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Adjusting from War to Peace in 1940s Britain

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Abstract: Most assessments of British economic policy in the transition from war to peace after 1945 praise the strategy adopted. This paper draws on recent growth theory and analysis of eastern European liberalisation to argue that British policy was seriously flawed. In particular, a heavy price was paid for the social contract and delayed liberalisation in the 1945-55 period in terms of subsequent growth and productivity performance. Policy choices, notably with regard to taxation and industrial relations, were, however, heavily constrained by political circumstances.

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,

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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 nationalisation 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 literature on transition from socialism to capitalism and on economic growth to query these judgements. 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 theorisers 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 post-war 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 inter-war 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 nationalisation even after the Conservatives returned to power in 1951.

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

(i) The prevailing imperatives of post-war 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 literature 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 stabilisation, price liberalisation, currency convertibility, privatisation 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 liberalisation 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 maximisation (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 realisation 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 summarised 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 post-war 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 per cent of NNP had been used for war purposes while in 1940-44 net non-war capital formation averaged minus 14 per cent of NNP (Pollard, 1992, Table 5.8). Important features of the post-war 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 (£m current prices)*

	Stock of National Debt	M_1	*Balance of Payments* *Visible*	*Invisible*	*Current Account*	*GDP at Factor Cost*
1938	8,149	1,862	–285	+230	–55	4,932
1945	23,774	4,967	–250	–620	–870	8,787
1950	25,986	5,710	–51	+524	+473	11,391

Source: Mitchell (1988).

Stabilisation 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. The UK experienced a revival of industrial output at about the average rate of Western Europe excluding Germany (Eichengreen and Uzan,

Table 2: *The Short-term UK Macroeconomic Position (1938=100)*

	GDP	*IND Y*	*C*	*I*	*G*	*X*	*M*
1948	111.9	120	100.3	100.8	129.1	113.3	85.3
1951	123.4	145	103.6	116.6	147.2	142.2	99.3

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

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 post-war austerity were severe.

Perhaps surprisingly in these circumstances, the late 1940s were characterised both by moderate inflation (an average of about 5 per cent for 1946-51) and very low unemployment rates (around 3.5 per cent for 1946-51) and very low unemployment rates (around 1.5 per cent 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 post-war and inter-war economies respectively, one would have expected a significantly higher NAIRU post-war. 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 that a structural break in wage setting behaviour led to a large fall in the NAIRU.

Table 3 shifts the focus to the 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).

Table 3: *UK Macroeconomic Performance in the 1950s*

	UK	*12 Country Median*
Growth of Real GDP/Hour Worked (% per annum)	2.3	4.0
Standardised 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.

IV THE ATTLEE AND CHURCHILL ADMINISTRATIONS RECONSIDERED

The early post-war 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 stabilisation, 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 appeasement of the trade unions, authorised 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 Stabilisation

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 organised labour was closely linked to the continuing danger of wage inflation, which was the chief fear of prominent Keynesians like Meade (Jones, 1987). The post-war 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 per cent against a trade weighted currency basket (30 per cent 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 per cent in 1946-50 to 133 per cent 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 experience in 1947.

At the outset, policy relied heavily on direct controls, as Table 4 reports. Clearly, a gradualist policy was adopted with regard to liberalisation 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 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).

Liberalisation 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

Table 5: *Average Tariff Levels (%)*

	1925	*1931*	*1952*
France	19	30	19
Germany	15	40	16
Italy	16	48	24
UK	4	17	17
USA	26	na	16

Source: Irwin (1993).

for about 10 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 liberalisation, 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, appeasement 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 post-war 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. 6406, 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 post-war 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 per cent in 1938 to 22 per cent in 1949 (Weaver, 1950, p. 202).

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 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.

This seems to be the most potent line of argument with which to elaborate an attack on the post-war 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 post-war Britain was the expansion of state spending *per se*.

What accounts for the high level of direct taxation? Clearly the Beveridge

Table 7: *Taxation, Government Spending and Investment (% CDP)*

	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).

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 per cent 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 per cent higher than in 1938 (in a now much more fully employed economy) while middle class and wealthy class consumption were, respectively, 18 per cent and 42 per cent 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). None the less, preoccupied and circumscribed by the problems of and their strategy for macroeconomic management, microeconomic policies were ill designed from this perspective.

Competition policy epitomises this. The UK emerged from the 1930s and the war with a proliferation of collusive agreements covering perhaps 60 per cent of manufacturing output and frequently sustaining inefficient producers (Gribbin, 1978). At the same time, company law was in some disrepute following inter-war scandals, such as the notorious Royal Mail case (Edwards, 1989) and the poor performance of the inter-war 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 nationalisation of nearly 10 per cent 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 post-war 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 per cent in 1955 (Scott, 1963, p. 14) — 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 subsidise 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 £17m (2.5 per cent) in 1953 rising to £165m (9.5 per cent) 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 per cent of GDP on R & D (Sanderson, 1972) by 1955 this had risen to 1.7 per cent and by 1960 to 2.5 per cent, second only to the United States in the OECD (United Nations, 1964). Much of this was state funded — state expenditure of £114m in 1950/1 rose to £196m in 1955/6 and £289m in 1961/2 compared with private industry spending of £24m, £77m and £248m 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 recognised that in countries like Germany more workers were trained to obtain higher, examined qualifications (Barnett, 1986) and that the British sys-tem 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 post-war 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 POST-WAR 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 Employed			
1938	143.0	70.0	74.9
1950	167.4	69.7	63.3
1960	167.5	88.6	90.2
1973	151.6	110.2	104.7
b) Manufacturing Output per Person Employed			
1938	191.6	76.3	107.1
1950	262.6	83.9	96.0
1958	250.0	91.1	111.1
1968	242.6	109.1	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 post-war 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 include this variable together with measures of factor accumulation confirm that British growth was disappointing. Normalising for the initial productivity gap, British productivity growth appears to have been 0.8 per cent 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 cent 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 emphasise this point.

Table 9: *Differences in the Sources of Growth, 1950-62*

	Excess Over the UK	
	France	*Germany*
Labour Input	–0.15	0.77
Capital Input	0.28	0.90
Total Factor Productivity	2.50	3.30
"Backwardness"	1.47	2.14
Other Specific	0.31	0.35
Residual Efficiency	0.72	0.81
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 residential efficiency is 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 per cent and 0.8 per cent 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 per cent relative to France and 13.2 per cent relative to Germany (1968, p. 264).

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 post-war 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.

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 10: *The Oxford Study (1947-49); 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).

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 summarised 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 inter-war Britain. It would seem likely that the chosen method of macroeconomic stabilisation, 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 liberalisation 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		

Notes: 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 stabilisation 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 minimising 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 post-war 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.

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