SOME ECONOMIC EFFECTS OF
REARMAMENT: GREAT BRITAIN, 1950-1953

by

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A THESIS

Presented to the Department of Economics
and the Graduate School of the University of Oregon
in partial fulfillment
of the requirements for the degree of
Master of Science

June 1955

APPROVED:

(Adviser for the Thesis)

mm Gift (#832) Bd. 1.10

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CHAPTER I

INTRODUCTION

The Korean War which began in the summer of 1950 was to reimpose upon the world economy, only so recently recovered from the devastation of World War II, many new and pressing economic problems. The war touched off a worldwide rearmament race which added new burdens to already strained economies. It was to increase greatly the complexities of economic decision on the part of government authorities. This situation provides the background for this thesis.

The Objectives of the Study

This study is essentially an inquiry into the role of government policy when a rearmament program is imposed upon a fully employed economy. In an armed economy, the allocation of available resources is largely dependent on the decisions of a central authority. Such decisions should of course be directed towards maximum defense potential with a minimum overall strain on the economy. The economic consequences of a defense program are to a large measure mitigated by these decisions or to some extent aggravated by a lack of or improper decisions. The objectives of this study are to analyze the national expenditures

of Great Britain in the period following the outbreak of war in Korea and to attempt to relate the significance and effectiveness of government policy to these expenditures.

The Nature and Procedure of the Study

Great Britain has been selected as the country for this case study because as a fully employed economy she presents an interesting and timely model of the impact of rearmament and its associated problems. The period to be considered is the four year span between 1950 and 1953, however this period will not be rigidly adhered to if discussion of either prior or subsequent years is relevant to the problem at hand. The principal reason for limiting the survey to this relatively short time is to attempt to bring into focus the actual impact of the rearmament program.

The economic problem presented by increased defense outlays has many ramifications but the basic issue is comparatively simple--where are the real resources required by this additional increment of defense production to come from? From the resources embodied in the gross national product Great Britain must meet claims for (1) exports (2) private consumption (3) investment (4) defense and (5) other government expenditures.¹ The rearmament program

¹W. M. Scammell, "Economic Policy and Rearmament", World Affairs, XXI (April 1951), 163.

has made it necessary to expand (4), but the question is--how? In the words of The Economist:

There are only two ways in which a larger slice of the cake of national output can be provided for defense. The first is by producing a larger cake. The second is by reducing the other slices....¹

The decision as to how the burden may be distributed among the remaining four is the heart of the economic problem of rearmament. What has happened to the cake and the role of policy in this reallocation is the heart of this thesis. The effectiveness and limitations of the methods available to bring about a shift in resources will be analyzed in greater detail within the context of the sector accounts they affect. At this point, a general outline of the nature of these methods is undertaken.

a. The resources necessary for defense might be withdrawn wholly or in part from British exports. That is, the men, machinery, and materials that go into production for export be converted into production for rearmament.

b. The transfer might take place within the Government sector of the economy, by reducing non-defense State expenditures and allowing these real resources to go into rearmament.

¹"The Measure of the Burden", The Economist, CLXII (Feb. 24, 1951), 412.

c. Private consumption may be reduced by two methods, either singly or together. First, consumption may be reduced by physical controls and rationing. This method will of course produce an unspendable accumulation of cash which may or may not be taxed away. Secondly, by an increase in direct or indirect taxes to reduce the consumer's disposable income and thus (assuming no dis-saving) reduce personal consumption.

d. Capital formation or investment might be reduced and the resources thus released transferred into defense production.

Two additional methods are available to bring about a transfer which preclude the necessity of making conscious reductions in the four major sector accounts.

a. The new expenditures needed for defense might be covered by rising production, due to an increase in productivity.

b. The government might simply bid for the necessary resources in the open market; which would result in inflation, continuing until consumption, exports, or capital formation had been adequately lessened.

A final method of meeting this problem is external (i.e., United States) aid. Although this factor was not insignificant in the British defense effort, its main value was in helping to relieve the special dollar problem im-

posed by the defense program. As an external item somewhat outside the scope of rearmament economics, the influence of United States aid will receive only brief treatment in the chapter on the British balance of payments.

Which of these preceding measures will be utilized as an instrument of policy in an armed economy, is largely dependent upon the decision of a central authority. With government policy as a determining element, the fact that some measures are more tractable than others in achieving a reallocation of resources should not be discounted. Put another way, ultimate decisions are more often than not based upon political as well as economic considerations.

This study proposes to attain its objectives by analyzing the pattern of expenditures in the four major sector accounts of the British economy. The analysis of these sectors will not be exhaustive or undertaken as an end in itself. Rather, the emphasis throughout the study will be limited to the relationship of these expenditures to the increased military outlays. After a brief sketch of the extent of the rearmament program, the first analytical chapter will examine what is perhaps Britain's most important and complex account--the balance of payments. The next three chapters will analyze in turn the pattern and significance of government expenditures; personal consumption; and fixed investment. All of these chapters will present in brief the major policies which were adopted by the central

authorities to lessen the economic impact of the rearmament program. The next chapter will examine the two factors which have the common denominator of affecting all sector accounts. These are: the problem of inflation and the importance of productivity to the defense effort. The final chapter will attempt to synthesize the material of the preceding chapters into what were considered to be the major changes, effects, and policies of the British rearmament.

The difficulty, of course, in this type of study is that a modern defense program affects all sectors of a nation's economy. For this reason, it is difficult if not impossible to ascertain causal relationships in a pattern of national expenditures that is both complex and inter-related.

The Rearmament

Soon after the invasion of South Korea, Great Britain announced an expansion of her defense effort, and in January 1951 defense expenditures were increased still further and given shape as a three year program. Such a rearmament program was made necessary because the five years following World War II had been devoted largely to economic recovery in Britain. Thus, defense planning became relegated to a low priority in the post war period, with heavy reliance being placed on the equipment left over from the Second World War. At its peak in 1944 the United

Kingdom's defense expenditures exceeded L 5,000 million and accounted for well over half the national income; in 1948 and 1949 it had been reduced to about L 750 million or about 6 per cent of the national income.¹

This sharp reduction in defense expenditures was due mainly to the economic crisis of 1946-47 when it became evident that the resources of Britain were not adequate to meet all of the competing claims upon them. The claims of the civilian were therefore given priority over those of defense and, coincident with the withdrawal of aid from Greece and Turkey, the rate of reduction of the armed forces was accelerated.²

The official attitude toward defense expenditures during this post war period may be summarized by a Statement Relating to Defense submitted to the Parliament in February 1947 by Minister of Defense:

Development in recent months have stressed the urgent need of restoring a balanced peacetime economy at the earliest possible moment, and by all possible measures. Defense policy must be compatible with this national need, not only because of the

¹Economic Survey for 1951, Cmd. 8195 (London: H.M. Stationery Office, April 1951), p.5.

²The Brookings Institution, Rearmament and Anglo-American Relations, 1952, p.24.

heavy demands made on the national resources, both of manpower and materials, by the Armed Forces, but also because a successful defense policy must find its roots in healthy social and economic conditions...¹

The outbreak of the Korean War brought about a change in public and official opinion, from reluctant acquiescence in defense expenditures to an active demand that more effective defense should be provided. Contrasting the above official policy on the question of priority of defense production over domestic production, is a statement made in April 1951 by Mr. Herbert Morrison, Secretary of State for Foreign Affairs:

Let me make two things perfectly clear. If severe shortage did thus curtail our output, although we would be unable to prevent its having some effect on the fulfilment of the rearmament program, it would certainly not be our policy to let that program take the first cuts or bear the main effects. So far as was physically possible we would continue to follow our existing line of policy and to protect both our defense program and our export drive, by taking the burden of shortage, while it continued, on our current standard of life. So far as budgetary policy is concerned, this would mean of course, not an easier Budget but a harder one.....²

Thus Great Britain was prepared to adopt policies giving highest precedence to national security. The defense plan was formally launched in January 1951 and provided for a total expenditure of some L 4,700 million; this sum to be

¹Ibid., p.24 (italics not in the original).

²British Information Services, "Official Statements on British Policy", I.D. 1058 (June 1951), p.2. (italics not in the original):

spent in gradually increasing amounts over a three year period beginning in April 1951.¹ The proposed amounts of expenditures were to be as follows: fiscal 1951 L 1,300 million, fiscal 1952 L 1,600 million, and fiscal 1953 L 1,800 million.² These expenditures represent an estimated absorption of 10 to 12 per cent of the British national income.³

Table I shows the actual expenditures for the defense program in terms of pay, production, and other expenditures which includes such items as food, petrol, and oil. It is evident from Table I that actual expenditures fell somewhat short of the proposed outlays. A combination of reasons was responsible for this, the main one being the modifications made in the program in late 1951, which spread the defense program over a four year period instead of three.⁴ The second change was made in late 1952 when it was realized that continued expansion at the rate contemplated was too great a strain for the economy to bear.

¹Economic Survey for 1952, Cmd. 8509 (London: H. M. Stationery Office, Apr. 1952), p.19.

²Scammell, op. cit., p.162.

³British Information Services, "Defense and Britain's Economy", Labor and Industry in Britain, XI (June 1953), 63.

⁴C. F. Carter, "The Impact of the Rearmament on Britain", Public Finance, Vol. VII, No.12 (1952), 49.

TABLE I

EXPENDITURES ON DEFENSE PROGRAM¹

(Financial years: L Million)

	1950- 1951	1951- 1952	1952- 1953	1953- 1954 (Est.)
1. Pay and allowances of forces...	208	262	285	287
2. Production, research and development, and works, of which:				
Metal-using industries...	170	275	470	510
Building and civil engineering at home.....	45	86	118	110
3. Other expenditure..	265	352	391	433
Total.....	801	1,129	1,513	1,637

Note: Civil defense is excluded. The totals in the table are arrived at before deducting the sterling counterpart of defense support aid provided by the United States; the amount of counterpart included in the estimates for 1953-54 is L 140 million, compared with L 85 million in 1952-53. Figures for expenditure in 1952-53 are provisional.

¹Economic Survey for 1953, Cmd. 8800 (London: H. M. Stationery Office, March 1953), p.49.

Therefore, the official decision was to forego the large increase in defense expenditures in fiscal 1953, and instead to keep it at the current high rate.¹

An additional factor bearing on this non-fulfilment was in the restricted defense production of the metal using and building industries, which incidentally accounted for approximately 50 per cent of total defense expenditures (Table I). This was apparently the result of deliberate policy, for the government "decided that for the time being, no substantial increase above the 1952 annual rate would be consistent with proper provisions for the expansion of exports and the development of home industry".²

For the three year period as a whole, Britain seemed willing to adjust her defense program as the economic strain became too great and as the strategic situation changed. Her objectives were to maintain a careful balance between the demands of defense and those of the other sectors of the economy. The White Paper Statement on Defense 1953 published in February 1953 made it clear that the means of achieving these objectives had to be kept flexible:

In times of stringency it is especially important to get the fullest possible value for our money; we must avoid committing ourselves too deeply in equipment which will have to be replaced at heavy cost with a

¹The Central Office of Information, Britain's Defense Effort, 1954, p.14.

²Economic Survey for 1953, Cmd. 8800 (London: H. M. Stationery Office, March 1953), p.48

relatively short space of time; and we must balance the need for greater defensive strength against the risk that by overstraining ourselves we shall give the Communists a bloodless victory...¹

¹British Information Services, "Defense and Britain's Economy", op. cit., p.60.

CHAPTER II

THE EXTERNAL SECTOR

This chapter examines the nature of the British overseas account together with the relationships of the Korean rearmament program to this sector. It will attempt to indicate the problems that arose as well as some of the official attitudes and policies designed to alleviate these problems. To this end, the chapter will analyze the pattern of the component items of the balance of payments for the three years following the imposition of the defense program.

The Overall Balance

The execution of a greatly enlarged and accelerated rearmament program became in mid 1950 the first objective of government policy. But Britain was unwilling to consider that the problems imposed by the rearmament program could be solved by giving over-riding priority to arms production. British experience during World War II had "proven that this is an ineffective and dangerous instrument in times when all resources are greatly strained".¹ The problem was how to rearm as fast as possible, while maintaining a strong and healthy economy. The official position on the impact of

¹Cmd. 8195, op. cit., p.8.

rearmament on the British balance of payments was as follows:

It (the rearmament) cannot be the sole objective. The potential military strength of this country depends upon a well equipped industrial system, healthy population at home, and an ordered balance of overseas payments. It is vital that our capacity to export should not be seriously impaired, for a flourishing export trade is an indispensable foundation of an economy so largely dependent on imports. Exports must therefore, as far as possible be maintained. Some particular types of exports are bound to be impeded by defense production, but the aim must be to make up for any such losses--and more than make up for them by increasing exports of other things.¹

Thus Britain was apparently ready to take action which would prevent her external account from falling into a serious deficit. She did admit that external debt which was accumulated as a result of stockpiling could be tolerated as this was simply changing asset for asset.² Her fundamental objective was to keep "as much as possible a balance of current account", i.e., to pay for with exports the imports she needed for use or consumption.³

This position was essentially a short run policy adopted to absorb the immediate impact of the defense outlays. Great Britain must do more than maintain a current balance in her external account; she must in fact maintain a sub-

¹Ibid., p.4.

²Ibid., p.28.

³Ibid., p.28

stantial surplus in her overseas account. The need for such a surplus arises out of her extensive external obligations. These obligations include such things as her traditional role in the development of overseas colonies; long term investment in productive enterprise overseas, particularly in the sterling area; and provisions for the repayment of long-term debts largely incurred as a result of World War II.¹ The need for a surplus was not in principle affected by the defense program. It had been estimated that the annual surplus on total current account needed to provide for these commitments was approximately L 300 to 500 million.² This sum would preclude the necessity for any excessive drains on the gold and dollar reserves and thus maintain the stability of sterling in the world markets.

As a matter of policy therefore, the meeting of increased defense requirements by transferring resources from the external account was not feasible for two reasons. First, and most important, because the government recognized that the maintenance of a surplus during the period of rearmament "was impossible in view of raw material shortages and the concentration of new defense production on the metal using industries which have been providing so large a share of

¹Ibid., p.29.

²Omd. 8800, op. cit., p.44.

British exports".¹ Second, even if a surplus had been maintained, it would have in all likelihood been absorbed by the above mentioned obligations.

Table II reveals that the actual results were somewhat better than the former statement would indicate. That is, although 1951 was an extremely precarious year for the British balance of payments, a remarkable recovery was made in 1952 and 1953, both of these years showing a substantial total current surplus.

The result of the United Kingdom's balance of payments for 1950 as shown on Table II was a surplus of L 244 million--the highest figure in thirty years.² The Korean war was to quickly change this favorable showing. In 1951 Great Britain was running a deficit in her external account of L 385 million, however it is apparent this deficit was solely with the non-sterling (mainly dollar) area. She was living beyond her income with the non-sterling area by L 728 million while actually running a surplus with the sterling area of L 343 million. Obviously it was necessary to take swift and decisive action in 1951 to prevent a complete exhaustion of the gold and dollar reserves. Chart I indicates this precipitous drain on the gold and dollar reserves in 1951.

¹Cmd. 8195, op. cit., p.29.

²Cmd. 8195, op. cit., p.26.

TABLE II

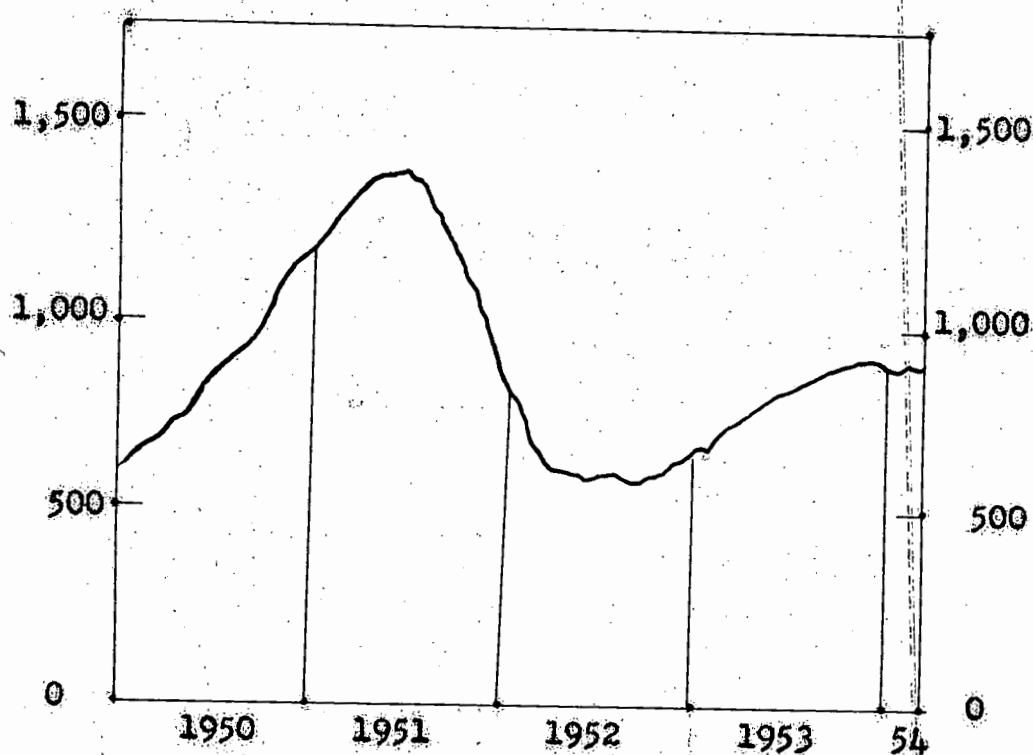
UNITED KINGDOM BALANCE OF
PAYMENTS ON CURRENT ACCOUNT¹
(£ million)

	1950	1951	1952	1953 (prov)
With non-sterling countries:				
Exports and re-exports....	1,228	1,471	1,503	1,465
Imports, f.o.b.	1,425	2,226	1,701	1,558
Government Expenditure(net) ²	-	-46	-42	-45
Other Invisibles (net)....	£207	£69	£7	£82
Current Balance (excluding defense aid).....	£10	-732	-233	-56
Defense Aid (net).....	-	£4	£121	£102
Current Balance (including defense aid).....	£10	-728	-112	£46
With rest of Sterling Area:				
Exports and re-exports....	997	1,275	1,323	1,210
Imports, f.o.b.	947	1,249	1,242	1,314
Government Expenditure(net)	-	-107	-131	-109
Other Invisibles (net)....	£184	£424	£417	£392
Current Balance.....	£234	£343	£367	£179
Total:				
Exports and re-exports....	2,225	2,746	2,826	2,675
Imports, f.o.b.	2,372	3,475	2,943	2,872
Government Expenditure(net)	-	-153	-173	-154
Other Invisibles (net)....	£391	£493	£424	£474
Current Balance (excluding defense aid).....	£244	-389	£134	£123
Defense aid (net).....	-	£4	£121	£102
Current Balance (including defense aid).....	£244	-385	£255	£225

¹Adapted from Economic Survey for 1952, Cmd. 8800 (London: H. M. Stationery Office, April 1952), p.10 and Economic Survey for 1954, Cmd. 9108 (London: H. M. Stationery Office, March 1954), p.9.

²Government expenditures, etc.

CHART I
GOLD AND DOLLAR RESERVES¹
(£ Million)



¹Economic Survey for 1954, Cmd. 9108 (London: H. M. Stationery Office, March 1954), p.7.

In an effort to alleviate this crisis in the balance of payments, it was agreed at the Commonwealth Finance Ministers meeting held in January 1952 that Great Britain would attempt to achieve a balance on current account with the non-sterling area in the second half of 1952 (including defense aid) and to be at least in current balance with the whole world (excluding defense aid).¹ These objectives were partially reached as Table II indicates. Britain had achieved a surplus with the whole world (excluding defense aid) of L 134 million, however she continued to run a deficit with the non-sterling countries (including defense aid) of some L 112 million. Despite this deficit, the overall performance was a vast improvement over the previous year and the position of sterling was greatly strengthened by this favorable 1952 balance. It has been estimated that the improvement in the balance of payments in 1952 was due in equal measure to better terms of trade and to decreased volume of imports.² These items will be discussed in greater detail later in this chapter.

As indicated in Table II, practically the whole of the improvement in the balance of payments in 1952 was due to a more favorable position with the non-sterling countries. It

¹Cmd. 8800, op. cit., p. 7.

²Ibid., p.10.

was in this part of the total balance which had the most direct impact on the gold and dollar reserves. This can be verified by reference to Chart I which shows a leveling off and gradual increase in the gold and dollar position for 1952 while Table II shows a L 499 million improvement in the non-sterling balance (excluding defense aid).

The 1953 results show relative stability in the overall balance, however there were divergent movements in the sterling and non-sterling transactions as revealed in Table II. That is, there was considerable improvement in the non-sterling balance which was largely offset by a deterioration in the sterling area transactions. The reasons underlying these and other changes in the preceding section will be clarified in an analysis of the specific effects of rearmament on the component items of the overall balance.

Exports and Rearmament

The initial view with respect to the affects of rearmament on British exports was that "a substantial reduction was inevitable in the volume of engineering products and semi-finished metal goods".¹ The main impact of the defense program on exports was that the demands would be heavily increased in the engineering products group. This fact becomes more significant with the recognition (Table III)

¹Cmd. 8195, op. cit., p. 32.

TABLE III

EXPORTS AND RE-EXPORTS:
VALUE AND VOLUME BY CLASSES¹

	1950	1951	1952	1953
Value (£ million)				
Iron & steel.....	156	159	192	197
Non-ferrous metals.....	77	70	82	90
Motor vehicles & parts.	243	276	286	262
Machinery.....	318	363	422	405
Other engineering products, including ships and aircraft.....	278	330	339	349
Total metals & engineering products.....	1,072	1,198	1,321	1,303
Chemicals.....	108	143	138	130
Refined petroleum.....	13	30	52	71
Textiles & clothing.....	416	539	381	383
Pottery, glass, etc. ..	54	68	68	60
Other manufactures.....	220	295	273	272
Food, drink & tobacco..	135	161	158	152
Coal.....	50	29	55	62
Other raw materials....	55	66	56	60
Other exports.....	48	51	80	89
Total Exports.....	2,171	2,580	2,582	2,582
Re-exports.....	85	127	144	105
Total Value of exports and re-exports as recorded in Trade Accounts.....	2,256	2,707	2,726	2,687
Adjustment for coverage and timing.....	-9	+39	+100	-12
Total receipts for exports and re-exports f.o.b. (as in Table)	2,247	2,746	2,826	2,675
VOLUME OF EXPORTS (1950 = 100).....	100	101	95	98

¹Adapted from Economic Survey for 1953, Cmd. 8800 (London: H. M. Stationery Office, Mar. 1953), p.13 and Economic Survey for 1954, Cmd. 9108, p.13.

that the engineering group constitutes approximately 50 per cent of total British export receipts.

To offset this drain on a major sector of British exports, the government adopted a policy of expanding the volume of total exports with emphasis on chemicals, textiles, and clothing.¹ Immediate difficulty was encountered with this policy. There was a rapid rise in export prices in 1951 as illustrated by the L 2,746 million receipts compared with L 2,247 million in 1950 (Table III), however this increase covers an actual decline in textile and clothing prices.² This slackening of demand for consumer goods, notably textiles, was one of the outstanding features of the export trade in 1951. It placed an even greater load on the engineering products to maintain export receipts. The conditions of world demand in 1951, after the initial outbreak of consumer spending following the Korean War had died down, was such that expansion of the total volume of exports must depend almost entirely on increasing engineering exports.³

To counteract the competing claims on the metals and engineering group, the government took steps to divert re-

¹Ibid., p.28.

²Cmd. 8509, op. cit., p.16.

³Ibid., p.17.

sources on a large scale from supplying engineering products to the home market to production for the export market.¹ This policy relieved some of the pressure of the rearmament program on the export sector, while at the same time sacrificing some of the equipment needed for home industry efficiency and expansion.

Table III reveals the total value of exports in 1952 to be about the same as the previous year with a marked drop in volume of 6 per cent. This decline in volume was offset by a 5 per cent rise in export prices, however the price rise was not uniform for all exports.² Prices for metals and engineering exports remained at their relatively high level in 1952 because of continued heavy world demand for these goods. In fact, Great Britain had no particular problem in meeting world competition in terms of price and quality of her capital goods. The major problem affecting British exporters of capital goods was that the rearmament program had slowed down the delivery dates of exports.³ To alleviate this situation, the government in 1952 extended the defense program over a greater span of time. In addition, as in the

¹Ibid., p.18.

²Cmd. 8800, op. cit., p.12.

³Ibid., p.14.

previous year the government took various measures to restrain home civil demand for plant and machinery.¹ Textiles prices, however, continued to decline in 1952. As a matter of fact, one British economist writes that "there was little evidence of consumer goods exports being hampered by excessive home demand, and larger quantities of these goods could have been produced for export if markets could have been found for them".²

The 1953 level of exports shows total value to be about constant with a 3 per cent increase in volume (Table III). This increase in volume was matched by a 3 per cent decrease in export prices.³ Exports of machinery dipped slightly in 1953 while consumer goods exports, i. e., motor vehicles, pottery, food, drink and tobacco suffered a more serious decline. Both of these decreases were due to increasing world competition plus a restrictive import policy imposed by the sterling area. The reasons underlying this restrictive action will be discussed in the section on British imports.

A study of Table III for the entire period under consideration reveals that the main reason for the increase in

¹Ibid., p.14.

²C. A. R. Crosland, Britain's Economic Problem (London: The Alden Press, 1953), p.102.

³Cmd. 9108, op. cit., p.12.

earnings from exports was due to higher prices. The volume of exports, except for a slight rise in 1951, actually declined 2 per cent while receipts for 1953 exports were bringing in L 428 million more than in 1950. Further study shows that while consumer goods exports accounted for the rapid increase in earnings in 1951, there was some difficulty in maintaining exports in these items in 1952 and 1953. The excessive overseas buying of consumer goods and raw materials in 1951 mainly the result of anticipated shortages and higher prices. For the three year period as a whole following the Korean war, it was the strong showing of the metals and engineering products which largely accounted for British exports earnings maintaining the level that they did. It would appear that to a large measure, credit for this achievement be given to the government policy of restricting home demand of engineering and metal products for the protection of export earnings.

Imports and the Raw Material Problem

The most immediate and serious affect of the Korean War on the British external account was to tremendously increase the cost of her imports. Great Britain is exceptionally vulnerable to any dislocation in world trade because half the food supply of the population and a greater part of the materials needed for the British manufacturing industry must be im-

ported from abroad.¹

The details of the pattern of imports in terms of value and volume are shown in Table IV. The most significant and critical year was of course 1951, which reflect a L 1,121 million increase in the payments of imports over the previous year. The main cause of this condition was the raw materials problem with its concomitant affects on the British terms of trade. The raw materials problem of 1951 was to directly impede production and was a major consideration in determining the scale of the rearmament program and its impact on the economy.²

In the first half of 1950, the supply of most raw materials seemed to be adequate, but immediately after the outbreak of hostilities in Korea, large scale purchases (both in Britain and the rest of the world) for stockpiling caused a sharp inflationary rise in commodity prices. The resulting difficulties, especially for Great Britain, were increased because she had reduced her purchases of dollar raw materials in 1950 on grounds of dollar economy.³ Thus, she was in the position of having to replace her depleted stocks in times of great scarcity and rising prices.

¹ R. G. Hawtrey, The Balance of Payments and the Standard of Living, (London: Royal Institute of International Affairs, 1950), p.114.

² The Brookings Institution, Rearmament and Anglo-American Economic Relations, op. cit., p.31.

³ Ibid., p.32.

TABLE IV

IMPORTS: VALUE AND VOLUME BY CLASSES¹

	1950	1951	1952	1953
VALUE (£ million c.i.f.):				
I. Food, drink & tobacco...	1,030	1,294	1,212	1,319
II. Raw Materials.....	997	1,711	1,398	1,284
III. Mfg. articles.....	564	883	849	723
IV - V. Other Imports.....	17	16	20	19
Total Imports.....	2,608	3,904	3,479	3,345
Difference on account of insurance, freight, coverage & timing.....	-233	-408	-536	-473
Total payments for imports f.o.b. (as in Table).....	2,375	3,496	2,943	2,872
VOLUME (1950 = 100)				
I. Food, drink & tobacco...	100	110	98	111
II. Raw Materials.....	100	111	103	116
III. Mfg. articles.....	100	121	111	109
All imports, as recorded in Trade Accounts.....	100	113	103	112

¹ Adapted from Economic Survey for 1953, Cmd. 3300 (London: H. M. Stationery Office, Mar. 1953), p.11 and Economic Survey for 1954, Cmd. 9108, p.11.

Without going into detail on the overall shortages involved, it might be well as an illustration of the problem to cite one example which the Economic Survey of 1951 considered one of the most serious. Says the Survey:

The scarcity of sulphur is without doubt the most threatening of all. Sulphur and sulphuric acid are consumed either directly or indirectly in almost every industry in the United Kingdom. The United States produces about 95 per cent of the world's natural sulphur and provides almost the whole of the United Kingdom's imports. In 1950 this country consumed some 470,000 tons of natural sulphur... The shortage of natural sulphur stems from the imposition by the United States of export controls designed to safeguard its diminishing reserves. In the first quarter of 1951, the United Kingdom received an allocation of 80,000 tons; against this, current requirements were estimated at 112,000 tons... A severe system of rationing has consequently had to be introduced.....¹

While Britain was being hurt by this rise in world commodity prices, the situation was favorable for the rest of the sterling area. The great increase in world demand for such products as wool, rubber, and tin led to a large rise in the dollar earnings of the sterling area. The United States had in early 1951 initiated a stockpiling program involving the expenditure of some 2 billion dollars which of course aggravated the raw material situation for Great Britain.²

In an endeavor to reach a solution to the raw materi-

¹Cmd. 8195, op. cit., p.14.

²This program was not without benefits for Great Britain. The rapid increase in earnings for re-exports in 1951-1952 (Table III) was due to abnormal shipments of tin and rubber finished goods to the United States.

als problem, Great Britain, France, and the United States announced in January of 1951 the formation of the International Materials Conference.¹ The basic purpose of this conference was to study the supply of critical raw materials and to make appropriate recommendations as to allocations among the consumers of the free world. In effect, the conference was a recognition that while domestic action may mitigate the worst effects of individual shortages, satisfactory remedies can in many cases only be found in international action. The record of the International Materials Conference shows that considerable progress was made in arriving at allocations of the principal raw materials in short supply.

In the meanwhile, Great Britain, in an effort to improve its procurement and allocation of basic commodities set up a Department of Raw Materials.² This department, as a single source of governmental policy determination, attempted to hold down inflationary price rises in raw materials by means of price control and by a system of allocation designed to restrict civilian consumption. It was in the area of raw materials that perhaps the greatest degree of controls existed as a direct result of British rearmament.

While the raw material price inflation of 1951 was

¹ The Brookings Institution, op.cit., p.33.

² Ibid., p.35.

advantageous to the Sterling Area as primary producers and detrimental to Britain as major consumers, these conditions did not last. To some extent they contained the seeds of their own destruction because the large sales of raw materials generated increased incomes in the overseas sterling area, and these, when they came to be spent were bound to result in increased expenditures on imports. Such an increase did in fact take place continuously during 1951, for in the second half of the year the overseas sterling area was importing from North America at double the 1950 rate.¹ Meanwhile in the third quarter of 1951 the raw material problem to a large measure solved itself because of a sharp break in commodity prices. This was due both to a cut in stockpiling and perhaps more to a slackening of demand as a natural reaction from excessive buying. Thus, commodity prices which reached their peak in mid 1951, continued to decline into 1951 as a result of this natural reaction. The exhaustion of the boom in commodity markets was accompanied by a fairly widespread recession in demand for consumer goods, especially in textiles, and this recession deepened as the fall in commodity prices reduced the demand of primary producing countries for manufactured and consumer goods.² As indicated above, many of the sterling area countries were im-

¹Cmd. 8509, op. cit., p.11.

²Ibid., p.36.

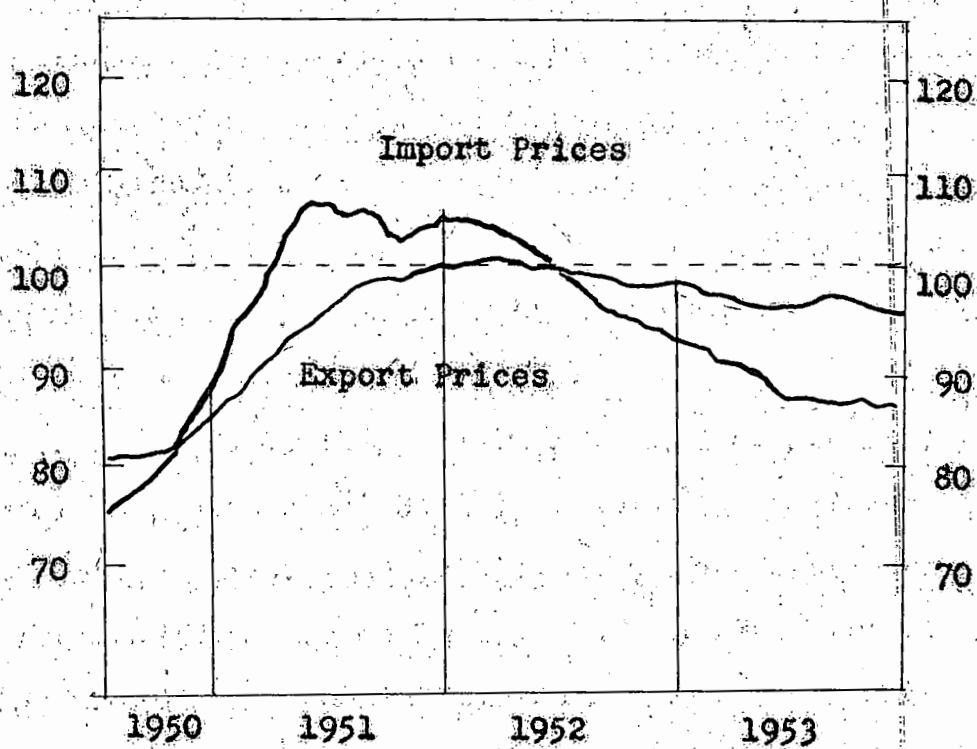
porting more than they could afford, and in the face of mounting balance of payments deficits they were forced to impose restrictions on imports. These restrictions of course worked a hardship on the British external account.

Aside from the limitations imposed on defense production because of the scarcity of raw materials, there was the concomitant effect of worsening terms of trade in the British balance of payments. Chart II, which shows the relationship of import prices to export prices, graphically illustrates the seriousness of the terms of trade in 1951. The chart indicates the terms of trade were most adverse in mid 1951. From that point, they gradually improved until mid 1952 where the ratio again became favorable to the overall balance. We have already considered the reasons for this improvement, the principal one being the world wide drop in commodity prices. One British economist considered the adverse terms of trade in 1951 the most serious and pressing problem confronting the rearmament effort:

The invisible items other than dividends and interest then gave, as had been expected, an equivalent surplus to prewar in real terms, so that taking the whole invisible account the only large change was the expected loss of investment income. It was not here that the falsification of post-war hopes occurred. The factor which upset all calculations was the deterioration in the terms of trade...¹

¹Crosland, Britain's Economic Problem, op. cit., p.43.

CHART II
IMPORT AND EXPORT PRICES¹
(Average 1952=100)



¹Economic Survey 1954, Cmd. 9108, p.12.

An illustration of the magnitude of the problem facing Great Britain can be drawn from the following:

Assuming that import prices would rise by the same amount as export prices, and with certain assumptions on the stability of invisible income, post World War II calculations set a target of exports of 175 per cent of the pre war level. Exports at this level would pay for imports some 15 per cent higher than pre war and still leave a substantial surplus. As matters turned out, to achieve the same goals, Britain would have had to increase 1951 exports to 266 per cent of the pre war level...¹

So critical was the problem of the cost of imports in 1951, that the government imposed import quotas, especially towards food items, on a scale designed to save approximately L 150 million in 1952.² These new quotas drastically curtailed imports from the continent, reducing the amount of trade Britain had liberalized from over 90 per cent of the 1948 level to about 60 per cent.³

Table IV reflects a 10 per cent drop in import volume together with some L 553 million less spent on imports during 1952. These gains were largely due to more favorable terms of trade and the import restrictions. The terms of trade continued to improve in 1953, however the advantages of lower import prices were almost offset by a 9 per cent

¹ Ibid., p.44.

² Cmd. 8509, op.cit., p.15.

³ W. Diebold, Jr., Trade and Payments in Western Europe (New York: Harper Bros., 1952), p.426.

increase in import volume (Table IV). Nevertheless, the situation had so improved in 1953 that the United Kingdom was able to take steps to relieve the import quotas that were set up in the previous year.

Invisible Earnings and External Aid

Great Britain has long relied on its net income from invisible transactions to cover part of its import bill. Table V indicates the nature of British invisible transactions as well as the results of this item for the four year span of consideration. The years 1951 and 1952 reflect a serious setback to the steady improvement which had taken place in the British net invisible earnings since the end of World War II. As shown in Table V, net income fell by L 86 million between 1950 and 1951 and declined another L 89 million in 1952. The main reasons for this deterioration were the seizure of the oil refineries at Abadan and the interest payments on the United States and Canadian loans which began in 1951.¹ The oil crisis, incidentally, aggravated the British 'dollar gap' because of the necessity to increase purchases of oil in the United States. Other contributing reasons for this adverse showing were a decline in receipts from interest, profits and dividends, largely

¹Cmd. 8509, op. cit., p.9.

TABLE V

UNITED KINGDOM
INVISIBLE TRANSACTIONS¹

	1950	1951	1952	1953 ²
EXPENDITURE:				
Shipping.....	200	283	299	248
Interest, profit, dividends.....	119	179	212	223
Travel.....	84	104	82	86
Migrants' funds, legacies, private gifts, etc. (net).....	-5	6	6	-3
Government Expenditure	166	191	217	214
Total.....	564	763	816	768
EARNINGS:				
Shipping.....	324	422	405	370
Interest, profits, dividends.....	263	304	289	272
Travel.....	61	75	80	88
Other (net).....	315	264	249	298
Government Receipts.	27	38	44	60
Total.....	990	1,103	1,067	1,088
INVISIBLE TRANSACTIONS (net).....	£426	£340	£251	£320

¹Adapted from Economic Survey 1953, Cmd. 8800, p.16 and Economic Survey 1954, Cmd. 9108, p.16.

²1953 figures are provisional.

from Malaya; increased interest payments on sterling balances, reflecting a general rise in interest rates in Britain; and finally additional military expenditures overseas.¹ The government attempted to relieve the situation by restricting the travel allowance to L 25 per person, but this was not sufficient to offset the overall adverse movements, so in November 1952 this allowance was raised to L 50 per person.²

The year 1953 showed considerable improvement in invisibles, increasing by some L 69 million (Table V). An improvement in the Iranian oil situation together with a government decision to pool supplies to the Commonwealth forces in Korea largely accounted for this increase.³

A matter somewhat outside the scope of defense mobilization but nevertheless of significance in the overall British defense effort was external aid. Reference to Table II reveals that the United States furnished defense aid to Great Britain for the three year period from 1951-53 in the amount of L 4 million, L 121 million, and L 102 million respectively. While these amounts were not large in terms of total British defense expenditures, they were important in providing Britain with the dollars to purchase 'dollar im-

¹Cmd. 8800, op. cit., p.15.

²Cmd. 9108, op. cit., p.15.

³Ibid., p.15.

ports' related to the defense program. The official British publication, Labor and Industry in Britain, concludes:

Had defense aid not been granted, Britain would certainly have had to consider whether she should curb defense production in order to avoid an increased dollar deficit.¹

Another factor worthy of brief mention was the United States 'off shore procurement' program. Under this program, the United States used some of the Mutual Security funds not only to supply defense goods, but for having them produced in the allied countries as well. The United States placed contracts in Britain up to June 1953, worth some 450 million dollars.² While economically this program consists of purchases rather than aid, it constitutes a form of dollar exports to the producing country, and thus helps to close the dollar gap widened by defense.

¹British Information Services, Labor and Industry in Britain, op. cit., p.64.

²British Information Services, Britain's Defense Effort, op. cit., p.23.

CHAPTER III

THE GOVERNMENT SECTOR

Government economy is perhaps one of the first panaceas thought of in times of economic crisis. However, the increasing role played by the State in the national economy, makes this remedy difficult to achieve and at times even unwise. The purpose of this chapter is to investigate the nature of government outlays in Great Britain and to appraise the impact of the defense program on these expenditures.

The Nature of Government Expenditures

The component items of expenditure of the central government are shown in Table VI. For purposes of analysis, government expenditures may be placed into three broad categories. These are: (1) defense claims on goods and services, (2) non-defense claims on goods and services and (3) transfer payments. It is evident from Table VI that total expenditures on defense and non-defense goods and services are approximately equal to transfer payments from 1951 to 1953. As the primary objective of this paper is an inquiry into the means of transfer of resources from the non-defense sector into the defense sector, an examination of the non-defense groups (2 and 3) is undertaken to determine their adaptability for this purpose.

TABLE VI
GOVERNMENT EXPENDITURE¹

L Million

	1950	1951	1952	1953
EXPENDITURE:				
Current expenditure on goods and services;				
Military Defense....	749	1,078	1,435	1,553
Health Services.....	382	415	422	436
Other.....	337	324	358	372
Total.....	1,468	1,817	2,215	2,361
Subsidies.....	444	453	400	336
National insurance benefits.....	267	403	470	524
Other pensions and grants to persons..	281	342	393	426
National debt interest.....	498	544	602	625
Current grants to local authorities..	305	328	366	410
Current grants paid abroad.....	39	41	53	50
Transfers to private capital account....	135	126	108	119
Total Expenditure	3,437	4,054	4,607	4,851
Balance over current revenue...	481	671	410	200
Total	3,918	4,725	5,017	5,051

¹Adapted from Economic Survey for 1954, Cmd.9108 (London: H. M. Stationery Office, March 1954), p.32 and Federal Reserve Bank of New York, "The Changing Impact of the British Budget", Monthly Review, Vol. 35, No.6 (June 1953), 84.

At the outset, however, we should consider the nature of the first category, i.e., government defense expenditures. In approaching a problem of this type, it appears there must be an ipso facto assumption that defense expenditures are unchangeable (at least in the current projected program) and that any reduction in State outlays must take place in non-defense or transfer payments. Put another way, one cannot solve 5 per cent of the problems imposed by a rearmament program by the simple expedient of cutting 5 per cent of the defense expenditures. The United Kingdom entered into its defense program in the face of a threatening third world war and with considerable world wide commitments. To question the wisdom of the magnitude of a given defense program in a given economic environment would be to enter into problems outside the scope of this paper. The basic foundation of this assumption is in the Government's recognition that military strength is most effective--indeed it can be maintained--only if it rests on a solid economic base.¹

This is not to infer that defense programs are always economically valid and omnipotent, for it may well be that they are too great a strain for the economy to bear. Indeed, as has been pointed out earlier in this study, the British defense program was twice adjusted for this reason.

¹Cmd. 8195, op. cit., p.45.

Government economy in non-defense expenditures traditionally has had a strong emotional appeal in time of rearmament. But in a modern welfare state such as Great Britain, the reformer who desires to cut civil expenditures is easily frustrated. The entire range of problems with which he might be confronted is well summed up by the Chancellor of the Exchequer in citing the main roadblocks to government economy. He says:

First, I should like to make two general observations. We are in a period where incomes and costs are rising, and this is bound to affect the government as it affects private institutions. It makes the task of reducing or even stabilizing expenditures all the more difficult.¹

His second point is perhaps even closer to the problem:

Secondly, there is no use supposing that government expenditures are something remote and separate from peoples lives, which can easily be cut without affecting them in any way... There are quite substantial sums spent on certain sections of the community whose standard of living is directly dependent upon them. Large cuts in expenditure hurt just as taxation hurts, though it is not always the same people who are affected.....²

Reference to Table VI indicates that government non-defense claims on goods and services consists of two groups, viz., national health services and 'other' (mainly education, housing, police, roads, general administra-

¹British Information Services, "Britain's Economy, 1951", Labor and Industry in Britain, Vol. IX, No.2 (June 1951), 72.

²Ibid.

tion). As for national health services, the major non-defense claimant of goods and services, we have an item that once established, is virtually incapable of reduction. Any cut in health services could conceivably be interpreted as a sacrifice of human lives. Furthermore, it could be argued that the health system is an integral part of defense because of the large potential hospital requirements needed in wartime.

The major component of 'other' expenditures on goods and services is the cost of education. In view of the fact that the number of children in British schools is expected to rise by 15 per cent in the period of 1950-55, expenditures on education will probably have to increase rather than be reduced.¹

The third and final group to consider is government transfer payments. Transfer payments, with the exception of subsidies and transfers to private capital account, are and have been virtually irreducible. The item in this group is interest payments on the national debt which is a responsibility no government can ignore. Furthermore, having set up a system of social security, pensions, and allowances, it becomes practically a contractual obligation of the State to maintain them. Because these payments meet

¹C. F. Carter, "Rearmament and Public Finance in Britain", Public Finance, V, No.3 (1950), 206.

only bare needs and are constantly diminishing in real value through inflation, there is likely if anything, to be a pressure to increase them.

Transfer payments represent few claims on real resources. Even those resources that are released because of government economy are of such a nature that they would not flow easily into defense uses. One British economist has this to say on the matter:

But preoccupation with general aggregates must not be allowed to obscure the fact that the defense demands are for the most part demands on the engineering and vehicles industries. There is no immediate virtue in reducing the demand for hair dressers, circus clowns, or grave diggers for they will in general not be available to increase the production of tanks...¹

To sum up, the prospects for transferring real resources from the government non-defense sector into rearmament, are not encouraging. The reasons for this are either the non-suitability of resources or simply an inability to effect cuts. Although many government departments could operate just as efficiently with 5 to 10 per cent less funds, such inefficiency seems to be inherent in the size of modern government. British experience has shown that attempts to lop off bits of a large number of services fail, and the "only effective means of economy is to close down whole sections of government activity".² That this

¹Carter, op. cit., pp.203-204.

²Ibid., p.207.

could be carried out, in view of the limited nature of the mobilization, is doubtful.

Government Expenditures and the Rearmament

Table VI shows the changes that have occurred in the pattern of government expenditures during the post Korean period. Total expenditures increased by L 1414 million in the three years following 1950--of this sum about L 900 million represented increased claims on goods and services while the remaining L 500 million was government transfer payments.

The principal factor which accounted for increased government claims on goods and services was of course the defense program which rose by L 806 million. A discussion of this defense program and the nature of its claims on the economy was presented in Chapter I while Table I gives a rough breakdown of what constitutes this L 806 million increase (defense figures in Table I are fiscal while those in Table VI are calendar which accounts for the slight discrepancy).

It is interesting to note that government non-defense claims on goods and services showed little evidence of retrenchment during the post Korean period (Table V). Says the Economic Survey for 1953 in discussing this item:

If price changes are eliminated, health and other current expenditures on goods and services by the central government was the same in 1952 as in 1951 and not greatly changed from 1950....¹

¹Cmd. 8800, op. cit., p.18.

The significant increases in government transfer payments were in insurance benefits and interest payments as shown in Table VI. Explanation for the former lies in the Labor government's decision in 1951 to enlarge the benefits under the National Insurance Program while the latter was due to the combined affects of service on the United States and Canadian Loans and increased interest rates.¹ Because a large share of British social services are administered and financed on the local level, current grants to local authorities also expanded considerably during this period as shown in Table VI.

The transfer payment that diminished markedly was government subsidies (mainly for food) which was reduced both in 1952 and 1953. These subsidies were for the benefit of the low income group and represent one of the few cases of a sizable reduction in government expenditures as a direct result of the rearmament. Certain other grants to persons were increased to offset this loss of position, therefore there remains some doubt whether this group actually suffered any real loss (see Table VI). Transfers to private capital account--chiefly World War II war damage compensation, gratuities, and refunds of WW II excess profits-- was a considerable item in the immediate post war period but of

¹ Federal Reserve Bank of New York, "The Changing Impact of the British Budget", Monthly Review, Vol. 35, No. 6 (June 1953), p. 85.

rapidly diminishing importance during 1950-53.¹

¹Ibid., p.85.

CHAPTER IV

THE PRIVATE SECTOR

The reduction of personal consumption as a means of gaining additional resources for an increased defense effort is the basis of this chapter. As the major item of total national expenditures--personal consumption accounted for 70.9 per cent of total expenditures in 1950 (Table XIV)--this chapter will examine the behavior of private consumption during the rearmament effort. The nature of personal consumption, its relationship to the overall needs of the defense program, and the means available for curbing consumption are the principal factors to be considered.

Personal Consumption and the Rearmament

The impact of a rearmament program on a fully employed economy inevitably puts a severe strain on private consumption. This is of course as it should be. The economic implication of the 1950 defense program were such however that the British government appeared unwilling to severely cut back civil consumption. The government attitude as related to private consumption and the defense effort was as follows:

The increased claims of defense are not distributed evenly over the economy, but are largely concentrated upon particular sectors--most of all upon the metal using industries. The great bulk of the output of these industries goes to home investment and exports and only

a very small part consists of consumption goods. This makes it much more difficult to shift the main burden of rearmament on to consumption...¹

Notwithstanding this difficulty, government policy felt it necessary that:

...we must try to meet some of the cost of rearmament by sacrificing for the time being the improvements we had hoped to enjoy in the standard of living and indeed cutting it back somewhat below the present level
...²

The problems that are imposed on an economy under mobilization are to a large measure proportional to the degree and extent of the defense effort. The extent of the defense effort is of course dependent upon the strategic military situation. In this connection, there are two basic assumptions that may be made in the course of a rearmament program. First, there will be a full scale war in the near future with all out economic mobilization and all considerations secondary to the successful prosecution of the war. This would present problems in war economics, however in many respects the problems would be clearly defined. In an all out war a nation devotes its whole energies, military and economic, to the pursuit of a single aim, i.e., the successful prosecution of the war effort. It curtails private consumption and accepts these sacrifices on the assumption that the period of war will be limited, and that

¹Cmd. 8195, op. cit., p.8.

²Ibid., p.5.

when peace returns the restraints imposed upon the economy will be lifted.

The second assumption is that there will be a prolonged period of distant and limited war or perhaps an uneasy peace. Rearmament imposed upon a situation of this type, becomes not an effort of single purpose as for total war, but rather an effort involving a choice in allocation of resources in terms of importance and priority. It is more difficult to restrict civilian consumption under these conditions without the risk of seriously jeopardizing morale and incentives. The second situation is far more complex in terms of economic policy and is essentially the nature of the rearmament program being considered in this study.

In analyzing the effects of a rearmament program on personal consumption, C. F. Carter, a British economist, makes certain observations as to the nature of personal consumption. In the first place, he feels that such items as food, rent, fuel and allied items are largely incapable of reduction in peacetime or in a period of limited mobilization.¹ As for drink and tobacco, major items of personal consumption, he states that these articles carry such a large burden of indirect taxes, that any reduction in

¹Carter, op. cit., p.202.

their consumption would sharply curtail government revenues.¹ He concludes that perhaps household goods and clothing outlays could be postponed, however "any large change would be difficult to achieve without bearing hardly upon the marginal items".²

Reference to the information in Table VII roughly verifies the position taken by Mr. Carter. It is evident from this table that the Korean rearmament has had little overall effect on the component items of personal consumption. The items represented on the first three lines of Table VII which are substantially those mentioned above, did in fact show a slight increase over the four year period. These items incidently account for approximately 60 per cent of total personal consumption. The only major factors which suffered a setback during this period were clothing and footwear which decreased by some 1.2 per cent (Table VII). Household goods declined slightly in 1951-52 but then made a substantial recovery in 1953. Based upon the statistics shown in Table VII and comparing total consumption changes with 1950; 1951 represents a 0.8 per cent decrease, 1952 a 2.0 per cent decrease, and 1953 a 1.8 per cent increase.

Of course to appraise the significance of this relative stability in personal consumption it is necessary to

¹Ibid., p.209.

²Ibid., p.202.

TABLE VII

PERSONAL CONSUMPTION¹(L million at 1948
market prices)

	1950	1951	1952	1953
Food.....	2,427	2,412	2,377	2,484
Drink and tobacco...	1,539	1,573	1,573	1,605
Rent, water, fuel & light.....	994	1,018	1,024	1,042
Household goods.....	651	613	575	651
Clothing and foot- wear.....	945	857	837	858
Private motoring & travel.....	516	525	564	622
Other goods & services.....	1,640	1,647	1,584	1,609
Total.....	8,712	8,645	8,534	8,871

¹Economic Survey for 1954, Cmd. 9108, p.21.

look into the pattern of personal income in the post Korean period as well as the government attitude towards this item. In early 1951, the government took the view that:

We must take care to avoid an inflation of costs brought about by pressure for increased money incomes. While some adjustments to wages have been necessary and some are still taking place, there should be no unreasonable increase in wage and salaries. The policy of common sense and restraint in personal incomes is as important today as in the past,¹ and is the responsibility of the whole community. . .¹

The policy of 'common sense' seemed unable to curb a sharp rise in wages immediately after the Korean defense program. This is reflected in Table VIII where in the first year after Korea, wages and salaries jumped by 9 per cent and for the entire period increased by almost 24 per cent. Total personal incomes rose by approximately 23 per cent in the entire four years (Table VIII). Of the 6 per cent increase in the total wage bill in 1953, about two-thirds was due to higher rates and one-third due to increased activity, i.e., longer hours worked and a rise in employment.² The reasons underlying the wage increases will be discussed in a subsequent chapter on the problem of inflation in the post Korean period. The point to be made here is that there appeared to be no evidence that the government attempted to fix wage ceilings coincident with the imposition of the defense program. It is true that in

¹Cmd. 8195, op.cit., p.42.

²Cmd. 9108, op.cit., p.20.

TABLE VIII

PERSONAL INCOME¹

L Million

	1950	1951	1952	1953
Wages and Salaries...	7,035	7,660	8,155	8,630
Other income of employees and Forces pay ²	3,898 ³	679	748	812
Income of self-employed.....	-	1,503	1,553	1,606
Rent, dividends and interest received by persons.....	-	1,291	1,406	1,489
National insurance benefits and other grants.....	-	787	910	1,000
Total personal income.....	10,933	11,920	12,772	13,537

¹Economic Survey for 1954, Cmd.9108, op. cit., p.20 and Economic Survey for 1952, Cmd.8509, op. cit., p.42.

²Employers' contributions to national insurance, superannuation and pension funds, etc.

³1950 data not broken down. 3,898 includes income of self-employed, rent, dividends, etc.

the first two years following Korea, Great Britain succeeded in shifting some resources away from private consumption (see Table VII). These decreases were however so slight, there was little marked deterioration of living standards. What occurred instead was largely a curbing of the improvement in these living standards in order to divert increased productivity into more pressing needs, specifically rearmament. To some degree, it would appear that the British rearmament policy was one of both "guns and butter". How this was brought about is largely a measure of the steps taken by the government to restrain private consumption.

Restraints on Personal Consumption

Perhaps the most important premise with which to start a program involving a reduction in consumption is that it be spread equitably over the community. The two major methods available for the achievement of this aim are: consumer rationing, by which consumption goods are distributed according to the exigencies of supply and the aggregate consumption allowed in the general economic plan; and taxation, by which personal incomes are curtailed.¹

These two methods constitute the basic issues in present

¹T. Scitovsky, E. Shaw, and L. Tarshis, Mobilizing Resources for War (New York: McGraw Hill Co., 1951), pp.104-6.

day mobilization economics, viz., the extent of reliance on the price system or direct physical controls to reallocate resources between civilian and military use. These two systems are of course not solely applicable in the area of private consumption as their imposition will influence investment, government expenditure, and the external account; but it is in the field of personal consumption that their impact is perhaps most strongly felt.

In addition to physical controls and taxation, the process of inflation can effect a redistribution of resources. To simply have the government bid for the necessary defense resources in the open market will inevitably result in a rise in prices and thus affect private consumption. This is nothing more than rationing by means of the price system which has many undesirable social effects. The problem of inflation which influences all aspects of the economy is of major significance to the rearmament program and will be dealt with separately in a subsequent chapter.

In formulating its tax policy, the British government has attempted to do more than raise adequate revenue merely to cover its current disbursements. The overall objective of fiscal policy during the post World War II period was to maintain total effective demand at a rate sufficient to provide a high level of employment without at the same time producing an inflationary rise in prices. By 1950 Britain's pro-

gress toward internal stability held the promise that the burden assumed by the budget in combatting inflation might soon be reduced and that incentive tax concessions might therefore become possible. This point was brought out in the Economic Survey for 1951 which stated:

The evidence seems to show that by the middle of 1950 steady adherence to the policy of disinflation had brought about a fairly satisfactory balance between total demand and total supply. Demand continued to run at a high level, but not at so high a level as to cause any marked symptoms of inflation.¹

This situation was markedly changed by the outbreak of war in Korea. The rearmament program necessitated a sharp increase in government expenditures, which the Chancellor of the Exchequer decided to cover only to a moderate extent by an increase in taxation.² There were two reasons for this attitude; first, as noted above, Britain's improved internal position together with the favorable results in the external balance in 1950 seemed to permit some relaxation of the government's disinflationary efforts. The second and perhaps most important reason for not greatly relying on increased taxation was that Britain "seemed at or near the limits of effective taxation".³

¹Cmd. 8195, op. cit., p.40.

²Federal Reserve Bank of New York, Monthly Review, op. cit., p.87.

³Ibid.

With respect to the second consideration, the burden of taxation in Great Britain is among the highest in the world. Combined central and local government revenue amounted to an equivalent of approximately 40 per cent of the national income compared with about 30 per cent in the United States.¹ In 1938 a single man in Great Britain bore a tax rate of 20 per cent on earnings above L 300; in 1950 the tax rate was 36 per cent starting at a point 25 per cent lower.²

Nevertheless the tax did rise slightly as a result of the Korean rearmament as is indicated in Table IX. Revenue from income taxes increased by L 288 million from 1950 to 1953 while revenue from indirect taxes increased by L 190 million in the same period. Of course these increases reflect greater total personal incomes (Table VIII) as well as increased tax rates. Personal income taxes were raised 6d on the pound in early 1951 to meet the immediate inflationary effects of the rearmament program.³ The tax changes of 1952 left the consumer with about the same real purchasing power as the previous year. The overall budget

¹Ibid., p.84.

²Carter, op. cit., p.208.

³British Information Services, Labor and Industry in Britain, op. cit., p.50.

TABLE IX

REVENUE ACCOUNT OF CENTRAL GOVERNMENT¹

L Million

	1950	1951	1952	1953
Taxes on Income.....	1,808	1,907	2,154	2,096
Taxes on Expenditure....	1,743	1,907	1,893	1,933
National Insurance contributions.....	41	452	476	526
Taxes on Capital.....	188	194	159	166
Profits and other income from property.....	138	247	197	225
Current grants from overseas governments.....	-	18	138	105
Total Revenue.....	3,918	4,725	5,017	5,051

¹Economic Survey for 1954, Cmd.9108 (London: H. M. Stationery Office, 1954), p.32 and Economic Survey for 1951, Cmd.8195 (London: H. M. Stationery Office, 1951), p.43.

policy for 1952 was "designed to readjust the tax structure in order to give greater incentives to increased output and export, and to economy in the use of import".¹ An example of the latter was the increased taxes on petroleum products in order to reduce the home consumption of these imported commodities. Thus, increased indirect taxes were used less as a source of revenue than as a restraint on import consumption.

Britain in its tax policy for 1952 had been able to turn somewhat from its previous preoccupation with the problem of combatting internal inflation to the provision, through tax relief, of a helpful stimulus to production. This strategy continued on into the 1953 budget with further tax remissions designed to maintain consumer purchasing power, so that the "great mass of the population can look forward to purchases of a kind that offer some incentive for hard work".²

To sum up, the dominant role of fiscal policy (as related to consumer expenditures) in the post Korean rearmament period seemed to be to stimulate consumer demand rather than to attempt to restrict personal consumption. There seemed to be no predilection on the part of the central au-

¹Cmd. 8509, op. cit., p.46.

²British Information Services, Labor and Industry in Britain, op. cit., p.52.

thorities to finance the increased rearmament expenditures on a 'pay-as-you-go' tax basis. One explanation for this lies in the already mentioned high level of direct and indirect taxes. With tax rates as high as they were in Great Britain, any substantial increase might have caused the marginal rates to rise so that the monetary inducement for additional work would disappear. Furthermore, conventional tax increases, without additional controls, would not prevent the use of liquid assets from maintaining a given level of consumption, i.e., through dissaving.

But perhaps a more significant reason in not attempting a 'pay-as-you-go' fiscal policy was due to the limited nature of the mobilization. One British economist, in discussing this issue, has this to say:

We must not lose sight of the unpleasant possibility that the rearmament may be a prelude to an all out war. The wise Chancellor will not use his last weapon now, for a war effort on the scale of the last war might require him to increase the proportion of revenue to national income from 40 per cent to 50 per cent. With taxes so near their limit of effectiveness, this would be very hard indeed...¹

The second means whereby personal consumption may be restrained is through the use of direct physical controls. Fixed authority takes the place of market incentives under this system with little reliance on the normal functions of

¹Carter, op. cit., pp.211-12.

the market economy. This method, sometimes called the "disequilibrium system",¹ was largely the system employed by Great Britain during World War II. The complete utilization of the disequilibrium system requires the imposition of: (1) direct controls over the employment of resources, (2) price control, (3) effective rationing and (4) a condition where aggregate money demand is substantially greater than the available supply of goods and services.² It follows from these requisites that the heart of the system is to divorce current income from current expenditure--present savings on the part of the public are to be converted at a later date into goods and services. Although this future promise is the main incentive of the system, it is also its greatest liability. The excess accumulations of savings make it difficult to terminate direct controls without precipitating a serious inflation. This partly explains why Great Britain had to leave many of the physical controls in force during the critical post World War II period.

As previously noted, demand continued to run at a high level during 1950 but there were no marked symptoms of inflation. The government policy towards physical controls

¹J. K. Galbraith, A Theory of Price Control (Cambridge: Harvard University Press, 1952), p.28.

²Ibid., p.29.

during early 1950 was one of relaxation. At this time consumer rationing and allocation controls were limited to a relatively small number of goods and commodities, however price controls remained generally in force.¹

With the outbreak of war in Korea, Britain did not resort to any radical expansion of domestic physical controls since those still in effect were quite far reaching in spite of recent relaxations. The major additional steps taken as a result of the rearmament were in the allocations of strategic raw materials and in the imposition of production priorities.² But early in 1952 the raw material problem had improved as did the conditions of British home demand. Therefore in 1952, Great Britain felt it possible and desirable to return to and even accelerate the relaxation of physical controls. For example: price controls were largely removed and 1024 statutory instruments of general application to consumption were allowed to lapse between November 1951 and October 1952.³ Certain basic controls such as restrictions on foreign exchange, imports, and home investment did however remain in force.⁴ Nevertheless the economy was made

¹Federal Reserve Bank of New York, Monthly Review, op.cit., p.87.

²Brookings Institution, op.cit., p.29.

³British Information Services, "Easing Controls in Britain", Labor and Industry in Britain, Vol.XI, No.1(1953) 39.

⁴Ibid., p.40.

much more flexible with the abandonment or modification of the overall pattern of controls. Ways were found to 'liberalize' the economic processes even within the restrictions that remained and to a large measure the consumer was free of physical controls.

The question arises as to the relatively small part played by physical controls in the British rearmament effort. As in the case of taxation, perhaps the best explanation lies in the limited nature of the defense effort which made it unfeasible to reimpose a whole frame work of physical controls. In analyzing some of the prerequisites necessary for the successful use of physical controls,

C. F. Carter says:

Controls require two essential conditions: there must be a psychological atmosphere in which they are regarded with approval and they must be imposed as an interlinked system covering all important parts of the economy. Without the condition of public acceptance or approval, the ingenuity of every citizen will be used to evade the restrictions and British experience suggests that the evasion will often be successful. Unless the system of controls is complete and interlinked, compression applied in one part of the economy will merely lead to unplanned expansion elsewhere...

Even though the network of physical controls during the rearmament period was not extensive, those that did remain undoubtedly played a significant role in the reallocation of resources. In many instances, direct physical

¹Carter, "Rearmament and Public Finance in Britain", op.cit., p.212.

controls rather than fiscal policy are the only means of forcing a fully employed economy such as Great Britain's into ways that will bring only negative benefits. For example, as has been pointed out, an extra tax on a new car might be wholly met by dis-saving without any appreciable fall in the demand for new cars. However, the outright prohibition of new car delivery in the home market would free resources which could be diverted into the export market or into defense production.

This appeared to be Britain's major goal in the use of direct controls in the post Korean period. Rather than a completely integrated system of restriction to effect a transfer of resources, controls were used in those areas where fiscal or monetary policy might be less suitable for obtaining these results.

CHAPTER V

THE INVESTMENT SECTOR

The investment sector contains perhaps the most important activity within a dynamic economy. Unfortunately the claims of a rearmament program are largely drawn from the same resources that sustain fixed investment. Add to this the conditions of fully employed resources and we have the makings of an economic dilemma. The consequences of a defense program on the level of investment together with the major decisions of the British authorities are the basis of this chapter.

Capital Reduction as a Means of Transfer

In the short run, it is inevitable that a rearmament program will diminish the level of capital investment. The hard fact is that the resources required for rearmament are to be found primarily in the engineering and building industries while these industries must also provide the major share of a nation's new investment. This is clearly borne out by analyzing the engineering and building claims in Table I (the British Defense Effort) and Table X (The Pattern of Fixed Investment).

As is evident from Table I, production in the metal using and engineering industries increased from L 170 million in 1950-51 to an estimated L 510 million in 1953-54. These increases reflect mainly a large expansion in the output of combat aircraft, tanks, weapons, ammunition, radio and radar equipment.¹ Furthermore, the defense program as shown in Table I involved an increase in building and civil engineering from L 45 million in 1950-51 to an estimated L 110 million in 1953-54. This extra work included the creation of more factory space for arms production, extension and improvement of airfields, development of the control and warning system and the improvement of anti-aircraft defenses.²

This in brief was the major initial impact of the rearmament effort on the British economy in terms of specific requirements. These industries received immediate defense orders, the fulfilment of which inevitably curtailed output for other purposes and it was precisely on this point that the major problems of the defense effort arose. For in those industries where the defense program was concentrated, viz., the metal using industries, was also the source in

¹Cmd. 8195, op.cit., p.6.

²Ibid., p.7.

1950 of almost one-half of British exports and about one-third of home investment.¹

The defense program imposed a tremendous new demand upon an important sector of the economy which was bound to adversely affect the level of exports or home investment. The effects of increased demand in the metal using industries on the British export position has already been considered in some detail in Chapter II. From this discussion, there appears to be little evidence of a deterioration in the export position, therefore the question arises as to the extent home investment was sacrificed to the military needs.

The level of capital investment in Great Britain is to a large extent a matter which rests in the hands of public authorities. There are two principal reasons for this: first, the British policy of nationalizing basic industries, together with the control of housing, brought over half of gross investment beneath the State's directing hands; second, the government has viewed public savings via the budget as necessary to compensate for an inadequate volume of business and personal savings.² For example, the combined

¹ Ibid., p.19.

² Carter, "Rearmament and Public Finance in Britain", op.cit., p.214.

current surplus of the government accounted for some 30 per cent of Britain's gross national savings for the period 1948 through 1952, while savings of public and private corporations comprised approximately 65 per cent, and personal savings were responsible for little more than 5 per cent of the total.¹ To this end, therefore, the government's budget policy was directed towards whatever surplus or deficit would serve to equate expected gross national savings with the expected gross national investment.² Further consideration will be given in a subsequent chapter to this budget surplus and how Great Britain has adapted it to restraining inflationary pressure within the economy.

The fact that a large proportion of fixed investment was under state direction was not however the determining factor in the program of capital reduction. The problem of releasing resources for rearmament needs, as in the case of government expenditures and personal consumption, had to be considered in relation to the resources required. An additional complicating factor in the investment sector was a realization on the part of the government of the necessity for continuing the re-equipment of British industry. The

¹Federal Reserve Bank of New York, Monthly Review, op. cit., p.86.

²Ibid., p.85.

carrying through of existing programs for urgent industrial re-equipment had to be maintained, for despite the demands of defense, the authorities recognized that sustained re-equipment of producer goods industries was vital to increased productivity. A rising level of industrial productivity was one of the major goals of public policy during the rearmament period. Thus, the decision in 1951 was to have investment in consumer goods industries mark time while investment in producer goods industries, e.g., machine tools, steel, was to expand as much as possible.¹

The British government had as a leftover from World War II certain controls on investment, licensing systems on new building, and capital issue controls.² However, with the onset of the defense program the authorities attempted no all out frontal attack on non-essential investment. Instead there was some tightening up of the existing controls and some home investment projects were postponed, delayed or simply frustrated by a shortage of materials, especially steel.³ According to the Economist, the government policy on investment at the beginning of the defense program was

¹Carter, "Rearmament and Public Finance in Britain", op.cit., p.216.

²Federal Reserve Bank of New York, Monthly Review, op. cit., p.86.

³"The Measure of the Burden", op. cit., p.413.

as follows:

. . . There is no intention to make any large deliberate cuts in the program of capital outlay for civil purposes. Apart from the possibility of minor prunings, any contraction of investment will be allowed to occur either 'involuntarily' through sheer inability to get supplies, or through a specific holding back of individual building projects that are in direct competition with defense works...¹

An example of the latter was an order by the government in November 1951 that "no new building will be allowed to start in the next three months".² There were also considerable restrictions during 1951 on the delivery of cars, trucks, and other metal consumer goods to the home market in order to free resources for export and defense. In the latter part of 1951, the authorities withdrew a special tax concession (in the form of accelerated write-offs) on new investment in an effort to discourage non-defense capital expenditures.³ The second brake to new investment came in April 1952 when the interest rate was raised from 2½ per cent to 4 per cent.⁴ This monetary measure plus other curbs on credit was designed to hold back all but the

¹"Wherewithal for Defense", The Economist, CLX (February 1951), 444.

²British Information Services, "Britain's Economic Position", Labor and Industry in Britain, Vol. IX, No. 4 (December 1951), 158.

³British Information Services, "An Incentive Budget", Labor and Industry in Britain, Vol. XI, No. 2 (June 1953), 56.

⁴Ibid., p.62.

most essential capital investment at home.¹

The eased pressure on internal demand in mid 1952 allowed Great Britain to reappraise her policy on investment. Against the background of a severe balance of payments crisis in 1951, the policies for 1951 and 1952 were inevitably concerned with the short run objectives of attaining an external balance with a maximum of internal stability. Superimposed upon these were the problems of expediting defense production. The successful progress towards these ends by late 1952 allowed Britain to give more attention to the fundamental problem of incentives, particularly as they bear on investment and productivity.

The budget for 1953 was therefore presented as an 'incentive budget' intended to stimulate productive effort. The Budget was characterized by significant reductions in taxation; but surveyed more comprehensively, it reflected the changed pressures affecting the British economy. To

¹The effects of monetary measures cannot of course be limited to one sector of the economy. The Federal Reserve Bank of New York, Monthly Review, June 1953, p.89, says the raising of the interest rate to 4 per cent and several ancillary measures--have made a significant contribution to internal stability and to the improvement in Britain's external accounts. In broader terms, perhaps the most notable aspect of the new monetary policy is that it reflects the British determination to use all available measures to maintain internal price stability and thereby to increase saving incentives at home and to encourage a more favorable environment for foreign trade.

stimulate internal demand, the Chancellor proposed the reduction of income taxes as well as a lessening of the purchase (sales) tax.¹ More stress was placed on the incentive to invest in industry than in previous budgets. For example, the special initial depreciation allowances which had been curtailed the previous year were restored in 1953 and excess profits taxes were to be eliminated as January 1, 1954.² The Chancellor of the Exchequer, in expressing the primary aims of the Budget, said:

All reliefs are carefully designed for the prime purposes of giving the incentive for greater production. . . .³

Fixed Investment and the Defense Effort

Table X shows the pattern of gross fixed investment in Great Britain during the post Korean period. In real terms, total gross fixed investment declined by L 23 million in 1951 (Table X), however in money terms, due to the rise in prices there was an increase of L 188 million between 1950 and 1951.⁴ The significant increase in investment during this period was in plant and machinery while

¹Federal Reserve Bank of New York, Monthly Review, op.cit., p.89.

²Ibid., p.89.

³"An Incentive Budget", op.cit., p.53.

⁴Cmd. 8509, op.cit., p.38.

TABLE X

GROSS FIXED INVESTMENT BY TYPE OF ASSET¹

(£ Million at 1952 market prices)

	1950	1951	1952	1953
Vehicles, ships & aircraft.....	347	304	267	315
Plant & machinery..	782	833	790	800
New Housing.....	398	394	485	620
Other new buildings & works ²	546	519	518	540
Total.....	2,073	2,050	2,060	2,275

¹ Economic Survey for 1954, Cmd. 9108 (London: H. M. Stationery Office, April 1954), p.23.

² Excluding building for the Service Departments.

building output contracted mainly due to the diversion of building resources into defense work.

Total gross fixed investment in real terms remained relatively constant between 1951 and 1952 as shown in Table X, but again due to the effects of inflation capital expenditures increased by some L 197 million between the two years.¹ The relative stability of investment in 1952 was due to the influence of several factors, viz., the restrictions imposed on new investment in order to free resources for export and the occurrence of certain shortages within the economy, notably in steel. In addition, 1952 represented a reduction in overall demand for new investment, which no doubt reflected the effects of the monetary and fiscal restraints discussed in the previous section.

Real expenditures on fixed investment appears to have been about L 215 million greater in 1953 than in 1952 (Table X). In money terms the increase was L 252 million, which indicates how inflationary pressures had eased by 1953.² The outstanding change in 1953 was in the very large increase in new house building. In fact, the trend in investment in new housing appears to have been the outstanding

¹Cmd.9108, op.cit., p.31.

²Ibid., p.31.

feature in gross fixed investment for the entire post Korean war period. Nearly 319,000 houses were completed during 1953 compared with just under 240,000 in 1952.¹ In view of the serious strain imposed on the British economy by the defense effort, perhaps a brief explanation of this growth in new housing is warranted.

As early as 1950, with almost half a million married couples living with parents and slum clearance virtually untouched since 1939, there appeared little likelihood that the defense effort would cause a reduction in new housing investment.² Furthermore, because housing had a high political priority, the authorities appeared ready to reconcile its growth within the defense effort on the grounds that housing extracts small claims from critical defense materials.

Apart from housing, the main increases in 1953 were in transport and communications services as well as a large increase in shipping investment due to a fall in sales abroad of second hand ships.³ Investment in plant and machinery remained almost constant with 1952. Considering the resource requirements of a rearmament program and the

¹ Ibid., p.22.

² Carter, "Rearmament and Public Finance in Britain", op.cit., p.214.

³ Cmd. 9108, op.cit., p.23.

pattern of fixed investment in Table X, the impact of the defense effort on fixed investment appears to have reached its peak in 1951.

A final item to be briefly considered apart from fixed investment is the changes in inventory investment, i.e., physical stocks and work in progress. As the "estimate of total stock changes involve much uncertainty because adequate information is not available about all categories of stocks",¹ this material reflects only the major changes that have occurred. The percentage of total expenditures and work in progress is shown in the expenditure side of Table XIV. There was a considerable net reduction in raw material inventories in 1950 due to the combined effects of deliberate economies on dollar imports and growing difficulties in obtaining raw materials from non-dollar sources in the face of increasing world demand in the latter half of 1950.² Because of the necessity to support the increased industrial activity brought about by the defense program, strategic stockpiling and commercial stocks greatly expanded during 1951 as shown in Table XIV. This was the result of a 13 per cent increase in the volume of imports between 1950 and 1951 (see Table IV) and occurred despite its adverse affects on the British balance of payments.

¹Ibid., p.24.

²Cmd. 8195, op.cit., p.30.

In the previous chapter, the changes which took place in home and overseas demand were considered in some detail. The altered conditions of demand in 1952 reflect a marked decrease in stocks as manufacturers and traders adjusted the level of their inventories to this new situation. One of the main features of the increase in demand in 1953 was the resumption of investment in stocks which had been checked in the previous year. Thus, the pattern of inventory investment in Great Britain during the post Korean period, with the exception of 1951 which partly represented a restoration of depleted stocks, was largely determined by the circumstances of demand.

CHAPTER VI

SOME ALTERNATIVES

In the absence of explicit governmental policy to bring about a re-allocation of resources, it is possible for an increase in gross domestic product to offset the impact of expanded defense outlays. On the other hand, a new and unplanned distribution of resources might occur through an inflationary rise in prices by having the other claimants in the market outbid by the defense program. Both of these factors play a key role in an economy under mobilization, the former tending to ease the burden of rearmament and the latter tending to complicate it.

The Problem of Inflation

Thus far in this study, it was not felt necessary to define the terms which have been used in analyzing British expenditures. An exception will be made in the case of inflation. This is because of the critical role played by inflation in the British economy during the post Korean period. But even more important, because inflation affects all sectors of an economy, the concept has particular significance to the objectives of this study. For the inflationary process, as well as the fiat from central government, can effect a redistribution of resources within a

national economy. For purposes of this study therefore, the following interpretation of inflation is deemed appropriate:

Inflation and rising prices are not synonymous for each other. Inflation is a state in which the flow of money trying to spend itself on goods and services is larger than the flow of goods and services available (at the prevailing price level). Inflation in a state of nature causes rising prices, just as a fever causes perspiration. But the rising prices, so far from being identical with inflation, are (like the perspiration) nature's attempt to restore the balance. . . .¹

As noted previously in the study, 1950 was a year of general stability with a fairly satisfactory balance between total demand and total supply and no marked symptoms of inflation. To a large measure, credit for this favorable showing must be given to Britain's budget policy which was used as a deflationary device in the post World War II period. Budget policy during this period aimed:

. . . to match our resources against our needs. This requires a real and substantial surplus, which more than provides for all government expenditures, capital and current, and leaves a balance, to be used to counter the inflationary pressure.²

Such current surpluses had a disinflationary impact in the sense that the financing of the government's capital outlays through taxation averted the inflationary expansion

¹"Inflation", The Economist, Vol. CLX (March 1951), p.579.

²Federal Reserve Bank of New York, Monthly Review, op. op.cit., p.85.

of bank credit. Furthermore, the disinflationary effects of these budgets facilitated the relaxation of physical controls, which as has been indicated, occurred up to the outbreak of war in Korea.

The immediate impact to the defense program was to upset the delicate balance by creating excessive demand conditions in terms of increased money expenditures while the supply situation was for all practical purposes fixed. The rearmament caused a world wide buying spree in the latter half of 1950 and first half of 1951, which greatly increased the prices of British imports. Because of the importance of imports to the British economy, these price increases were inevitably reflected in the internal price structure. As the internal price level increased, the pressures for additional money incomes increased along with it--and the race was on. The degree of inflation is largely a measure of the interaction between the wage and price levels, which is shown for the post Korean period in Table XI.

Once inflation is present, the role of government policy largely determines what form it is to take, i.e., suppressed or open. It would appear that government policy in Great Britain was somewhat tardy for by March 1951, in the words of The Economist, "inflation was galloping".¹

¹"Three-Quarters Peace", The Economist, Vol. CLX (March 1951), 521.

TABLE XI
WAGE PRICE INDICES¹
(1948 = 100)

	1950	1951	1952	1953
Wholesale prices (all goods).....	120	146	149	150
Wages (weekly rates)	104	113	122	128
Ratio-wages to prices.....	87	77	82	85
Cost of living.....	106	116	126	130

¹Adapted from International Monetary Fund, International Financial Statistics, Vol. VII, No. 6 (Washington: Government Printing Office, June 1954), 168.

The central authorities recognized that a policy of control called for restraint on wage increases. We have observed in Chapter IV that this restraint was to be a voluntary restraint and concluded that this policy was not successful. This is further verified by reference to the wage index in Table XI. Public policy also called for a drawing off of sufficient purchasing power by means of taxation and thus serve to contract the inflationary conditions of demand. Judging from the extreme jump in prices during 1951 (Table XI), one must conclude that the controls as well as the monetary and fiscal measures were simply inadequate to restrain the inflationary pressures.

The overall policy, which was tantamount to a compromise between open and suppressed inflation, appeared to be premeditated however, for the government recognized the danger to incentives in a higher level of taxation. Furthermore, they wanted to keep the economy as flexible as possible, so they rejected the complete framework of controls that might have lessened the effects of inflation. Britain wished also to preserve her traditional system of wage stabilization in which the unions kept their demands at moderate levels in return for a government promise to keep prices from rising unduly. By resorting to such partial remedies, Great Britain undoubtedly allowed inflation to get out of hand in 1951 (Table XI). This represents an

effective redistribution, especially for those on fixed incomes, which in quantitative terms is difficult if not impossible to measure.

More than any specific measures, it was perhaps a combination of events which reversed the inflationary trend in the early part of 1952. These events have already been discussed in the preceding chapters and need only to be mentioned at this point. Such things as the fall in world commodity prices, better terms of trade, and the cessation of United States stockpiling indirectly slackened the internal demand in Britain and thus helped to curb inflation. The Economist attaches particular significance to buyer resistance to high prices explaining that "price increases, running far ahead of wages, restrained consumer expenditures and so helped to check inflation without the necessity of increasing taxes and controls".¹

Mr. Graham Hutton, a British economist, feels that the inflationary problem in Great Britain was the result of overburdening the productive system and could be solved only by lightening the burden or by increasing the productivity of the system.² Reference to Table XI shows that the in-

¹"Outlook for Inflation", The Economist, Vol. CLXII (Jan. 1952), p.1.

²G. Hutton, We Too Can Prosper (London: George Allen, Ltd., 1953), p.219.

flationary pressures had greatly subsided in 1952 and 1953. The fact that prices remained relatively constant while wages continued to climb in 1953 was largely a result of increased productivity.¹ An examination of the significance of productivity to the British defense effort will now be undertaken.

The Importance of Productivity

In Chapter I it was suggested that one of the measures whereby resources might be made available for increased defense requirements would be to raise the national output. The burden of rearmament on the British economy would obviously be greatly softened if a large increase could be achieved in total production. If the existing labor force and pattern of industry could provide the extra production, there would be little need for a reduction in consumption, investment, export, or government expenditures. The sacrifice would only be a sacrifice in improvements that would otherwise have come about.

The record of productivity in Great Britain prior to the Korean rearmament had been outstanding. By 1950 productivity for all industries had increased by an average of 7 per cent a year for the preceding three years, while for manufacturing industries alone, (on which the direct burden

¹Cmd. 9108, op.cit., p.30.

of defense production falls) the increase was even greater.¹

The problem confronting the government at the outbreak of the Korean war was to maintain and if possible surpass these achievements in productivity. The prospects for increasing output depend upon the complex inter-relationships of many variables--such things as manpower, fuel, power, steel, and other raw materials. It will not be the purpose of this section to discuss in detail the full range of problems for each of these items. Rather, emphasis will be on those factors which were special bottlenecks or made particular contributions to productivity.

A general characteristic of the British economy in 1950 which made attaining a higher level of productivity difficult was the virtual full employment of manpower. With increasing numbers of workers going into the Armed Forces and with Civil employment constant, the number of workers available for production did in fact decrease at the beginning of the defense program.² In those cases where the government took products formerly sold to civilian consumers or where the product of a factory was merely changed from civil to military, there were no great labor problems. Although these factories encountered few labor problems, there were other temporary dislocations to the flow of output

¹Cmd. 8195, op.cit., p.17.

²Ibid., p.10.

which was the inevitable cost of switching industry from one pattern of production to another. It was in those industries that had to expand output, particularly the engineering industries, where the manpower problem became acute. In fact, as the defense program advanced, one of the most serious problems was the shortage of skilled workers.¹

The government attempted to alleviate the manpower situation by placing contracts in areas where labor was available, but a heavy load inevitably fell in some districts where skilled labor was scarce. Specific measures taken by the authorities included government sponsored worker training programs and the setting up of a system of labor preferences by the Employment Exchanges in order to place workers in jobs of special importance and where their skills might be fully utilized.²

Apart from the manpower problem, certain material shortages plagued the British productive effort. While there was no simple quantitative relationship between materials and output--scarcities in steel, copper, sulphur and non-ferrous metals undoubtedly hampered industrial productivity.³ Because of its importance to the defense effort and

¹Cmd. 8509, op.cit., p.20.

²Cmd. 8195, op.cit., p.12.

³Ibid., p.18.

exports, the steel shortage was most vital and warrants further inquiry. In 1951, steel production fell 650,000 tons short of the record 1950 level (the highest since World War II) and would have fallen more if producers had not drawn heavily on their stocks of scrap (by 361,000 tons) and pig iron (by 214,000 tons).¹ The principal reasons for this decline were considerably less scrap imports (560,000 tons in 1951 compared with 1,930,000 tons in 1950) and a shortage of coke for the production of pig iron.² The problem was mitigated somewhat by the allocation plans set up by the government as discussed in Chapter II.

Steel production gradually improved in 1952 and was some 500,000 tons greater than the previous year.³ Contributing to this achievement were the vastly increased imports of pig iron (730,000 tons or double the 1951 level); improvements in the supply of coke; and six new blast furnaces which came into operation during the year.⁴ Because of the large expansion of plant and the general improvement in the supply of raw materials, production in 1953 reached the record level of 17.6 million tons or some 1.5 million

¹Cmd. 8509, op.cit., p.26.

²Ibid., p.26.

³Cmd.8800, op.cit., p.32.

⁴Ibid., p.32.

tons over 1952.¹ The steel supply problem was largely overcome by 1953 and made possible the expansion of exports, replenishing of stocks, and the ending of distribution controls.

The situations considered above were mainly obstacles to increased productivity at the onset of the defense program. Aside from the favorable results of productivity during the post World War II period, which were mainly the result of re-equipment and modernization of British industry, the question arises as to additional factors which would lead to greater productivity. The Economic Survey for 1951 sums up the prospects in a paragraph which might be profitably quoted:

Technical advance continues unflagging. Never have greater efforts been made in scientific and industrial research. . . . Never have employers and employed been more alive to the needs and opportunities for improved organization and technical training. Never have firms done more to make available to each other the benefits of their knowledge and experience. At the same time, full employment and absence of selling problems have made it possible for manufacturers to plan for long runs, and they and their workers have both abandoned some of the restrictive habits of thought inherited from earlier years. The rate of investment in plant and machinery remains high. There seems therefore little reason to believe that the recent record of improvement could not be maintained, if we were assured over the next two or three years of adequate material supplies from overseas. . . .²

Against this brief background, the results of industrial productivity and employment for the post Korea period are shown in Table XII. As is evident from this data, in-

¹Cmd. 9108, op.cit., p.48.

²Cmd. 8195, op.cit., p.18.

TABLE XII

SELECTED INDUSTRIAL PRODUCTIVITY
AND MANUFACTURING EMPLOYMENT¹

(1948 = 100)

	1950	1951	1952	1953
Coal.....	104	107	108	107
Steel.....	109	105	108	119
Cotton yarn..	108	109	75	86
Total industrial production	114	117	114	120
Mfg. Employment.....	105	108	106	108

¹International Monetary Fund, International Financial Statistics, Vol. VII, No. 6 (Washington: Government Printing Office, June 1954), 168.

dustrial productivity increased by 3 per cent in 1951, decreased 3 per cent in 1952, and increased 6 per cent in 1953. It is to be noted that the two key industries in the British economy and the defense effort, viz., coal and steel, fell considerably behind the rate of total industrial productivity.

According to the Economic Survey for 1952, the increase in productivity during 1951 was due to the ability of the engineering, shipbuilding and electrical goods industries to expand output at the pre-Korean level despite shortages in steel and non-ferrous metals.¹ For example, the gross value of the output of the metal-using industries increased by L 500 million between 1950-51 while the output for textiles and agriculture remained virtually unchanged.² Credit for Great Britain being able to maintain productivity in 1951 in spite of the problems brought on by the defense program must be given to her decision to give first priority to defense production. This precedence to defense production was given regardless of the adverse effects it had on export and home production.

Although the effects of the steel shortage were still being felt by March of 1952, the most important cause of

¹Cmd. 8509, op.cit., p.22.

²Ibid., pp.31-35.

the fall in production in 1952 was the change in demand conditions which took place during the year. This can be seen in Table XIII which shows that domestic expenditures in all sectors except government declined in 1952. The fall in demand was accentuated by a decline in stocks and work in progress--in contrast with 1951 when a large increase occurred (Table XIII).

Aided by the tax concessions granted by the Budget, home demand recovered in 1953 and was credited with raising gross domestic product by about 4 per cent.¹ Of the changes in expenditures which produced this expansion of gross domestic product, the Economic Survey for 1954 feels the most important were a resumption of investment in stocks and work in progress, a rise in personal consumption, and increase in home building, and more defense outlays.²

The impact of these changes in productivity on the gross domestic product for the three post Korean years is shown on the supply side of Table XIII. This table summarizes the total output and total demand conditions for the period following the defense program. It is perhaps the most significant information in this study, for it reveals the overall effects of the rearmament program in terms

¹Cmd. 9108, op.cit., p.18.

²Ibid., p.18.

TABLE XIII
CHANGES IN REAL OUTPUT AND EXPENDITURE¹
1951 TO 1953

1951 compared with 1950 (L million at 1950 prices)

Change in:		Change in:	
Gross domestic product...	250	Exports & re-exports...	75
Imports.....	330	Government Expenditure	175
		Gross fixed invest....	-
		Personal consumption..	-
		Total.....	250
		Investment in stocks & work in progress	300
Total supplies available.	550	Total domestic expen- diture.....	550

1952 compared with 1951 (L million at 1951 prices)

Change in:		Change in:	
Gross domestic product...	-100	Exports & re-exports...	-60
Imports.....	-230	Government expenditure	325
		Gross fixed investment	-35
		Personal consumption..	-110
		Total.....	-120
		Investment in stocks & work in progress...	-450
Total supplies available,	-330	Total domestic expen- diture.....	-330

1953 compared with 1952 (L million at 1952 prices)

Change in:		Change in:	
Gross domestic product...	500	Exports & re-exports...	-60
Imports.....	285	Government expenditure	110
		Gross fixed invest....	215
		Personal consumption..	350
		Total.....	615
		Investment in stocks & work in progress...	170
Total supplies available	785	Total domestic expen- diture.....	785

¹ Adapted from Cmd. 8509, op.cit., p.39; Cmd. 8800, op.cit., p.19; Cmd. 9108, op.cit., p.19.

of demand as well as the influence of productivity in terms of output.

Demand conditions seemed to have played a major role in the determination of national output during our phase of consideration, although not all of the changes in production in different industries can be attributed to changes in demand. For instance, the output of coal and steel (which it will be recalled did not keep pace with total productivity) was determined largely by supply factors, as it had been impossible to meet home and export demand in full out of domestic production.¹

¹Cmd. 9108, op.cit., p.24.

CHAPTER VII

SUMMARY AND CONCLUSIONS

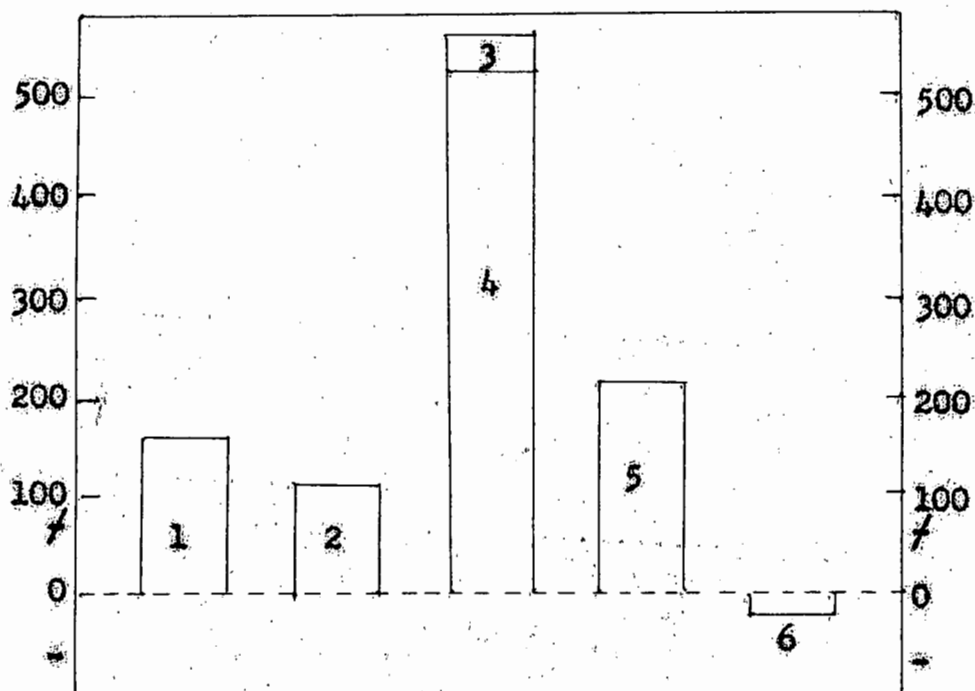
The preceding chapters have attempted to unravel some threads in the economic history of Great Britain for the three years following the outbreak of war in Korea. This analysis was presented in terms of the impact of the rearmament program on the pattern of British expenditures and its results may be summarized into three major conclusions.

The first conclusion, which also served to recapitulate analysis of national expenditures, is that Great Britain achieved a substantial measure of success in diverting its available resources into the defense effort. This conclusion is supported by Chart III which shows the changes that have occurred in final expenditures since 1950. The data are in 1952 prices; however, since there was little change in the price level between 1952 and 1953, the chart largely reflects the distribution within the economy of the total increase in production 1950-53. It is apparent that the major share of new output (approximately 55 per cent) went into the rearmament program. As part of the increase in real product normally arises in the form of consumption goods and because no forceful measures were taken to reduce

CHART III

CHANGES IN FINAL EXPENDITURE
SINCE 1950

(Difference between 1953 and 1950 at 1952 prices)



- Legend:
1. Consumers' expenditure.
 2. Exports of goods and services.
 3. Government non-defense current expenditure.
 4. Government defense current expenditure.
 5. Fixed investment - new housing.
 6. Other fixed investment.

¹ Economic Survey for 1954, Cmd. 9108 (London: H. M. Stationery Office, March 1954), p.42.

personal consumption, the substantial level of consumers' expenditures during this period is understandable. The study revealed the reasons underlying the expansion of new housing investment as a combination of necessity, political expediency, and non-absorption of essential defense resources. The sector most adversely affected was 'other fixed investment', mainly because of the competing claims of the defense program and exports. It is expected that any material increase in 'other fixed investment', once the defense claims begin to recede, will also increase export capacity and thus improve the balance of payments position.

The magnitude of the structural shift in total expenditures during the post Korean period is shown in Table XIV. This information, which takes into account the rise in prices as well as output, reflects the readjustments that occurred as Britain proceeded with her rearmament program. It further supports the conclusion that, for the four year period as a whole, she was notably successful in transferring resources into the defense effort.

This achievement is largely a reflection of explicit government policies formulated during 1951 and 1952. It is therefore in order to point out some of the more significant decisions discussed in this study which helped to make this reallocation possible.

The willingness to divert resources from exports and investment into rearmament by means of extensive priorities

TABLE XIV

COMPOSITION OF GROSS NATIONAL
EXPENDITURE IN BRITAIN

(In per cent of total)

	1950	1951	1952	1953
Personal Consumption...	70.9	68.7	66.7	65.5
Government expenditure on current goods and services.....	15.8	16.9	18.5	18.4
Gross domestic capital formation:				
Fixed investment....	13.1	12.9	13.2	13.7
Inventory investment	+ 1.7	4.2	0.0	1.0
Balance on foreign transactions.....	1.9	-2.7	1.6	1.4
Gross national expendi- ture at market prices.	100.0	100.0	100.0	100.0

¹Adapted from Economic Survey for 1954, Cmd.9108 (London: H. M. Stationery Office, March 1954), p.31 and Economic Survey for 1953, Cmd. 8800 (London: H. M. Stationery Office, March 1953), p.23.

given to the defense program undoubtedly contributed to this accomplishment. To offset the inevitable decline in exports, every effort was made to expand exports using non-essential materials. The widespread use of allocations and controls in the area of critical defense materials certainly expedited the defense effort. As a single source of policy determination, the setting up of a new Department of Raw Materials helped to mitigate what was perhaps the major problem of the defense effort--the shortage of strategic raw materials. Governmental policy with respect to manpower training and placement was vital to the increased productivity which Great Britain managed to achieve during this period. The decision made early in 1952 to spread the defense program over a greater span of time eased the economic pressures and problems of resource allocation. Finally, we have internal economic policy which, despite certain deficiencies to be shortly considered, aided in the successful integration of mobilization into the British economy.

The second conclusion is that while it was inevitable that the defense program would adversely affect the balance of payments in 1951, justification for the degree of deterioration which actually occurred is questionable. Britain began her defense program in the face of numerous conditions which made the achievement of an active balance of payments in 1951 virtually impossible. For example, her comparatively

low level of imports during 1950 made it necessary to replenish depleted stocks in 1951. This restocking occurred at a time when world commodity prices were rising and hence the terms of trade were turned against Great Britain. Finally, there were the deliberate priorities given to the claims of rearmament over exports which made the maintenance of an external balance unlikely. The unfortunate but unrelated loss of the Abadan oil refineries at about the same time was to complicate further the balance of payments problem.

We have seen that one of the limiting factors of the defense program during 1951 was the scarcity of raw materials. Therefore, it is reasonable to assume that the 11 per cent increase in the volume of raw materials (Table IV) was warranted as necessary for the defense effort and the stockpiling program. The same assumption can be made in the case of the increased volume of manufactured articles, although in view of the failure of the defense program to meet original estimates in the first year, evidence (Table XIV) seems to indicate that stock replenishment might have been carried too far in 1951. It was in the imports of food items that serious questions arise as to the economic propriety of allowing the volume of food imports to rise by 10 per cent in 1951, at a cost of about L 300 million to the balance of payments (Table IV).

When we recall that the government imposed import quotas

early in 1952, which bore especially hard on food items, it might logically be inferred that the increase in food imports was largely unplanned--or if not unplanned, at least imprudent. Had these quotas been set up in 1951, the serious external deficit might have been lessened as well as the overall adverse effects on trade liberalization which occurred when restrictions finally were imposed.

Finally this study reveals that the internal instability which characterized 1951 and 1952 was intensified by inappropriate internal economic policy. It will be recalled that the combined effects of higher commodity prices and excessive consumer buying in anticipation of price increases, led to severe inflationary conditions during 1951. In 1952 there was a marked fall in home and external demand, attributable mainly to the sharp break in commodity prices and a general slowing up of consumer expenditures. Thus, 1952 was a year of moderate disinflation.

The very difficult situation in 1951 clearly called for immediate and simultaneous use of all means of economic control at the government's command--fiscal measures, physical controls, and changes in monetary and credit policy. There was no definite indication in this study that the government's internal policies were sufficient to restrain these inflationary pressures. There were some efforts to raise personal income taxes in 1951 to check inflationary

conditions. Whether this was enough or whether the results would have been negative had taxes been raised even higher is a matter of conjecture. Certainly the government authorities were aware of the possible dangers to incentives and hence productivity by further increases in taxation. We have seen that personal taxes remained virtually constant during 1952 which undoubtedly intensified the disinflation of that year. The tax concessions on new investment which were withdrawn in April 1952 (for the discouragement of non-essential new investment) might have been more effective had they been rescinded in the 1951 Budget. Because economic events have a habit of doing the unexpected, one of the dangers in the reliance on the Budget as an instrument of internal stability is that if conditions change, fiscal policy might well be out of tune with economic reality.

The government was apparently unwilling to reimpose a complete framework of physical controls with the onset of the defense program. Such controls would have curbed the inflationary conditions of demand but at the price of economic inflexibility. A certain amount of inflation was inevitable in 1951 due to higher import prices affecting the internal price structure and thus largely beyond the control of British authorities. This partly explains the continued reliance on 'voluntary' wage stabilization in 1951, a policy which undoubtedly aggravated the wage-price

spiral. All evidence seems to indicate that Britain wanted to retain the market price system of allocation during the period of mobilization. There appeared to be a predilection towards the use of the fiscal instrument (although not on a complete equilibrium basis), rather than an extensive use of physical controls.

It was the area of monetary and credit controls that reflected the greatest paralysis of British internal policy. This study indicates that 1951 was a year of passive monetary policy for it was not until early 1952 that the interest rate was significantly raised and serious efforts to curb credit were taken. To have made the holding of stocks more expensive and curbed the excessive buying in 1951 through more extensive credit restriction would have inserted a note of restraint that was notably lacking in the first year of mobilization. This lack of resolute action combined with the above partial remedies certainly resulted in an undue loss in the value of the pound in 1951 which amounted to an unplanned redistribution of resources. Ironically, when the necessary steps were finally taken, the bottom was beginning to fall out of demand. As a result, rather than prompting economic stability these actions served to intensify the disinflation which characterized 1952. The economic propriety of British decisions with respect to fiscal policy and physical controls during 1951-52 is even now a matter of speculation. But it is with a reasonable degree of certainty

that one can assess monetary and credit policy as being
'too little and too late'.

BIBLIOGRAPHY

I. Documents

- British Information Services, "An Incentive Budget",
Labor and Industry in Britain, XI (June 1953).
- _____, "Britain's Defense Effort",
Prepared by the Central Office of Information (1954).
- _____, "Britain's Economic Posi-
tion", Labor and Industry in Britain, IX (December 1951).
- _____, "Britain's Economy, 1951",
Labor and Industry in Britain, IX (June 1951).
- _____, "Defense and Britain's Eco-
nomy", Labor and Industry in Britain, XI (June 1953).
- _____, "Official Statements on
British Policy", I. D. 1058.
- Economic Survey for 1951, Cmd. 8195, London: H. M. Sta-
tionery Office (April 1951).
- Economic Survey for 1952, Cmd. 8509, London: H. M. Sta-
tionery Office (April 1952).
- Economic Survey for 1953, Cmd. 8800, London: H. M. Sta-
tionery Office (March 1953).
- Economic Survey for 1954, Cmd. 9108, London: H. M. Sta-
tionery Office (March 1954).
- International Monetary Fund, International Financial Sta-
tistics, VII, Washington: Government Printing Office,
June 1954.

II. Books

- Brookings Institution, Rearmament and Anglo-American
Relations, Washington: Brookings Institution, 1952.
- Crosland, C.A.R., Britain's Economic Problem, London:
The Alden Press, 1953.

- Diebold, William, Trade and Payments in Western Europe, New York: Harper & Bros., 1952.
- Galbraith, J. K., A Theory of Price Control, Cambridge: Harvard University Press, 1952.
- Hawtrey, R. G., The Balance of Payments and the Standard of Living, London: Royal Institute of International Affairs, 1950.
- Hutton, Graham, We Too Can Prosper, London: George Allen, Ltd., 1953.
- Scitovsky, T.; Shaw, E.; Tarshis, L., Mobilizing Resources for War, New York: McGraw Hill Co., 1951.

III. Articles

- Carter, C. F., "The Impact of the Rearmament on Britain", Public Finance, VII (1952), 35-51.
- _____, "Rearmament and Public Finance in Britain", Public Finance, V (1950), 199-221.
- The Federal Reserve Bank of New York, "The Changing Impact of the British Budget", Monthly Review, XXXV (June 1953), 84-89.
- "Inflation", The Economist, CLX (March 17, 1951), 578-580.
- "Measure of the Burden", The Economist, CLX (Feb. 24, 1951), 412-413.
- "Outlook for Inflation", The Economist, CLXII (Jan 5, 1952), 1-2.
- Scammell, W. M., "Economic Policy and Rearmament", World Affairs, XXI (April 1951), 158-169.
- "Three-Quarters Peace", The Economist, CLX (March 10, 1951), 521-523.
- "Wherewithal for Defense", The Economist, CLX (Feb. 24, 1951), 444-447.

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