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Planning the new industrial nation: Scotland 1931 to 1979.

According to Benedict Anderson, nations are 'imagined communities' that are nonetheless constructed on the foundations of material circumstance and by the conscious decisions of their builders.¹ **As Anderson shows, the ways that a nation can be imagined are historically contingent. Under certain circumstances the nation is** imagined through economics: 'the economy is not pre-existing reality, an object which we simply observe and theorise about. Our understanding of the "economy" as a distinct entity, a distinct social "sphere" or social "system", is the product of a dramatic process of imaginative abstraction and representational labour'.² Over the twentieth century as government policy played a more active role in determining economic outcomes and especially through the mid-century promise of planning, the economic sphere became increasingly understood in politicised, and therefore national, terms. This paper analyses **the particular form of** economic imagining of one nation, Scotland, in a specific time period, the years from the economic crisis of 1931 down to the arrival of the Thatcher government in 1979.

In that period there emerged a predominant image of Scotland as an 'industrial nation', and an industrial nation that needed planned change. This had a strong basis in the popular national imaginary that embedded an understanding of the Scottish nation within occupational identities and workplace cultures.³ The predominance of these identifications is clear in mid-twentieth century information films such as the 1938 *Wealth of a Nation*, which emphasised the contribution of coal mining, steelmaking and shipbuilding to the Scottish economy and depicted masculine labour in heavy industries. However, addressing the conditions of the Depression, and the problems it had created for these export-facing 'staple' industries the film notes "Scotsmen faced the problem of reshaping their national policy."⁴ It anticipated the post-Second World War adoption of heightened state planning and a more active regional policy to bring 'new' industries to Scotland, and to rationalise the staple industries. This included public ownership of mining and later steel, which acted to strengthen connections between economic activities and conceptions of the nation and governmental responsibilities.⁵

It is the institutional and intellectual underpinnings and evolution of the elite ‘project’ of planning a new industrial nation which are analysed here. This article focuses on the activities of the ‘technocratic’ elements of the Scottish elite, the civil servants and academic economists who played a key role in conceptualising and quantifying the Scottish economy, and making and applying policy to develop the Scottish industrial nation between the 1930s and 1970s. These activities were shaped by the widely shared understandings considered in the previous paragraph but were nevertheless very much the activities of a socially restricted elite grouping. This article aims to enhance our understanding of modern Scotland, and, more broadly, the nature of the forces leading to the imagining of nations through economic concepts and policies.

The article is not concerned with party politics, but it does link the development of certain economic policy positions to the arguments of those who, in retrospect, are seen to have embraced ‘Unionist-Nationalism’. Their politics combined a strong commitment to the maintenance of the Union of 1707, with an equally strong view about the need for a distinctively Scottish approach to economic policy issues. Thus where ‘Unionist-Nationalism’ was a term originally applied to approaches to the relations between the UK state and *civil* society in nineteenth-century Scotland, we argue for its relevance to the mid-twentieth century development of understandings of ‘economic society.’⁶

The first section provides the context of the drive to economic planning and the associated assumptions and practices within Britain as a whole. The second shows the development of a specific Scottish understanding of desirable economic change, underpinned by a range of intellectual and institutional factors. The context of administrative devolution, and the role of the Scottish Office in policy-making, and as a key body which connected civil servants and academic economists, is profiled. Alec Cairncross is examined in both sections as a key actor who bridged the divide between UK and Scottish level policymaking. His championing of applied economics in Scotland, with a focus on to industry, is analysed alongside his strong support for a conception of the Scottish economy as a distinct identity. However, he is also understood as operating between ‘unionist’ and ‘nationalist’ impulses, given his role as a UK government advisor and the definite limits to his vision of a differentiated Scottish economy. The third section traces the evolution of an understanding of the ‘Scottish industrial nation’, and its relationship with an evolving planning agenda and

the extension of administrative devolution, through the decades to the 1970s. The final part offers some tentative conclusions.

I

The Great Depression of the 1930s shifted the political economy of Britain towards ‘economic planning’, if that term is used in its broadest sense to suggest that some kind of deliberate control should replace (or at least supplement) the operations of the market economy.⁷ In the 1930s ‘planning’ was an incoherent notion, supported by ideologues and politicians across the political spectrum, from Oswald Mosley’s New Party on the Right, through Macmillan’s *Middle Way* to the Communist Party on the Left. The policies actually implemented in this period were much more modest than many proposed, combining steps towards a particular type of managed economy at the macroeconomic level, and limited moves towards ‘corporatist’ planning at the microeconomic level.⁸

The Second World War fundamentally shifted the relationship between the state and the economy. At the macroeconomic level, the politically crucial desire to contain inflation led to the ‘first Keynesian budget’ in 1941, and the parallel development of statistics and mechanisms of control aimed at balancing overall supply and demand. Alongside this ‘macroeconomic planning’ developed an immense administrative and statistical apparatus to channel the maximum of resources, including labour, into producing for the war effort.⁹ While the effectiveness of this planning has been disputed, it seems clear that the wartime experience reinforced the belief across much of the political spectrum that planning was the road to effective post-war reconstruction and economic security, rather than the ‘Road to Serfdom’.¹⁰ Not the least of the war’s legacies was the apparatus constructed to move work to the workers, a policy continued in post-war regional policy.¹¹ For the Labour Government of 1945 greater planning of the economy was a central part of its agenda, though the precise meaning to be attached to this term was much disputed at the time, and historians have stressed the diversity of interpretations at work in the government’s planning activities.¹²

Most analysts of the Attlee government see some retreat from more radical versions of economic planning in the late 1940s, and a partial replacement of these by a Keynesian emphasis on macroeconomic management.¹³ But such a trend should not be exaggerated; Labour was keen to hang on to a wide range of economic controls to supplement budgetary and monetary policy, and to continue to influence major developments in the economy.¹⁴

A key figure linking these British developments to subsequent events in Scotland is Alec Cairncross. A Scot, Cairncross spent most of the war as a planner in the Ministry of Aircraft Production, and for much of the late 1940s was economic adviser to the Board of Trade.¹⁵ **Debates about planning in the 1940s have been characterised as a battle between ‘thermostatters’, advocates of macroeconomic planning, and ‘gosplanners’, supporters of Soviet-style detailed planning of output.**¹⁶ **Within this dichotomy Cairncross was undoubtedly a ‘thermostatter’. This meant a considerable scepticism about the capacity of state agencies to plan economic activity, but by no means the advocacy of a ‘laissez-faire’ belief in the beneficence of unregulated markets. However, this dichotomy is really too crude to capture Cairncross’s evolving position.** His Whitehall experience strengthened his support for two things: an applied economics grounded in detailed statistical knowledge of the economy, especially its production capacity, and close collaboration (but not direction) between state agencies and industry to achieve policy goals. This was the legacy he was to take to Scotland when he became Professor of Political Economy in Glasgow in 1951.

This appointment coincided with the election of a Conservative government that partially delivered on their promises to ‘set the people free’, by, eventually, scrapping rationing and many other controls inherited from Labour. However, there was no return to laissez-faire; not only was macro-management highly active (‘stop-go’), but attempts to shape economic development continued, through, for example, trade policy, where tariffs and quotas were actively deployed within a broad trend to liberalisation.¹⁷

Conservatives in the 1950s largely eschewed the language of planning, but the term tentatively returned to their vocabulary in the early 1960s, when declinist attacks on

their stewardship of the economy led to the ‘great re-assessment’, and the attempt to use a variety of instruments to improve the growth of the economy.¹⁸ Much of what they began was taken-up and added-to by Labour after 1964, but with a new ideological emphasis on the positive merits of planning. This culminated in the *National Plan* of 1965, an Anglicised version of French-style ‘indicative planning’, which marked the high-water mark of public use of the term in post-war Britain.¹⁹ The failure of the *Plan* to deliver its target four per cent rate of growth helped deflate the language of planning. The Conservatives after 1970 asserted a renewed faith in market mechanisms (however much compromised in practice), while the 1974-1979 Labour government produced no *Plan* to rival that of 1965.

The extension of the economic role of the state brought with it two important and inter-twined developments in the UK state apparatus; a much increased employment of economists, and a huge increase in the production of official economic statistics.

The penetration of economists into the British state was very slow before 1939. While economic expertise was on occasion mobilised in the 1930s, as with the Economic Advisory Council from 1930, such expertise was held largely at arm’s length by the state.²⁰ However, the war rapidly multiplied the number of economists in state service. The creation of an Economic Section in the Cabinet Office provided a central advisory role for economists, but economists were also employed on a substantial scale in various ministries, notably in Supply and Aircraft Production.²¹

When many of the economists drawn into government service by the war left for academia after 1945, the numbers employed in government stayed stable until the mid-1960s when they shot-up from 22 in 1964 to 352 in 1975.²² One of the tropes of these government economists was the need to expand and improve economic statistics, and in this endeavour they were part of a broader process.

The twentieth-century growth of economic statistics was part of a much wider phenomenon: as many authors have suggested, an explosion in the production and dissemination of statistics is a key feature of modernity. Badiou, for example, notes, ‘The ideology of modern parliamentary societies, if they have one, is not humanism, law or the subject. It is number, the countable, countability’.²³ ‘Countability’, in turn,

has been central to the economic imagination. As Tooze remarks, ‘Today, statistics define our knowledge of the economy.’²⁴ Unsurprisingly, this close interconnection has been most obvious when economists have sought to plan the economy; the economy they desired to exert control over had to be imagined in measurable form.

To post-war eyes the state of economic statistics in 1939 was lamentable: ‘there were virtually no official aggregates of the kind we now take for granted: no GNP, no index of industrial production, no balance of payments (except in very tentative form) no adequate consumer price index, and so on’.²⁵ Cairncross goes on to argue that after 1940 there was a revolution in UK economic statistics under the stimulus of war, covering especially labour and production, alongside the macroeconomic data necessary for budgetary policy. This revolution is symbolised by the creation of the Central Statistical office (CSO) in 1940/41.²⁶ In his discussion of the Attlee years, Cairncross celebrates how much better-equipped that government was to address economic policy problems because of the much enhanced quality of available statistics, though he does emphasize the poor quality of data on international capital movements and domestic capital formation.²⁷

But by the 1950s, with attacks on the conduct of economic policy growing, serious criticism of the state of economic statistics was renewed. Such criticism was famously expressed by the Chancellor of the Exchequer, Harold Macmillan, in 1956, when he argued that trying to steer the economy with such out of date statistics was ‘looking up a train in last year’s Bradshaw’.²⁸ Such views were echoed when the Radcliffe Committee examined the conduct of monetary policy two years later.²⁹ But if data for macroeconomic management were seen as inadequate, there were much more serious problems when it came to the planning of the supply-side, which re-emerged as a key concern from the early 1960s with the ‘great reassessment’.³⁰

In the mid-1960s the Treasury view as expressed to the Estimates Committee on government statistical services was that economic statistics for short term demand management were ‘satisfactory’.³¹ But this was not the view of Cairncross, who had returned to Whitehall as the chief economic adviser in 1961.³² In 1965 he identified a range of priorities for improvement, focussed on demand management issues, especially investment statistics, his *bete noire*.³³ The unreliability of much of the data

economic managers had to work with is a staple feature of his many discussions of the 1960s.³⁴ Other key figures concur.³⁵ Unreliability meant not simply ‘not enough’-in some cases too much very poor material was being churned out. For example, much monthly data which was extraordinarily unreliable, and publication was halted in the early 1960s.³⁶ Another problem belying any simple notion of a progressive filling of data gaps was that, as more numbers were produced, the discrepancies between different data sets became more glaring.³⁷

Accompanying the continuing traumas of short term macro management in the 1960s were the Labour government attempts to avoid the ‘errors’ of ‘stop-go’ by pursuing a range of more interventionist policies aimed at reconciling a value of \$2.80 for the pound with faster growth. This led to new or renewed emphasis on three policy areas with major implications for economic statistics. These areas were economic planning, incomes policy, and higher productivity. The pursuit of each of these led to an intensified ‘technocratic’ search for better data. But at the same time, pursuit of each of these policies was also about managing the understanding and behaviour of the population. In this context, economic statistics were not only tools for central government the better to manipulate newly-prioritised aggregates, but weapons of mass persuasion in what Wilson called ‘the new battle of Britain’.³⁸

The focus on the supply-side in trying to raise the growth rate of the economy was accompanied by an overwhelming focus on the industrial sector the economy, and an accompanying focus on industrial statistics. This belief in the centrality of industry is very clear in the 1965 *National Plan*, which has detailed discussion of industrial sectors, plus some analysis of agriculture, construction and energy, but with almost no attention to the service sector. Logically this belief would lead to policies such as the Selective Employment Tax, which sought to raise the cost of labour in the service sector to free-up more workers for industry, in the belief that this would raise the overall level of productivity.³⁹ While this particular policy measure was highly controversial, and soon reversed, it was emblematic of widely-shared views about the British economy; while views on how to change that economy increasingly diverged by the 1970s, it was still common ground that it was *industry* that was the core of economic activity.

II

These trends in the UK influenced developments in Scotland, but there were also distinctive aspects to that country's economic trajectory. Since the Union of 1707 the Scottish economy had been highly integrated with the rest of Britain. But it had also, by the late nineteenth century, become highly 'globalized', particularly because of a greater disproportionate dependence on international trade than the UK as a whole. This went along with an industrial structure, in which the export-oriented 'old staple' sectors of coal, iron and steel, shipbuilding, heavy engineering and jute had a greater weight than in the UK as a whole.⁴⁰

It was inter-war unemployment that first focussed attention on Scotland's industrial structure. The predominance of the 'old staples' made Scotland particularly vulnerable to the Great Depression of the 1930s. That depression, as noted above, stimulated a new willingness to depart in limited areas from 'laissez-faire' at the UK level. But as far as domestic industrial development was concerned those limits were severe. In the 1920s the main policy response to mass unemployment was a focus on 'Industrial Transference', encouraging the migration of workers from depressed areas. In the 1930s political pressures for a more effective response to mounting joblessness and stalling economic development in areas reliant on staple **industries led to regional surveys, and subsequently the creation of 'special areas' defined by high levels of unemployment. Here we can see the creation of the 'regional problem', grounded in new geographical categorizations and statistics, that was to inform British economic policy for decades.**⁴¹ Commissioners were appointed to look at possible remedies, including one for Scotland, but their suggestions were only acceptable to Whitehall if they involved a focus on reducing unemployment without direct interference with private decision-making.⁴²

Whitehall Departments were not only resistant to radical departures in employment policy, but also extremely sensitive to any suggestion that Scotland as a unit had problems which were distinct from those of the UK as a whole. But the Scottish Office, as it grew in both stature and prestige, began to evolve a sense that there was indeed a distinctiveness that needed to be addressed.⁴³ Such bureaucratic sensitivities seem to accord with broader opinion, indicated, for example, by the creation of the

Scottish National Development Council (SNDC) in 1931, and the Scottish Economic Council in 1936. These sensitivities, spurred by concerns about the impact of war demand on the shape of the economy, led to the creation of the Scottish Council on Industry in 1942. The SNDC and Scottish Council on Industry merged in 1946 to establish the Scottish Council (Development and Industry) which played an influential role in shaping policy and bringing together a policy elite combining voices from business, the civil service and academic economics.⁴⁴

McKenzie's research indicates that the interwar crisis predicated post-Second World War policy priorities. A novel brand of "economic unionist-nationalism" was the predominant ideology of the industrialists who dominated the SNDC. This envisioned the "rationalisation and diversification" of Scottish industry; heavy industry was to be modernised, whilst new sectors of light manufacturing, which were prospering in the South East of England and which Scotland had failed to indigenously develop, were to be attracted.⁴⁵ These objectives were to be achieved within the framework of the British state, and in particular an enlarged and empowered Scottish Office, which in due course 'led the way in promoting this notion of a Scottish national economic interest.'⁴⁶

By the mid-1930s the language of planning permeated Scottish discussions of the economic future, as in the UK as a whole. Parliamentary and public debates routinely repudiated the 'laissez-faire' approach which saw the state's role as largely limited to encouraging the workers to move to where work was available, in favour of seeking to shape developments by 'planning'.⁴⁷ The language of planning in Scotland was almost invariably linked to the notion that unplanned development had left Scotland over reliant on 'older and traditional' industries, and that the core aim of planning was to encourage 'newer industries'.⁴⁸ This notion drew on local initiatives in Scotland dating back to the beginning of the 1930s, such as the Development Board for Glasgow (1930), or the 'Do It in Dundee' campaign from 1931.⁴⁹ But it was taken up more broadly at the political level by the end of the decade, and, supported by employers, which was encapsulated in the Scottish Economic Committee's *Scotland's Industrial Future: the Case for Planned Development* (1939). The underlying assumption was 'that future growth would not be substantial in the older industries and in those where Scotland was already well-represented'; the most practical

expression of this view before 1939 was the creation of Scottish Industrial Estates in 1937, aimed at attracting ‘footloose’ industries to the country.⁵⁰

Despite these elements of policy devolution, the level of economic integration between Scotland and England, coupled to Whitehall’s concern to discourage any sense of separateness, meant that economic statistics which treated Scotland as a primary unit of analysis hardly existed before 1945. This is most obvious in relation to macroeconomic data: while the first National Income accounts for Scotland were constructed in the 1950s, no official data were published until the 1970s, and only today are their efforts to construct comprehensive historical accounts.⁵¹ A similar absence relates to other macroeconomic data; there are no systematic historical balance of payments data, nor estimates of a Scottish inflation rate.⁵² However, Scottish data on unemployment rates exist from the 1930s, with Scotland designated as a ‘region’ of the UK for specification of the ‘regional problem’.

During the Second World War the Secretary of State for Scotland, Tom Johnston, commissioned reports on the Clyde Valley, the Highlands and Central and South Eastern Scotland. The last of these argued for a collective Scottish position as the basis for policy, suggesting that ‘the interests of Scotland as a whole will best be served if consideration is given to a more widely planned dispersal’ of population from Glasgow.⁵³ The interwar focus on industrial diversification was continued, and rationalised in economic and social terms. Traditional industries such as textiles had ‘a bad unemployment history before the war and were likely to continue to be unstable.’ This was juxtaposed to ‘Modern industry [which] is not on the whole so strongly localised as older established industry’, and would therefore, it was hoped, be easier to draw to Scotland given that manufacturing plant in consumer goods industries are less dependent on the location of natural resources.⁵⁴

Thus, while the Second World War reinforced *political* unionism by encouraging a sense of Britishness (and this was underpinned in the early post-war years by the creation of powerful new UK-wide institutions in the NHS and nationalised industries) the impetus from the 1930s towards building a separate administrative apparatus in Scotland was sustained. This apparatus, as already suggested, had begun to articulate a view of a distinct Scottish industrial nation in the 1930s, and Johnston’s

wartime activities extended this vision. In the early post-war years this combination of a strengthened political unionism but a growing sense of economic difference was, paradoxically, further enhanced by the extended scope of the UK state, as the rejection of 'laissez-faire' manifested itself in policy measures which, unintentionally, underpinned notions of 'a *Scottish* industrial economy.' **Here we can see a distinctive (if unavowed) 'Unionist-Nationalism' at work.**

Crucial here was the 1945 Distribution of Industry Act, a key moment in the development of the understanding of the 'Scottish industrial nation'. This was partly because it created the apparatus for the collection of much more industrial data, on both employment and investment, data which clearly distinguished Scotland (as a 'region') from other parts of the UK. But more broadly, the workings of the Act shifted Scotland to a different industrial structure by attracting predominantly 'footloose' as opposed to resource-reliant industries, and this became an integral part of the meaning of 'industrial Scotland'. For economic modernizers, it fitted with the widespread notion that Scotland needed to change its industrial structure, and attract foreign, both English and American, investment; bringing in mobile 'modern industry' was to be central to the new industrial Scotland.

The influx of American manufacturing investment from the 1940s was particularly significant for the re-shaping of industrial Scotland, and generated a great deal of debate, both contemporaneous and historical. Most initial responses were positive, but later doubts became common, partly for pragmatic reasons about the significance for the achievement of economic goals, but also for broader reasons concerning the whole notion of a 'Scottish economy'. On the pragmatic aspect, criticisms arose from the perceived 'branch plant' character of much of this new investment, suggesting the creation of factories concerned only with assembly, peripheral to the main activities of the company. This feature, it was believed, both deprived Scotland of crucial activity in R&D, and made Scottish plants vulnerable to strategic decisions made outwith the country. In 1967 the newly-created Scottish Economic Planning Board noted that between 1962 and 1967 engineering redundancy rates had more than doubled, from below to above average for the Scottish workforce. This centred on the "other machinery" category which largely consisted of electronics and electrical engineering. Between 1962 and 1966 Scottish employment in electronics increased by

over 50 per cent but only by 14 per cent in Britain as a whole whilst Scotland's share of industrial R&D fell relatively and absolutely. An official pessimistically concluded 'at least to some extent the trends result from structural factors such as the large number of branch factories in Scotland in these growth sectors of industry controlled from Headquarters elsewhere.' This outcome was particularly 'disturbing because of the great emphasis we have attached to the long term change in the Scottish industrial structure, resulting from the increase in modern science-based engineering and electrical industries.'⁵⁵

Criticism of the 'branch-plant' character of American investment points to one of the tensions in seeing this investment as part of an unambiguous 'modernization' of Scottish industry. In other dimensions, too, this 'modernization' was ambiguous in its effects. American firms typically brought a larger scale of production, but this was associated with poor industrial relations.⁵⁶

In the 1970s these various pragmatic concerns fused into a broader disquiet with the production of data showing how far control of industry in Scotland had been redistributed away from the country, especially to England and the USA. As a pioneer of this analysis argued 'it is becoming difficult to talk meaningfully of a distinct "Scottish economy" except in a strict geographical sense. Instead one is seeing the development of increasingly strong links with the world economic system, although these links are often hidden within the global operations of the multinational parent companies of Scottish subsidiaries and branch plants'.⁵⁷

As we have seen, in the UK the growth in belief in economic planning both derived from and drove forward the increased employment of economists and the related expansion of the production of official economic statistics. This was a largely uncontroversial trajectory, few challenging the technocratic understanding of the modern state on which it was based. But in Scotland, the nation without a state, these matters were more complex.

While the UK state saw a rapid expansion of employment of professional economists in senior advisory positions in the 1960s, in Scotland no such employment occurred

until 1972, when Gavin McCrone became the Chief Economic Adviser to the Scottish Office, a post he held in conjunction with other offices until 1992.⁵⁸

This did not mean that prior to McCrone's appointment economists were uninvolved in official discussion of the Scottish economy; as in the UK, they were central to the project of planning the industrial nation, but their role was never as embedded in the state apparatus. However, there were some examples of making use of such expertise, for instance in 1950 the Board of Trade commissioned the American Economist, R.L. Meier, to write a report titled 'Industrial Planning in Scotland'. Even at this relatively early post-Second World War stage in regional policy development Scotland was treated as 'a distinct region in a much larger economy.' The report emphasised the role of 'new technology' and industries in terms which became characteristic of post-1945 regional policy. The Board would endeavour to aid the development of new industries including chemicals and synthetic fibres, with an aim of enhancing labour productivity and avoiding the pitfalls of reliance on the 'steam and steel complex' exposed during the interwar period.⁵⁹

Cairncross was a key figure in debate about the Scottish economy in the 1950s and into the 1960s.⁶⁰ He gave evidence to the Catto *Committee on Scottish Financial and Trade Statistics*, and chaired the Local Development Committee set up by the Scottish Council on Development and Industry in 1951/2. Above all, he was a key member of the Tothill Committee, established in 1959, and whose Report, discussed in detail in section III below, was the single most important official publication on the Scottish economy in the post-war decades.⁶¹ Apart from these official roles, Cairncross played a major part in encouraging and shaping empirical debate on the Scottish economy in the 1950s. He was the driving force behind the re-establishment of the Scottish Economic Society in 1953 and the publication of the *Scottish Journal of Political Economy* from 1954. In his introduction to the first issue of this new journal Cairncross conjured up a Scottish tradition of economics, with a bent towards approaching 'social and economic problems on a broad front, employing an empirical, matter-of-fact treatment rather than a highly abstract analysis'.⁶² Alongside this, both the Society and the *Journal* were intended to appeal beyond professional economists to Scottish educated opinion. This applied, empirical approach made Cairncross a powerful advocate of expanding the statistical apparatus available to economic policy

makers, and the landmark book he edited on the Scottish economy whilst Professor at Glasgow was sub-titled 'A Statistical Account of Scottish Life'.⁶³ However, as already noted, he had little sympathy with Scottish nationalism and regarded the idea of separate balance of payments figures for the country as erecting 'a new Hadrian's wall.'⁶⁴

After Cairncross's return to Whitehall in 1961 a direct role for academic economists in Scottish policy-making was set-up through the meetings of an economic consultants committee to the Scottish Development Department, which was established at the behest of the Tothill report and represented a significant step forward in the unionist-nationalist administrative devolution agenda.⁶⁵ The committee first met in December 1962, and monthly thereafter.⁶⁶ Its initial members were Professors Donald Robertson, Thomas Wilson, and Archibald Campbell, three economists with diverse specialisms, but who shared Cairncross's commitment to economics as an empirical, applied discipline.⁶⁷ (Wilson had been vice-chair of Tothill).

The economic consultants had no one consistent 'line' on economic policy in Scotland, but they did show some scepticism about the priority accorded by the Board of Trade to attracting new industry, and argued that 'changes within existing Scottish industry were probably more important'. At later meetings the economists were assured that help was available for existing industries to modernise, but the view was still that there was more support for incoming firms.⁶⁸

A similar theme can be found in the consultants' discussion of the Tothill report (see below), which they argued put excessive focus on 'new' industries; they accepted Tothill's stress on growth, but thought this should include 'modernization' of 'old' industries.⁶⁹ However, Scottish Development Department's records are indicative of Harvie and Foster's conclusions that Tothill effectively abandoned any commitment to developing indigenously controlled Scottish heavy industry in favour of a growing reliance on externally controlled capital in light engineering.⁷⁰ For instance in 1965 T.R.H Godden of the SDD's Distribution of Industry Panel argued for transferring engineering labour into light industries, expressing concern at the 'present somewhat artificially high level of activity in Clyde[ship] yards, which was leading them to try

and claw back skilled labour, could not be without its disadvantages in the long-term if a temporary aggravated shortage of key skills were to make it more difficult for Scotland to attract different kinds of industry having a more expansionist long-term future.’⁷¹

London’s concern with Scottish economic issues was partly a function of the perceived strength of Scottish nationalism. In the early 1950s the degree of separateness of the Scottish economy was a bone of contention in political and official circles.⁷² One result of this tension was a *Royal Commission on Scottish Affairs 1952-1954*. The setting up of this commission clearly arose from discontent with a perceived lack of concern with Scottish interests in London.⁷³ These pressures were also reflected in the setting-up of the *Catto Committee*, which called for the revival of separate Scottish budget accounts, but resisted the idea of producing Scottish trade or balance of payments data.⁷⁴

One consequence of the absence of balance of payments data was that Scottish economic discussions were less obsessed with the external payments position than contemporary debate in the UK, debate that was central right down to the introduction of floating exchange rates in the early 1970s. This contrast was added to by the common assumption that unemployment was the highest priority in Scotland-perhaps even more than in the rest of the UK. This emphasis is demonstrated through Meier’s report and responses to it. The report notes that ‘the history of joblessness has been responsible for the emphasis upon full employment in the reconstruction and reorganization of Scottish industry over the past five years.’ Its focus is upon the provision of stable work and diversification through ‘new industries.’⁷⁵

Correspondence between Board of Trade officials cast doubt on Meier granting legitimacy to Dundee jute employer’s concern that there would soon be a labour shortage to argue for an end to placing major new industrial sites there.⁷⁶

In Scotland, economists played their usual role as advocates of improved economic statistics. For example, in a paper for the Toothill Committee, Peacock and Dosser itemised major deficiencies in the data, ranging across National Income, industrial production, private investment, and wages and prices. They noted but did *not* focus attention on the paucity of data on the non-industrial sector, concluding ‘if it is

reasonable to regard Scotland as a region which is sufficiently distinct and important to have a distinct policy for economic development, then the statistical information available is far from adequate'. The paper suggested the lack of information might derive from an absence of understanding of how much it was needed, but clearly implied that the main reason was 'the non-acceptance of the region as a separate unit in policy-making.'⁷⁷ A hostile response from the Scottish Statistical Office not only suggested these criticisms of data availability were exaggerated, but also emphasised that Scotland was not a 'self-governing and fiscally independent country' and by implication questioned how far it could or should have a distinct policy approach, and therefore the need for more specifically Scottish statistics.⁷⁸

III

One obvious issue in defining the industrial nation was spatial, which was interwoven with questions about the sectoral composition of industry. Where were the internal boundaries of 'industrial Scotland', and what were the implications of this notion for those (geographically extensive) parts of Scotland where industry was thin on the ground? Historically, 'industrial Scotland' had been closely associated (explicitly and implicitly) with 'the Clyde Valley' or 'West Central Scotland', with other industrial areas given a subordinate status.⁷⁹ This continued to be the case in much official discourse in the post-war period, with most focus on the Western central belt. Thus in the 1960s there were two Scottish economic plans, the first concerned with West Central Scotland, which as defined in this plan contained 90 per cent of Scotland's manufacturing industry, whilst the second covered the whole of Scotland.⁸⁰

This West Central focus was recognised to be problematic, and this had already led to the setting-up of a 'Local Development Committee' in 1951 to look at industry in smaller towns.⁸¹ This Committee produced data showing how widespread manufacturing industry was in Scotland, with only just over 50 per cent in Glasgow and the surrounding area. The focus on manufacturing is perhaps also misleading; coal mining, railways and port transport were typically considered part of the 'industrial nation' but were not recorded (Table 1).

Table 1. Distribution of manufacturing in 1948

Area	Insured persons in manufacturing 1948	Proportion of total for Scotland (percentage)
Glasgow	424,660	55.0
Edinburgh and Lothians	80,599	10.4
Kilmarnock and North Ayrshire	45,532	5.9
Dundee	43,984	5.7
Falkirk and Stirling	43,850	5.7
Aberdeen	28,308	3.7
Total: major industrial areas	666,933	86.4
Rest of Scotland	104,938	13.6
Grand total	771,871	100

Source: Glasgow University Archives (GUA) Cairncross papers DC106/5A/4 'Draft Report of Local Development Committee' 1951.

These figures make the exclusion of Edinburgh from most discussion of 'industrial Scotland' especially striking. Not only was Edinburgh the administrative capital of Scotland, where much of the official discussion of 'Industrial Scotland' originated, but it was also a significant industrial centre, with over half of its employed population in industry in 1951 and a leading location for Scottish brewing and distilling. However, partly as a deliberate strategy on the part of the local authority, Edinburgh never presented itself as an 'industrial city', but rather as a historical and administrative centre.⁸² So the industrial nation was always in part geographically 'exclusive'.

Another hugely important spatial aspect was the role on 'New Towns'. Whilst this was a policy pursued in other parts of the UK, it was especially ambitious in

Scotland, notably in relation to Glasgow.⁸³ The aim was to shift very large numbers out of the tenements of the central city, and move them to new towns which would be both attractive places to live and offer attractive environments for new industrial development, especially in ‘new’, light manufacturing industries. Recent research suggests that there were contemporary concerns that this policy would ‘skim the cream’ of the Glasgow population and worsen the city’s problems.⁸⁴ But at the time of its conception this approach seemed to combine a major attack on the slums with industrial modernization conceived in both geographical and sectoral terms.

Not separately identified in the table above are figures for the Highlands and Islands, the region hardest to fit into the image of an industrial nation, with its vast acres of land, but little industrial activity. One approach was to try to industrialise the Highlands.⁸⁵ Such a project was full of complications. The dominance of unemployment as the primary concern of economic planning in the early post-war period did not fit with the Highlands, where policy was driven by depopulation by out-migration. Those who argued for industrial expansion in the region conjured up the notion of ‘growth poles’ *avant la lettre*, aiming to site industrial development not in areas suffering unemployment, but those locations which seemed to offer the best hopes of economic growth. Yet, the depth of the commitment to a Scottish ‘industrial nation’ is reflected in the scale of resources which were expended trying to extend it Northwards through Highland industrialisation. In spite of its predominantly rural character of the region and its traditional reliance on agrarian and fisheries activities, the area was designated for major industrial projects in the post-Second World War period. This was intensified following the inception of the Highland and Islands Development Board in 1965 which supported significant projects, including a smelter in Invergordon and a pulp mill near Fort William.⁸⁶

Notwithstanding issues surrounding the depopulation of the Highlands, there is no doubt that debate and policy on the post-war Scottish economy and its industrial structure and performance was dominated by unemployment. And this was underpinned by the existence of extremely good data on unemployment in all its dimensions, generated as a result of the National Insurance system. The tracking of unemployment data was intense from the 1940s.⁸⁷

It should be stressed that contemporary discussions took for granted a labour market highly-segmented in terms of gender, but exhibited a strong concern for the employment prospects of men as well as women. Indeed, a shift from male-dominated to more gender-balanced sectors was part of the ‘modernization’ envisaged. Rather than focussing exclusively on men’s employment, a common worry at the time was that the expansion of new industrial sectors would be constrained by a shortage of women workers.⁸⁸

An important feature of the post-war settlement’s focus on unemployment was the 1944 *White Paper on Employment Policy*, which embodied the assumption of a ‘contract’ between state and worker, in which ‘high and stable’ employment would require an acceptance of both mobility and a willingness to raise productivity by workers. This fed into discussion about industry in a number of ways, but perhaps was most significant in the current context for its relationship to debates about actual/possible/desirable mobility of labour.⁸⁹ This issue was complicated in Scotland by the impact of the enormous relocation of population brought about by the demolition of large parts of central Glasgow and the movement of population to peripheral new towns. In this way ‘urban planning’ drove a forced mobility of labour. ‘Bringing work to the workers’ therefore meant not moving jobs into central Glasgow, but trying to get incoming firms to locate in these peripheral towns.⁹⁰

The focus on employment and unemployment in post-war Scotland is wholly unsurprising; Scotland was a nation of wage earners: a ‘proletarian nation’.⁹¹ The extent to which Scotland was also perceived as an ‘industrial nation’ depended in part on understandings and definitions of industry. Whilst in 1958, the peak of staple industry employment, just under 37% of Scottish employment was in manufacturing, the additional 3.9% in mining 6% in construction, 2.8% in gas and electricity, 8.3% in transport and communications and 11.2% in distribution are indicative of significant sectors which included occupations with ‘industrial’ work cultures and working class identities. Prime examples include coal miners, dockers and railway workers. (Table 2).

Table 2 Scottish GDP by industry of origin, 1958.

	Scotland 1958	UK 1958	Wales 1956	NIreland 1952
Agriculture, forestry and fishing	6.0	4.5	5.7	18.4
Mining and quarrying	3.9	3.6	11.7	0.4
Manufacturing	36.4	35.6	33.2	30.0
Construction	6.0	6.0	7.2	7.2
Gas, electricity and water	2.8	2.7	3.0	2.1
Transport and Communications	8.3	8.0	8.2	7.3
Distribution	11..2	12.7	9.2	13.2
Insurance , banking and finance	2.0	2.9	2.1	2.0
Other services	9.2	10.1	8.8	6.1
Public Admin and Defence	6.4	6.3	5.5	4.9
Public Health	1.9	1.7	4.5 (including education)	2.8
Local authority education	2.4	2.0		2.1
Rent from ownership of dwellings	3.0	3.5	3.3	1.5
Domestic service	0.4	0.5	0.4	2.0

Total	100	100	100	100

Source: GUA DC Cairncross papers 104/1/1 ‘Industry and employment in Scotland 1962-63’, citing official data.

While many aspects of the debate about industrial Scotland shifted significantly in the three decades after 1945, all agencies and commentators assumed that the problems of industry were the key economic question: Cairncross summarised this view: ‘The picture that emerges is one of an industrial economy that shows signs of lagging behind the rest of the country.’⁹² While, of course, the decline of individual industrial sectors was well-recognised, there was no sense of a secular trend to de-industrialization. This commitment to industry was a deeply embedded cultural assumption (not, of course, confined to Scotland), rather than grounded in economic theory, which did not seriously address this issue until the 1960s, when Kaldor and Baumol examined it from very different perspectives.⁹³ This attitude both sustained, and was in turn sustained by the economic statistics produced (both at UK and Scottish level) which focused on industry: these included the index of industrial production and the Censuses of Production, both of which excluded agriculture, forestry and fishing, transport and distribution, financial and administrative services.

So the Scottish economic debate focused on *different* ways of thinking about industry, underpinned by plentiful data on some of its aspects. The Census of Production, which was re-instated in 1948 after a wartime gap was the best established source, and used a Standard Industrial Classification (SIC) which (amended periodically) became the staple source for industrial analysis. Much use was made of SIC in detailed studies, though there was recognition of the associated problems.⁹⁴

The SIC distinguished between industrial sectors at different levels of aggregation. At the highest level of aggregation Scotland’s industrial structure looked very similar to that of the UK as a whole. At this level industry is divided into broad groups such as ‘Food, Drink and Tobacco’, ‘Metal Manufacture’, Shipbuilding and Marine

Engineering' 'Paper, Printing and Publishing', 'Vehicles' and 'Chemicals and allied Trades'. But, as McCrone argued, as of c.1960, 'the structural disadvantage is more apparent within orders than in comparisons between order groups. Thus in Scotland vehicles until recently contained no motor car manufacture, and comprised mainly commercial vehicles with a heavy weighting of locomotive shops. Food, drink and tobacco on Scotland includes whisky manufacture; and textiles are primarily woollen and jute textiles.'⁹⁵

Many of the themes characterising Scotland's industrial development articulated in the 1950s and 1960s drew on the pioneering work of the econometrician C.E.V. Leser, some of which was included in the 1954 'Scottish Economy' volume. This analysis stressed the *lack* of key industrial sectors in Scotland, especially vehicles, precision instruments, and other light engineering products. Their absence was seen as bringing three important disadvantages: 'It means first, that some of the more important growing industries have inadequate roots in Scotland; second that line production technique, with all the planning procedures associated with it, are as yet unfamiliar to Scottish managements; and third, that the impulse to technological advance that comes from the association of new industries withhold is largely absent.'⁹⁶

Where discussion moved away from attracting new firms into Scotland to the shortcomings of indigenous firms, the debate about the causes of problems became inescapably complex and controversial. Some saw these shortcomings as externally imposed. For example a discussion of the 'Next stage in regional planning' argued that government-funded R&D, mainly located in England, was a major reason for the southwards drift of industry.⁹⁷ This was a version of the 'branch plant' criticism often levelled at US-owned firms.

The *Scottish Economy* recognised that most people in the country were employed in services, but gave little detailed analysis of this sector. It has a chapter devoted to 'production' which focuses on industry, plus one on manufacturing and one on coal. The chapters on public sector (health, education, local government) concentrate on finance rather than employment in these sectors. In part this focus was founded on statistical availability; the Census of Production was focussed on 'production

industries' and a Census of Distribution, covering much of the service sector had to wait.

After the major step forward in unemployment policy with the 1945 Distribution of Industry Act, the 1950s saw a reduction in concern with this issue, and cut backs in regional incentives. But at UK government level the late 1950s saw a revival of concern about unemployment, and this was strongly reflected in Scotland, where unemployment rates had been persistently above those for the UK as a whole.

Somewhat paradoxically, from a desire to address this issue came the Toothill enquiry which argued for focussing resources on 'growth points' rather than on the existing 'development districts' based on unemployment levels. While the report cites comparative GNP data (for the UK, not Scotland) it links these figures to the growth of *industrial* production without further ado, hence its claim that 'Basically, the most disturbing of the Scottish statistics are those for industrial production', so whatever the innovations in Toothill's discussions in other respects, the focus on industry was central to its arguments.⁹⁸

The notion that history had left Scotland with an out-dated industrial structure was formulated in diverse ways. For example, the *heavy/light* distinction is discussed in Toothill, where it is noted that this dichotomy is 'not commonly used in industry itself'. Some contributors to Toothill's discussions preferred to use 'capital versus consumer goods', and asserted that Scotland was mainly a capital goods economy, and that this predominance had been reinforced since the war by an influx of producers of earth moving machinery, BMC commercial vehicles, and office machinery.⁹⁹ This particular distinction was said to be significant in a number of ways, but especially because capital goods industries were usually the basis of the most important technological changes but 'I think it is true to say that, with one possible exception, no major technical innovation has taken place in Scotland over the last 20 years, in fact the last 40 years'. It was also argued that serious problems arose through the reliance on imports for consumer goods: 'it is essential to have the manufacturing here because of the employment it can give and knowhow that can be acquired, it is rather like importing a body without a head'.¹⁰⁰

The revived UK interest in planning in the 1960s had the result of producing two plans for Scotland; one for the Central Belt, one for the whole country. The first of these embodied Toothill's ideas about focusing attention on growth areas, rather than on areas of high unemployment. Initially this Report had been greeted with a great deal of official scepticism in London, because of its shift away from a specific focus on unemployment, but political considerations supervened.¹⁰¹

These Scottish plans, it should be noted, were the only plans published for any sub-division of Britain. An apparatus of regional planning for the whole country was established in 1965, but none of these bodies produced documents equivalent to those produced for Scotland. Of course, the use of the language of planning is always ambiguous as to where effective power lies. Both the 1960s Scottish plans (like the UK *National Plan* of 1965) were about 'indicative' planning, largely focussed on encouraging the private sector to take a more expansionary view of the economic prospects, rather than 'ordering' change. The nearest to *dirigiste* regional planning in the UK was the creation of the Highlands and Islands Development Board, which did have executive rather than purely advisory powers.¹⁰²

The Scottish National Plan of 1965 aimed 'to speed up the evolution of a modern industrial structure in Scotland', a process which had already been partially successful. It projected a rise in manufacturing employment over the *Plan* period of 50,000, for construction 20,000, and services of 60,000, but saw the development of services as primarily 'important if Scotland is to be an attractive area for incoming industrialists'; and only office employment and tourism are seen as making 'direct contribution to economic growth'.¹⁰³

The last burst of enthusiasm for planning in the vague, but vaguely *dirigiste*, sense of the 1940s and 1960s came with the creation of Scottish Economic Planning Department in 1973, and the publication of the West Central Scotland plan in 1974. This in turn led to the creation of the Scottish Development Agency (SDA), which commenced operations in December 1975. The SDA sustained the focus on industry. Hood points to its aim as 'strengthening the industrial base' which suggests continuity.¹⁰⁴ But such agencies and the understandings that underpinned them were becoming in the 1970s the focus of much more fundamental contention. The rise of

neoliberalism in the Conservative party reinforced the inclination to see such bodies as bringing ‘creeping socialism’, and this notion was linked in critics accounts to the Labour government’s much vilified National Enterprise Board.¹⁰⁵ The scope of the SDA’s role was substantial, and in particular it took over the role of attracting foreign investment to Scotland from the Scottish Council Development and Industry (This role was in turn shifted to *Locate in Scotland* in 1981).¹⁰⁶

IV

Although the idea of a long-run transition towards an economy dominated by services can be traced back to at least the 1930s, the term ‘deindustrialization’, seems not to have come into use until the 1970s.¹⁰⁷ But the process described under that name has characterised Britain since the mid-1950s (Table 3), which shows European-wide deindustrialization measured by employment levels.

Table 3: Industrial employment in Europe

	Peak year	% in industry in peak year	% in industry in 1998	% fall peak to 1998

UK	1955	47.9	26.6	44.5
Belgium	1957	47.0	26.1	44.5
Switzerland	1964	48.8	26.3	46.1
Netherlands	1965	41.1	22.2	46.0
Sweden	1965	42.8	25.7	40.0
Germany	1970	49.3	35.0	29.0
Italy	1971	39.7	31.9	19.6
France	1973	39.5	25.2	36.2

Source: C.Feinstein, ‘Structural change in the developed countries in the twentieth century’ *Oxford Review of Economic Policy* 15 (1999), p.39.

This process has been more rapid in Scotland but with broadly the same trajectory as the UK as a whole, with decline beginning in the 1950s, especially in coalmining and textiles, and then moving to most manufacturing in the 1960s, and with especially fast falls in the 1970s and 1980s.¹⁰⁸

In retrospect this powerful deindustrialization trend renders particularly striking the focus on industry in debates about the Scottish economy up to the 1970s. The point is not to subject those involved in these debates to the condescension of posterity, but to register how powerful the commitment to industry in the Scottish economic imaginary in the decades after 1945 was. This, to reiterate, was such a powerful mentality, shared across the political and policymaker spectrum, that the need to explicitly defend the commitment seems not to have arisen until the crisis of the 1970s unleashed a deindustrialization debate.

How are the underpinnings of this commitment to the ‘industrial nation’ to be understood? Unsurprisingly, one source was Scottish industrial owners, some of whom, as noted above, were key proponents of modernization from the 1930s. But in that decade a degree of administrative devolution to Scotland began the process of creating both a notion of Scottish industrial distinctiveness, and an apparatus within which the problems of this distinctiveness could be conceptualised, measured and addressed. This apparatus was, especially in the early days, only partly distinct from the UK state, and shared that state’s growing focus on mobilising economic expertise and statistical data in pursuit of widening economic goals. What emerged after 1945 was an ‘elite project’ encompassing industrialists but also, crucially, technocrats in favour of Scottish industrial modernization, based on widespread assumptions about the distinctive pathologies of an ‘old-fashioned’ Scottish economy.

To call this an elite project is not to suggest a lack of popular concern with economic and industrial matters. Such concern, especially manifested in the desire for full employment, was highly important in shaping the political context of the period after 1945. Nevertheless, much of the argument about how to shape industrial Scotland was insulated from immediate politics. Economic planning was coordinated through an alliance between key employers, a small state apparatus which was largely cordoned-

off from immediate electoral considerations, and a coterie of statistical and economic experts, mainly university-based.

There has been much debate about whether over the long-run there has been a distinct ‘Scottish economics’.¹⁰⁹ What seems clear is that in the 1950s and 1960s a certain style of pragmatic, applied, statistically-focussed economics dominated the Scottish economic profession. This style of economics fitted well with the policy-oriented needs of the poorly-resourced Scottish state apparatus. From this came a symbiotic relationship which provided the intellectual underpinnings for the modernization project.

As emphasized above, there were both elements of agreement and disagreement amongst proponents of this new industrial Scotland. It is worth emphasizing the most striking level of agreement about the future; that it would be *industrial*, and it would need to be brought into being by ‘planning’. There is little evidence in the 1950s and 1960s, amongst either the employers or the economists or state technocrats of the neoliberal, anti-state, thinking already in evidence south of the border.¹¹⁰ In the broadest terms, we can see Scotland beginning to develop a trajectory which in the long-run was to make the ‘Unionist-nationalism’ from which the modernizing project originated increasingly fragile.¹¹¹

While the focus of this article is on Scotland, the approach taken can, we believe, feed into wider debates about the history of economic understanding. In part this links to a literature which emphasizes the ‘embeddedness’ of economic knowledge in particular configurations of the state apparatus, rather than treating that knowledge as an all-powerful shaper of events (as in many narratives of the ‘rise of Keynesianism’ or ‘the rise of neo-liberalism’).¹¹² But beyond that important story of embeddedness, we have tried to show, at least in part, how a particular form of economic understanding became ‘the common sense of the nation’ something which, in different versions, has characterized how many countries have come to see themselves in the twentieth century.¹¹³

¹ Anderson, *Imagined Communities*.

² Tooze, ‘Imagining national economies’, 213-4.

³ Knox, *Industrial Nation*, 307.

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- ⁴ Alexander ‘Wealth of a Nation’ (1938) *Scottish Screen Archive* <http://ssa.nls.uk/film/1062> [accessed 28/8/2015].
- ⁵ Perchard, “‘Broken Men”’, 82-84.
- ⁶ **Morton, *Unionist-Nationalism*.**
- ⁷ Ritschel, *Politics of Planning*, 20-49.
- ⁸ Booth, ‘Britain in the 1930s; Ritschel, *Politics of Planning*, 183-231; Toye, *Labour Party*, 34-86.
- ⁹ Chester (ed), *Lessons*.
- ¹⁰ Devons, *Planning in Practice*; *idem.*, ‘Economic planning’; Cairncross and Watts, *The Economic Section*, 176-187.
- ¹¹ Booth, ‘The Second World War’.
- ¹² Robinson, ‘The economic problems’; Tomlinson, ‘Planning’; Toye, ‘Gosplanners’.
- ¹³ Booth, *British Economic Policy*.
- ¹⁴ Rollings, ‘The Reichstag method?’
- ¹⁵ ODNB, Cairncross, Sir Alexander Kirkland; Cairncross, *Living with the Century*.
- ¹⁶ **Toye, ‘Gosplanners versus thermostatters’.**
- ¹⁷ Milward and Brennan, *Britain’s Place*.
- ¹⁸ **Pemberton, *Policy Learning***; Tiratsoo and Tomlinson, *The Conservatives*.
- ¹⁹ O’Hara, ‘Numbers, experts and ideas’.
- ²⁰ Winch, ‘Economic knowledge’, 59-60; Howson and Winch *The Economic Advisory Council*.
- ²¹ Edgerton, *The Warfare State*, 145-190; Devons, *Planning in Practice*.
- ²² Booth and Coats, ‘The market for economists, 442-5.’
- ²³ Badiou, *Number and Numbers*, 3; cited in Crook and O’Hara, *Statistics and the Public Sphere*, 1; Rose, ‘Governing by numbers’.
- ²⁴ Tooze, *Statistics and the German State*, 1.
- ²⁵ Cairncross, ‘The development of economic statistics’, 11-12.
- ²⁶ *Ibid.*, 14-15; Ward and Doggett, *Keeping Score*.
- ²⁷ Cairncross, *Years of Recovery*, 56-57, 152-3, 448.
- ²⁸ O’Hara, ‘Towards a new Bradshaw?’, 1; Wilson ‘Statistics and decision-making’. Bradshaw’s was a nineteenth-century comprehensive railway timetable, last published in 1960.
- ²⁹ Radcliffe Report, chapter 10; The National Archives (TNA) CAB 108/352 ‘Recommendations on economic statistics by Radcliffe Committee’ 1 Oct. 1959.
- ³⁰ O’Hara, ‘Numbers, experts and ideas’.
- ³¹ *Fourth Report*: xxx.
- ³² **O’Hara, *Governing Post-War Britain*.**
- ³³ TNA T230/716 Cairncross ‘Economic indicators’ 8 Feb. 1963.
- ³⁴ Cairncross, *The Wilson Years*, 37,53; *idem*, *Managing the British Economy*, 276-8.
- ³⁵ Croham, ‘Were the instruments of control for domestic economic policy adequate?’, 92.
- ³⁶ TNA T230/716 Cairncross, ‘Publication of provisional figures’ 5 Oct. 1962.
- ³⁷ TNA CAB147/24 Balogh, ‘Economic statistics and their organization’ Oct. 1964.
- ³⁸ Tomlinson, ‘Managing the economy’.
- ³⁹ Tomlinson, *The Labour Governments*, 132-4
- ⁴⁰ Buxton, ‘Economic growth’.
- ⁴¹ **Linehan, ‘Regional survey’.**
- ⁴² Campbell, ‘The Scottish Office’; for British policy more generally, Scott, *Triumph of the South*, 253-280.
- ⁴³ Campbell, ‘The Scottish Office’, 176; for the evolution of distinct administrative structures in Scotland, linked primarily to economic concerns, Levitt, ‘Introduction’, 29-34.
- ⁴⁴ *Royal Commission on Scottish Affairs*, 19.
- ⁴⁵ McKenzie, ‘Public-spirited men cannot, 2-3.
- ⁴⁶ Paterson, *Autonomy*, 118.
- ⁴⁷ Levitt, ‘Introduction’, 30-32.
- ⁴⁸ Saville, ‘The industrial background’.
- ⁴⁹ Slaven *The Development*, 202; Tomlinson, Morelli and Wright, *The Decline of Jute*, 19.
- ⁵⁰ Saville, ‘Industrial background’, 14-15.
- ⁵¹ Johnston, Buxton, and Mair, *Structure and Growth*, chapter 6; Campbell, ‘Income’; McCrone, *Scotland’s Economic Progress*; statistical issues are discussed in Jameson, *An Illustrated Guide*, especially 169-178. For historical NI Accounts see Geary and Stark, ‘Regional GDP’.
- ⁵² On the balance of payments, Murray ‘Trade’; Dow, ‘The Scottish balance of payments’.

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- ⁵³ National Archives of Scotland (NAS) SEP/4/8 Town and country planning association annual conference 29 and 30 September 1945, notes on paper submitted by Dr D C Mears, 143-4. This, of course, was linked to a wider UK programme of dispersal advocated by the Barlow *Report*.
- ⁵⁴ NAS SEP 4/322 Research Programme 10 'Research on Industries which will fit most naturally into the long term economies of each of the Development Areas' 1945, 2-5.
- ⁵⁵ NAS SEP/17/57 A.W. Teel to Mr Grant, Scottish Economic Planning Board, Edinburgh 'Redundancies and Unemployment Change' 6 September 1967.
- ⁵⁶ NAS SEP 4/3706/43 Peter Lauener to Mr Scrimgeour SEPD Industrial Development Division 'Working Days Lost Through Industrial Dispute' 21 October 1981.
- ⁵⁷ Firm, 'External Control and Regional Policy', 156; Hood and Young, 'US Investment in Scotland', 284, 289-290.
- ⁵⁸ Peden, 'The managed economy', 236.
- ⁵⁹ NAS SEP 4/585/8A/ RL Meier 'Industrial Planning in Scotland: The Role of New Technology in The Economic Development of a Region' 9th June 1950, 11-14.
- ⁶⁰ **O'Hara, *Governing Post-War Britain*, 112-113**; even after becoming Economic Adviser to the UK government in 1961 he still took an active interest in economic policy in Scotland: Levitt, *Treasury Control*, 197-204.
- ⁶¹ Though it cannot be explored here, it is worth noting that Toothill's advocacy of 'growth poles' drew in part on arguments in the fast-expanding field of development economics, in which Cairncross was an active participant. He took time out from his Glasgow post in 1955/6 to lead the foundation of the Economic Development Institute in Washington DC; he also published *Factors*.
- ⁶² Cairncross, 'The Scottish economic society', 5.
- ⁶³ Cairncross, *The Scottish Economy*.
- ⁶⁴ GUA Cairncross papers DC 106/5A/7, Discussion of Catto Report.
- ⁶⁵ Levitt, 'The Origins'.
- ⁶⁶ GUA Cairncross papers DC104/1/1. Minutes of first meeting 21 December 1962; DC104/1/3 Minutes of meeting 22 November 1965.
- ⁶⁷ Robertson was Cairncross's successor in Glasgow, Wilson was professor of political economy there from 1958, and Campbell was professor of applied economics at Dundee from 1955.
- ⁶⁸ GUA Cairncross papers DC104/1/1. Minutes of first meeting 21 December 1962; DC104/1/2 Minutes of tenth meeting 30 October 1963.
- ⁶⁹ GUA Cairncross papers DC104/1/1.
- ⁷⁰ Harvie, *No Gods*, 62; Foster, 'The economic restructuring' 63.
- ⁷¹ NAS SEP/17/40/30 T. Godden 'Distribution of Industry Panel: 27 November 1964', 30 November 1964.
- ⁷² Ward, *Unionism*, 27-32.
- ⁷³ *Royal Commission on Scottish Affairs, Report*, para 30.
- ⁷⁴ *Committee on Scottish Statistics*. The revival of Scottish fiscal accounts was seen by Cairncross as a way of undermining Nationalist claims: *Living with the Century*, 184 and GUA Cairncross papers DC 106/5A/7, Discussion of Catto Report.
- ⁷⁵ NAS SEP 4/585/8A/ RL Meier 'Industrial Planning in Scotland: The Role of New Technology in The Economic Development of a Region' University of Chicago 9 June 1950.
- ⁷⁶ NAS SEP 4/585/15 Skelton reply to Dr Meier June 1950.
- ⁷⁷ NAS SEP4/1694 Committee of Enquiry into the Scottish Economy, Paper 48, A. Peacock and D. Dosser, 'Scottish economic statistics' 18 November 1960, conclusions, also SEP4/3348 Paper 24.
- ⁷⁸ NAS SEP 4/1694 J. Grant 'Notes on Paper 48 by Messrs Peacock and Dosser'.
- ⁷⁹ Scott, *The Industries; The Clyde Valley Regional Plan..*
- ⁸⁰ *Central Scotland*, 6; *The Scottish Economy 1965 to 1970*.
- ⁸¹ SCDI, *Local Development in Scotland*.
- ⁸² Madgin and Rodger, 'Inspiring capital?'
- ⁸³ **McCrone, 'Urban renewal'**.
- ⁸⁴ **Collins and Levitt, 'The "modernization" of Scotland'**.
- ⁸⁵ GUA Cairncross papers DC106/5A/4 'Memorandum on the development of country towns outside the central industrial belt of Scotland' June 1951; Perchard and Mackenzie. "'Too much on the highlands?'" , 3-22. The Labour Party's *Plan for Post-war Scotland* had called for the encouragement of 'light and clean' industries in the highlands.
- ⁸⁶ MacKenzie, "'Chucking buns'", 2-5.
- ⁸⁷ For general discussion of policy focus on un/employment SEP4/585 and SEP4/765 *passim*.

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- ⁸⁸ NAS SEP4/3348 Paper 9; SEP4/690 Papers 28, 48, 56, 59; SEP4/693 Papers 16 and 53; SEP4/784 'Progressive statement no.4' and Memo by Scottish Development Committee *Male/female 'industries'*.
- ⁸⁹ NAS SEP 4/766 'Taking Stock'.
- ⁹⁰ Cameron, 'Economic analysis; MacInnes, 'The deindustrialisation of Glasgow'; McCrone, 'Urban renewal'.
- ⁹¹ Foster, 'A proletarian nation? .
- ⁹² Cairncross, 'Introduction', 1.
- ⁹³ Kaldor, *Causes*; Baumol, 'Macroeconomics'.
- ⁹⁴ For example, NAS SEP4/905 'Furniture'; NAS SEP4/903 'Iron and steel'. Two issues were the classification of an establishment by its main activity, ignoring minor ones; and slowness in distinguishing fast-growing 'new' industries, such as electronics being included in 'other electrical goods': NAS SEP 4/3347 SCDI Papers 14 March 1960.
- ⁹⁵ McCrone, *Scotland's Economic Progress*, 48-49; see also McCrone, 'The role of government'.
- ⁹⁶ Leser, 'Manufacturing industry', 121; see also Leser SEP4/569 'Some aspects of the industrial structure of Scotland' Glasgow, 1952.
- ⁹⁷ NAS SEP3347 SC(DI) 25 April 1964 also DC104/1/2
- ⁹⁸ Toothill: *Report*, paras 02.04, 02.20 and Table 1.
- ⁹⁹ NAS SEP4/3348 Committee of Enquiry into the Scottish Economy Paper 49 'Capital and consumer industries' 18 November 1960.
- ¹⁰⁰ NAS SEP4/3342 Paper 11a; SEP4/558 Paper 76; SEP4/690 Paper 59.
- ¹⁰¹ Levitt 'Introduction', 34-5.
- ¹⁰² McCrone, *Regional Policy*, 234.
- ¹⁰³ *The Scottish Economy*, vii, 4, 32; compare NAS SEP4/1693 'Important Scottish Industries' 1960, where the only service industry included is catering because of its importance for tourism.
- ¹⁰⁴ Hood, 'The Scottish Development Agency', 3.
- ¹⁰⁵ *Ibid.*, 4-5.
- ¹⁰⁶ The end of SDA was announced in 1988, as it was increasingly clear that it was ill-fitted to the language of neoliberalism; appropriately to match the ideology of the age it was replaced in 1991 by *Scottish Enterprise*
- ¹⁰⁷ Blackaby, *De-industrialization*; Tomlinson, 'De-industrialization'.
- ¹⁰⁸ Phillips, 'De-industrialization'.
- ¹⁰⁹ Hutton, 'A Scottish tradition'.
- ¹¹⁰ Rollings, 'Cracks'. Despite the employment of Alan Peacock in the 1940s, St Andrews University didn't become a significant outpost of neo-liberal economics until the 1970s.
- ¹¹¹ Phillips, *The Industrial Politics of Devolution*.
- ¹¹² O'Furner and Supple, *The State and Economic Knowledge*.
- ¹¹³ Dauntton and Trentmann, *Worlds of Political Economy*. 3.

References

- Alexander, D. 'Wealth of a Nation' (1938) *Scottish Screen Archive* <http://ssa.nls.uk/film/1062> [accessed 28/8/2015].
- Anderson, B., *Imagined Communities: Reflections on the Origins and Spread of Nationalism*. London: Verso, 1991.
- Badiou, A. *Number and Numbers*. Cambridge: Polity, 2008.
- Barlow *Report of the Royal Commission on the Distribution of the Industrial Population* Cmnd. 6153 1940.
- W. Baumol 'Macroeconomics of unbalanced growth: the anatomy of urban crisis' *American Economic Review* 57 (1967): 415-426.
- Blackaby, F. ed. *De-industrialization*. London: Heinemann, 1978.
- Booth, A. The Second World War and the origins of modern regional policy' *Economy and Society* 11 (1982): 1-21.
- Booth, A. 'Britain in the 1930s. A managed economy?' *Economic History Review* 40 (1987): 499-522.
- Booth, A. *British Economic Policy 1931-49: a Keynesian Revolution?* Hemel Hempstead: Harvester Wheatsheaf, 1989.
- Booth, A. and A. Coats, 'The market for economists in Britain, 1945-75: a preliminary survey' *Economic Journal* 88 (1978): 442-5.
- Buxton, N. 'Economic growth in Scotland between the wars: the role of production structure and rationalization' *Economic History Review* 33 (1980): 538-55.
- Cairncross, A. *Factors in Economic Development*. London: Allen and Unwin, 1962.
- Cairncross, A. *Years of Recovery*. London: Methuen, 1985.
- Cairncross, A. 'The development of economic statistics as an influence on theory and policy' *National Income and Economic Progress. Essays in Honour of Colin Clark*, edited by D. Ironmonger, J. Perkins and T van Hoa, 11-20. Basingstoke: Macmillan, 1988.
- Cairncross, A. *Managing the British Economy in the 1960s*. Basingstoke: Macmillan, 1996.
- Cairncross, A. *The Wilson Years: A Treasury diary 1964-9*. London, Historians Press, 1997.
- Cairncross, A. *Living with the Century*. Fife: iynx, 1998.
- Cairncross, A. and N. Watts, *The Economic Section 1939-1961. A Study in Economic Advising*. London: Routledge, 1989.
- Cairncross, A., ed. *The Scottish Economy*. Cambridge: Cambridge University Press, 1954.
- Campbell, A. 'Income' in *The Scottish Economy*, edited by A. Cairncross (ed.), *The Scottish Economy*, 46-64. Cambridge: Cambridge University Press, 1954.
- Campbell, R. 'The Scottish Office and the Special Areas in the 1930s' *Historical Journal* 22 (1979): 167-83.
- Cameron, G. 'Economic analysis for a declining urban economy' *Scottish Journal of Political Economy*, 18 (1971): 315-344.
- Central Scotland. A Programme for Development and Growth*, Cmnd. 2188, 1963.
- Chester, D., ed. *Lessons of the British War Economy*. Cambridge: Cambridge University Press, 1951.
- Collins, C. and I. Levitt, 'The "modernization" of Scotland and its impact on Glasgow, 1955-1979: "unwanted side effects" and vulnerabilities' *Scottish Affairs*, forthcoming.**
- Committee on Scottish Financial and Trade Statistics* Cmnd 8609, 1952.

-
- Croham, A. 'Were the instruments of control for domestic economic policy adequate?' *The Legacy of the Golden Age* edited by Cairncross, F. and A. Cairncross, 89-93. London: Routledge, 1992.
- The Clyde Valley Regional Plan* Glasgow, 1946.
- Committee on Scottish Financial and Trade Statistics* Cmnd 8609, 1952.
- Daunton, M. and F. Trentmann eds. *Worlds of Political Economy. Knowledge and Power in the Nineteenth and Twentieth Centuries*. Basingstoke: Palgrave, 2004.
- Devons, E. *Planning in Practice. Essays in Aircraft Planning in Wartime*. Cambridge: Cambridge University Press, 1950.
- Devons, E. 'Economic planning in war and peace' in Devons, *Essays in Economics* London: Allen and Unwin, 1961: 61-86.
- Dow, S. 'The Scottish balance of payments' *Royal Bank of Scotland Review*, 160 (1988): 12-22.
- Edgerton, D. *The Warfare State, Britain, 1920-197*. Cambridge: Cambridge University Press, 2006.
- Firn, J. 'External Control and Regional Policy' in *The Red Paper on Scotland* edited by G. Brown, 153-67. Edinburgh: EUSPB, 1975.
- Foster, J. 'A proletarian nation? Occupation and class since 1914' in *People and Society in Scotland vol III, 1914-1990* edited by A. Dickson and J. Treble, 201-240. Edinburgh: John Donald, 1992.
- Foster, J., 'The economic restructuring of the West of Scotland 1945-2000: Some lessons from a historical perspective', in *Restructuring Regional and Local Economies* edited by G. Blazyca, 57-72. Aldershot: Ashgate, 2003.
- Fourth Report from the Estimates Committee, *Government Statistical Services*, HC246 1966/7
- Geary, F. and T. Stark, 'Regional GDP in the UK, 1861-1911: new estimates' *Economic History Review* 68 (2015): 123-44.
- Harvie, C. *No Gods and Precious Few Heroes*
- Hood, N. 'The Scottish Development Agency in retrospect' *Three Banks Review* 171 (1991): 3-21.
- Hood, N. and S. Young, 'US Investment in Scotland-Aspects of the Branch Factory Syndrome', *Scottish Journal of Political Economy* 24 (1976), 279-94.
- Howson, S. and D. Winch, *The Economic Advisory Council 1930-39*. Cambridge: Cambridge University Press, 1977.
- Hutton, A. 'A Scottish tradition of applied economics in the twentieth century' in *A History of Scottish Economic Thought* edited by A. Dow and S. Dow, 228-44. Abingdon: Routledge, 2006.
- Jameson, B., ed. *An Illustrated Guide to the Scottish Economy*. London: Duckworth, 1999.
- Johnston, T., N. Buxton and D. Mair, *Structure and Growth of the Scottish Economy*. London: Collins, 1971.
- Kaldor, N. *Causes of the Slow Rate of Growth of the United Kingdom*. Cambridge: Cambridge University Press, 1966.
- Knox, K., *Industrial Nation*. Edinburgh: Edinburgh University Press, 1999.
- Labour Party, *Plan for Post-war Scotland*. Edinburgh: Labour Party, 1941.
- Leser, C., 'Manufacturing industry' in Cairncross *The Scottish Economy*, 118-32.
- Levitt, I. 'The Origins of the Scottish Development Department, 1943-1962', *Scottish Affairs* 14 (1996): .
- Levitt, I., ed., 'Introduction', to *The Scottish Office. Depression and Reconstruction 1919-1959*. Edinburgh: Scottish History Society, 1992.
- Levitt, I. ed., *Treasury Control and Public Expenditure in Scotland, 1885-1979*. Oxford, Oxford University Press, 2014.
- Linehan, D., 'Regional survey and the economic geographies of Britain 1930-1939' *Transactions of the Institute of British Geographers* 28 (2003), 96-122.**

-
- Madgin, R. and R. Rodger, 'Inspiring capital? Deconstructing myths and reconstructing urban environments, Edinburgh 1860-2010' *Urban Studies* 40 (2013): 507-529.
- McKenzie, A. 'Public-spirited men cannot stand by and do nothing': Scotland's inter-war industrialists and economic revival'. Glasgow: unpublished paper, 2015.
- MacKenzie, N. "'Chucking buns across the fence?" Government-sponsored industry development in the Scottish Highlands, 1945-1982. *Business and Economic History On-line*, 4, (2006): 2-5.
- McCrone, G. *Scotland's Economic Progress 1951-1960*. London: Allen and Unwin, 1965.
- McCrone, G. *Regional Policy in Britain*. London: Allen and Unwin, 1969
- McCrone, G. 'The role of government' in *The Economic Development of Modern Scotland 1950-1980* edited by R. Saville, 195-213. Edinburgh: John Donald, 1985.
- G. McCrone, G. 'Urban renewal: the Scottish experience' *Urban Studies* 28 (1991): 919-938.
- MacInnes, J. 'The deindustrialisation of Glasgow' *Scottish Affairs* 11 (1995):73-95
- Milward, A. and G. Brennan, *Britain's Place in the World: A Historical Enquiry into Import Controls 1945-1960*. London: Routledge, 1996.
- Morton, G. *Unionist-Nationalism: the Historical Construction of Scottish National Identity: Edinburgh, 1830-1860*. Edinburgh: Edinburgh University Press, 1994.**
- Murray, W. 'Trade' in Cairncross, *Scottish Economy*: 133-148
- ODNB, Cairncross, Sir Alexander Kirkland [Alec] (1911–1998)
- O'Furner, M. and B. Supple eds. *The State and Economic Knowledge. The American and British Experiences*. Cambridge: Cambridge University Press, 1990.
- O'Hara, G. 'Towards a new Bradshaw? Economic statistics and the British state in the 1950s and 1960s' *Economic History Review* 60 (2007): 1-34.
- O'Hara, G. 'Numbers, experts and ideas: The French economic model in Britain, c.1951-73' in *Statistics and the Public Sphere. Numbers and the People in Modern Britain, c.1800-2000* edited by Crook, T. and G. O'Hara, 84-100. Abingdon: Routledge, 2011.
- G. O'Hara, *Governing Post-War Britain. The Paradoxes of Progress, 1951-1973* (2012), 112-130.**
- Paterson, L. *The Autonomy of Modern Scotland*. Edinburgh: Edinburgh University Press, 1994
- Peden, G. 'The managed economy: Scotland, 1919-2000' in *The Transformation of Scotland. The Economy since 1700* edited by T. Devine, C. Lee and G. Peden, 233-65. Edinburgh: Edinburgh University Press, 2005.
- H. Pemberton, *Policy Learning and British Governance in the 1960s* (2004), pp.46-79**
- Perchard, A. "'Broken Men" and "Thatcher's Children": Memory and legacy in Scotland's Coalfields', *International Labor and Working-Class History* 84 (2013):82-84.
- Perchard, A. and N. Mackenzie. "'Too much on the highlands?" Recasting the economic history of the highlands and islands' *Northern Scotland* 4 (2013): 3-22.
- Phillips, J. *The Industrial Politics of Devolution. Scotland in the 1960s and 1970s*. Manchester: Manchester University Press, 2008.
- Phillips, J. 'De-industrialization and the moral economy of the Scottish coalfields' *International Labour and Working Class History* 84 (2013): 99-115.
- Radcliffe *Report of the Committee on the Working of the Monetary System*, Cmnd. 827, 1959.
- Ritschel, D. *The Politics of Planning. The Debate on Economic Planning in Britain in the 1930s*. Oxford: Oxford University Press, 1997.
- Robinson, E. 'The economic problems in the transition from war to peace' *Cambridge Journal of Economics* 10 (1986): 165-85.
- Rollings, N. 'The Reichstag method of governing? The Attlee government and economic controls' in *Labour Governments and Private Industry* edited by H. Mercer, N. Rollings and J. Tomlinson, 15-36. Edinburgh: Edinburgh University Press, 1992.
- Rollings, N. 'Cracks in the post-war Keynesian settlement? The role of organised business in Britain in the rise of neo-liberalism before Margaret Thatcher' *Twentieth Century British History* 24 (2013) : 637-659

-
- Rose, N. 'Governing by numbers; figuring out democracy' *Accounting, Organization and Society* 16 (1991): 673-692.
- Royal Commission on Scottish Affairs, vol II Memorandum by Her Majesty's Treasury and the Trade and Industry Departments*, 1953.
- Royal Commission on Scottish Affairs, Report* Cmd 9212, 1954.
- Saville, R. 'The industrial background to the post-war Scottish economy' in *The Economic Development of Modern Scotland* edited by Saville, 1-46. Edinburgh: John Donald. 1985).
- Scott, P. *Triumph of the South. A Regional Economic History of Early Twentieth Century Britain*. Aldershot : Ashgate, 2007.
- Scott, W. *The Industries of the Clyde Valley during the Great War*. Oxford, Clarendon Press, 1924.
- Scottish Council (Development and Industry) *Report of Committee on Local Development in Scotland*. Edinburgh: SCDI, 1952.
- The Scottish Economy 1965 to 1970. A Plan for Expansion* Cmnd. 2864, 1966.
- Slaven, A., *The Development of the West of Scotland*. London: Routledge and Kegan Paul, 1975.
- Tiratsoo, N. and J.Tomlinson, *The Conservatives and Industrial Efficiency 1951-64. Thirteen Wasted Years?* London: Routledge, 1998.
- Tomlinson, J. 'Planning: Debate and Policy in the 1940s', *Twentieth Century British History* 3 (1992): 154-74
- Tomlinson, J., 'Managing the economy, managing the people: Britain, c. 1931-1970' *Economic History Review* 57 (2005): 555-85.
- Tomlinson, J. *The Labour Governments 1964-1970 vol. III Economic Policy*. Manchester: Manchester University Press, 2004.
- Tomlinson, J. 'De-industrialization not decline: a new meta-narrative for post-war Britain' *Twentieth Century British History* (2015) doi: 10.1093/tcbh/hwv030 First published online: October 12, 2015
- Tomlinson, J., C.Morelli and V.Wright, *The Decline of Jute* London: Pickering and Chatto, 2011.
- Toothill: *Report of a Committee appointed by the Scottish Council (Development and Industry)* Edinburgh: SCDI, 1961.
- Tooze, A., 'Imagining national economies: national and international economic statistics, 1900-1950' in *Imagining Nations* edited by G. Cubitt ,212-228. Manchester: Manchester University Press, 1998.
- Tooze, A. *Statistics and the German State, 1900-1945. The Making of Modern Economic Knowledge*. Cambridge: Cambridge University Press, 2001.
- Toye, R. 'Gosplanners versus thermostatists: Whitehall planning debates and their policy consequences, 1945-49' *Contemporary British History* 14 (2000): 81-106.
- Toye, R. *The Labour Party and the Planned Economy 1931-1951*. Woodbridge: Boydell, 2003.
- Ward, P. *Unionism in the United Kingdom, 1918-1974*. Basingstoke: Palgrave, 2005.
- Ward, R. and T.Doggett, *Keeping Score. The First Fifty Years of the CSO*. London: CSO, 1991.
- Wilson. J.H. 'Statistics and decision-making in government-Bradshaw revisited' *Journal of the Royal Statistical Society Series A* 136 (1972): 1-16.
- Winch, D. 'Economic knowledge and government in Britain: some historical and comparative reflections' in *The State and Economic Knowledge* edited by M. Furner and B. Supple, 40-70. Cambridge: Cambridge University Press, 1990.