Cambridge Journal of Economics 2023, **47,** 1–19
https://doi.org/10.1093/cje/beac061
Advance Access publication 3 December 2022

Elite philanthropy and applied economics: the Rockefeller Foundation's role in post-war research direction

Ann Vogel and Alan Shipman*

This essay investigates how, why and with what results the Rockefeller Foundation (RF) influenced the development of UK economics between 1930 and 1950. It shows the extent to which the RF, as the major sponsor of the newly emerging 'applied economics' research in the US and Europe, shaped the conversion of newly emerging macroeconomic theory into policy and research, and steered the fast expanding 'applied' economics in an econometric direction based on newly available national accounts data. The RF played a decisive role in selecting the economists retained for applied research when World War 2 ended, and with it the type of work funded. We argue that the RF's preference for financing stand-alone institutes restrained the initial expansion of England's applied economics research despite a head-start on national income accounting and business-focused research. Drawing on unpublished correspondence between John Maynard Keynes (1883–1946) and senior RF officers, we show how the difficulty in obtaining start-up funding conditioned the turn towards econometrics in the early choice of leadership and research plans at the University of Cambridge's Department of Applied Economics, narrowing its earlier vision for a 'realistic approach' consonant with that of Keynes. Covering the path-dependent nature of applied economics in its formative phase, the essay demonstrates the role of philanthropic elite organisations in knowledge formation that led to the making of microeconomics and macroeconomics.

JEL classifications: B2, B4, I23

Key words: Elite philanthropy, John Maynard Keynes, Rockefeller Foundation, Transnational networks, Department of Applied Economics

Epigraph: 'Tell Walter that nationalization has not affected the quality of the lunch at the Bank.'
—Henry Clay to J.H. Willits, 5 April 1946[1]—

1. Introduction

Philanthropic foundations were an important source of support for economic research in Europe and North America in the 20 years from 1930, when policymakers were awakening to the possibility of macroeconomic intervention and the need for accurate

Manuscript received 12 September 2020; final version received 21 February 2022
Address for correspondence: Ann Vogel, Faculty of Humanities and Social Sciences – Sociology, Humboldt University Berlin, 10117 Berlin, Universitätsstraße 3b, Germany; email: annvogel@rocketmail.com
* Humboldt University, Berlin (AV) and The Open University, Milton Keynes, UK (AS).
[1] RF Record Group 1.1 Series 401 Projects England.

data to support it in the context of interwar depression and centrally-directed wartime full employment. The Rockefeller Foundation (RF) had a central role in financing the inter-war expansion of economic research and policy analysis in the UK, and shaping its direction in the decade that followed the Second World War (WW2). While philanthropy's role in the post-1945 expansion of US higher education is well documented (Walton, 2019, p. 480), few studies exist of its impact in Europe, or of funds channelled to specific research programs as distinct from general institution-level donations. Goodwin, anticipating more recent analyses of 'philanthro-capitalism', highlights early philanthropic foundations' scope for funding that shielded researchers from the perceived agendas of government or business sponsors, while being 'able both to subsidize and to propagate directly ideas and forms of enquiry that it approves and to discourage those it deplores' (1993, p. 157). While Goodwin traces foundations' influence on the development of US social science to the Ford Foundation's launch in 1949, our examination of wartime correspondence[2] highlights earlier influence by the RF in Europe, especially in shaping the direction of applied macroeconomic research when the 'realistic' approach forged by John Maynard Keynes's monetary and fiscal ideas competed for attention with the econometrics associated with nascent national income accounting. It provides novel insights on foundation philanthropy's agency at a crucial point in the translation of social science theory into data-enabled applications.

As the leading sponsor of economic and social research in Britain from 1930 to 1950, the RF's choice of which organisations to support and which applications of theory and statistics to pursue significantly affected the type of economics which expanded in universities and government-related institutions after WW2. We investigate the extent to which it influenced the interpretation of Keynes's theories for policy-making and university teaching, promoted free-trade theories over 'Keynesian' macroeconomic and international policy designs, and permitted econometrics (applied to the newly compiled national income accounts) to prevail over non-parametric and survey-based approaches to applied economics.

Central to the RF's planning for the European social sciences was its negotiation with Cambridge-based economists over launch funding for the Department of Applied Economics (DAE). We explore how early battles for research funding and academic staffing affected the size and direction of the DAE, and the progress of Cambridge's vision of 'realistic' applied economics relative to other approaches in Europe and America that began expanding rapidly after post-war demobilisation. This included a transatlantic scholarly exchange for economics professors. The planning and eventual limited implementation of this small-grants program provides insight into RF officers' vision and preferences for the discipline. It helps to explain why the 'Keynesian Revolution', despite its quick reputational ascent in Europe and the US (Wapshott, 2011, pp. 155–170), remained peripheral to RF officers, who pursued different ideas of 'the right kind of economics' into which the DAE plan ultimately shrank. We conclude that RF philanthropy proved incapable of spearheading a Keynesian-led applied economics such as the DAE project, despite Keynes's personal engagement.

[2] Archival research in the 2006, Sleepy Hollow, New York: During two archive research periods, we examined roughly forty boxes of copy-paper cartons' size with material that spans over two decades of Rockefeller Foundation activities, constituting communication between RF headquarters in New York and branch offices (mainly in Paris), and with clients, authorities, and network ties (Record Group 1.1. Series 401 Project England and interrelated project folders). Additionally, we examined the published Trustees Bulletin Board and the diaries of the higher-ranked officers for strategic decisions influencing mundane office work.

Brokering between US and European research institutions and universities, the RF could monitor the rapidly developing, often conflicting approaches to theoretical and applied economics, and channel resources to what it deemed the capabilities that would take the social sciences forward (Stapleton, 2003, pp. 105–106). Our opening quotation indicates the way in which the RF's ultimate role was to reassure its American base that fiscal and monetary institutions would not be decisively changed by 'Keynesian' economic policy. Henry Clay, an Oxford economist and advisor to the Bank of England (1930–44), asked the director of the RF's Social Science Division (SSD), Joseph H. Willits, to pass on his reassurance to Walter Stewart, the chair of the RF's board of trustees. Willits, himself a professional economist, stood in amicable contact with many of the clients and advisors of the RF, while Stewart was an American economist holding elite government positions throughout his life. Their balancing of interests between American sources and European uses played a key gate-keeping role in deciding which locations, practitioners and approaches prevailed in the expansion of economics to meet new challenges during and after WW2.

Section 2 charts the rapid expansion of applied economics research in British universities and government after 1930, in response to the Great Depression and wartime planning needs, identifying the RF's centrality in advancing core funding. Section 3 examines the Cambridge DAE's pursuit of a large RF grant ahead of its launch in 1945, led by Keynes in parallel with his diplomatic engagement with the US government. Section 4 analyses the divergence between Keynes and Willits over a 'realistic' applied economics, which ultimately sank the DAE funding application, and the RF's rejection of British 'Keynesian' visions in favour of a free trade focus transmitted from the US, as revealed in abortive plans for an international economist exchange program (1941–51). Section 5 summarises the findings, concluding that applied economics fits into a wider pattern of path dependency in the emergence of scientific disciplines for which demand grows fast when resources are initially constrained.

2. External funding for applied economics and the interwar Cambridge-London collaboration

In Europe, as in the US, the 1929–39 Great Depression had raised the demand for economists to explain why market mechanisms were not restoring full employment, and whether changes in monetary, fiscal, trade or industrial policy could accelerate its return. The University of Cambridge, deciding in 1939 to set up an applied research unit alongside its established Economics faculty, was following in the path of several other leading UK universities. Manchester, with a growing number of economists in its Commerce faculty, set up an Economics Research Section in 1931, headed by John Jewkes (Cord, 2017, p. 311n). From 1934, a committee that included William Beveridge (then director of the London School of Economics, or LSE), Henry Clay (who had left Manchester for the Bank of England in 1930), Noel F. Hall (lecturer at University College London) and industrialist Josiah Stamp (appointed as Bank of England director in 1928) worked to assemble funding for an independent centre for statistical analysis and economic research. The result was the National Institute of Economic and Social Research (NIESR) in 1938, with Stamp being its first director (1938–43) (Jones, 1998, pp. 3–4). Oxford's Institute of Statistics, founded in 1935, was launched and mainly staffed by economists, with Arthur L. Bowley acting as director in 1940 after retiring from his LSE professorship of statistics (Gittins, 2013, p. 4). Citing support for institutes in France, the Netherlands, Austria and Germany, as well as the Geneva-based League of Nations and Nankai University of China, the RF notes that 'many other European institutions were enlisted in the effort to gather data and to understand the causes of the economic crisis' (The Rockefeller Foundation, 2020). Before WW2, few universities were able or willing to give much recurrent funding to applied economics. Business support for research was curtailed by the Great Depression, and governments found little need to finance ongoing economic research (Caircross and Watts, 1989, pp. 3–8). With little home-grown philanthropy for scientific research, the RF became the UK social science's major sponsor on the eve of WW2 (Jones, 1998, p. 1), its decisions to fund British and European social sciences being spurred by its recognition of the need to rescue European Jewish scholars and scientists fleeing fascism through scholarship offers (cf. Gemelli, 2000).[3]

The Rockefeller interest in funding stand-alone institutes for macroeconomic and industrial study in Europe mirrored its extended support from 1929 for the US National Bureau of Economic Research (NBER), which was leading the development of national income accounting and theoretical and empirical analysis linked to its methodologies and databases. Following upon this success, the RF became major funder of the UK's NIESR from 1937, providing up to one-third of its institutional budget (adding to business and public funding) and making it a channel of smaller grants for university-based projects. Similarly, France's Institute for Scientific Research on Economy and Society was founded and developed through Rockefeller grant money.

The RF also funded university-based centres, notably Oslo's Institute of Economics from 1932, to whose first director Ragnar Frisch it had awarded a US fellowship in 1927. This research visit permitted Frisch to connect personally with macroeconomists and econometric pioneers including Wesley C. Mitchell, Irving Fisher and Allyn A. Young. Success in sponsoring the NBER and Social Science Research Council (SSRC) in the US convinced the RF that such organisations could usefully bring together the still small and scattered community of applied economists, offering better resources (and, soon, computing facilities) than most universities could provide. Together, university-based and stand-alone research institutes yielded a growing network, connected via the RF, on which it could rely for expert knowledge as well as policy and program implementation.

Cambridge's DAE was included in the RF's roll-call of beneficiaries at formative stage. By 1928, when the RF began assigning social science funding to Britain and Europe, Cambridge and the LSE were in pole position to become the nucleus of UK applied economics research. In 1922, their economists had jointly launched the London and Cambridge Economic Service (LCES), which compiled various statistical series indicating current economic conditions, using statistical analysis to model the economic cycle and generate forecasts (Cord, 2017, pp. 308–311). This Cambridge-LSE collaboration, as the RF's major European grant-recipient, affirmed the focus on macroeconomic data collection and business cycle research, as set out by the first director of the RF's SSD, Edmund Day. LCES editorial meetings brought leading figures in the Cambridge economics faculty, including Keynes, Dennis Robertson, Austin Robinson and Richard Kahn, into regular contact with LSE counterparts including Beveridge, Arthur L. Bowley (who had pioneered the sampling techniques), Lionel Robbins (professor of economics from 1929) and Friedrich von Hayek, who

[3] RG 1.1 Series 200 box 47, F 545a. 200 Refugee Scholars—Report Applegat, Thomas B. 'The foundation's Experience with Refugee Scholars' Ref 3.

had arrived in 1931 from the Institute for Business Cycle Research in Vienna, where he had been appointed as first director by Ludwig von Mises (Cord, 2017, pp. 310–311). Core LCES members also attended the UK Government's Economic Advisory Council meetings in 1929–31, and the Council's spin-off Committee on Economic Information until 1939 (Howson and Winch, 1977). Like the NBER, and its 'other' Cambridge's counterpart, the Harvard Economic Service, the LCES underestimated the severity of the 1929–30 economic downturn, but held on to its business subscriber base by broadening its data provision and analysis and breadth of commentary.

In 1926, while on an RF fellowship in the US, von Mises learned about the usefulness of empirical research into business cycles (Wapshott, 2011, p. 40), which might not require fiscal and monetary remedies or state-provided safety nets if businesses could sufficiently anticipate them. The famous clash between his protégé Hayek and the more interventionist Keynes (Wapshott, 2011, pp. 41–45) sowed expectation of inter-institutional rivalry, reinforced by perceived tensions between Keynes and Beveridge and their younger disciples, as well as Alexander Carr-Saunders, who succeeded Beveridge as LSE director. Tracy B. Kittredge, attending a November 1937 LCES editorial session in London as the RF's Paris branch officer, observed an 'extraordinarily harmonious' meeting with (among others on the London side) Robbins, Bowley, Hall, R. G. D. Allen, Frank Paish and Hayek, which ended in agreement to concentrate on business cycle measurement and forecasting and to coordinate work internationally through the Standing Committee of the Conference of Business Cycle Institutes, through which the RF coordinated its European and American grant-receiving centres.[4]

Cambridge and the LSE were also attuned with the RF's interest from the mid-1930s in 'social security', interpreting both as a broad policy objective and a specific set of fiscal policies aimed at macroeconomic stabilisation. Beveridge, recognised as the UK's leading expert on social insurance since his involvement in the 1909 'Minority Report' on the poor laws (Great Britain Royal Commission on the Poor Laws and Relief of Distress *et al.*, 1909), was already assembling the team of economists schooled in the new national income accounting who would do the groundwork for his enquiries into tax and benefits in the 1940s. The team included Nicholas Kaldor, an LSE lecturer from 1927, whose RF research fellowship in 1935–36 had raised his international profile with visits to Harvard, Chicago, California and Columbia universities and to Econometric Society meetings in Colorado (Thirlwall, 1987, p. 30). The RF rejected Beveridge's plan for a 'Beveridge Institute' at the LSE because it would have complicated sponsorship of NIESR, with Beveridge rejecting, in turn, its offers of both the directorship and chairmanship of NIESR; and while the RF also channelled funds to Beveridge for personal research, no publications resulted (Jones, 1998, pp. 3–5).

3. Negotiating for finance, 1939–44

Keynes (1936)'s General Theory fundamentally questioned whether economists' task stopped at observing and forecasting the business cycle, and moved his Cambridge circle centre-stage in rethinking macroeconomic stabilisation and cycles in light of the Depression (Wapshott, 2011, pp. 154–170). Cambridge having approved the DAE project in November 1939, Keynes immediately requested core funding from the RF,

[4] RF 1.1 Series 401 S Box 71 F 944, London and Cambridge Economic Service, Letter TBK to JVS on 17 November 1937.

continuing grant negotiations with its officers throughout the war even during his intensive involvement in the UK's negotiations with US officials and economists over logistical and post-war planning. He communicated mainly with Joseph Willits, SSD director from 1939. In the US, Willits was a published economist, administrator and government advisor on employment and industrial research, serving in the SSRC earlier (Stapleton, 2003; de Rouvray, 2004). Keynes used his personal ties acquired as negotiator after World War 1 to approach other economists for DAE support including Walter Stewart, then chairing the RF's Board of Trustees.

Although Cambridge had chosen not to launch the DAE or decide on its management until peace returned, Keynes persevered with plans to secure RF commitment for advance funding. He frankly conveyed that the planning sub-committee could not offer a full research program until post-war conditions and challenges were clearer, parrying RF requests for more detail to assess the risk of a pre-commitment. As early as 1941, Willits pressed Keynes to indicate the candidates for the directorship, as a clue to DAE's likely research direction. In January 1941, Keynes—referring to earlier exchange with Kittredge—wrote that his own position at the Treasury, and that of Austin Robinson in the War Cabinet office, now enabled them to identify suitable applied economists among those working for the government, fit to tackle post-war policy problems. Interviewed five months later by Kittredge, Keynes had nominated three to four 'specialists in the field of economic statistics, public finance and credit and industrial problems' fitting the DAE ambitions. Kittredge's interview report to Willits, however, expressed a lack of confidence in the DAE planners, as a transparent research program and clear leadership role which the RF expected were lacking. Kittredge emphasised that Keynes was not thinking 'so much of concrete programs of empirical research as of adding a certain number of lecturers and teachers to the Cambridge faculty' who would pursue their own personal research.[5]

Keynes concluded the 1941 exchange with a request for a guaranteed annual grant of at least £2,000 (£102,000 in 2020-prices) 'for a period of three to five years', which would allow the sub-committee to make 'preliminary arrangements' with three to four candidates who would contribute to planning the DAE's launch. In May 1942, he informed the foundation officers that university-side finance would not be available to match the potential grant, a typical condition of RF European grant-making policy. Recognising that the RF would make a lower offer to reduce its risks, Keynes shifted to advocating a slow launch supported by a grant of £2,500 (£119,000 in 2020-prices), justifying the increase with the growing competition between government, business, and other academic and research institutions for promising young economists and appealing for RF support to 'start right off the mark at zero hour.'[6]

Keynes's fear of missing the moment was amplified by the number of colleagues called into Whitehall from Cambridge, and building profiles that might secure good post-war jobs elsewhere. Robinson had joined the Ministry of Production and the Cabinet Office, where James Meade was involved in the newly formed Central Statistical Office (CSO) and would soon work alongside Richard Stone (Caircross and Watts, 1989, pp. 32, 52–34). David Champernowne, a Cambridge doctoral student and fellow of King's College after a prize-winning dissertation on income distribution

[5] RF 1.1 Series 401 S University of Cambridge, Economics, Box 80, Folder 1053, Interview JMK by TBK, Report 12 June 1941, Washington, DC.

[6] RF 1.1 Series 401 S University of Cambridge, Economics, Box 80, Folder 1053, JMK to TBK on 1 May 1942.

(Thirlwall, 1987, pp. 77–95), was employed by the Ministry of Aircraft Production. The DAE's architects needed resources to recruit and retain the best of the crop to create their ideal 'applied economics'. But while Keynes's reputation, personality and ideas had put him at the centre of the network of wartime economists, he had also made enemies within it. Despite apparent closeness between his own objectives and those of NIESR, which had been supported by RF and Leverhulme Trust grants since 1938, Keynes in 1942 rejected the presidency of NIESR (vacant after Stamp's death in an air raid), expressing in a frankly worded letter to the deputy director Henry Clay that he had 'only limited sympathy' with the Institute's record of achievement (Jones, 1998, p. 68). Keynes boldy demanded direct funding for the DAE project on the basis that it would supersede NIESR in its focus on national income and schemes for unemployment relief. In doing so, he created friction over a research line that was among Willits's core research and policy interests as an industrial economist (Stapleton, 2003, p. 102; de Rouvray, 2004, p. 2). Linking the DAE closely to the University's faculty, Keynes further challenged RF practice by intending the grant to substitute rather than complement University funds.

The long correspondence with the RF drew to a close at the end of 1944, when Keynes was in North America, first with Austin Robinson in Washington, DC, where he was leading the UK Treasury's economic negotiations with the US Administration. Keynes wrote again persuasively to Willits, who then invited views from Noel F. Hall (now NIESR director) and Wesley Mitchell, director of research at the NBER (1920–45), a long-time adviser to the RF's SSD officers (cf. Rutherford, 2007). Willits recognised the strength of UK economics on his visit to England in September–October 1944, reporting afterwards that 'Economics […] leaders exert great influence, not only on economic thinking, but also on public policy and administration.'[7] But Keynes missed this final opportunity to exercise his famous charm at personal meetings (Skidelsky, 2001, pp. 337–372), as he was in the US from early October until 27 November, when he left for Canada's High Commission in Ottawa.

In his letter of 13 November 1944, Keynes had told Willits that with the two most important statistical department heads about to retire, 'there is eager bidding from Whitehall for the services of the best', heightening DAE's need to offer attractive salaries and research funds to compete with the UK government's growing demand for personnel to collect and analyse official statistics. On 22 November 1944, Willits responded with a provisional grant-in-aid of $7,500 to support a rigorous development plan for the DAE for up to two years with no commitment for future RF engagement.[8] But Keynes rejected outright what was effectively the sum of £1,861 (£83,000 in 2020-prices, at the official $4.03/£1 exchange rate), doubting that this was enough for the University to now commit to financial support.

In correspondence with Willits, Keynes had praised Richard Stone as the 'ideal Director' in waiting and 'the man we want', describing him as 'primarily responsible for a revolution' in UK official statistics at the CSO and pointing out his significant contributions to applied economics. After graduating from Cambridge, Stone had

[7] RF 1.1 Series 401 Box 83, F 1096 'Objects of trip to England, September and October 1944', 3 August 1944.

[8] RF 1.1 Series 401 S University of Cambridge, Economics, Box 80, Folder 1053, JMK to JHW, letter of 13 November 1942 and JWH to JMK, letter of 22 November 1944. In a 1943-inquiry into 'The role of the economist in the machinery of government' Keynes recommended to rotate economists between state and academia after the war, with Whitehall appointments to be capped at 3–4 years (Caircross and Watts, 1989, pp. 40–45).

gained experience in the City of London and Ministry of Economic Warfare, where (with Meade, under Robinson's supervision) he worked on compiling the first UK national accounts for 1938–44. Keynes then recruited him as an assistant at the Treasury (Pesaran and Harcourt, 2001, p. F148). In November 1944, Stone was approved as a lifetime director of the DAE by a steering committee (usually chaired by Keynes) and formally appointed to the post In May 1945 (Newbery, 1998, p. xx).

Economic measurement, via national income accounting built on statistical analysis, quickly became the DAE's focus in Stone's ten years as director (Fright, 2016). Stone committed to a simultaneous focus 'on the work of observations, i.e. the discovery and preparation of data; the theoretical appraisal of problems, i.e. the framing of hypotheses in a form suitable for quantitative testing; and the development of statistical methods appropriate to the special problems of economic information' (Pesaran and Harcourt, 2001, p. F149).

Keynes's (1939) early objections to the econometric testing of business cycle theories formed part of the challenge taken on during Stone's directorship. While other projects, notably on income distribution and household expenditure, ran alongside the DAE's econometric work, its main achievements in 1945–55 were finding statistical solutions to non-stationarity, omitted explanatory variables and other difficulties of time-series analysis (Pesaran and Harcourt, 2001, p. F150). Stone also secured Cambridge University Press for a combined NIESR-DAE book series which included his own seven volumes on national income (Jones, 1998, p. 12).

Expansion was slow, however, and in 1953 Stone acknowledged that the DAE was still below its optimal size, with 21 researchers and 14 support staff at that time (Newbery, 1998, p. xx). The focus on econometrics to the exclusion of other applied research troubled Stone's colleagues in the Cambridge faculty, who arranged for him to take up an accounting professorship in 1955 and hand the DAE to the more pragmatic Brian Reddaway (Pesaran, 1991; Singh, 2008). Meanwhile NIESR, under RF pressure, had diversified its post-war income with additional grants from UK-based philanthropic foundations and business sponsors—totalling £4,230 (almost £180,000 at 2020 prices) in 1946 (Jones, 1998, p. 10). Better able to recruit its own economists and seconding the ablest from the Treasury, NIESR also stopped making operational grants for external projects, concentrating instead on attracting top academic and civil service talent into project work, thereby following NBER practice (Denham and Garnett, 1998, pp. 49–50). Willits's influential position as an economics expert, and personal interests in the same topics Keynes and the DAE cared about, beg the question of why the RF hesitated to underwrite a proposal by the 'world's most influential economist' (Wapshott, 2011, p. 87).

4. Competing visions of 'realistic' economics and the exclusion of British Keynesianism

Keynes's limited influence over Willits is clearly linked, in their exchanges, to differing interpretations of 'realistic' applied economics. As early as 1941, Keynes's conversations with the RF reveal his ambition to build a department dedicated to 'statistical and realistic field research' undertaken by 'specialists in the fields of economic statistics, public finance and credit and industrial problems'.[9] Keynes wished to rely neither on the government-collected national accounts data nor on econometrics, which

[9] RF 1.1 Series 401 Box 80, F 1052 96. 401S. Letter by JMK to TBK, 28 January 1941.

by the late 1930s was emerging as a possible way forward on the vexed questions of defining and explaining business cycles. Earlier work at Cambridge, funded with a NIESR grant, addressed the problem of economic change—especially relating to industrial strategy and labour markets—without inviting the hazards that Keynes (1939) had already identified in time-series econometrics.

Willits, while acknowledging its potential usefulness for understanding business cycles,[10] agreed with Keynes's caveats over econometrics' reliability and analytical scope, and his defense of other statistically informed applied research methods. His writings make clear that he viewed social reality as too complex to be easily explained by analysing regularities in the data, despite progress made at the NBER and Cowles Commission, and he 'blamed overly technical and mathematical economics for having failed in the struggle against dogma' (cf. de Rouvray, 2004, pp. 2–3, 12). Responding to Keynes about Stone's candidacy, Willits formulated the DAE project as 'a new approach to the study of economic problems. (Call it "inductive," "empirical," "realistic" or what you will)'.[11]

When Keynes increasingly focused on negotiations with US economists and officials over post-war monetary arrangements and UK financial support from Bretton Woods in July 1944 to his death in April 1946, Willits heard more from other US applied economists and their European counterparts. Increasingly decisive, as the DAE's launch date approached, were the opinions he received from econometricians who had entered his US circle through a new scholarly-exchange project. The US econometricians among Willits's informal econometrician advisors recognised Keynes as a trained and fearless mathematician, but ultimately dismissed him as old-fashioned (Garrone and Marchionatti, 2009). The later stages of the war revealed a further potential for econometrics: as a source of democratic policy 'control' of the macroeconomy, able to counterpose the central planning with which the Soviet Union rose to challenge the US.

Willits's attitude towards econometrics and applied economics is also influenced by a long-term project of his own, on economic history and area studies. His earlier industrial research had drawn him to an alternative approach which recognised entrepreneurs as the agents of change, with history as empirical material. He pursued this with generous in-house funding ($1.5 million dollars, equal to twenty percent of SSD's 1940 commitments) and substantial autonomy from wider RF governance structures, coordinating a small group of relatively disconnected economic historians. With Anne Bezancon, a professor at the Wharton School of Business and Finance, co-leading, he was supported by a former peer, as Willits was a Wharton dean during 1933–39. Funds kept flowing well beyond 1945, even when doubts began to emerge about the project's efficacy, including some expressed by Simon Kuznets, an initial participant (de Rouvray, 2004, pp. 13–17).

Pursuing economic history with quantitative alongside qualitative information on real events, their approach to modelling economic progress left room for 'entrepreneurial' discovery of new markets and profit opportunities, as portrayed in Hayek's *The Road to Serfdom* (1944), contesting any suggestion that wartime planning methods could usefully extend into peacetime (de Rouvray, 2004, pp. 15–18). Hayek was well known to RF officers through his LSE and LCES connections. Hayek had proven

[10] On RF grants for European study of trade and business cycles see Craver (1986, p. 213).

[11] RF 1.1 Series 401 S University of Cambridge, Economics, Box 80, Folder 1053, JWH to JMK, letter of 22 November 1944.

himself by 1937 as a valuable source of insider information about Beveridge's goals for the social sciences, which the RF saw as deviating from their own ideas. Hayek's own ideas, were supportively communicated within the RF by his close associate John Van Sickle, assistant director at the SSD and later a professor of economics at Vanderbilt University and Wabash College.[12]

Hayek's 1945 trip to the US began as *Road to Serfdom* was selling-out its Chicago University Press edition, reaching millions as a *Reader's Digest* condensed book (Hayek *et al.*, 2001, pp. 26–27). This allowed him to renew contacts with Chicago dating back to Aaron Director's LSE visit in 1937, and to discuss with like-minded faculty members the creation of an international institute to develop their distinctive commitment to decentralisation of economic and political power via free markets—a project starting in 1947 as the Mont Pèlerin Society (Mirowski and Plehwe, 2009) where Van Sickle was a member.

The RF's officers were also sufficiently in touch with trade economists in the US Treasury to grasp the emerging tension between US and UK visions of post-war trade and payments architecture, long before Keynes crossed the Atlantic to present his post-war plans. Less than a year into the war, Keynes (1940) had spelt out how to finance an expanded wartime budget by rationing consumption, and begun designing post-war payment arrangements that would let Britain resume free trade while keeping national control over fiscal and monetary policy. His aforementioned January 1941 letter to Kittredge for DAE funding came soon after presenting his opinion on post-war international trade and payment arrangements to Roosevelt's negotiator, Harry Hopkins, in London, where they discussed US lend-lease proposals. Tasked the previous month with countering Germany's proposals for a currency union across the countries the Nazis had invaded, Keynes (1940) had voiced clearly his preference for the pound Sterling to be Europe's international currency, maximising its attractions by keeping the British Empire intact and staying off the Gold Standard. Recognising that the US would emerge from this world war as the only large economy with a trade surplus enabling it to act as an external creditor, Keynes was determined to preserve the widest possible Sterling Area, so that countries exporting to the UK would receive British pounds they could immediately spend on products from it, financing the wide external deficit.

Noting in April 1941 that the Belgians and Dutch had signalled some willingness to join, Keynes advised negotiator Frank Ashton-Gwatkin, writing 'the wider the area the better... The arrangements now slowly perfecting relate to the payment agreements which now cover nearly the whole world outside North America' (Keynes and Moggridge, 1980, p. 18). Correspondingly, he 'exploded in rage' when presented, in July 1941, with US trade proposals that would end British Imperial preference (Steil, 2014, p. 14). For the rest of wartime, Keynes pursued a design with an international currency and lender-of-last resort that could force sovereign creditors to absorb some of the adjustment cost for external imbalances, in contrast to US plans which placed it all on the sovereign debtor. It was in the light of this objective, designed to allow the British government to restore full employment via fiscal and monetary easing as explained in his *General Theory* (1936), that Willits and his colleagues evaluated

[12] RF 1.1 Series 401 Box 71, F 944: LSE 1937—When RF officers sounded out Hayek on the social biology chair a Beveridge-led fraction pursued, he pronounced it as superfluous to them, triggering immediate RF-side action ultimately leading to the replacement of the social biology program with a readership in population studies, a major RF interest.

the DAE's application—and weighed up Keynes's enthusiasm for 'promising young economists and statisticians' who had proved themselves in service to a government that had switched to a central planning model for the purpose of winning the war.

Alongside funding for European stand-alone research institutes modelled on the NBER, the RF explored a visiting program for UK and US economists. Transatlantic travel was still slow and expensive (particularly for young scholars), making external sponsorship essential for long visits, especially to the US. In March 1940, Kittredge told Willits that he was 'still convinced' about 'such an exchange of personnel' being 'one of the most significant measures which the Foundation could adopt at the present time to maintain intellectual contacts across the Atlantic.'[13] The explicit aim was to help a new European generation of economists 'learn from the Americans' and obtain practical advice on economic reconstruction. The outbreak of WW2 delayed the start of the exchange program while alerting Willits to its usefulness when economists were working on policy requiring international agreement. His 1944 tour 'confirmed his impression that "the discovery of the new crop of younger men around whom to build" a programme was the best way to proceed'. Rather than securing them through projects like the DAE, he concluded that 'the time was not ripe to identify and cultivate such scholars on a large scale, because 'the government will need more than are available and will hang on to them as long as possible' (Stapleton, 2003, p. 106). The RF's archive records show that over twenty names were drawn up between 1941 and 1951 and circulated as lists continuously among RF officers and experts for comment. Table 1 summarises the exchange candidates discussed up to 1945.

From 1941, the search was clearly focused on international trade and finance, represented by economists (Viner, Williams, Staley, Young and Ellis), political scientists who viewed trade as a source of international stability (Bidwell, Angell, Armstrong and Wright), and senior policy advisers already designing a US-centred post-war monetary architecture (Goldenweiser, Rodkey and Burns). Keynes played no recorded role in the exchange discussions, despite his frequent communication with the RF officers and with US policymakers through this time. Hansen and Garver, representing a broader macroeconomic focus as co-authors of a leading pre-Keynesian textbook (Garver and Hansen, 1928), dropped from the RF discussion after 1941. Redfield, an anthropologist, had been involved as university dean in the Chicago School discussions that led to the Mont Pèlerin Society (Van Horn and Mirowski, 2010), and shared an interest in Mexico with the cultural geographer Sauer.

This inclusion of social scientists outside economics (especially at Chicago) in the wartime exchange discussion reflects the RF's difficulty in finding scholars aligned with the direction it felt appropriate for British economics, under new priorities for social-science funding it had already formed (Mueller, 2013). International relations, whose expert study had been pursued under RF sponsorship since the 1920s via the UK Royal Institute of International Affairs (Chatham House, founded 1920) and US Council on Foreign Relations (founded 1921), was viewed as especially effective for an Anglo-American elite-guided post-war reconstruction using social science expertise (Parmar, 2002, pp. 53–57). The economists in contention for study visits were predominantly theorists focused on international trade, and on money and banking as contributors to the trade cycle.

[13] RG 1.1 401 Postwar reconstruction, exchange scholars, 1940-41, Box 5, F 58; Memorandum, 'Arrangements of Study Visits of European Scholars to the United States' TBK to JHW on 22 March 1940. Letter of 19 January 1940 by Acting Director Geoffrey Crowther, NIESR to Stacy May.

Table 1. *Planned scholarly exchanges, 1941–51*

Scholars	Affiliation at time	Research focus	Year discussed
Trips from the US to the UK			
Jacob Viner	University of Chicago	International trade	1941, 1942, 1944
Alvin Hansen	Harvard University	Macroeconomics	1941
P. W. Bidwell	Council on Foreign Relations	International relations	1941
Eugene Staley	Chicago University, Johns Hopkins University	Cross-border investment, trade	1941
Quincy Wright	Chicago University	Politics	1941
Hamilton Fish Armstrong	Council on Foreign Relations	International relations	1941
Frederic B. Garver			1942
Carl O. Sauer	University of California at Berkeley	Geography	1942
Ralph A. Young	University of Pennsylvania, Federal Reserve	Monetary policy, banking	1942
Arthur F. Burns	Rutgers University, NBER	Business cycles, monetary policy	1942
Robert Redfield	University of Chicago	Anthropology (Mexico)	1942
Simon Kuznets	NBER, War Production Board	Growth, development, national income	1942
John H. Williams	Harvard University	International trade, monetary policy	1942
Howard S. Ellis	University of California		1944
Norman Angell	Independent Scholar	Trade as contributor to peace	1944
Robert Rodkey	University of Michigan	Banking	1944
Emanuel Goldenweiser	Federal Reserve	Monetary policy, statistics	1944
George Stigler	University of Minnesota, Columbia University	Microeconomics, welfare theory	1946/1947
Herbert Feis	Economic Advisor for International Affairs to the US Department of State	Economic history, international relations	1951
Albert G. Hart	University of Columbia	Monetary policy, cycles	1951
Paul A. Freund	Harvard University	Constitutional law	1951
Edwin F. Gay	Harvard University	Economic history	1941
Trips from the UK to the US			
Arnold Toynbee	University College London, London School of Economics	History, International relations	1942
Lionel Robbins	London School of Economics	Methodology, History of thought	1945
Ian M. D. Little	Oxford University	Welfare theory	1951

Through their visits and conversations, RF officers were fully aware of the widespread enthusiasm in UK academic and Treasury circles for Keynes's explanation for the pre-war slump, and suggestions for achieving post-war expansion with an architecture that allowed domestic fiscal and monetary activism. But their conversations with US international relations scholars and government advisers indicate the controversial nature of Keynes's theories and post-war monetary designs. The economic advisers' doubts about his empirical strategy gave more reason to step back from the 'Keynesian' programme. The debate with Hayek at the LSE, which began in 1931 when economists tried to fashion a policy response to the Wall Street Crash and Great Depression (Wapshott, 2011), had led to Keynes being portrayed as an advocate of state intervention to manage the economy. For Van Sickle, Britain's interwar malaise could be much more easily explained by a departure from Hayekian free competition and sound money than by any Keynesian demand deficiency or 'liquidity trap': 'The economy of Great Britain was converted into a caricature of an enterprise system between the two world wars. Output restriction was permitted, even encouraged, in one activity after another' (Van Sickle and Rogge, 1954, p. 32).[14]

Keynes' prescriptions in 1936 for boosting aggregate demand could be viewed as an alternative to sector-level output restriction for reviving private profit (Winch, 1989, pp. 62–64). But he was still better known for the portrayal of the large corporation as a semi-autonomous 'unit of control' that might attain the efficiencies of central coordination while preserving the individual freedoms of laissez-faire (Keynes, 1926, p. Part IV), presenting a benign managerial view that contrasted with that of Hayek and his intellectual allies, who viewed the large corporation as lacking or even stifling entrepreneurial freedom. The impression of Keynes shifting from economic liberalism towards what was interpreted by US philanthropy as 'statist' solutions was reinforced by his close association with Beveridge (2000[1942])'s national insurance proposal. Keynes's argument that fiscal policy could restore full employment more effectively than monetary policy, because of liquidity traps during the Great Depression and the need for direct reallocation from private saving to public military investment in wartime, clashed with opinions within the RF as reinforced by its American external advisors. The apprehension this aroused among US observers was made clear in an exemplary advice to Willits given by Princeton economist Robert B. Warren, calling the 'non-monetary economics totalitarian economics (Central Europe)', and referring to the widespread acceptance of Keynesian theory as 'British and American economists [drifting] more and more toward the acceptance of quasi-totalitarian principles (e.g., Keynes)'.[15] While still funding Beveridge's high-profile trips to North America, the RF ceased support for his unemployment studies. By the time his postwar full-employment blueprint on how extensively UK social policy was to be rebuilt around Keynes's fiscal principles (Beveridge, 1944), RF officers were viewing both as problematic.[16]

Thus, while Willits and Keynes agreed on the meaning of 'applied' in economic research, the officers' communications led to the judging of Keynes's efforts within a value frame that would soon become that of the Cold War but was mainly conveyed at that time as a problem of threatened liberal society and the practice of 'good social sciences' (cf. de Rouvray, 2004). Henry Clay informed Willits in August 1944 that Stone would be travelling to the US in late September, carrying letters of introduction

[14] Van Sickle's colleague Benjamin Rogge was also a member of the Mount Pèlerin Society. It was at Wabash College, Indiana, where Milton Friedman in a research project with these scholars launched an all-out attack on the state as anti-entrepreneurial (Mirowski and Plehwe, 2009).

[15] RG 3 Series 910, box 3, Folder 17, 910. Program and Policy—Reports, PRO-31-35, 1942–43. Letters of Robert Warren on 8 December 1939. Warren was also on the Committee on Economy History (de Rouvray, 2004).

[16] RF 1.1 Series 401 England, Beveridge, William, Visit Social Security, 1–11 May 1943 Box 65. RF 1.1 401 Box 71, F944: LSE 1937; Memorandum JVS to TBK on 19 January 1937.

to Mitchell at the NBER and Stacy May (the US War Production Board's head of planning and statistics), but this was outside the RF program and none of Keynes's younger followers was considered for an exchange.[17] The RF focused on sending scholars who could take American economic wisdom to the UK, and exposing visitors to the US to the increasingly sophisticated models that its macro-econometricians were starting to build and estimate with national accounts data.

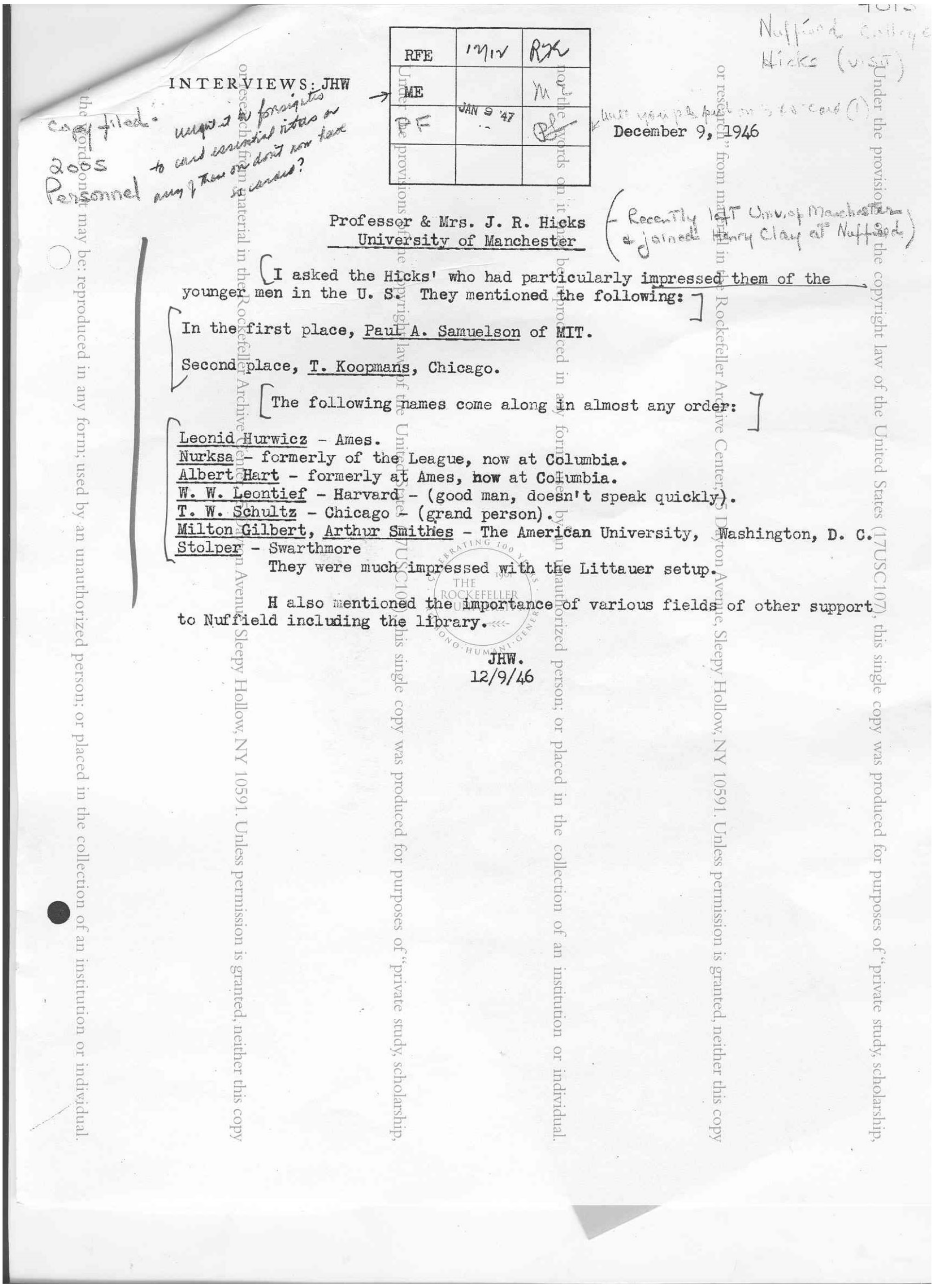
In December 1946, eight months after Keynes's death, the RF asked John Hicks—who had visited the US while in transition from Manchester University to Nuffield College Oxford—and his wife Ursula, a renowned economist, for a list of the leading US economists likely to be of value to an exchange program. The Hicks's' list, shown in the original inter-office communication by the RF in Figure 1, put Paul Samuelson in top position, with Tjalling Koopmans second, and others in no order of preference.[18] Samuelson, at MIT since receiving his doctorate from Harvard in 1941, was soon to give 'Keynesian economics' a globally influential distillation via his published dissertation (1947) and undergraduate textbook (1948). Koopmans was regarded as a leading representative of the now fast-developing econometrics, his misgivings about Wesley Mitchell's business-cycle measurement as 'measurement without theory' (1947) not yet published. Among the others listed, Hart (who studied monetary policy and cycles), Gilbert (involved in national income accounting and later international monetary policy) and Smithies (the Bureau of the Budget's leading fiscal policy expert) were the only ones with visible macroeconomic interests and some knowledge of Keynes's contributions at this stage. Leontief, whose input-output techniques for analysing inter-industry transactions (1941) would later play an integral part in Stone's social accounting matrices (Deaton, 2008), had rejected the generality of Keynes's assumption of an aggregate demand constraint, arguing that it rests on downward inflexibility of interest rates and money wage rates (W. W. Leontief, 1936).

Fewer than ten ultimately travelled on exchanges—mostly young UK scholars making post-doctoral trips to the US and a few well-established US researchers visiting the UK. Even before the shrinkage in number, the design of the exchanges after 1945 extinguished any hope of the RF channelling 'Keynesian' ideas for realistic applied research or macroeconomics to the US. The final selection shows RF officers' caution over the relevance of British-developed 'Keynesian' ideas and their appropriateness for peacetime. Samuelson and Koopmans eventually made the trip to Britain, deepening their econometric collaboration with Stone during his DAE directorship, resulting in a report, (Samuelson *et al.*, 1954). Other visitors included Ragnar Frisch from Oslo and Milton Friedman from Chicago.[19] Senior Chicago economists Jacob Viner and Frank Knight received RF grants to visit LSE in 1947 and 1948 respectively. Robbins made the reverse trip to Chicago. Jewkes, who went on to be a visiting professor at Chicago in 1953–54, was first sponsored to visit the US while writing his critique of wartime centralisation (1948) which echoed Hayek's warning of stagnation and repression if planning were to continue into peacetime. Ian Little went from Oxford University

[17] RF 1.1. Series 401 S Box 80, Henry Clay, Bank of England, to JHW on 11 August 1944.

[18] RF 1.1 401 S, Box 74, Folder 982. Nuffield College, Hicks, J.R. (Visit, Economics, 1945–53). Published with permission of Rockefeller Archive Centre director, Kenneth W. Rose.

[19] Stone travelled extensively under UN and Organisation for European Economic Cooperation (OEEC) auspices (e.g., to Princeton Institute for Advanced Studies) while developing the first system of national accounts (Barker, 2017; Pesaran and Harcourt, 2001, pp. F150–152).


Nuffield College
Hicks (visit)

INTERVIEWS: JHW

Copy filed.
2005
Personnel

RFE	1/21/47	RK
ME		M
PF	JAN 9 '47	PF

December 9, 1946

Professor & Mrs. J. R. Hicks
University of Manchester

(Recently left Univ. of Manchester & joined Henry Clay at Nuffield.)

I asked the Hicks' who had particularly impressed them of the younger men in the U. S. They mentioned the following:

In the first place, Paul A. Samuelson of MIT.

Second place, T. Koopmans, Chicago.

The following names come along in almost any order:

Leonid Hurwicz - Ames.
Nurksa - formerly of the League, now at Columbia.
Albert Hart - formerly at Ames, now at Columbia.
W. W. Leontief - Harvard - (good man, doesn't speak quickly).
T. W. Schultz - Chicago - (grand person).
Milton Gilbert, Arthur Smithies - The American University, Washington, D. C.
Stolper - Swarthmore

They were much impressed with the Littauer setup.

H also mentioned the importance of various fields of other support to Nuffield including the library.

JHW.
12/9/46

Fig. 1. *Interview of economists John R. and Ursula Hicks by Joseph H. Willits, recorded on 9 December 1946. For source, see footnote 18*[18].

to MIT, Stanford and Princeton universities in 1951, the year after publishing his influential critique of welfare economics (1950). The Hickses themselves made the crossing, though mainly to visit RF headquarters. Few of the economists—and none of the early-career 'Keynesians'—discussed in all the RF communications over 10 years ever made the exchange journey.

5. Concluding discussion

Keynes's unsuccessful wartime pursuit of a grant commitment from the RF, and the absence of 'Keynesians' from RF-sponsored scholarly exchanges immediately after WW2, underscore the significant influence of philanthropic sponsors on the direction taken by European applied economics at its formative stage. Foundations, of which the RF was by far the largest targeting social sciences in the 1930s and early 1940s, could confer not only funding for research outside government that was largely unavailable from universities or business, but also approval that gave prestige to researchers within their institutions and signalled relevance of their projects to the wider public (Goodwin, 1998, p. 158). At the centre of the RF's economics network, Joseph Willits convinced himself of the tough competition for personnel pressed on him by Keynes during his UK visit in November 1944. Yet, he drew different conclusions from his observations—seeing advantages in leaving economists to tackle policy or business problems *in situ* rather than gathering them at an academic centre, and identifying scholarly exchanges, funded with small grants rather than institutional grants, as the best way to transfer and develop frontier knowledge.

The economists considered and selected for the exchange program confirm RF officers' scepticism towards new macroeconomic approaches in the UK, while indicating uncertainty and need for extra-institutional assessment. They had become sensitive to the intellectual preference for an economics that accepted and formalised free market and free trade principles over activist fiscal and social policy. Having initially sympathised with a distinctly 'realistic' approach to applied economics, they veered towards a US-focused economic history immediately after the war, influenced by the perceived role of entrepreneurs in driving growth through technological change. They also promoted European econometrics to harness the value of statistics, quantitative economic theory and mathematics (cf. Frisch, 1946)—in line with the new national income accounting, which was to dominate the 'empirical economics' on which Cambridge's Department of Applied Economics was to focus when finally launched.

Samuelson's aforementioned foundational works greatly influenced the direction of post-war undergraduate and postgraduate teaching and research, quickly displacing other 'Keynesian' textbooks, notably those by Lorie Tarshis (1947) and Kenneth E. Boulding (1948) (see also Harcourt, 1982). Policymakers' and sponsors' preference for the more neutral and 'scientific' appearance given by mathematical presentation may also have helped to side-line less axiomatically or statistically driven approaches (Lawson, 2012), including Cambridge's Keynesianism and Austrian economics after Hayek. The archival research presented here suggests that the development of 'applied economics' may have encountered a similar historical contingency at the point in the 1940s, in Europe and America, when demand for applied analysis was rising due to the expansion of governments' role in the economy and collection of data, and when practitioners were still few in number and working mainly outside universities.

A small network of grant-program administrators and advisers, some with imperfectly concealed personal agendas, significantly influenced the type of institution selected for expansion, the choice of economists recruited to them and sent for knowledge-sharing with them, the problems on which they focused and the methods they used. While the arrival of other sponsors, including government departments and research councils, later allowed the DAE and other centres to grow towards optimum size, the early restriction and conditions attached to their foundational funding delayed their emergence and lastingly deflected their direction of research.

Conflict of interest statement. None declared.

Bibliography

Barker, T. 2017. Richard Stone (1913–1991), pp. 835–55 in R. A. Cord (ed.), *The Palgrave Companion to Cambridge Economics*, London, Palgrave Macmillan UK

Beveridge, W. H. 2000[1942]. Social insurance and allied services. November 1942, Cmd 6404. His Majesty's Stationary Office [reprint], *Bulletin of the World Health Organization*, vol. 78, no. 6, 847–55

Beveridge, W. H. 1944. *Full Employment in a Free Society*, New York, W. W. Norton & Company

Boulding, K. E. 1948. *Economic Analysis, revised edition*, London, Hamish Hamilton

Caircross, A. and Watts, N. 1989. *The Economic Section, 1939–1961: A Study in Economic Advising*, New York, Routledge, Chapman and Hall

Cord, R. A. 2017. The London and Cambridge Economic Service: history and contributions, *Cambridge Journal of Economics*, vol. 41, no. 1, 307–26

Craver, E. 1986. Patronage and the directions of research in economics: the Rockefeller foundation in Europe, 1924-1938, *Minerva*, vol. 24, no. (2–3), 205–22

de Rouvray, C. 2004. 'Old' economic history in the United States: 1939–1954, *Journal of the History of Economic Thought*, vol. 26, no. 2, 221–39. doi:10.1080/1042771042000219046

Deaton, A. 2008. Stone, John Richard Nicholas (1913-1991), pp. 6373–77 in S. N. Durlauf (ed.), *The New Palgrave Dictionary of Economics*, London Palgrave, Macmillan

Denham, A. and Garnett, M. 1998. *British Think-tanks and the Climate of Opinion*, London, UCL Press

Fright, M. P. 2016. Accounting for the origins and impact of the DAE: Attempting an intellectual history of economic measurement. Conference Paper '40 Years of the Cambridge Journal of Economics Conference', Cambridge, St Catherine's College. http://www.cpes.org.uk/40cje-papers/

Frisch, R. 1946. The responsibility of the econometrician, *Econometrica*, vol. 14, no. 1, 1–4

Garrone, G. and Marchionatti, R. 2009. The role model of econometric method in economic analysis: a reassessment of the Keynes-Tinbergen debate, 1938-1943, pp. 148–72, R. Arena, S. Dow, & M. Klaes (eds.), *Open Economics: Economics in Relation to Other Disciplines*, London, Routledge

Garver, F. B. and Hansen, A. H. 1928. *Principles of Economics*, Boston, Ginn and Company

Gemelli, G. 2000. *The 'Unacceptables': American Foundations and Refugee Scholars Between the Two Wars and After*, New York, Lang

Gittins, J. C. 2013. *Oxford University Department of Statistics. A Brief History*. www.stats.ox.ac.uk. Accessed 1 September 2022

Goodwin, C. D. 1993. Doing good and spreading the gospel (economic), pp. 157–73, in D. C. Colander and C. A. W. (eds.), *The Spread of Economic Ideas*, Cambridge, New York, Cambridge University Press

Goodwin, C. D. 1998. The patrons of economics in a time of transformation, *History of Political Economy*, vol. 30, 53–81

Harcourt, G. C. 1982. An early Post-Keynesian: Lorie Tarshis. Or: Tarshis on Tarshis by Harcourt, *Journal of Post Keynesian Economics*, vol. 4, no. 4, 609–19

Hayek, F. A. v., Feulner, E. J., Blundell, J. and Institute of Economic, A. 2001. *The Road to Serfdom (April 1945 Reader's Digest Condensed Version)*, London, Institute of Economic Affairs

Howson, S. and Winch, D. 1977. *The Economic Advisory Council 1930-1939 A Study in Economic Advice During Depression and Recovery*, Cambridge, Cambridge University Press

Jewkes, J. 1948. *Ordeal by Planning*, London, Macmillan & Co

Jones, K. 1998. *Sixty years of Economic Research: A Brief History of the National Institute of Economic and Social Research 1938-98*, London, National Institute of Economic and Social Research

Keynes, J. M. 1926. *The End of Laissez-faire*, London, Hogarth Press

Keynes, J. M. 1936. *The General Theory of Employment Interest and Money*, New York, Harcourt, Brace & World

Keynes, J. M. 1940. *How to Pay for the War: A Radical Plan for the Chancellor of the Exchequer,* London, Macmillan

Keynes, J. M. 1939. The League of Nations Professor Tinbergen's Method, *The Economic Journal*, vol. 49, no. 195, 558–77

Keynes, J. M. and Moggridge, D. 1980. *Activities 1940-1944: Shaping the Post-war World: The Clearing Union*, London, Macmillan Press for the Royal Economic Society

Koopmans, T. C. 1947. Measurement without theory, *Review of Economics and Statistics*, vol. 29, no. 3, 161–72

Lawson, T. 2012. Mathematical Modelling and Ideology in the Economics Academy: competing explanations of the failings of the modern discipline?, *Economic Thought*, vol. 1, 13–22

Leontief, W. 1941. *The Structure of American Economy, 1919-1929*, Cambridge, MA, Harvard University Press

Leontief, W. W. 1936. The Fundamental Assumption of Mr. Keynes' Monetary Theory of Unemployment, *The Quarterly Journal of Economics*, vol. 51, no. 1, 192–7

Little, I. M. D. 1950. *A Critique of Welfare Economics*, Oxford, Clarendon Press

Mirowski, P. and Plehwe, D. 2009. *The road from Mont Pèlerin: the making of the neoliberal thought collective*, Cambridge, MA, Harvard University Press

Mueller, T. B. 2013. The Rockefeller Foundation, the Social Sciences, and the Humanities in the Cold War, *Journal of Cold War Studies*, vol. 15, no. 3, 108–35

Newbery, D. M. 1998. Foreword, pp. xix–xxii in I. Begg and B. Henry (eds.), *Applied Economics and Public Policy (Department of Applied Economics Occasional Papers)*, Cambridge, Cambridge University Press

Parmar, I. 2002. Anglo-American Elites in the interwar years: idealism and power in the intellectual roots of Chatham House and the Council on Foreign Relations, *International Relations*, vol. 16, no. 1, 53–75

Pesaran, M. H. 1991. The Et interview: Professor Sir Richard Stone, *Econometric Theory*, vol. 7, no. 1, 85–123. doi:10.1017/S0266466600004254

Pesaran, M. H. and G. C. Harcourt 2001. Life and work of John Richard Nicholas Stone 1913-1991, *The Economic Journal*, vol. 110, no. 461, F146–65

Great Britain Royal Commission on the Poor Laws and Relief of Distress, Wakefield, H. R., Webb, B. and National Committee for the Prevention of Destitution. 1909. *The Minority Report of the Poor Law Commission*. London, Printed for the National Committee to Promote the Break-up of the Poor Law

The Rockefeller Foundation. 2020. Economics. The Rockefeller Foundation: A Digital History [Online]. https://rockfound.rockarch.org/economics. Accessed 20 Februrary 2022

Rutherford, M. 2007. American institutionalism and its British connections, *European Journal of the History of Economic Thought*, vol. 14, no. 2, 291–323. doi:10.1080/09672560701327984

Samuelson, P. A. 1947. *Foundations of Economic Analysis*, Cambridge, MA, Harvard University Press

Samuelson, P. A. 1948. *Economics: An Introductory Analysis*, New York, MacGraw-Hill Book

Samuelson, P. A., T. C. Koopmans and J. R. N. Stone 1954. Report of the evaluative committee for econometrica, *Econometrica*, vol. 22, no. 2, 141–6

Singh, A. 2008. Better to be rough and relevant than to be precise and irrelevant: Reddaway's legacy to economics, *Cambridge Journal of Economics*, vol. 33, 363–79

Skidelsky, R. J. A. 2001. *John Maynard Keynes. Fighting for Britain 1937-1946* (Vol. 3), London, Macmillan

Stapleton, D. H. 2003. Joseph Willits and the Rockefeller's European Programme in the Social Sciences, *Minerva*, vol. 41, no. 2, 101–14. doi:10.1023/A:1023602713292

Steil, B. 2014. *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the Making of a New World Order*, Princeton, Princeton University Press

Tarshis, L. 1947. *The Elements of Economics: An Introduction to the Theory of Price and Employment*, Boston, Houghton Mifflin Co

Thirlwall, A. P. 1987. *Nicholas Kaldor (Grand Masters in Economics)*, Brighton, Wheatsheaf Books

Van Horn, R. and Mirowski, P. 2010. Neoliberalism and Chicago. In *The Elgar Companion to the Chicago School of Economics*, Cheltenham, Edward Elgar

Van Sickle, J. and Rogge, B. A. 1954. *Introduction to Economics*, New York, Toronto, London, D. van Nostrand Company, Inc

Walton, A. 2019. The History of Philanthropy in Higher Education: A Distinctively Discontinuous Literature, pp. 479–533 in M. B. Paulsen (ed.), *Higher Education: Handbook of Theory and Research* (Vol. 34). Cham, Springer International Publishing

Wapshott, N. 2011. *Keynes Hayek: The Clash that Defined Modern Economics*, New York, London, W.W. Norton & Co

Winch, D. 1989. Keynes, Keynesianism, and State Intervention, pp. 107–28 in P. A. Hall (ed.), *The Political Power of Economic Ideas: Keynesianism across Nations*. Princeton, Princeton University Press