The British Engineering Industry and Commonwealth Development in the early 1950s[1]

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Introduction

In Churchillian doctrine, Britain was at the intersection of three spheres of political and economic power: the Anglo-American special relationship, western Europe, and the Commonwealth. Historians of economic policy have had plenty to say about postwar Anglo-American relations, and much has now been written on Britain's attitude towards European economic integration. But the United Kingdom's economic relationship with the Commonwealth has sometimes been dismissed as a troublesome anachronism, which merely served to obfuscate Britain's destiny in Europe. For example, Milward and Brennan are incredulous that in the 1950s Britain apparently regarded Australia, with a population of 9.5 million, as a more promising market than western Europe, with a population of 250 million.[2]

Recent studies of the Sterling Area in the 1950s have had relatively little to say about the industrial underpinnings of this economic community.[3] This article combines financial and industrial history to

[1] I am obliged to Douglas Farnie, Gary Hawke, Paul Robertson, Tim Rooth, and John Wilson for helpful comments on an earlier draft, and to Victoria University of Wellington for covering research expenses.

[2] A.S. Milward and G. Brennan, *Britain's Place in the World: A Historical Enquiry into Import Controls 1945-60* (London 1996), pp.109-10. See also J.R.V. Ellison, 'Perfidious Albion? Britain, Plan G and European Integration', *Contemporary British History*, 10, 4 (1996), pp.1-34.

[3] C.R. Schenk, *Britain and the Sterling Area* (London 1994); G. Krozewski, 'Sterling, the "Minor" Territories, and the End of Formal Empire, 1939-1958', *Economic History Review*, XLVI, 2 (1993), pp.239-65.

examine a scheme, floated in 1952, to forge the British engineering industry into the locomotive of Commonwealth development. Although this plan fizzled out, the reasons for its demise are of considerable interest, because they shed light on the reasons why the Commonwealth was in the long run unsustainable as an economic community.

I. Convertibility and Commonwealth development

The sterling Commonwealth resolved, in 1952, to mount a new push towards dollar convertibility, in view of the perception that inconvertibility was undermining sterling's attractiveness as a reserve currency. At the December 1952 Commonwealth Economic Conference (CEC), the British sought approval for the 'Collective Approach', which was a scheme to introduce non-resident current-account convertibility at a flexible exchange rate. The 'Collective Approach' would have required American cooperation, and the imposition of controls over the access of sterling Commonwealth countries to their accumulated sterling balances, as a safeguard against the collapse of the pound.[4] Sterling Commonwealth countries accepted that convertibility was a worthy objective, but were reluctant to countenance any interference with their sterling balances, and wary of the proposed flexible exchange rate. A fall in the value of sterling would have involved a reduction in the dollar value of the sterling balances. Most Commonwealth governments also regarded the development of their economies as more urgent than the achievement of convertibility. New Zealand's premier, Sid Holland, told British leaders that, as a topic to excite the public, convertibility was a "flop".[5] In an effort to win support for the 'Collective Approach', the British promised to make a 'Special Effort' to meet Commonwealth demands for development capital and capital goods. Commonwealth leaders endorsed the 'Collective Approach' on these terms.[6] American and continental opposition, however, effectively killed the 'Collective

[4] J.S. Fforde, *The Bank of England and Public Policy, 1941-1958* (Cambridge 1992), chs 6-7.
[5] *New Zealand Political Debates*, 299, 28 April 1953, p.313.
[6] J. Polk, *Sterling: Its Meaning in World Finance* (New York 1956), pp.263-9.

Approach', and non-resident convertibility, at a fixed rate, was not attained until December 1958.

This article is concerned with a neglected, but important, aspect of the 'Special Effort'. Although the 'Special Effort' is usually regarded as a purely financial affair, it also embraced the provision by the United Kingdom of real resources in the form of capital goods.[7] Each Commonwealth country brought an economic development plan to the CEC, which in general terms stated its intentions and priorities, and set out its capital goods requirements. The stated emphasis in these plans was on the development of primary production, with the goal of increasing the exports and reducing the imports of the Sterling Area, and thereby improving the prospects for sterling. New Zealand, for instance, intended to increase its farm production, and to embark upon a major pulp and paper development in the Kaingaroa forest. Large imports of capital goods, particularly of heavy crawler tractors and farm machinery, would be needed to bring New Zealand's plan to fruition.[8]

Britain's submission was markedly different from the others, and gave pride of place to the expansion of the capital goods industries. According to British officials, "United Kingdom engineering production occupies a unique position in the whole structure of the development of the sterling Commonwealth."[9] As well as earning dollars directly, the British engineering industry would save dollars by replacing American products in the sterling Commonwealth. Britain would help its Commonwealth partners to overcome bottlenecks in transportation and electricity generation by supplying more and better locomotives, rolling stock, and heavy electrical plant. More construction equipment and agricultural machinery would also be provided.[10] British capital would finance these purchases of engineering goods, and the Commonwealth economy would continue to develop along complementary lines.

[7] Schenk, *Britain and the Sterling Area*, p.37.

[8] New Zealand Archives, Wellington [hereafter NZA], T1, 61/3/12, pt 5, CEC(O)(52)11, 'New Zealand Development', Paper A, 22 September 1952.

[9] NZA, T1, 61/3/12, Pt 4, CEC(O)(DP)(52)1 (Revise), 'Promising Fields for Development in the Sterling Area', 5 November 1952, p.12.

[10] NZA, T1, 61/3/12, pt 5, CEC(O)(52)7, 'Development in the United Kingdom', 22 September 1952; EA1, 154/7/16, CEC(O)(52)23, 'Report on Development Policy', 12 October 1952.

These plans were impressive on paper but in reality they were rather flimsy. It was unclear how they would be coordinated and implemented. Furthermore, Commonwealth governments had no intention of confining themselves to primary production, and were actively fostering the growth of secondary industries.

II. The postwar British engineering industry

The British government had sound reasons for offering engineering products, and in particular capital goods, as its principal real contribution to Commonwealth development. On the demand side, the potential market in the Commonwealth for engineering products was enormous. On the supply side, the British engineering industry had undergone rapid expansion since 1939. Since the international competitiveness of this industry remained a matter for debate, the development of protected Commonwealth markets was an attractive option.

The only limit to the demand for engineering goods in the developing countries was the availability of finance, but supplies were often difficult to obtain. When deliveries of capital goods to the third world were cut back due to rearmament, in 1951, UNESCO and the UN Economic Commission for Africa and the Far East (ECAFE) pleaded with Britain and other industrial nations not to deprive their clients of essential development goods.[11] Sterling Area governments were clamouring for more capital goods in the early 1950s. Southern Rhodesia claimed in 1952 that its ambitious development plans were being frustrated by an inability to obtain delivery of locomotives.[12] Even wealthy Sterling Area countries, such as New Zealand, had similar concerns. Heavy crawler tractors were required for New Zealand's development programme, but they were not yet available in Britain, while American suppliers were fully occupied on military contracts.[13] British officials remarked that the Sterling Area

[11] Public Record Office, London [hereafter PRO], T229/278, 'Note by A.J. Collier', 10 May 1951.
[12] NZA, T1, 61/3/12, Pt 4, CEC(O)(DP)(52)6th meeting, Minutes of Committee on Development Policy, 2 October 1952.
[13] NZA, T1, 61/3/12, Pt 5, CEC(O)(52)11, 'New Zealand Development', Paper B, 22 September 1952.

would remain a lucrative market for engineering products if customers were given adequate credit and deadlines were met; however "a failure on our part to supply will mean the placing of orders in North America, Western Europe or Japan. ... Our experience in Canada in the last fifteen years has shown us that once a market for capital equipment has been lost it is extremely difficult to recapture it."[14]

Engineering output in the United Kingdom almost doubled between the late 1930s and the early 1950s, and engineering exports as a share of total exports rose from 27 per cent in 1938 to 42.5 per cent in the first three-quarters of 1952.[15] Engineering was increasingly regarded as an industrial spearhead. A large modern engineering sector was essential to underpin Britain's military capability.[16] During the war, Britain had broadened the scope of its engineering activities, and this process of diversification continued in peacetime, aided by the temporary elimination of German competition, the dollar shortage, and the *ad hoc* use of import controls. In the early 1950s, for example, the prominent engineering firms of Vickers and Fowlers began to manufacture industrial tractors in competition with established American exporters. The government welcomed this initiative, which served to increase reserve tank production capacity, and granted these British tractor suppliers import quota protection.[17]

In each postwar sterling crisis, the engineering industry was called upon to make a substantial contribution to exports. Cotton and coal had led the export drive in the immediate postwar years, but the baton had passed to engineering by the early 1950s. The delicate condition of the balance of payments at the start of 1952 induced the Chancellor of the Exchequer, R.A. Butler, to announce cuts in home investment to free more capital goods for export.[18] Although ministers were particularly

[14] PRO, T236/3071, PEC(52)20, 'Development in the Commonwealth: Memorandum by a Group of Officials', 1 September 1952, p.8.
[15] *Engineering*, 2 January 1953, p.10.
[16] D. Edgerton, "Whatever Happened to the British Warfare State? The Ministry of Supply, 1945-1951", in H. Mercer, N. Rollings and J. Tomlinson (eds), *Labour Governments and Private Industry: The Experience of 1945-1951* (Edinburgh 1992), pp.91-116.
[17] Milward and Brennan, *Britain's Place*, p.258.
[18] PRO, T229/318, Butler to Thorneycroft, 4 April 1952; SUPP14/345, 'Capital Goods - Reduction of Home Consumption', 22 February 1952.

anxious to boost sales in the dollar area, their officials felt that the sterling Commonwealth would be more receptive to the type of goods that Britain had to offer. They took comfort in the knowledge that the displacement of North American goods in the sterling Commonwealth would make an almost equally valuable contribution to the relief of the dollar shortage.[19]

More fundamentally, there was a growing recognition of the need for accelerated structural change. Without sophisticated modern industries, Britain would encounter persistent balance of payments problems, and find it increasingly difficult to compete with other industrial nations. Some experts, including Thomas Balogh, a leading Oxford economist, argued that infant industry protection was justified on developmental grounds, irrespective of strategic considerations. Balogh concluded, in 1947, that Britain's industrial future lay with the production and export of capital goods and high-quality consumer goods.[20] In 1945, the Treasury sage, Otto Clarke, maintained that Britain should specialize in the supply of high value-added manufactures rather than basic items like cotton textiles. Sophisticated manufactures would be less intensive in their use of raw materials, and, since Clarke expected the terms of trade to move in favour of primary producers, the national import bill would be reduced.[21] The Economic Section believed that the dollars saved by increasing machinery exports to the sterling Commonwealth could "contribute at least as much towards the solution of the overall dollar problem of the Sterling Area as the drive to sell exports directly to the dollar area."[22]

The impending revival of Japanese competition in basic consumer goods, in the early 1950s, gave British officials further food for thought. Miss Dennehy, of the Board of Trade, advocated "reducing [British] capacity in certain industries in which Japan is heavily engaged and which are likely to develop first in the backward countries (notably textiles)

[19] PRO, T229/318, Turnbull to Strath, 6 February 1952.
[20] T. Balogh, *Unequal Partners*, II (Oxford 1963), p.167.
[21] Sir R. Clarke, *Anglo-American Economic Collaboration in War and Peace 1942-1949*, ed. Sir A. Cairncross (Oxford 1982), p.104.
[22] Bank of England Archive [hereafter BoEA], OV44/28, SA(50)3, 'The Future of the Sterling Area: Note by the Economic Section', 8 February 1950.

and building up those which serve the development of natural resources, social capital and industry (mainly engineering)."[23] Heavy capital goods and luxury items, which were intensive users of skilled labour, and unsuited to mass production techniques, appeared to offer the best prospects.

Engineering had a more promising future than cotton, but its success in global competition was still far from assured. British manufacturers in most industries were considered vulnerable to American and German competition. The superiority of American technology, management, and working practices had been a constant theme in public debate during the 1940s.[24] A rude awakening was anticipated for British firms in the 1950s. The trade journal, *Engineering*, commented in 1953 that the growth of the engineering sector since 1939 was the result of an unparalleled sellers' market. British firms had not worried about such issues as productivity, marketing, and product innovation between 1945 and 1950, because the lack of foreign competition had made it possible for them to export obsolete goods at high prices.[25] Demand for engineering products was given a final boost by rearmament in the early 1950s. At their peak, defence orders absorbed one-eighth of the output of the metal goods sector.[26] The government tried to minimize the pressure on capital goods producers by slanting rearmament orders towards consumer engineering firms, but all branches of the industry had to endure an increased scarcity of steel, which was rationed between February 1952

[23] PRO, BT11/4909, 'Japanese Competition: Background Note for the President', 23 November 1951.

[24] Mercer, Rollings, and Tomlinson, *Labour Governments and Private Industry*; N. Tiratsoo and J. Tomlinson, *Industrial Efficiency and State Intervention: Labour 1939-51* (London 1993); N.F.R. Crafts and M. Thomas, 'Comparative Advantage in UK Manufacturing Trade, 1910-1935', *Economic Journal*, 96, 3 (1986), pp.629-45; S.N. Broadberry and N.F.R. Crafts, 'Explaining Anglo-American Productivity Differences in the Mid-Twentieth Century', *Oxford Bulletin of Economics and Statistics*, 52, 4 (1990), pp.375-402; S.N. Broadberry and R. Fremdling, 'Comparative Productivity in British and German Industry 1907-37', *Oxford Bulletin of Economics and Statistics*, 52, 4 (1990), pp.403-21.

[25] *Engineering*, 2 January 1953, pp.10-12.

[26] Sir A. Cairncross, *Years of Recovery: British Economic Policy 1945-51* (London 1984), ch. 8; P. Burnham, 'Rearming for the Korean War: The Impact of Government Policy on Leyland Motors and the British Car Industry', *Contemporary Record*, 9, 2 (1995), pp.343-67.

and May 1953.[27] Rearmament began to wind down in the second half of 1952, and, in February 1953, Duncan Sandys, the Minister of Supply, assured his colleagues that the conflict between defence and export orders was no longer acute.[28] A major role for engineering in Commonwealth development now appeared to be both more feasible, as regards the availability of capacity, and more desirable, in the sense that it would help to sustain profits.

German firms were regarded as the principal competitive threat to the British engineering industry. During the war, the future of German industry had been a topic of heated debate. Lionel Robbins, writing in 1942, feared that the award of large reparations payments to continental countries would result in substantial export orders for German firms at the expense of British companies. It is interesting that the American Morgenthau Plan for the pastoralization of Germany assumed that British industry would require permanent protection from German competition. Lord Cherwell, Churchill's closest advisor, was anxious to crush German industry, and proposed that Britain should claim Germany's export markets for key products, such as machine tools and steel, in partial settlement of war reparations.[29] However, Germany was allowed to rebuild its industrial might, and at the close of the 1940s British officials were predicting that the German engineering industry would sweep British goods out of continental European markets. These officials advised that British engineering firms should avoid German competition by concentrating on markets in North America and the Sterling Area.[30]

There was also evidence, in the early 1950s, that Japan was diversifying into mechanical engineering on the basis of skills developed in arms production. It was part of American cold-war policy to

[27] T. Geiger, "'The Next War is Bound to Come': Defence Production Policy, Supply Departments and Defence Contractors in Britain, 1945-57", in A. Gorst, L. Johnman and W.S. Lucas, *Contemporary British History 1931-61* (London 1991), p.113, n.32; J.C.R. Dow, *The Management of the British Economy 1945-60* (Cambridge 1964), p.160.

[28] PRO, CAB134/846, EA(53)3rd meeting, Minutes of Economic Policy Committee, 5 February 1953.

[29] Sir A. Cairncross, *The Price of War: British Policy on German Reparation 1941-1949* (Oxford 1986), pp.21, 33, 54-5.

[30] A.S. Milward, *The European Reconstruction of the Nation State* (London 1992), pp.405-7.

encourage the development of Germany and Japan as 'workshop economies' for the supply of engineering products and other manufactures to western Europe and Asia respectively. This strategy was designed to bind the vanquished powers into the free world alliance. American aid programmes in Asia were used to stimulate demand for Japanese goods, much to the disgust of the British.[31] In 1951, the British embassy in Tokyo warned that Japanese firms were already competent in the production of light engineering goods, such as sewing machines and bicycles, and were developing capacity to supply heavy capital goods, including electricity-generating equipment and diesel locomotives. Although the embassy was confident that Japanese capital goods would not meet the standards of customers in advanced economies, it feared that they could become a serious threat to British markets in the third world.[32]

Sterling Area markets were deemed essential to the prosperity of the engineering industry in the medium term. Most Sterling Area countries granted tariff preferences to British goods,[33] and used discriminatory quotas against foreign, and particularly American and Japanese, products. Balogh longed for a more stringent regime of Commonwealth trade discrimination. He advocated the negotiation of long-term bilateral trade agreements, and the coordination of national development plans in the Sterling Area. Armed with secure Commonwealth contracts, British firms would at last invest in facilities for the manufacture of new products, and British industrial productivity would slowly converge on the American level.[34] Balogh's imperial socialism was far too radical for an establishment that was at heart committed to "foot-dragging" multilateralism.[35] But the grit with which the British fought to defend their preferences, not least

[31] W.S. Borden, *The Pacific Alliance: United States Foreign Economic Policy and Japanese Trade Recovery, 1947-1955* (Madison, WI 1984).
[32] PRO, BT11/4918, 'Report on Japanese Competition from the Tokyo Embassy', 9 November 1951.
[33] D. MacDougall and R. Hutt, 'Imperial Preference: a Quantitative Analysis', in D. MacDougall, *Studies in Political Economy* (London 1975), 1, pp.244-68.
[34] Balogh, *Unequal Partners*, II, pp.104-5, 111, 167, 193, 219.
[35] J. Tomlinson, *Democratic Socialism and Economic Policy: The Attlee Years, 1945-1951* (Cambridge 1997), p.41.

on engineering products, in the 1950s and 1960s, shows how highly they still valued Commonwealth markets.[36]

While not suggesting that the industry was in crisis, J.A. Jukes, of the Economic Section, remarked in November 1952 that the "slack which is now developing in our engineering industry enables us to take a forthcoming attitude on development."[37] Other British officials noted that it was of "prime importance to the United Kingdom that ... the Sterling Area should be developed by United Kingdom plant and equipment. By doing this we will not only benefit our own overall balance of payments and retain a long-term export market for our manufacturers, we shall also benefit the central reserves."[38] By linking the problems of Commonwealth development and the future of the engineering industry, British officials hoped to solve them simultaneously.

III: Engineering's role in the 'Special Effort'

In several important respects, 1952 was not an auspicious year for the launch of a coordinated development programme in the British Commonwealth. Firstly, the Commonwealth was in the process of evolving from the "cozy club" of the war and reconstruction years into "[just] another international association."[39] Commitment to the Commonwealth was starting to erode, as its leadership became less racially homogeneous,[40] and the practical value of an economic and military partnership with Britain, which was no longer a superpower, began to diminish. Secondly, free-market ideas were in the ascendant in Britain, Australia, and New Zealand, where conservative ministries, which

[36] J. Singleton, 'New Zealand, Britain, and the Survival of the Ottawa Agreement, 1945-77', *Australian Journal of Politics and History*, 43, 2 (1997), pp.168-82.
[37] PRO, T230/246, EC(S)(52)38, 'Economic Policy with Inconvertible Sterling: Memorandum by J.A. Jukes', 4 November 1952, p. 11.
[38] PRO, T236/3071, PEC(52)20, 'Development in the Commonwealth: Memorandum by a Group of Officials', 1 September 1952, p. 8.
[39] W.B. Hamilton, K. Robinson, and C.D.W. Goodwin, "Preface", in W.B. Hamilton *et al*, *A Decade of the Commonwealth, 1955-1964* (Durham, N. C. 1966), p.vi.
[40] A. Seldon, *Churchill's Indian Summer: The Conservative Government 1951-55* (London 1981), pp.343-6.

were inherently sceptical of economic planning, had replaced the socialist governments of the 1940s.

At the January 1952 Commonwealth Finance Ministers' Conference, British pleas for more austerity and further cuts in dollar imports, in order to manage the deepening sterling crisis, were heard with rising impatience. Commonwealth leaders argued that the Sterling Area could not survive for much longer on the basis of such unimaginative policies. As well as pressing for the resumption of convertibility, the Australian Treasurer, Arthur Fadden, called for a new initiative to develop the Commonwealth's productive resources, and thereby to raise incomes and strengthen the Sterling Area's balance of payments. Other delegations welcomed Fadden's intervention. Commonwealth development also had its supporters in Britain, most notably, and quite uncharacteristically, the Governor of the Bank of England, Cameron Cobbold, who enthusiastically welcomed a Southern Rhodesian proposal for a coordinated programme of Sterling Area development.[41]

While the bulk of the British policy-making establishment continued to regard development as a subsidiary theme to high financial politics, the views of the Commonwealth finance ministers could not be ignored. Donald MacDougall, the economic advisor to Lord Cherwell, noted that a combined strategy of convertibility and development "would require big structural changes in production and trade, such as a large increase in [British] steel and engineering capacity."[42] An inter-governmental Commonwealth Development Working Party was set up to consider how best to exploit the Sterling Area's resources. Unfortunately, a rift soon emerged over whether or not the development programme should be controlled from the centre. Two of the smaller countries, Southern Rhodesia and New Zealand, proposed the formation of a Commonwealth Development Corporation,[43] with powers to allocate

[41] Fforde, *The Bank of England*, pp.422-6; Schenk, *Britain and the Sterling Area*, pp.37-8; D. Lee, *Search for Security: The Political Economy of Australia's Postwar Foreign and Defence Policy* (Sydney 1995), pp.147-8.

[42] D. MacDougall, *Don and Mandarin* (London 1987), p.87.

[43] Not to be confused with the much more limited Commonwealth Development Finance Corporation which was established at the December 1952 CEC.

development finance among member states. Sir Edgar Whitehead, the Southern Rhodesian Finance Minister, seems to have had in mind the establishment of a central planning authority for the sterling Commonwealth.[44] But larger Commonwealth countries, including Australia and Pakistan, condemned the Southern Rhodesian plan. They realized that the British, who would be required to provide most of the capital, would inevitably dominate the proposed authority. The sovereignty of independent Commonwealth nations would be undermined, and there would be nasty squabbles over the distribution of capital.[45] Only a much more informal mechanism would be acceptable to the Commonwealth as a whole.

After much argument, a list was drawn up of the most promising fields for Commonwealth development, with the proviso that Britain would not supply additional capital for "uncompetitive import saving production which can flourish only behind a barrier of import restriction."[46] British industry was unrelentingly hostile to the establishment of secondary industries in the Sterling Area.[47] Cereals, sugar, tobacco, cotton, copper, machinery, zinc, coal, and cocoa were identified as the main priorities.[48] Each country would formulate its own development programme in the light of this information, and present it for discussion at the CEC later in the year.

Although the financial aspects of the 'Special Effort' are not the main concern of this article, it is worth outlining British intentions in this area. In August 1952, British officials estimated that gross investment of all kinds in the Sterling Area was running at the rate of £4,000 to £5,000 million per annum, half of which was in the United Kingdom. They envisaged a rise in investment of £2,000 million in total over five years

[44] PRO, T229/573, FM(D)(UK)(52)51 Fourth Revise, 'Draft Paper for U.K. Ministers on Commonwealth Development Report', 16 August 1952, p. 9.
[45] PRO, T229/572, 'Interim Report of the Commonwealth Development Working Party: Note by Butt', 20 February 1952; Butt to Robinson, 17 March 1952.
[46] PRO, CAB129/56, C(52)379, 'Development in the Sterling Area', 31 October 1952, p.1.
[47] PRO, SUPP14/138, 'Factors Militating Against the Export Trade of the Engineering Industry', 26 November 1952.
[48] PRO, DO35/5579, FM(D)(UK)(52)64, 'The Scope for Sterling Area Development: Note by the Economic Section', 15 September 1952, p. 1

under the 'Special Effort', which would be devoted to projects designed improve the area's balance of payments. Britain would contribute about £750 million of the additional capital, two-thirds of which would be invested in home industry, and one-third in the sterling Commonwealth. Other sterling Commonwealth countries would be expected to make large contributions from their own savings. The British figures were not released to the Commonwealth, and, since no figures were mentioned in later versions of the scheme, uncertainty was allowed to reign.[49] Nevertheless, as part of the 'Special Effort', controls on the outflow of capital to the sterling Commonwealth were relaxed, and more sterling was released to borrowers through the World Bank. It was hoped that the Americans would cooperate by restraining exports of capital goods to the sterling Commonwealth, and permitting dollar loans to be spent on British equipment. The Americans do appear to have helped to some extent; for instance they authorized the use of dollar borrowing by the Federation of Rhodesia and Nyasaland to purchase British railway equipment.[50]

British officials had to select the types of engineering products that would be offered to the Commonwealth, and to devise a mechanism that would ensure their availability in adequate quantities. Since the plan was to develop the Commonwealth's primary production capacity, the focus would be on the production of capital goods suitable for use in infrastructure, mining, and agricultural projects. But it was pointed out that new claims on the output of a fully employed economy could only be satisfied if savings were made elsewhere. In order to supply more capital goods to the Commonwealth, it would be necessary to make cuts in consumption or domestic investment (probably defence or social services), or else accept a further delay in the replenishment of the gold and dollar reserves.[51]

[49] PRO, DO5578B, FM(D)(UK)(52)56(Revise), 'UK Working Party on the Commonwealth Development Report: Draft Report for UK Ministers', 28 August 1952.
[50] PRO, T230/246, EC(S)(52)37, 'The Economic Situation: Memorandum by C.R. Ross', 1 November 1952; *Engineering*, 9 July 1954, p.34.
[51] PRO, DO35/5578B, FM(D)(UK)(52)56(Revise), 'UK Working Party on Commonwealth Development Report: Draft Report for UK Ministers', 28 August 1952, p.23.

Consideration had already been given to possible measures to raise the output of capital goods for developing countries, during 1951, when UNESCO and ECAFE had expressed alarm about the effects of rearmament. At that time, the Economic Section's David Butt had contemplated the use of defence powers and steel allocations to compel firms to supply the items required.[52] While this approach did not appeal to the British Conservative government, which was elected in 1951, it did enjoy some support in the Commonwealth. In September 1952, Indian and Southern Rhodesian officials argued that, if the British government was serious about promoting Commonwealth development, it should restrict investment in decaying industries, such as cotton and farming, and direct resources into engineering. Embarrassed British officials replied that the government did not have dictatorial powers. They defended British agriculture on strategic grounds, stressed that British consumer goods were vital earners of foreign exchange, and argued that it would be reckless to overcommit the British economy to capital goods production.[53] Although the British were prepared to think about the manipulation of building regulations to give priority to appropriate investment projects, they were not inclined to discuss the use of steel rationing in this context.

Consideration was given to various schemes, including tax concessions, cheap finance, insurance, and long-term contracts underwritten by the government, to encourage firms to invest in additional capacity to meet Commonwealth demand for capital goods. But Robert Hall, the Director of the Economic Section, was satisfied that a tight domestic macro-economic policy would serve to induce firms to cater for the Commonwealth. J.C.R. Dow added that a strong dose of Crippsian moral exhortation would also be necessary.[54] Ministers endorsed Hall's approach: "the main contribution which the Government can make ...

[52] PRO, T229/278, 'Overseas Development and Rearmament: Note by D.M.B. Butt', April 1951.
[53] NZA, T1, 61/3/12, Pt 4, CEC(O)(DP)(52)1st to 3rd meetings, Minutes of Committee on Development Policy, 26, 28, 29 September 1952.
[54] PRO, T230/246, EC(S)(52)38, 'Economic Policy with Inconvertible Sterling: Memorandum by J.A. Jukes', 4 November 1952, p. 12; EC(S)(52)41, 'Taxation and Incentives: Memorandum by J.C.R. Dow', 12 November 1952; EC(S)(52)42, 'Selective Investment and Discriminatory Tax Policies: Memorandum by C.R. Ross', 28 November 1952; T230/226, 'Overseas Investment: Memorandum by Robert Hall', 29 January 1953.

is the creation of an economic climate which encourages ... [engineering firms] to develop production along the right lines."[55] Commonwealth countries were advised that engineering firms would be more accommodating if they were assured of a steady export demand. Without such an assurance, many companies would be reluctant to install new capacity and train skilled workers. Consequently, it would be in the interests of Commonwealth customers to place firm orders as soon as possible, and indicate that repeat orders would be forthcoming.[56]

In so far as British engineering producers were capable of responding flexibly to market forces, there was much to be said for the government's approach. The pressure of demand on the engineering and steel industries was declining in the second half of 1952. At the beginning of the year, official economists had predicted falling demand for consumer engineering products. They foresaw further austerity at home, and cuts in non-essential imports in the sterling Commonwealth, as efforts to protect foreign exchange reserves intensified. Under these circumstances, firms in the consumer engineering section would have an incentive to switch their idle plant to the production of capital goods.[57] The Economic Section predicted that the Commonwealth development initiative would not place a major burden on the supply of engineering labour in the short term. Several years would be occupied in the negotiation of contracts, the design of improved products, and the construction of factories, and there would be no substantial increase in the demand for engineering labour until 1955-57. Hence Commonwealth development would not crowd out other claims on the engineering industry, such as defence, home investment, and dollar exports.[58]

[55] PRO, CAB129/56, C(52)379, 'Development in the Sterling Area', 31 October 1952. See also J. Park, 'Wasted Opportunities? The 1950s Rearmament Programme and the Failure of British Economic Policy', *Journal of Contemporary History*, 32, 3 (1997), pp.372-8.
[56] NZA, T1, 61/3/12, pt 5, CEC(O)(52)7, 'Development in the United Kingdom', 22 September 1952, pp. 15-16.
[57] PRO, T230/245, EC(S)(52)5, 'Future Policy on Steel and Investment', 30 January 1952.
[58] PRO, DO35/5578A, FM(D)(52)54, 'Internal Implications of Suggested U.K. Contribution of £750 Million Over 5 [sic] Years to "Viability Investment" Either in the U.K. or in the Sterling Area', 25 August 1952; DO35/5579, FM(D)(UK)(52)64, 'The Scope for Sterling Area Development: Note by the Economic Section', 15 September 1952, pp.30-1.

There was no guarantee, however, that British industry would respond in the desired fashion. Managerial inadequacies aside, the engineering industry had to contend with conflicting incentives. Britain was economizing on imports of non-essential goods from the dollar world, so as to protect the pound. Since tight controls on imports of American fripperies encouraged the manufacture of substitute consumer goods in Britain, it was difficult for capital goods producers to obtain adequate supplies of labour and other inputs.[59]

At the conclusion of the CEC, in December 1952, the former Labour Chancellor of the Exchequer, Hugh Gaitskell, dismissed the conference communiqué as vague and 'platitudinous'. He could not understand how the Commonwealth proposed to achieve its development objectives in the absence of a powerful central agency to direct the plan.[60] Gaitskell may have been right but, in view of the fact that most Commonwealth governments would not countenance a central planning authority, there was no alternative to muddling through on an informal basis.

IV. The fate of the Commonwealth development plan

Within a year of the CEC, the Commonwealth development plan was revealed as a damp squib. The United Kingdom was disappointed with the trickle of applications to borrow for eligible development projects, and was not prepared to widen its criteria to approve prestige schemes that offered no balance of payments benefits.[61] British engineering exports to the sterling Commonwealth actually fell during 1953, and manufacturers of capital goods showed little inclination to invest in new capacity for hypothetical customers in the Commonwealth. Many firms had no confidence in the future of Commonwealth markets, while others abstained from expansion because they preferred to keep "fairly long order books."[62]

[59] J.O.N. Perkins, *Sterling and Regional Payments Systems* (Melbourne 1956), pp.51-2.
[60] *The Times*, 15 December 1952.
[61] PRO, DO35/5575, 'Brief on Commonwealth Development for Lord Swinton's Tour', 9 September 1953, pp. 10-12.
[62] PRO, T236/3373, GEN446(DP)(53)1st meeting, Minutes of UK Working Party on Commonwealth Development, 22 October 1953.

In early 1954, spare capacity existed in a number of branches of the capital goods industry, including commercial vehicles, tractors, internal combustion engines, woodworking machine tools, accumulators, ball and roller bearings, commercial refrigerating machinery, textile machinery, printing and bookbinding machinery, scientific laboratory instruments, and scientific glassware. Demand was somewhat higher for aircraft, railway wagons, diesel locomotives, excavators and some contractors' plant, coal mining machinery, machine tools, mechanical handling equipment, and industrial process control equipment. But "near-shortages" persisted only in companies making capital goods for the nationalized industries, such as railway equipment, heavy electrical plant, and coal mining machinery.[63] Putting on a brave face, Sir Leslie Rowan, of the Treasury, assured Commonwealth officials at the Sydney Finance Ministers' Conference, in January 1954, that Britain was now in an even better position to supply capital goods to the Commonwealth. British products could be delivered without undue delay, and were competitive in price and quality with foreign alternatives. He added that Britain was now prepared to make capital available for general development schemes, as well as for specific projects, although the stipulation about balance of payments enhancement would remain.[64]

These glad tidings were received with scepticism. The ability of the engineering industry to deliver products of high quality at reasonable prices, without lengthy delays, was still questioned by some delegations. Sir Oliver Goonetilleke, the Ceylonese Finance Minister, predicted that competition from American, German, and Japanese manufacturers would continue to intensify. He pointed out that Ceylon was a poor country which could not afford to turn away foreign salesmen offering bargains.[65] Some sterling Commonwealth countries were not convinced by Rowan's claim that Britain was making a genuine effort to supply more capital.

[63] NZA, EA1, Acc. W2619, 153/38/5, FM(54)4, 'Development in the United Kingdom: Memorandum by the United Kingdom Government', December 1953; PRO, T234/8, 'State of the Engineering Industries', 2 February 1954; 'Notes on the Economic Secretary's Comments on the Note About the Engineering Industry', 10 February 1954.

[64] NZA, EA1, Acc. W2619, 153/38/6, FM(O)(54)1st meeting, Minutes of Meeting of Officials, 4 January 1954.

[65] NZA, IC1, Acc. W1955, 74/16, Pt. 3, 'Report of First and Second Ministers' Meetings', 8 January 1954.

Perhaps they were aware that, during 1953, there had been an unsuccessful campaign in Whitehall to have the 'Special Effort' scrapped.[66] More positively, Senator Spooner, of Australia, thought that the finance ministers should allocate the responsibility for developing particular products to specific countries, although he did not go so far as to suggest the establishment of production targets. Spooner would have assigned engineering products to Britain, but his proposal aroused no interest.[67] Although the finance ministers pledged themselves to persevere with the strategy agreed to in 1952, they did so with a marked lack of enthusiasm. And without enthusiasm the chances of progress were negligible.

On the basis of Schenk's tentative figures on external investment,[68] it is possible to calculate that gross British investment in the rest of the Sterling Area, between 1953 and 1957 inclusive, was £289 million higher than it would have been if it had remained at the 1952 level. Although this sum exceeded the target of £250 million discussed by British officials in 1952, it is unclear how much of the increase was due to the 'Special Effort'. In view of the disappointing response to the Commonwealth development initiative, it is probable that other factors were largely responsible for the rise in British investment in the Sterling Area.

The role of the British engineering industry in the 'Special Effort' was virtually forgotten by 1955. Nevertheless, similar ideas continued to rise to the surface from time to time. In 1961, Sir Roy Harrod, the personal economic guru of Prime Minister Harold Macmillan, proposed a £1,000 million loan to India, which would be tied to purchases of British capital goods. The Whitehall view, stated by Alec Cairncross, was that industry would not be able to supply India without cutting deliveries to other markets, and Harrod's scheme was dismissed.[69] Then, in 1963, in a speech at Houghton-le-Spring, the new Labour leader, Harold Wilson, called for the expansion of tied aid programmes. He advocated measures to stimulate investment in the capital

[66] Schenk, *Britain and the Sterling Area*, pp.90-2.
[67] NZA, IC1, Acc. W1955, 74/16, Pt. 3, 'Report of Sixth Ministers' Meeting', 12 January 1954.
[68] Schenk, *Britain and the Sterling Area*, p.95.
[69] PRO, PREM11/3287, Harrod to Macmillan, 18 October 1961; 'Sir Roy Harrod's Letters to the Prime Minister', by Alec Cairncross, 3 November 1961.

goods industry so as to create the capacity needed to satisfy higher third world demand. Private firms would be offered financial incentives to expand, and new state-owned enterprises would be established in the engineering industry. Jaws dropped in amazement at this scheme in the Commonwealth Relations Office. It may not be a coincidence that Thomas Balogh was one of Wilson's advisors at this juncture.[70]

Contrary to the expectations of the Economic Section, the Commonwealth development initiative did not gather momentum in the mid-1950s. This article does not pretend to provide a detailed history of the export performance of the engineering industry, but table 1 demonstrates that British engineers lost rather than gained ground in the sterling Commonwealth in the 1950s. West Germany was the main beneficiary of declining British competitiveness – western European markets did not distract the Germans from seeking new customers in the Commonwealth. Although Britain retained a large slice of sterling Commonwealth markets for engineering products, this largely reflected

TABLE 1 - British, West German, and US shares of sterling Commonwealth imports of metal goods, 1953 and 1959 (%)

	1953			1959		
	UK	West Germany	USA	UK	West Germany	USA
Power machinery	75.1	8.6	11.9	70.5	10.3	9.4
Agricultural machinery	49.8	3.7	35.9	49.2	6.5	30.6
Office machinery	51.6	4.4	33.2	55.6	10.1	14.9
Metal working machinery	61.2	15.2	18.7	37.3	41.3	15.7
Mining, constructional and other specified machinery	58.4	13.6	21.8	50.1	14.3	21.3
Electrical machinery and equipment	79.7	5.4	7.3	60.3	17.0	6.5
Railway vehicles	55.8	18.9	6.3	53.5	22.3	12.0
Road motor vehicles	70.9	2.4	14.0	55.6	19.7	11.9
Non-motorised Road Vehicles	94.3	2.6	0.8	77.6	5.8	2.0
Scientific instruments	56.1	20.7	14.6	39.2	23.7	15.8

S.J. Wells, *British Export Performance: A Comparative Study* (Cambridge 1964), pp.217-29.

[70] PRO, CAB134/1777, 'Mr Harold Wilson's Economic Programme for the Commonwealth', 7 June 1963.

its commanding initial position, and the persistence, sometimes in diluted form, of Commonwealth preferences and dollar discrimination.[71]

V. Accounting for the failure of the scheme

It remains to account for the collapse of the ambitious scheme to attach the British engineering sector to the cause of Commonwealth development. There were three main obstacles to success. Firstly, there was little scope in the 1950s for closer economic coordination in the Commonwealth. Secondly, British firms were reluctant to give priority to sterling Commonwealth orders, due to uncertainty about the reliability of Commonwealth markets, and the competing demands of the nationalized industries. Thirdly, British engineering exporters faced growing customer resistance in the Commonwealth, due to slow delivery times, uncompetitive prices, and import substitution policies.

By contemporary standards, the spirit of economic cooperation in the Commonwealth was strong in the 1950s. The Sterling Area and the Commonwealth preference system were well-entrenched defensive positions. But member countries were not inclined to extend their collaboration into new fields; in particular they were not prepared to sacrifice national goals, such as import substitution industrialization, in order to implement a common development strategy. J.V. Bailey, of the Bank of England, summed the situation up in 1957:

"I don't, in fact, believe that there is any real interest by Commonwealth countries in each other's development plans. All are interested in the United Kingdom and the United Kingdom is interested in all – but there the story virtually ends. No one in Rhodesia has ever heard of the Snowy Mountains [hydroelectric scheme in Australia] and if any Australian is interested in [the] Kariba [dam project in Africa] it would only be because there is an indifferent race horse of that name."[72]

[71] Schenk, *Britain and the Sterling Area*, pp.78-87. Also see A. Maizels, *Industrial Growth and World Trade* (Cambridge 1963), ch. 10 and I.B. Kravis and R.E. Lipsey, *Price Competitiveness in World Trade* (New York 1971), chs 12-15.

[72] BoEA, OV44/46, 'Commonwealth Economic Committee', Note by J.V. Bailey, 23 September 1957.

Consequently, the 1952 Commonwealth development programme was imprecise and lacked central direction. A studied coyness was maintained about the details of the engineering industry's mission. The CEC communiqué simply stated that throughout "the Commonwealth there is wide scope for expanding production of essential supplies which the whole world needs – food and agricultural products, minerals and engineering products."[73] Furthermore, when Butler met industrial leaders shortly after the CEC, he expatiated on the need to increase British exports in general, but did not mention the issue of Commonwealth development.[74] The trade journal, *Engineering*, had to read between the lines of the CEC communiqué to divine its implications for the capital goods industry. *Engineering* concluded that further import substitution industrialization in the Commonwealth would be delayed, and that the demand for British capital goods would increase.[75] It would appear, however, that the journal's readership had other ideas.

Ministry of Supply officials attributed the reluctance of capital goods producers to increase their capacity to "financial reasons and to a lesser extent to uncertainty about the future. Heavy industry [moreover] ... had been very badly hit by the Australian import ban [in 1952-3], since hitherto manufacturers had always had confidence in Commonwealth markets."[76] Sir Harry Railing, of the General Electric Company, confirmed that the erection of import controls against British goods in the sterling Commonwealth had shocked many firms. He added that the recovery of German competition would soon increase the uncertainty faced by firms in the heavy engineering sector.[77]

The British Electrical and Allied Manufacturers' Association (BEAMA) stated that the stringent import controls, introduced by Australia in March

[73] Quoted in Polk, *Sterling*, p.265.
[74] PRO, SUPP14/170, 'The Export Drive, Informal Meeting with Both Sides of Industry', 17 December 1952; *The Times*, 18 December 1952.
[75] *Engineering*, 16 January 1953, p.71.
[76] PRO, CAB134/982, IPC(53)2nd meeting, Minutes of Investment Programmes Committee, 14 January 1953.
[77] PRO, SUPP14/138, EAC(52)32nd meeting, Minutes of Engineering Advisory Council, 1 October 1952.

1952, "were a severe blow" to exporters of heavy electrical plant.[78] But Australia was not the only culprit, and other Sterling Area countries were restricting British imports for a mixture of balance of payments and import substitution motives. For example, India ordered cuts in imports of British office machinery and sewing machines.[79] At the Finance Ministers' Conference, in 1954, Commonwealth nations were told that Britain "could lend much more easily if they provided a fairly good market for our goods."[80] Australia relaxed its controls on British imports, in late 1953, as payments difficulties eased, and phased them out in 1954, although it reintroduced them in 1955 when the external position deteriorated again.[81] It is difficult to know how seriously to take the lamentations of British firms about import controls, and it is likely that some of them used the Australian situation as an excuse for their own lack of enterprise. It is worth noting that foreign manufacturers were accustomed to facing import controls in the sterling Commonwealth. Nevertheless, the sudden erection of import barriers inside the Sterling Area set a dangerous precedent, and showed that Commonwealth markets were no longer secure for British capital-goods producers.

Manufacturers of heavy electrical plant argued that they were hampered by the ability of subsidized German and Swiss firms to offer generous credit terms to customers in the Commonwealth and elsewhere. They complained that the Export Credits Guarantee Department (ECGD) and the City of London did not provide sufficient assistance to British exporters. Although British employers did not request countervailing subsidies, they did call for a reduction in the tax on undistributed profits, and an improvement in credit facilities.[82] But the government was

[78] PRO, T229/507, 'Heavy Electrical Plant Consultative Council: The BEAMA Review of Export Problems and Prospects', 14 November 1952, p. 5; Sir J.G. Crawford, *Australian Trade Policy, 1942-1966* (Canberra 1968), pp.490-513.
[79] PRO, SUPP14/345, 'Report on Export Drive', 13 December 1952; 'Capital Goods – Reduction of Home Consumption', 22 February 1952; SUPP14/169, 'Agricultural Tractors', July 1954.
[80] R. Hall, *The Robert Hall Diaries, 1954-61*, ed. Sir A. Cairncross (London 1991), p.5.
[81] Schenk, *Britain and the Sterling Area*, pp.81-4.
[82] PRO, T229/508, Minutes of Meeting with Heavy Electrical Plant Producers, 13 October 1953; SUPP14/138, 'Factors Militating Against the Export Trade of the Engineering Industry', 26 November 1952; SUPP14/170, 'Minutes of Meeting with Industrial Representatives on the Export Drive', 17 December 1952.

unmoved. An official British study later concluded that the ECGD offered a better service than its German counterpart, and that the German banks were not unduly accommodating to exporters. Intriguingly, American manufacturers considered that both British and German firms were able to offer more attractive terms of credit than US firms could.[83]

Britain's nationalized industries exerted a strong competing demand for capital goods.[84] Butler was worried that the resulting excess demand for electricity generating equipment would frustrate the Commonwealth development initiative. He explained to Geoffrey Lloyd, the Minister of Fuel and Power, in November 1952, that:

"At the meeting of Commonwealth Prime Ministers in three weeks' time we may be offering to contribute to Commonwealth development schemes of a worth-while character. Much hinges, therefore, on our being able to show our intention to help them to go ahead with the right sort of development and at the same time to reduce their heavy dollar expenditure on capital goods. Heavy electrical plant is perhaps the most crucial of all our exports in this connection."[85]

Butler wanted Lloyd to curb the apparently insatiable demand of the British Electricity Authority (BEA) for generating equipment. But Sir Henry Self, the deputy chairman of the BEA, was vehemently opposed to the "rephasing" of orders. Self contended that, since the BEA had encouraged the heavy electrical firms to extend their capacity, it should have the first call upon their output. It was later suggested that work on Commonwealth orders was actually interfering with the delivery of plant to the BEA.[86] Railing concurred with these sentiments, and said that the expansion of

[83] PRO, CAB134/1231, EP(56)58, 'German Competition with Particular Reference to the Engineering Industries', 5 July 1956, pp. 14-15. Dwight D. Eisenhower Library, Abilene, Office of the Council of Economic Advisers, Box 15, File: International: Export Credit Insurance [1954], 'Export Credit Insurance Outside Normal Banking Channels in Foreign Countries: Federal Reserve System Staff Paper', June 15, 1954; Memorandum to Steve Saulnier from Neil H. Jacoby, April 6, 1954.

[84] L. Hannah, *Engineers, Managers, and Politicians: The First Fifteen Years of Nationalised Electricity Supply in Britain* (London1982), pp.23-8, 291, 294; M. Chick, *Industrial Policy in Britain, 1945-1951* (Cambridge 1998), pp.137-57.

[85] PRO, T229/507, Butler to Lloyd, 11 November 1952.

[86] PRO, T229/507, Minutes of Heavy Electrical Plant Consultative Council, 25 July 1952. Chick, *Industrial Policy*, p.140.

domestic generating capacity must not be delayed, otherwise consumer goods exporters would suffer power shortages.[87] Under pressure, the plant manufacturers agreed to give priority to exports over certain BEA orders, although they subsequently reneged on this commitment.[88]

Many Commonwealth customers were losing patience with British companies. A common criticism was that British heavy engineering firms often missed deadlines, and did not even have the courtesy to alert customers when they were running out of time. One British company's failure to deliver power-station equipment to Jamaica on schedule, in 1953, resulted in this order's cancellation and the purchase of second-hand American equipment instead. In 1953, the British Senior Trade Commissioner in India reported that heavy electrical plant could be obtained in six months from foreign suppliers compared with eighteen months from British firms.[89] This made a mockery of the claim of British firms that it was not possible for them to make faster deliveries. Sandys berated the producers of heavy electrical machinery, telling them that their clients in Australia and New Zealand no longer trusted their assurances about delivery dates, and indicated that they had lost much goodwill.[90] British pricing policies also attracted strong criticism. New Zealand was incensed by the operation of a price ring by heavy electrical manufacturers. BEAMA's response was that it was reasonable to quote 'level prices' because uncontrolled competition would lead to the neglect of R&D and quality. This reply cut no ice, and more orders were lost. In 1951, a Swiss firm which undercut the British level price by 40 per cent won a contract to supply circuit breakers to New Zealand.[91] Third world

[87] PRO, T229/508, Minutes of Heavy Electrical Plant Consultative Council, 3 March 1953.
[88] PRO, T229/508, 'Note of Meeting Held in Mr Turnbull's Room', 28 January 1953; Hannah, *Engineers, Managers, and Politicians*, p.51.
[89] PRO, T229/508, 'Exports of Power Station Equipment: Memorandum by the Ministry of Supply', 1953; 'Summary of Replies from Senior Trade Commissioners on Heavy Electrical Plant Deliveries', 1 June 1953; SUPP14/113, 'Delayed Export Deliveries', 26 November 1952.
[90] PRO, T229/508, Minutes of Meeting with Heavy Electrical Plant Producers, 13 October 1953.
[91] PRO, BT11/4615, 'Record of Meeting Between the President of the Board of Trade and the Prime Minister of New Zealand', 25 January 1951; Wooller to Bergin, 23 May 1951; 'Electrical Machinery: Complaints from New Zealand', August 1952; 'Level Prices in Overseas Markets: BEAMA Memorandum', 18 July 1951; R. Jones and O. Marriott, *Anatomy of a Merger: A History of G.E.C., A.E.I., and English Electric* (London 1970), ch. 9.

customers complained that British companies placed too much emphasis on quality and too little on cost. Indian plastics manufacturers commented that, while British machinery was excellent, it was too complicated for their workers to operate. They preferred to buy Italian machinery, which was simple to use and less than one-third of the British price.[92]

Commonwealth countries were not prepared to abandon their policies of import substitution, and several were establishing their own capital-goods industries. Australia had taken steps to develop a modern engineering sector, for defensive purposes, during the Second World War.[93] After the war, in accordance with Sterling Area policy, Australia discriminated against imports from the dollar area, with the result that a number of American engineering firms set up Australian subsidiaries.[94] *Engineering* anticipated that British firms would lose their Australian markets for consumer durables and simple capital goods, and would have to specialize in the provision of the heaviest and most sophisticated engineering products.[95] India was also determined, for a mixture of political and economic reasons, to develop a large engineering industry. In fact the British were partly to blame for this situation, since they had encouraged India to expand its tiny engineering industry to supply munitions during the Second World War.[96] In 1953, India placed restrictions on imports of British diesel engines, so as to favour domestic producers as well as to save sterling.[97] British engineering firms, such as Leyland Motors, were increasingly drawn into joint ventures with Indian capitalists, in the knowledge that the alternative was exclusion from this important market.[98]

[92] PRO, SUPP14/169, 'Report on the Market for Plastics Machinery in India', 14 August 1953.
[93] K. Tsokhas, 'Dedominionization: The Anglo-Australian Experience, 1939-1945', *Historical Journal*, 37, 4 (1994), pp.861-84.
[94] D.T. Brash, *American Investment in Australian Industry* (Cambridge, MA 1966), p.24.
[95] *Engineering*, 6 August 1954, pp.164-6.
[96] J.N. Bhagwati and P. Desai, *India: Planning for Industrialization* (London 1970), p.85. A. Inder Singh, *The Limits of British Influence: South Asia and the Anglo-American Relationship, 1947-56* (London 1993), p.18.
[97] *Engineering*, 1 January 1954, p.11.
[98] Burnham, 'Leyland', p.365, n.57.

British capital goods producers and their sterling Commonwealth customers were pulled in opposite directions during the 1950s, and this situation was prejudicial to the effective integration of their development strategies. The chances of progress were reduced even further by the fact that any central direction of Commonwealth development was out of the question. This does not necessarily mean that the alliance between the engineering industry and Commonwealth development planners was totally misconceived. Under different circumstances – in a Commonwealth ruled by a tribe of Baloghs – the outcome, whether for better or worse, would have been different.

Conclusion

The collapse of the plan to combine Commonwealth development with the expansion of the British engineering industry was a practical demonstration of the limits of Commonwealth economic cooperation. Having asserted their political independence from Britain, large countries such as India, Pakistan, and Australia were reluctant to pool their sovereignty in the economic sphere. Although sterling Commonwealth countries still valued their commercial and financial ties with Britain, they were painfully aware of their industrial and technological inferiority relative to Britain. As the only capital exporter and advanced industrial nation in the Sterling Area, the United Kingdom was bound to be the dominant partner in any collective economic project, a prospect that was politically unsettling to the rest of the Sterling Area.

A Commonwealth development programme, involving the engineering industry, may have been somewhat more attractive if the British had not stressed that their principal objective was to foster the production of primary goods in the sterling Commonwealth. Perhaps the British should have accepted that the countries of the sterling Commonwealth were determined to industrialize. If Britain had undertaken to provide more capital for the development of secondary industries in the sterling Commonwealth, large orders would have been forthcoming for light industrial machinery as well as for heavy capital goods. The British should have listened to their customers, instead of

trying to impose an archaic framework of complementary development upon them. Britain's failure to transcend the Victorian dogma of complementarity suggests that its contribution to the wasting of the Commonwealth economic community was no less damaging than that of nationalists in the dominions and republics beyond the seas.

Another precondition for progress would have been the adoption a more interventionist industrial policy in the United Kingdom, with the aim of hastening structural change, but an active industrial policy was impossible in the political environment of the 1950s. While the scheme to use the engineering industry to develop the Commonwealth was not in principle futile, it must be conceded that it was somewhat impractical, not to say visionary, and in the years that followed the economies of the sterling Commonwealth gradually drifted apart.