

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

ADJUSTING FROM WAR TO PEACE IN 1940s BRITAIN

N F R Crafts

No.411

WARWICK ECONOMIC RESEARCH PAPERS



DEPARTMENT OF ECONOMICS

UNIVERSITY OF WARWICK COVENTRY

ADJUSTING FROM WAR TO PEACE IN 1940s BRITAIN

N F R Crafts

No.411

June 1993

This paper is circulated for discussion purposes only and its contents should be considered preliminary.

ADJUSTING FROM WAR TO PEACE IN 1940s BRITAIN

By
N.F.R. Crafts
(University of Warwick)

Paper presented at the Dublin Economic Workshop Guest Lecture at the Irish Economic Association Meeting, Galway, May 1993.

I. INTRODUCTION

New policy problems awaken interest in the past and provide economic historians both with a new agenda and new tools with which to revisit the historiography of a period. The transition from the command economy of wartime to the market forces of peacetime, now the focus of renewed attention as a result of the demise of communism in Eastern Europe, is an excellent case in point.

The economic history of late 1940s Britain has hitherto been written mainly by archives-led scholars and those involved in policy at the time and has been largely neglected by new economic historians. Much of the literature has been very supportive of the policy decisions of the Attlee government. For example, Tomlinson, in his widely read text, concludes that "this was a period of successful macroeconomic management by almost any standards" (1990, p.236). Cairncross summed up his magisterial account as follows: "How successful was the government? Measuring success in terms of the aims it set out in its 1945 election programme, it was obviously highly successful: full employment was maintained to almost universal surprise; there was no repetition of the inflationary boom of 1919-20 and the slump that followed; the entire programme of nationalization was carried out; the National Health service was successfully launched; the welfare state was put on a solid foundation" (1985, p. 507).

My general theme in this paper is that there are powerful arguments from the recent economics literatures on transition from socialism to capitalism and on economic growth to query these judgments. In particular, the success of the Attlee Years appears much more doubtful if a long rather than a short time horizon is adopted and if links between the macroeconomic policy framework and its microeconomic implications are considered. At the same time, exploring these issues will reveal some lessons for economic theorizers and will, I hope, reinforce the proposition that learning between economics and economic history should be a two-way process.

The main argument in the paper is that the postwar settlement in the UK was helpful in the short term in achieving a better inflation-unemployment performance but in the long term inhibited productivity growth. This happened because of the inheritance from the interwar economy of craft trade-unionism combined with monopolistic product markets and because the deal effectively precluded necessary reforms of industrial relations structures, vocational training and anti-trust policy while locking the economy in to high levels of direct taxation and nationalization even after the Conservatives returned to power in 1951.

Several distinctive features of the UK postwar position shaped the context of economic performance and should be kept in mind.

- (i) The prevailing imperatives of postwar macroeconomic policy were to cope with an horrendous balance of payments position (Cairncross, 1985) and a formidable monetary overhang (Eichengreen, 1992).
- (ii) American leverage on British policy was relatively weak but not entirely absent.
 Thus, the UK joined the European Payments Union but did not sign the Treaty of
 Rome and accepted the Anglo-American Productivity Council but was relatively
 immune to the conditionality of Marshall Plan funding (Eichengreen and Uzan, 1992).
- (iii) The scope for rapid growth from 'catch-up and reconstruction' was clearly less than in most OECD economies which in the late 1940s had a larger productivity gap with the US.

II. BASIC IDEAS

My revisionist approach to 1940s British economic history draws on the burgeoning literatures concerning economic reform in Eastern Europe and new growth theory.

Economists writing in the first of these have established something of a consensus reform prescription, moving as rapidly as possible on all fronts, comprising macroeconomic stabilization, price liberalization, currency convertibility, privatization and the creation of a social safety net (Fischer, 1992). Williamson (1991, p. 385) defines an agreed 'minimum bang' to include a set of microeconomic reforms including import liberalization as essential to generate competitive pressures on managers.

Arising from this general approach are three particularly interesting issues relating to the Attlee period.

- (i) Was the policy stance based on substantial continuing use of controls too gradualist and would a 'bigger bang' have been desirable?
- (ii) Would a "Thatcher-shock" involving much greater import competition and initially higher unemployment have been beneficial both for productivity performance and as an alternative way of restraining the wage bill while freeing resources from consumption for exports and investment?
- (iii) Were microeconomic reforms well-designed from the perspective of enhancing subsequent rapid economic growth?

The literature on endogenous growth argues that economic policy can have long-term growth rate effects by raising capital accumulation, contrary to the presumptions of the Solow model. The argument turns on the absence of diminishing returns to a broad concept of capital embracing human as well as physical components and the ability to influence saving and investment decisions based on intertemporal maximization (Rebelo, 1991). Provided accumulation strategies are controlled for recent theory also stresses the proposition that growth will be faster the bigger the initial productivity shortfall relative to the leader country. Empirical investigation of these hypotheses for a large cross-section of countries

finds robust evidence of the importance of catch-up, physical and human capital accumulation as determinants of growth performance (Levine and Renelt, 1992).

Nevertheless, economic historians have always stressed that catch-up is not an automatic process but depends on institutional arrangements which impact on the realization of catch-up potential (Abramovitz, 1986; Crafts, 1992). In this context a useful set of ideas on which to draw is the investigation of 1980s British productivity using bargaining models, well summarized in Wadhwani (1989). The implications are that competitive product markets and unemployment promote productivity as does a world of industrial as opposed to craft unions.

Arising from this literature are two more key issues:

- (i) Does the new growth theory provide any support for the most vociferous criticisms of the Attlee Government, for example Barnett (1986), that its expansion of the welfare state was seriously detrimental to growth?
- (ii) Did the macroeconomic policy framework have adverse effects on productivity improvement despite the government's obvious interest in raising efficiency in the context of the export drive?

III. A BRIEF REVIEW OF MACROECONOMIC OUTCOMES

The macroeconomic management problems confronting the postwar UK were, of course, formidable and in some ways quite similar to those recently facing Eastern European countries. At the peak in 1943 about 56% of NNP had been used for war purposes while in 1940-4 net non-war capital formation averaged minus 14% of NNP (Pollard, 1992, Table 5.8). Important features of the postwar position are reported in Table 1 which shows a large balance of payments deficit and reflects the unbalanced budgets of wartime and the monetary

overhang at the end of the war resulting from forced saving. The econometric estimates in Eichengreen (1992) suggest that even in 1950 real money balances were still about 50 per cent above what would willingly have been held.

TABLE 1

National Debt. Money Supply and Balance of Payments
(£mn current prices)

	Stock of National Debt M ₁ Balance of Pay		nce of Paym	ients	GDP at Factor Cost	
			Visible	Invisible	Current Account	
1938 1945 1950	8149 23774 25986	1862 4967 5710	-285 -250 -51	+230 -620 +524	-55 -870 +473	4932 8787 11391

Source: Mitchell (1988)

Stabilization of public finances after the war and a successful rescue of the balance of payments position are shown in Table 1. The position in terms of expenditure and output over the years of the Labour governments is reported in Table 2.

TABLE 2

The Short-Term UK Macroeconomic Position (1938=100)

GDP	IND Y	C	I	\mathbf{G}	X	M
					113.3 142.2	

Sources: Feinstein (1972) except for industrial production taken from Eichengreen and Uzan (1992).

The UK experienced a revival of industrial output at about the average rate of Western Europe excluding Germany (Eichengreen and Uzan, 1992, Table 7) while the policy priority in a tightly controlled economy given to increases in exports and, to a lesser extent,

investment over consumption is clearly reflected. Restraints on consumption during this period of postwar austerity were severe.

Perhaps surprisingly in these circumstances, the late 1940s were characterized both by moderate inflation (an average of about 5% for 1946-51) and very low unemployment rates (around 1.5% as measured at the time). In terms of conventional models this seems to suggest a period when the NAIRU was low. Yet in terms of the well-known models of Layard and Nickell (1985) and Dimsdale et al. (1989) which consider separately the postwar and interwar economies respectively, one would have expected a significantly higher NAIRU postwar. Broadberry (1991) points this out noting accelerated structural change, higher trade union density and taxation and adverse shifts in the terms of trade. His econometric analysis resolves the puzzle and indicates a structural break in wage setting behaviour led to a large fall in the NAIRU.

TABLE 3

UK Macroeconomic Performance in the 1950s

	UK	12 Country Median
Growth of Real GDP\Hour Worked (% per annum)	2.3	4.0
Standardized Unemployment Rate (%)	2.5	2.6
CPI Inflation Rate (% per annum)	4.1	3.6
Misery Index (%)	6.6	6.7

Source: Derived from Maddison (1982). The Misery Index is the sum of the inflation and unemployment rates; the 12 countries are the European economies in Maddison's advanced countries database.

Table 3 shifts the focus to 1950s. Here the Misery Index sustains its good performance while international comparisons show British performance on unemployment and inflation to be pretty typical of Western Europe at the time. Productivity growth was,

however, distinctly lower than elsewhere. While initially this could be put down to the after effects of the war, by the end of the 1950s it was becoming accepted that persistently lower UK growth required policy reform particularly in terms of the supply-side (Kirby, 1991).

IV. THE ATTLEE AND CHURCHILL ADMINISTRATIONS RECONSIDERED

The early postwar governments can now be assessed in terms of the questions posed in section II. The general policy picture was one of a strong commitment to macroeconomic stabilization, a much expanded welfare state and very limited attention given to reforming the supply side of the economy. It should be remembered that in most respects the policy shift in 1951 was quite limited. As Addison puts it "By the late 1940s the collectivist hour was over, but the new collectivist state was set in concrete. In all its fundamentals, the Conservatives accepted it" (1987, p.7). More pungently, Seldon describes the Churchill government as "one of the wettest administrations of the century" (1987, p.65).

Seen from the perspective of modern macroeconomics, the period 1945-55 can be thought of as an episode when governments sought a 'social contract' to lower the NAIRU. The TUC and key trade union leaders were persuaded to accept and encourage wage restraint in return for welfarism, expanded public ownership, leaving industrial relations unreformed and commitments to full employment and re-distribution of incomes (Flanagan et al., 1983; Tomlinson 1991). The Conservatives on returning to office in 1951 pursued a policy amounting to appearsement of the trade unions, authorized personally by Churchill and headed by Monckton, Minister of Labour, who was nicknamed 'the oil-can" (Smith, 1990). Although Broadberry (1991) suggests that this paid off in terms of short run macroeconomic performance, there may have been a considerable price to pay in terms of growth performance, an issue explored in the following sections.

(a) Macroeconomic Stabilization

In many respects the policy framework chosen resembles that which the IMF would recommend nowadays in Eastern Europe. The budget was quickly balanced with a high priority given to containing inflation. Indeed the approach of successive governments to their dealings with organized labour was closely linked to the continuing danger of wage inflation, which was the chief fear of prominent Keynesians like Meade (Jones, 1987). The postwar situation was precarious and the avoidance of substantial inflation was in one sense a major achievement, although perhaps costly in terms of efficiency.

Some key aspects of macroeconomic policy were maintained virtually throughout. First, a nominal anchor was accepted in the form of a fixed exchange rate, which was devalued only once in September 1949, by about 9% against a trade weighted currency basket (30% against the dollar) (Cairncross and Eichengreen, 1983). Second, substantial budget deficits were eschewed and the ratio of the stock of national debt to GDP fell from an average of 244% in 1946-50 to 133% in 1956-60 (Hatton and Chrystal, 1991, p.75). Third, convertibility of the pound sterling was not restored until 1958, with the exception of a short-lived, disastrous experiment in 1947.

TABLE 4
Controls, 1946-51 (%)

	1946	1948	1951
Consumer Expenditure Rationed	28	31	10
Imports Controlled	96	91	54
Industrial Raw Materials Controlled	94	81	41
Price Controlled Goods/ Consumption	48	49	40

Source: Dow (1964).

At the outset, policy relied heavily on direct controls, as Table 4 reports. Clearly, a gradualist policy was adopted with regard to liberalization prompted by lessons drawn from the experience of 1919-22. As controls were relaxed and capital mobility increased, an initial policy of cheap money gave way to one in which interest rates responded to pressure on the pound and were appreciably higher. Towards the end of Labour's administration and clearly under the Conservatives primitive attempts at planning the growth of demand through controls were replaced by the attempted fine tuning of Keynesian demand management.

TABLE 5

Average Tariff Levels (%)

	1925	1931	1952
France	19	38	19
Germany	15	40	16
Italy	16	48	24
UK	4	17	17
USA	26	na	16

Source: Irwin (1993)

Liberalization of external trade was resisted by a Labour government seeking to rectify a difficult balance of payments position and worried by the weakness of British firms in the face of American competition. Concessions were made in the face of American pressure, notably in the form of accepting membership of the European Payments Union (Burnham, 1990, pp.106-7), but in 1952 tariffs were no lower than after the abandonment of free trade in 1932. The devaluation of 1949 has generally been heralded as successful and a depreciation of the real exchange rate seen as necessary for combining internal and external balance (Cairncross and Eichengreen, 1983). Through the 1950s interest rates were generally a little above American levels, enough to indicate slight doubts about the credibility of the commitment to \$2.80, but the competitiveness gain was not completely eroded until the late 1950s (Obstfeld, 1992).

In many respects, then, macroeconomic policy appears to conform to the current IMF textbook approach. There are, however, obviously some departures. These include the rejection of a currency reform, the long delay before resuming convertibility and the persistence of a serious monetary overhang for about ten years after the war. Given Eichengreen's estimates, a large adjustment of both the price level and the exchange rate would have been required if this overhang were to be eliminated that way, as implied by a 'big bang' approach to rapid liberalization, and convertibility restored.

In these circumstances of disequilibrium, an attempt to return to convertibility at a fixed exchange rate was bound to lead to rapid exhaustion of Britain's foreign exchange reserves, as, of course, 1947 showed only too clearly. Given the attempts at social contract with the trade unions, the alternative of convertibility and decontrol with further substantial depreciation of the pound was unattractive to the government in view of its possible terms of trade effects, as the debate over the so-called Robot scheme proved in 1952 (Eichengreen, 1992, pp. 58-9).

The implications of this strategy, (failure to eliminate the monetary overhang, continued use of controls, non-convertibility, pegging the exchange rate, appearement of the TUC), understandable as it was, for coping with the inflationary threat were that serious restraints were placed on the policies which might be used to promote faster growth. In particular, gradualism implied that opportunities to increase competitive pressures on managers of British firms were foregone - there would be no Thatcher-shock.

(b) Tax and Benefit Policies

An obvious feature of postwar Britain was the expanded size of the government budget and taxation relative to GDP and the priority given to welfare state expenditures while at the same time relatively large defence expenditures were sustained. The changed political climate reflected the wartime Beveridge Report (Cmnd. 6404, 1942), perhaps the most

famous and popular inquiry into social security ever published, which had argued the need to double benefit expenditures. Barnett (1986), in a celebrated polemic, placed much of the blame for subsequent postwar decline on this 'New Jerusalemism'.

New Growth Theory stresses in particular the importance for growth of high marginal rates of direct taxation as a deterrent to accumulation of both physical and human capital. The share of direct taxes in private income from production doubled, rising from 11% in 1938 to 22% in 1949 (Weaver, 1950, p. 202).

TABLE 6

50 Years of Personal Income Taxes

	Standard Rate (%)	Top Rate (%)
1938	25	62.5
1949	45	97.5
1961	38.75	88.75
1973	38.75	88.75
1979	33	83
1989	25	40

Source: Reports of the Inland Revenue Commissioners; rates in force on January 1.

As Table 6 reports, a particularly damaging feature of the shift to increased direct taxation was not so much the average level of taxes as the extremely high marginal rates contained in the system which proved politically very difficult to reform once imposed. Tanzi (1969, pp. 123-6) indeed argues that the British income tax system had a structure much less conducive to investment and growth than any other OECD country he studied.

TABLE 7

Taxation, Government Spending & Investment (%GDP)

	UK	12 Country Median
Total Tax Receipts (1955)	29.8	26.6
Tax Excluding Consumption Taxes (1955)	19.6	17.1
Total Government Outlays (1960)	32.2	30.6
Defence Expenditure (1950-9)	7.5	3.6
Residential Construction (1950-9)	3.0	4.7
Machinery and Equipment Investment (1950-9)	7.4	8.4

Sources: OECD (1970), (1981), (1992)

This seems to be the most potent line of argument with which to elaborate an attack on the postwar tax and benefit system. Table 7 shows that the UK was only a little more heavily taxed than the median OECD country while the exceptionally large burden in government spending was on defence rather than social transfers. Table 7 makes it seem unlikely that the major reason for relative economic decline in postwar Britain was the expansion of state spending per se.

What accounts for the high level of direct taxation? Clearly the Beveridge approach to social welfare was unduly expensive and over-reliant on a contingency benefits/social insurance structure (Dilnot et al., 1984). As might be expected, a sizeable fraction of benefits went to the non-poor - Weaver's estimates suggest that about 25% of expenditures in 1949 were received by the middle or wealthy classes and that, if these flows had been eliminated, direct taxation could have remained at its 1938 level without unbalancing the budget (1950, p.202, 208). In a wartime civil service memo, Hubert Henderson noted that "most of the

additional money that is to be spent will go to persons whose incomes are already above the defined poverty line" (1955, p.195).

Nevertheless, the main reason for initiating such a progressive system of income taxation was as a framework for restraining consumption, which was desirable from a macroeconomic point of view, within the social contract (Ilersic, 1955, p.115). Thus, the rationale can be seen as similar to that of retaining rationing and other direct controls and stressed restricting the consumption of wealthy persons rather than that of the working class. In this, policy was successful; Weaver (1950, p.212) estimated total working class consumption in 1949 to be 22% higher than in 1938 (in a now much more fully employed economy) while middle class and wealthy class consumption were, respectively, 18% and 42% lower.

Whether clear links can be drawn between this approach to taxation and the relatively low level of UK capital formation, also reflected in Table 7, remains to be established. Similarly, the timidity of subsequent governments prior to the 1980s in the field of tax reform requires further research.

(c) Supply-Side Policies for Growth

There is no doubt that the Labour government keenly desired to improve UK productivity performance to ease their macroeconomic management task (Tomlinson, 1993). Nonetheless, preoccupied and circumscribed by the problems of and their strategy for macroeconomic management, microeconomic policies were ill designed from this perspective.

Competition policy epitomizes this. The UK emerged from the 1930s and the war with a proliferation of collusive agreements covering perhaps 60% of manufacturing output and frequently sustaining inefficient producers (Gribbin, 1978). At the same time, company

law was in some disrepute following interwar scandals, such as the notorious Royal Mail case (Edwards, 1989) and the poor performance of the interwar economy had persuaded many of the case for a mixed economy. Key decisions were implemented in the period 1947-9 which included the nature and responsibilities of the Monopolies and Restrictive Practices Commission, a new Companies Act and the nationalization of nearly 10% of GDP which would henceforth account for about a fifth of all investment, including coal-mining, railways, gas and electricity (Dunkerley and Hare, 1991).

Both firms' and workers' representatives argued strongly in the years 1944-8 against wartime Board of Trade proposals to introduce tough anti-trust legislation. The short-term imperative of solving the postwar balance of payments problem proved to be their decisive weapon with the result that anti-trust policy was rendered effectively toothless until the Restrictive Practices Act of 1956 (Johnman, 1991; Mercer, 1991). Since the threat of import competition remained relatively remote for most manufacturers - the share of imports in home demand was only 4.7% in 1955 (Scott, 1963, p.41) - an important avenue to raising productivity growth, increasing competition in the product market, was completely closed.

By contrast, the pressure of competitive forces bearing on management through the capital market was substantially strengthened as a result of the 1948 Companies Act. The disclosure requirements brought to Britain for the first time the hostile takeover bid (Hannah, 1974) and by the late 1950s a merger boom was well on the way. In one sense this was a very positive development seen against the background of sleepy and self-perpetuating, amateurish management revealed in studies like those of the Acton Society Trust (1956). On the other hand, in retrospect, it appears at best a mixed blessing. Studies of the merger and takeover boom which began in the mid-1950s have found little evidence that, in practice, it resulted in better productivity performance or selectively eliminated bad managers (Cowling et al., 1980; Meeks, 1977; Singh, 1975) and, relative to German-style capital markets, it seems to have risked short-termism in managerial investment decisions (Franks and Mayer, 1990).

The main thrust of pro-growth policies was intervention to subsidize various forms of investment. Here, with the exception of policy on training, there were less constraints from industry or the unions but there seem to have been serious deficiencies in the approach adopted. Initial allowances on industrial investment were introduced in 1945 and Morris and Stout (1985) characterised the period from then until 1972 as one where policy stressed 'investment led growth', much as might be advocated by some new growth theorists.

Investment allowances were added in 1954. Tax savings on investment were £17 mn. (2.5%) in 1953 rising to £165 mn. (9.5%) by 1960 (Musgrave and Musgrave, 1968, p.59). It is generally accepted that these incentives had rather little effect on the volume of investment, one important reason being the frequency with which the rules changed as a consequence of their being used primarily as an instrument of demand management (Kirby, 1991, pp. 241-2).

Research and development was another major area of policy intervention. Whereas in the 1930s the UK had spent less than 0.3% of GDP on R & D (Sanderson, 1972) by 1955 this had risen to 1.7% and by 1960 to 2.5%, second only to the United States in the OECD (United Nations, 1964). Much of this was state funded - state expenditure of £114 mn. in 1950/1 rose to £196 mn. in 1955/6 and £289 mn. in 1961/2 compared with private industry spending of £24 mn., £77 mn. and £248 mn. in the same years (Edgerton, 1991). A great deal of this funding went to defence-related activities and it is widely agreed that this offered little in the way of the externalities envisaged by new growth theory to the rest of the economy.

From the standpoint of the early 1990s the scant attention paid by the government to the reform of educational syllabuses and, especially to training, seems quite astonishing. Relatively early school-leaving continued to prevail (United Nations, 1964). Reliance was still placed on the traditional systems of apprenticeship and on-the-job training, although shrewd observers recognized that in countries like Germany more workers were trained to obtain higher, examined qualifications (Barnett, 1986) and that the British system of

apprenticeship was more a method of restricting entry to skilled occupations than a reliable method of assuring quality training (Liepmann, 1960).

Here there probably were serious problems arising from the social contract.

Intervention to reform training would have involved a serious breach of the sacred principle of voluntarism in industrial relations. The difficulties were revealed when, in 1964, an Industrial Training Act was passed involving a compulsory levy system on employers to establish training boards. This was designed to meet trade union concerns but as such failed to meet the need for establishing a much higher stock of flexible, transferable skills (Vickerstaff, 1985).

The process of empirical investigation of postwar British economic growth using the insights of these new models is only just beginning but some early results are worth noting. First, econometric investigation at the NIESR of a cross-section of British manufacturing for 1954-86 rejects the hypothesis of externalities to physical capital investment postulated in Romer (1986) and concludes that there are strongly diminishing returns to fixed capital formation, as in traditional growth accounting (Oulton, 1992).

Second, further econometric work by the NIESR finds evidence of significant externalities in British manufacturing coming from human capital, and to research and development expenditures (O'Mahony, 1992). This suggests that the crucial policy mistakes and/or institutional failures may have lain in this direction rather than in inappropriate subsidies to physical investment and that further research should concentrate on these aspects of the British supply-side.

V. THE FAILURE OF POSTWAR CATCH-UP IN BRITAIN RE-EXAMINED

The relative economic decline which policymakers were beginning to sense by the later 1950s and 1960s is indeed confirmed by Table 8. This shows France and Germany by

1960 well on the way to overtaking British levels of overall labour productivity while Britain failed to reduce the American lead in GDP/person employed between 1950 and 1960.

Relatively weak UK performance in manufacturing productivity is also confirmed in Table 8.

TABLE 8

Comparative UK Productivity Levels (UK = 100)

	USA/UK	France/UK	Germany/UK
a) GDP per person Er	nployed		
1938 1950 1960 1973	143.0 167.4 167.5 151.6	70.0 69.7 88.6 110.2	74.9 63.3 90.2 104.7
b) Manufacturing Ou	tput per Pers	on Employed	
1938 1950 1958 1968	191.6 262.6 250.0 242.6	76.3 83.9 91.1 109.1	107.1 96.0 111.1 120.0

Source: GDP per person employed based on Maddison (1991) and manufacturing output per person employed based on Broadberry (1992); the comparisons are purchasing power parity adjusted.

It is generally accepted that postwar OECD growth performance has been strongly influenced by differential scope for catch-up (Dowrick and Nguyen, 1989; Englander and Mittelstadt, 1988). Formal tests of models which includes this variable together with measures of factor accumulation confirm that British growth was disappointing. Normalizing for the initial productivity gap, British productivity growth appears to have been 0.8% per year lower than might have been expected (Crafts, 1992). Similarly, implementation of Levine and Renelt's robust regression results (1992, Table 5) indicates a shortfall of about 0.7% per year relative to predicted growth given physical and human capital accumulation and catch-up potential in the UK. This is in fact very much what might be expected, given Denison's classic growth accounting exercise. Table 9 rearranges Denison's own presentation of his results to emphasize this point.

TABLE 9

Differences in the Sources of Growth, 1950-62

	Excess Over the OK	
	France	Germany
Labour Input Capital Input Total Factor Productivity "Backwardness" Other Specific Residual Efficiency	-0.15 0.28 2.50 1.47 0.31 0.72	0.77 0.90 3.30 2.14 0.35 <u>0.81</u>
Total	2.63	4.97

Source: Derived from Denison (1968, Table 6.4); 'Backwardness' is the sum of rows 20 and 24 in Denison's table, other specific is row 14 and

Evenes Over the IIK

residual efficiency in row 29.

The main difference between the UK and her rivals is seen to lie in total factor productivity growth, rather than capital inputs growth. Indeed, as has long been remarked, the most striking feature of this period is not that British investment spending was low but that the British incremental capital to output ratio was high. While a large part of the greater productivity growth came from the greater initial backwardness of France and Germany, associated particularly with their greater scope to redeploy resources away from low productivity agriculture, a deficiency of 0.7% and 0.8% per year respectively is attributed to lesser British success in eradicating inefficiency. Indeed a major theme of Denison's paper was the substantial shortfall in UK productivity levels in 1960 coming from differences in work effort, restrictive practices and management quality; he estimated that this amounted to a shortfall of 14.3% relative to France and 13.2% relative to Germany (1968, p.274).

While there appears to be a growth shortfall which new growth theory cannot fully explain, invoking the bargaining model of productivity could be helpful. Seen from this perspective, the postwar settlement and method of macroeconomic management would surely seem conducive to low productivity bargaining equilibria, notably through inhibiting reform of industrial relations and product market competition, while sustaining very high

employment levels. If such a model fits the data, then it would be reasonable to conclude that a significant ongoing price was paid for the social contract trajectory of transition from war to peace in terms of productivity foregone.

TABLE 10
The Oxford Survey (1947-9): Adverse Effects on Labour Effort

	Yes	No
Effects on Attitudes of Current Labour Shortage	12	2
Restrictive Labour Practices	9.5	6
Direct Taxation of Wages	15	4

Source: Andrews and Brunner (1950)

Certainly, there is source material from the time which is supportive of these inferences; for example, Table 10 reports some findings of a survey of businessmen. Better known are the reports of the Anglo-American Productivity Council which frequently indicate a behavioural productivity gap and low effort equilibria, often highlighting influences of the sort proposed by the model.

Table 11 reports the results of an attempt at econometric estimation of a reduced form of the bargaining model similar to that used for the work on the 1980s UK and summarized in Wadhwani (1989). The model has plausible coefficients and obtains correct signs, though some variables are statistically insignificant, with results that are similar to those obtained by Broadberry and Crafts (1992) for interwar Britain. It would seem likely that the chosen method of macroeconomic stabilization, the approach to improving the balance of payments, the failure to reform industrial relations and the obstacles to increasing product market competition all combined to lower productivity relative to a more thorough and rapid liberalization of the wartime economy.

TABLE 11

Cross-Section Regression of Bargaining Model for Productivity Growth in UK Manufacturing, 1954-63

CONSTANT	2.508 (4.525)
AACP	0.486 (1.165)
CAPLABGR	0.216 (2.735)
DELTACR5	-0.039 (-1.513)
EMPSHOCK	0.746 (1.709)
LOCALAGT	-0.033 (-3.728)
OUTPUTGR	0.465 (7.319)

 $R^2 = 0.541$; N = 57

Definitions of variables are as follows: Caplabgr is the rate of growth of the capital to labour ratio, DeltaCR5 is the change in the 5-firm concentration ratio, Empshock is a dummy variable = 1 if employment fell in the preceding period (1948-54), Localagt is the percentage of workers covered by local collective bargaining agreements, Outputgr is the rate of growth of real output and AACP is a dummy variable taking the value 1 if there was a report on the industry from the Anglo-American Productivity Council.

Source: Crafts (1993) in which full details of data are given. t-statistics in parentheses, dependent variable is labour productivity growth.

VI. CONCLUSIONS AND SOME IMPLICATIONS

The preceding sections present a strong prima facie case that the conventional historical literature is too sanguine about the Attlee government's economic policy. With respect to the questions posed at the start of the paper, arguments have been set out that the transition from war was handled in too gradualist a manner, that accepting the short run unemployment costs of a somewhat more Thatcherite policy would have had some benefits in higher subsequent productivity, that microeconomic, especially competition, policy was badly handled and that the macropolicy framework effectively ruled out some productivity enhancing policies. While welfare state spending should not be given too prominent a place in the list of policy mistakes, the structure of direct taxation does appear to have been unfortunate.

What lessons are there for today's economists from this historical experience? First, and most obviously, it should be clear that catch-up is not an automatic process. It follows

that it will not be possible accurately to forecast East European growth prospects using a simple model derived from new growth theory despite some brave attempts to do so (Cohen, 1991). More generally it would seem that growth theorists may be devoting too much attention to the implications of factor accumulation and too little to the efficiency with which factors of production are used.

Second, while the conventional wisdom that macroeconomic stabilization is essential for the transition from a command to a market economy is surely correct, the British experience suggests that avoiding inflation at all costs and minimizing unemployment in the early phase can be costly in terms of reducing long-run growth. Short term performance should not be given too high a weight in judging alternative plans for transition.

Third, in designing blueprints for reform, political constraints need to be respected. Economics tells us that quite a large part of Labour's postwar strategy was misconceived - political historians will, no doubt, respond that they had only very limited choices, a view which seems implicitly to be endorsed by the 'wetness' of the succeeding Churchill administration.

Finally, the dog that didn't bark; note the absence from this account of discussion of reference to the Marshall Plan and the conditionality of American aid. This is quite intentional and also contains a message. Historians of the period (e.g., Milward, 1984) now regard this as a very minor part of the recovery story - the amounts were small and the leverage on European governments generally minor, given the need the Americans had for their continuation in office. Maybe, we should expect that experience with Russia will be similar.

REFERENCES

- Abramovitz, M. (1986), "Catching Up, Forging Ahead and Falling Behind", *Journal of Economic History*, 46, 385-406.
- Acton Society Trust (1956), Management Succession (London).
- Addison, P. (1987), "The Road From 1945", in P. Hennessy and A. Seldon (eds.), *Ruling Performance*, (Oxford: Blackwell), 5-27.
- Andrews, P.W.S. and Brunner, E. (1950), "Productivity and the Business Man", Oxford Economic Papers, 2, 197-225.
- Barnett, C. (1986), The Audit of War, (London: Macmillan).
- Beveridge, W.H. (1942), Social Insurance and Allied Services, Cmnd. 6404, (London:HMSO).
- Broadberry, S.N. (1991), "Why was Unemployment in Postwar Britain So Low?", CEPR Discussion Paper No. 541.
- Broadberry, S.N. (1992), "Comparative Productivity Performance in Manufacturing since the Early Nineteenth Century: Europe and the United States", mimeo, University of Warwick.
- Broadberry, S.N. and Crafts, N.F.R. (1992), "Britain's Productivity Gap in the 1930s: Some Neglected Factors", *Journal of Economic History*, 52, 531-558.
- Burnham, P. (1990), *The Political Economy of Postwar Reconstruction*, (London: Macmillan).
- Cairncross, A. (1985), Years of Recovery, (London: Methuen).
- Cairncross, A. and Eichengreen, B. (1983), Sterling in Decline, (Oxford: Blackwell).
- Cohen, D. (1991), "The Solvency of Eastern Europe", CEPR Discussion Paper No. 539.
- Cowling, K., Stoneman, P., Cubbin, J., Cable, J., Hall, G., Domberger, S. and Dutton, P. (1980), *Mergers and Economic Performance*, (Cambridge: Cambridge University Press).
- Crafts, N.F.R. (1992), "Productivity Growth Reconsidered", Economic Policy, 15, 387-426.
- Crafts, N.F.R. (1993), "'You've Never Had It So Good?': British Economic Policy and Performance, 1945-60.", in B. Eichengreen (ed.), *Europe's Postwar Recovery*, (London: Routledge), forthcoming.
- Denison, E.F. (1968), "Economic Growth", in R. E. Caves (ed.), *Britain's Economic Prospects*, (London: Allen & Unwin), 231-278.
- Dilnot, A.W., Kay, J.A. and Morris, C.N. (1984), *The Reform of Social Security*, (Oxford: Clarendon Press)
- Dimsdale, N.H., Nickell, S.J. and Horsewood, N. (1989), "Real Wages and Unemployment in Britain during the 1930s", *Economic Journal*, 99, 271-292.
- Dow, J.C.R. (1964), *The Management of the British Economy 1945-60*, (Cambridge: Cambridge University Press).

- Dowrick, S. and Nguyen, D-T. (1989), "OECD Comparative Economic Growth 1950-85: Catch-Up and Convergence", *American Economic Review*, 79, 1010-1030.
- Dunkerley, J. and Hare, P. (1991), "Nationalized Industries", in N. F. R. Crafts and N. W. C. Woodward (eds.), *The British Economy Since 1945*, (Oxford: Clarendon Press), 381-416.
- Edgerton, D. (1991), England and the Aeroplane, (London: Macmillan).
- Edwards, J.R. (1989), A History of Financial Accounting, (London: Routledge)
- Eichengreen, B. (1992), "Was the European Payments Union a Mistake?", paper presented to CEPR Workshop on Institutions and Economic Growth, London.
- Eichengreen, B. and Uzan, M. (1992), "The Marshall Plan: Economic Effects and Implications for Eastern Europe and the Former USSR", *Economic Policy*, 14, 13-75.
- Englander, A.S. and Mittelstadt, A. (1988), "Total Factor Productivity: Macroeconomic and Structural Aspects of the Slowdown", *OECD Economic Studies*, 10, 7-56.
- Feinstein, C.H. (1972), National Income, Expenditure and Output of the United Kingdom, 1855-1965, (Cambridge: Cambridge University Press).
- Fischer, S. (1992), "Stabilization and Economic Reform in Russia", *Brookings Papers in Economic Activity*, 1, 77-111.
- Flanagan, R.J., Soskice, D.W. and Ulman, L. (1983), *Unionism, Economic Stabilization and Incomes Policies: The European Experience*, (Washington, DC: Brookings Institution).
- Franks, J. and Mayer, C. (1990), "Capital Markets and Corporate Control: A Study of France, Germany and the UK", *Economic Policy*, 10, 191-231.
- Gribbin, J. D. (1978), "The Postwar Revival of Competition as Industrial Policy", Government Economic Service Working Paper No. 19.
- Hannah, L. (1974), "Takeover Bids in Britain before 1950: An Exercise in Business Pre-History", Business History, 16, 65-77.
- Hatton, T.J. and Chrystal, K.A. (1991), "The Budget and Fiscal Policy", in N.F.R. Crafts and N.W.C. Woodward (eds.), *The British Economy since 1945*, (Oxford: Clarendon Press), 52-88.
- Henderson, H.D. (1955), The Interwar Years and Other Papers, (Oxford: Clarendon Press).
- Ilersic, A.R. (1955), Government Finance and Fiscal Policy in Postwar Britain, (London: Staples Press).
- Irwin, D., A. (1993), "The Gatt's Contribution to Economic Recovery in Postwar Europe", in B. Eichengreen (ed.), *Europe's Postwar Recovery*, (London: Routledge), forthcoming.
- Johnman, L. (1991), "The Labour Party and Industrial Policy, 1940-5", in N. Tiratsoo (ed.), *The Attlee Years*, (London: Pinter), 29-53.
- Jones, R. (1987), Wages and Employment Policy, 1936-1985, (London: Allen & Unwin).

- Kirby, M.W. (1991), "Supply-Side Management", in N.F.R. Crafts and N.W.C. Woodward (eds.), *The British Economy Since 1945*, (Oxford: Clarendon Press), 236-260.
- Layard, R. and Nickell, S.J. (1985), "The Causes of British Unemployment", *National Institute Economic Review*, 111, 62-85.
- Levine, R. and Renelt, D. (1992), "A Sensitivity Analysis of Cross-Country Growth Regressions", *American Economic Review*, 82, 942-963.
- Liepmann, K. (1960), Apprenticeship: An Enquiry into its Adequacy under Modern Conditions, (London: Routledge & Kegan Paul).
- Maddison, A. (1982), Phases of Capitalist Development, (Oxford: Oxford University Press).
- Maddison, A. (1991), Dynamic Forces in Capitalist Development, (Oxford: Oxford University Press).
- Meeks, G. (1977), Disappointing Marriage, (Cambridge: Cambridge University Press).
- Mercer, H. (1991), "The Monopolies and Restrictive Practices Commission, 1949-56: A Study in Regulatory Failure", in G. Jones and M.W. Kirby (eds.), Competitiveness and the State: Government and Business in Twentieth Century Britain, Manchester: Manchester University Press), 78-99.
- Milward, A. (1984), The Reconstruction of Western Europe, 1945-51, (London: Methuen).
- Mitchell, B.R. (1988), *British Historical Statistics*, (Cambridge: Cambridge University Press).
- Morris, D.J. and Stout, D.K. (1985), "Industrial Policy", in D.J. Morris (ed.), *The Economic System in the UK*, (Oxford: Oxford University Press), 851-894.
- Musgrave, R.A. and Musgrave, P.B. (1968), "Fiscal Policy", in R. E. Caves (ed.), *Britain's Economic Prospects*, (London: Allen & Unwin), 21-67.
- Obstfeld, M. (1992), "The Adjustment Mechanism", CEPR Discussion Paper No. 648.
- OECD (1970), National Accounts, 1950-1968, (Paris: OECD).
- OECD (1981), Long Term Trends in Tax Revenues of OECD Member Countries, 1955-1980, (Paris: OECD).
- OECD (1992), Historical Statistics, 1960-1990, (Paris: OECD).
- O'Mahony, M. (1992), "Productivity and Human Capital Formation in UK and German Manufacturing", National Institute of Economic and Social Research Discussion Paper No. 28.
- Oulton, N. (1992), "Investment, Increasing Returns and the Pattern of Productivity Growth in UK Manufacturing, 1954-86", National Institute of Economic and Social Research Discussion Paper No. 5.
- Pollard, S. (1992), The Development of the British Economy, 1914-1990, (London: Arnold).
- Rebelo, S. (1991), "Long-run Policy Analysis and Long-run Growth", *Journal of Political Economy*, 99, 500-521.

- Romer, P.M. (1986), "Increasing Returns and Long-Run Growth", *Journal of Political Economy*, 94, 1002-1037.
- Sanderson, M. (1972), "Research and the Firm in British Industry, 1919-39", Science Studies, 3, 107-151.
- Scott, M. (1963), A Study of UK Imports, (Cambridge: Cambridge University Press).
- Seldon, A. (1987), "The Churchill Administration, 1951 -1955", in P. Hennessy and A. Seldon (eds.), *Ruling Performance*, (Oxford: Blackwell), 63-97.
- Singh, A. (1975), "Takeovers, Natural Selection and the Theory of the Firm: Evidence from the Postwar UK Experience", *Economic Journal*, 85, 497-515.
- Smith, J.D. (1990), The Attlee and Churchill Administrations and Industrial Unrest, 1945-55: A Study in Consensus, (London: Pinter).
- Tanzi, V. (1969), *The Individual Income Tax and Economic Growth*, (Baltimore: Johns Hopkins University Press).
- Tomlinson, J. (1990), Public Policy and the Economy Since 1900, (Oxford: Clarendon Press).
- Tomlinson, J. (1991), "The Labour Government and the Trade Unions, 1945-51", in N. Tiratsoo (ed.), *The Attlee Years* (London: Pinter), 90-105.
- Tomlinson, J. (1993), "Mr Attlee's Supply-Side Socialism", *Economic History Review*, 46, 1-22.
- United Nations (1964), Some Factors in the Economic Growth of Europe during the 1950s, (Geneva: United Nations).
- Vickerstaff, S. (1985), "Industrial Training in Britain: the Dilemmas of a Neo-Corporatist Policy", in A. Cawson (ed.), *Organised Interests and the State*, (London: SAGE Publications), 45-64.
- Wadhwani, S. (1989), "The Effects of Unions on Productivity Growth, Investment and Employment: A Report on Some Recent Work Centre for Labour Economics, London School of Economics, Discussion Paper No. 356.
- Weaver, F. (1950), "Taxation and Redistribution in the United Kingdom", Review of Economics and Statistics, 32, 201-213.
- Williamson, J. (1991), "The Economic Opening of Eastern Europe", in J. Williamson (ed.), *Currency Convertibility in Eastern Europe*, (Washington DC.: Institute for International Economics), 363-431.