





Industry dynamics and trade association power: The shifting nature of business influence in UK aluminium

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ABSTRACT

This article examines industry dynamics and their influence on business-government relations through a study of the UK aluminium industry, focusing on the changing role of its leading trade association, the Aluminium Federation (ALFED). It explores how ALFED developed its capabilities and relations with executive and legislature over time, revealing how it changed its composition to reflect the changes in the industry that it represents, consequently affecting its wielding of influence and power. This is examined through specific episodes and what they reveal about gradual, as well as dramatic changes, in the organisation and business power and influence.

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Introduction

The exercise of business power occurs through a variety of modes which are affected and effected by different time periods and relationships in an often evanescent and ever-changing way. Business historians have paid less attention to power but have often left it residing in the background of analyses of other facets of business activities (Rollings, 2021). One of the principal modes of business power's exercise can be found in the activities of trade associations (Bowman et al., 2017). However, business historians and business and management scholars alike have highlighted a relative neglect of trade/industry associations as expressions of business power and for the conduct of business-government relations (Lawton et al., 2018; Rajwani et al., 2015; Reveley & Ville, 2010; Rollings, 2022; Rollings & Kipping, 2008). Reveley and Ville defined trade associations as fitting a, 'newly derived organisational category that seeks to encapsulate large-scale member-driven organisations' (2010, p. 837).

Exploring business power through trade association analysis proffers the opportunity to explore industry cooperation and resources and capabilities in relation to an important but less studied aspect of the conduct of business-government relations, in the wake of several other recent studies (Bertilorenzi, 2018; Kurosawa, 2018; Pitteloud, 2021; Rollings & Kipping, 2008; Stokes & Banken, 2015). We do this through a study of the Aluminium Federation (ALFED; the trade association for UK aluminium) between its formation in 1962 and 2022 to contribute new and detailed insights to the nature of business-government relations and

fluctuations in the exercise of business power, and the specific imprint of an industry on those. It further articulates the methodological challenges in exploring these spaces and demonstrates the benefits of history to interrogating theory in the social sciences (Berridge & Stewart, 2011; Kipping & Üsdiken, 2014; Maclean et al., 2016; Perchard et al., 2017). We seek to answer the research question: how do industry dynamics affect power relations within trade associations and their conduct of business-government relations?

Historical perspectives and methods are an important approach for exploring the subject matter of trade associations, and more broadly corporate political activity and business power, not least given one of Hacker and Pierson's key points in their critique of instrumentalist analyses of business power that: 'the structural power of business is a variable, not a constant' (2002, p. 282). The tendency to measure lobbying success as an end point overlooks the complexity, preferences, challenges, and ultimately adaptation to contextual change inherent in the pursuit of political activity by any interest group over time (Wuokko et al., 2022). Despite a recognition of the importance of history to an understanding the development of corporate political activity (CPA) and nonmarket strategy, there is little evidence of this penetrating either area (Lawton et al., 2014; Mellahi et al., 2016). This is even though, as Jones and Lubinski (2012) note, following the watershed of the First World War that, 'the management of distance was replaced by the management of governments as a central challenge firms faced' (pp. 86–87). In our analysis of the aluminium industry in the UK and its trade association ALFED, we identify both the changing nature of the industry and the ALFED's organisational structure as key to understanding how business power was exercised throughout the period.

Industry imprint and dynamics: aluminium industry cooperation

Modern aluminium production historically required a vertically integrated supply chain for whilst bauxite (the mineral from which is it extracted) is abundant in the earth's crust (the quality of those deposits is still critical), cryolite used in anode baths to reduce aluminium from alumina (aluminium oxide) historically only had one major source of deposits: Greenland. Primary aluminium production is also immensely energy intensive (accounting for between 30%-50% of the costs of aluminium production). Historically, aluminium producers sought out hydro-power resources to provide the energy for this stage of the production process. By 1913, seven companies controlled 94 per cent of the global share of aluminium production. By 1979, six firms controlled 54 per cent of bauxite mining, 74 per cent of alumina production, and 62 per cent of primary aluminium production. By 1994, the majors still controlled 62 per cent respectively of primary production (Perchard, 2012). Thus, it was also a process that from the start was also intensely capital-intensive and increasingly required close relations with government over land and water rights, as well as in other policy areas such as regional development.

ALFED emerged into an industry that had long experience of inter- and intra- industry cooperation, including cartelisation. National aluminium industries also had strong ties with the state and extensive experience of political brokering, not least because of the strategic importance of the metal, including of the adverse impact of that relationship as well as the positives (Bertilorenzi, 2016; Grinberg & Hachez-Leroy, 1997; Perchard, 2012, 2019). Formal industry cooperation started in 1901 with the agreement between the first movers: The Aluminium Company of America (Alcoa); Aluminium Industrie Aktiengesellschaft (AIAG; now

Alusuisse); the British Aluminium Company (BACo); and Produits chimiques d'Alais et de la Camargue (subsequently Aluminium Pechiney). Immediately after the cessation of hostilities in 1918, the leaders of the British, French, and North American aluminium industries met in Paris to discuss cooperative terms. The Aluminium Association (1926–1931) and then the Alliance Aluminium Company (AAC) (1931–1939) formalised the height of this transnational industry cooperation in the interwar years with coordination and inter-firm knowledge transfer on marketing, research and development, and transportation (Bertilorenzi, 2016; Storli, 2014). The UK industry also had plenty of experience of firm collaboration and with government during the inter-war years (1919-1939) through its participation in the British Non-Ferrous Metals Research Association (BNFMRA) formed in 1919, which brought together a large network of companies, professional societies, laboratories, and universities funded by government and with input from the newly created Department of Scientific and Industrial Research. It was such networks that produced pioneering work on aluminium alloys, notably for use in aircraft production during wartime (Perchard, 2012).

After 1945, industry cooperation continued with several important European and international initiatives. This included the Centre international pour le développement de l'aluminium (1950); the European Wrought Aluminium Association (EWAA) (1953); the Aluminium Foil Conference (AFC) (1955); the European Foil Convertors (who merged in 1972 with AFC to form and the European Aluminium Foil Association), and Comité de Liaison des Industries de Métaux Non Ferreux (later Eurométaux) (1957); and the Organisation of European Aluminium Smelters for the Secondary producers (1960). European primary producers had formed The Club after the Treaty of Rome (1957), which focused both on collaboration over trade policies but also social activities such as an annual skiing trophy. This became the European Primary Aluminium Association (EPAA) in 1969. These organisations were superseded by the establishment of the International Aluminium Institute in 1972, and the European Aluminium Association (formed out of EWAA and EPAA; now European Aluminium) formed in 1981 where ALFED played a central role and maintained close relations (Bertilorenzi, 2016, 2021).

Such organisations characterised business-government relations in the industry for much of the twentieth century across different areas (Bertilorenzi, 2016; Grinberg & Hachez-Leroy, 1997; Perchard, 2012, 2019). Changing context and industry dynamics profoundly altered ALFED's role as a trade association and its ability to exercise power and influence at home and abroad. These changed circumstances also directly influenced its own internal reorganisation and the practice of business-government relations in the UK aluminium industry. The industry history of collaboration and the role trade associations such as ALFED played in their operations points to a tradition and imprint that producers drew upon in a climate of changing industry dynamics and business-government relations.

Methodology

Investigating business-government relations and the conduct of corporate political activity and the exercise of business power, present many challenges, with some of these particularly acute given the sensitivity of these institutions to such scrutiny. ALFED has few surviving historical records in their possession meaning we had to draw on a range of other archival collections including Glasgow University Archives Service, the Institut pour l'histoire de l'aluminium (IHA)'s archival collections, the UK Parliamentary Archive,

and UK National Archives, alongside Hansard (the official reports of UK Parliamentary debates and select committee reports) and historical newspaper collections, as well as oral history interviews conducted with, and correspondence provided by, former or serving ALFED office holders and industry leaders. For much of the later period of our focus, government sources were covered by the UK government's 30-year closure rule, restricting access to departmental papers. As such we sought to explore these elements through a combination of primary and secondary sources (chiefly parliamentary archives and papers and oral histories or correspondence, and historical newspaper coverage). The combination of these sources was not only necessary, because of the gaps in sources, but also desirable for triangulation of sources and in reaching understanding of the exercise of business influence on the complexities of policy processes. In seeking to understand the dynamics in the industry and the shift from the conduct of public affairs at firm level to the enhanced role of the trade association, we were also keen to understand the complexities of the politics of a body representing different parts of the supply chain with at times distinct agendas against the transformation of the global and national industry (Decker, 2013; Jordanova, 2000). These written sources were complemented by the conduct of elite oral history interviewing with key figures past and present within ALFED.

Despite longstanding calls for greater use of oral history within business history, it remains under-utilised though not absent (Perks, 2010; Ryant, 1988). Where it has been used Crawford and Bailey (2019) aver: '[It] has largely followed the practices of the first wave of oral historians, who identified interviewees as a means of filling gaps in extant documentary records' (pp. 7–8). This is our rationale for its use in this work, which is particularly relevant given ALFED's incomplete archival records. The interviews we conducted help us both to enrich the history and better elaborate the motivations of leaders, and 'tell us not just what people did, but what they wanted to do, what they believed they were doing, and what they now think they did' (Portelli, 1991, p. 50). Business leaders' narratives provide us with insights to understand networks of power and influence as well as the challenges they face(d) seeking to cement their legacies. In this regard, it shares much in common with the written personal testimonies in here (Harris and Norland).

All oral history interviewing involves a high level of trust between interviewer and interviewee and is governed by the relationship between both and the dynamics of power, the twin subjectivities, 'intersubjectivity', of both parties (Abrams, 2010; Perks & Thomson, 2016). If elite interviewing is often claimed, by both historians and social scientists (Berridge, 2010; Harvey, 2011; Seldon & Papworth, 1983), to involve a greater degree of trust between interviewer and interviewee because of the sensitivity of the subject matter then this only serves to downplay the imperative of trust and sensitivity in all oral history interviewing. All research involves degrees of 'gatekeeping', but oral history recruitment is especially reliant on the trust of gatekeepers to opening up opportunities (Grele, 2007). In this case, ALFED's trust of the research team and familiarity with their body of work around the industry instilled confidence. This also built on extant experience of using oral history, combined with archival and secondary research, in the history of the industry (Perchard, 2012).

In order to contextualise ALFED's history and development, we go on to explore the dynamics of the global aluminium industry and the imprint on the industry's patterns of organising and cooperation, as well as the national development of the industry in the UK as a way of showing how it sought to exercise and influence power.



The Aluminium Federation 1962–1972: infancy

The 16 subscribers (a mixture of vertically integrated global majors (Alcan, Alcoa, BACo) and large downstream aluminium extruders and rollers) to ALFED's original articles of association in April 1962 sought an organisation that would not just promote technical knowledge, education and the uses of aluminium, but also one which would actively encourage cooperation across the industry and with governments (HMSO, 1948; Articles of Association ALFED, 1962). As a new trade association, ALFED joined an already well populated network of industry bodies. Political scientist Samuel Finer, in his landmark 1958 study of 'the Lobby', Anonymous Empire, identified 2500 trade associations operating in Britain four years before ALFED was formed. Of these, Finer (1958) estimated half were manufacturing associations. Aside from the Institute of Directors (26,000 members), the British Employers Confederation (270 firms or professional bodies), the Federation of British Industries (7,533 firms and 283 trade associations), and the National Union of Manufacturers (5,500 companies and 71 trade associations), most were significantly smaller. ALFED's entry into what could be assumed as a crowded marketplace was actually the first attempt by the aluminium industry at creating an effective umbrella trade association that sought to protect and promote the interests of its members in the UK.

By the early 1960s, the UK aluminium industry was presented with considerable opportunities and challenges. On the one hand, the UK was experiencing significant growth with rising affluence and national infrastructure investment, notably in transport (accounting for almost one third of the domestic aluminium market), with the growth of national airlines and passenger and transport planes, new rolling stock for the railways, the advent of shipping containerisation (in 1956) and household car ownership (which almost quadrupled between 1950 and 1960). Following the passing of the 1956 Clean Air Act, the secondary aluminium industry was confronted with a pressing need to modernise and clean up emissions. In 1963, Britain's application to the European Economic Community (EEC) was refused with implications both for the supply and prices of raw materials and access to markets. US takeovers of British firms stoked European industry and political leaders fears that a newly admitted UK would act as a staging post for US companies to exploit European markets and launch more hostile acquisitions. The European Free Trade Area formed by Austria, Denmark, Norway, Portugal, Sweden, Switzerland, and the United Kingdom in 1959 had also failed to realise significant gains. Concurrently, exports to Commonwealth countries had been steadily declining. Meanwhile, the UK was heavily reliant on imports of aluminium ingot from Canada, with BACo's West Highland smelters unable to meet domestic demand. This then was the situation that the industry and the newly formed ALFED, found itself in West (1962; Perchard, 2012).

ALFED's founding articles committed it to 'represent as its official liaison and advisory body the interests of the Industry as a whole with the Governments of the United Kingdom, the British Commonwealth, and foreign countries, with trade associations and all other bodies, on matters relating to and affecting the Industry, including therein the representation of the Industry as a whole within any other organisation' (HMSO, 1948; Articles of Association ALFED, 1962, p.2). However, its ability to enact this was limited by its capabilities and governing council. This was because much of the CPA within the industry was conducted on a firm to government basis, predominantly by the majors, BACo and Alcan (and later Alcoa), and between smaller downstream producers and their constituency parliamentarians (Financial Times, January 1963; Financial Times, May 1962; Perchard, 2012; Perchard & MacKenzie, 2021). Operating out of offices in Birmingham and London, ALFED's early office holders sought to advance the interests to the utmost of their abilities and experience within the context of the industry of the day. The skills and experience of the leadership and staff at the lay chiefly in the dissemination of technical knowledge and training and were not best placed to meet the fresh challenges of the fast-changing global industry or of the domestic economic and political environments.

The engagement of Dick (H.R.) Murray-Shaw, Secretary-General, 1962-1972 with government was confined to bringing the various industry parties together and coordinating with bodies such as the BNFMRA (TNA BT328/96 Aluminium Federation, 1962-1975 Murray-Shaw and Carter correspondence 1963, 1964 and letter from Wahler to Murray-Shaw, 1967, circulars from Murray-Shaw to ALFED members, 1964) and was wholly technical in nature (TNA BT 328/96, Alkali Inspectorate and Aluminium Industry meeting 1964). During this time, secondary (recycled) aluminium had become very important, with secondary aluminium production rising from 8,000 to 40,000 tons between 1935 and 1946. By 1964, an estimated 13 per cent of the Britain's aluminium workforce were employed in secondary aluminium production, with a sales value between £20-25 m (£431.2-539 m in 2021 real terms) and represented by its own Association of Light Alloy Refiners and Smelters (ALARS) (formed through a merger in 1959) which was a member of ALFED (Bennett, 1964; Perchard, 2012). These component member associations were to become more important to ALFED in due course as the power and influence of the large multinational vertically integrated players like BACo and Alcan waned, and smaller producers became more prominent in the UK industry in the 1960s.

ALARS highlighted the issues that ALFED increasingly faced in representing a diverse sector but one in which the global majors still dominated. ALARS was a founding member of ALFED and represented a significant part of the aluminium supply chain and workforce, almost 60% of its members were small or medium size enterprises with the vast majority producing 5,000mts or less. These were, by and large, small regional businesses with few enjoying access to the elite social networks and capital that the firms like BACo, Alcan and the Alcoa subsidiaries did (Bennett, 1964; Perchard, 2012; Perchard & MacKenzie, 2021). ALFED's governance structures were dominated by BACo and Alcan with a clear divide evident between the global majors and small downstream producers.

The challenges looming for the global industry, the need for a different approach to business-government relations, and ALFED's lack of in-house capabilities to approach such trials were highlighted by the issues arising from the fallout of the UK government-sponsored smelter lottery launched in 1967, part of the Labour government of Harold Wilson's 'White Heat' revolution to modernise British industry. The government's proposal was to encourage the development of a new generation of aluminium smelters at three locations (Anglesey, Invergordon and Lynemouth) and in so doing reduce, if not eliminate, imports of aluminium ingot (and help address the UK's balance of payment issues) and sponsor the expansion of civil nuclear power development, including the new Advanced Gas-cooled Reactors (AGR) stations. The difficulties around these negotiations highlighted energy supply and prices as a recurrent issue for the industry and the Federation, as well as the weaknesses for producers of firm-by-firm negotiations with government, albeit with differing outcomes for the companies involved. In BACo's case, their embedded strategic failings and long proximity to government ended with their Invergordon smelter forced to close in 1981 after less than a

decade in operation whilst Alcan circumvented government to strike a deal with the publicly-owned National Coal Board to supply the Lynemouth smelter (1974–2012), demonstrating a greater astuteness in Alcan's part not only to the inherent flaws in the AGR smelter plan but also of how to navigate the institutional environment. A third producer, the Anglesey Aluminium Company (AAC) (a consortium that included Rio Tinto Zinc), though opting for power supplied to their smelter (1971–2009) by nuclear generation chose to be supplied by an older Magnox reactor fared better than BACo. However, the experience would be instrumental in stirring the Labour Party peer, former government minister, and AAC Chairman and Rio Tinto Deputy Chairman, Lord Edward Shackleton, subsequently to be instrumental in strengthening the industry's voice in Parliament and government departments (Edgerton, 2005; MacKenzie, 2012; Perchard, 2012; Perchard & MacKenzie, 2021).

By the end of ALFED's first decade, other global events were further underlining the need for far greater national and transnational industry-wide cooperation, especially for downstream producers without the voice and influence of the majors, chiefly the UK's admission to the EEC in 1972 and gradual distancing from traditional Commonwealth markets and the 1973 oil crisis. ALFED was ill-equipped and prepared to meet either the fresh challenges confronting global industry or the domestic economic and political environments. In 1969, ALFED was forced to sell off its central London offices due to financial constraints, signalling a loss of prestige and waning influence (Financial Times, December 1969; Financial Times December 1972; Financial Times, July 1973). By 1972, matters had come to a head, with a growing number of industry leaders increasingly disgruntled at the governance and direction of ALFED publicly demanding reform, with the *Financial Times* reporting in May (p. 20):

The Federation has been shrinking in scope and budget for several years. Its London offices (headquarters are in Birmingham) were closed to save money. The problem has been that the membership of the Federation were not happy with it. It has only about 29 members, either primary producers or semi-fabricators... they dominate the Federation. This top-heaviness meant that the other firms were unwilling to put much money into the Federation efforts.

ALFED remained for much of its first decade a technical body, with little independent power and influence, lacking capabilities, resources, networks, and capital to prosecute any public affairs functions. Significantly for ALFED as an organisation, large sections of its membership were also deeply unhappy with it and pressing for reform. The following, pivotal, decade would prompt significant changes in ALFED and the domestic industry that illustrate the changing nature of business power in the UK aluminium industry and how the industry engaged with government.

1973–1983: from technical influence to collective power

1972 saw a change of leadership in ALFED whereby Murray-Shaw was ousted and replaced by his deputy Paddy Matthews as Secretary-General. Matthews subsequently set out the vision for the reform of ALFED in July 1973, stating 'The broader base of the federation will also enable it to speak and act authoritatively, both nationally and internationally, on behalf of the industry as a whole' (Financial Times, July 1973, p. 11). The section identifies a pivotal decade in which ALFED increased its influence and transformed from a technical advisory body to a functioning professional trade association. The drive for greater transnational cooperation was also reflected in the formation of the International Aluminium Institute (IAI) and the International Primary Aluminium Institute (IPAI) in 1972. The strength, and defensive necessity, derived from such alliances were evident in collectively negotiating with European Aluminium through Eurométaux over the Generalised Agreement on Tariffs and Trade (GATT) and with the relationship between the EEC and other trading blocs and authorities (ALFED, 1988; Bertilorenzi, 2018; European Aluminium, 1981). In 1981 former ALFED president (and BACo MD and chairman) Ronny Utiger felt sufficiently concerned to ask an industry audience: 'Does the aluminium industry have a future [in Europe]?'. Utiger also urged European industry as a whole, in light of greater liberalisation and an end to protection, to 'start thinking now about the implications for policy and management' (Utiger in European Aluminium, 2021, p.4). In the UK aluminium industry this was a decade of profound upheaval, and the question was whether ALFED was equipped to meet those challenges in negotiating on behalf of the industry with government and sustaining influence publicly and privately.

Matthews, with the support of Utiger (ALFED President, 1972–1973), oversaw the progressive restructuring of the Federation around a new constitution intended both to address the concerns of the industry's wider membership with the creation of 10 industry associations, each with a representative on the ALFED Council. ALFED's reorganisation was also informed by the recommendations of the 1972 report of the Devlin Commission on Industrial and Commercial Representation sponsored by the CBI and the Association of British Chambers of Commerce (*Financial Times*, December 1972). These changes reflected a broader impetus in British industry to modernise and professionalise management practice and leadership, as well as distinctions between technical managers and gentlemen directors and those from graduate management programmes and bringing external perspectives (Perchard & Gildart, 2022; Thompson, 1995; Tiratsoo, 1990; Tiratsoo & Tomlinson, 1993, 1998). ALFED's reorganisation was about creating an organisation that could more effectively support its members in their relations with government and the exercise of business power.

Nevertheless, the distinctions and sense of dominance by the global majors persisted for some time. Alcoa GB Chairman Otto Realf Norland (Vice-President, 1981; President, 1982) observed when he joined ALFED's Council in 1978 upon becoming Alcoa GB's chairman:

I was also automatically appointed to the Council of the Aluminium Federation. Alcan and British Aluminium were the biggest aluminium companies in the UK, followed by Alcoa, and many large manufacturing companies were also represented by their managing director or chairman. The Stockist Federation and other specialist associations had one representative each, and the council totalled around 18 men, half of whom were old industrial hands and pipe smokers. (Norland, 2021, p. 278)

Norland, previously an MD of establishment merchant bank Hambros and with considerable accrued experience of working with financing for shipbuilding and other industries in the UK and Norway, highlighted the implications of access to elite networks for influence: 'If you had Eton and Oxford, American banks and the right clubs you had elite groups who conducted politics more or less worldwide' (Norland interview, 2022). Norland's observations of the elite membership credentials, and associated cultural and social capital, that were a pre-requisite of such influence was clearly neither just confined to aluminium nor to the so-called Anglo-Saxon economies but have been evident within *pantouflage* in France or *amakudari* in Japan (Charle, 1987; Kipping, 2003).

In a fast-changing global market and political environment, while trying to service the needs of an increasingly diverse membership, ALFED required adaptability and access to global networks and influence across borders. Much as the perceived dominance of the global majors might have bred some resentment amongst sections of the Federation's membership, the experience of some of these directors from the large vertically integrated multinationals of working across borders and in other sectors and their networks in national and transnational governments, as well as business, was invaluable. Norland, through his position at Hambros had extensive networks and experience in European industry and the European Commission and Parliament that brought valuable connections on this front both in forging links in Europe and with the newly formed European Aluminium Association. Dick Charles served as the Association's first chairperson and served on the General Assembly and Aluminium Group of Eurométaux. Gus Margraf, John Elton, and Paula Rata either had well-developed connections within the global industry or within government (or both). These connections would prove very useful to ALFED and its members as the Federation negotiated global trade agreements, regulation, and shared interests across borders such as imports and energy costs (Harris correspondence, 2022; The Times, July 1969; ALFED, 1988; The Times, December 1995; Perchard, 2012; Perchard & MacKenzie, 2021).

ALFED's restructuring came in time to meet wider seismic changes in trade policy, global aluminium markets and international industry cooperation. These included the UK joining the EEC and the formation of the IAI. More importantly though for global and domestic aluminium markets was the floating of aluminium futures on the London Metals Exchange (LME) in 1978. ALFED and the large majors initially vehemently opposed the LME aluminium futures contract preferring to stick with long established price lists, controlling price volatility in an industry with high capital-intensive spending and energy costs (as the closure of Invergordon and the collapse of BACo would demonstrate, this could make or break producers). BACo, Alcan, and subsequently ALFED, sought support from the UK government's Department of Trade and Industry (DTI) to oppose the LME's moves, following on from longstanding concerns about the dumping of cheap imports (Financial Times, September 1970; The Times, October 1970). This demonstrated BACo's waning power in negotiations with government and ALFED's own lack of influence within the policy cycle.

In September 1976, Utiger, in his capacity as BACo MD and president of the European Primary Aluminium Association, approached the Department of Industry warning that the launch of Aluminium Futures would cause upheaval in the global industry and cause major price fluctuations (Utiger to Clark letter, IHA, 1976). Reporting on a last-minute meeting between ALFED and industry ministers about the impact of Aluminium Futures on UK aluminium in May 1978, French producer Aluminium Pechiney's US trader hinted to the company's international lead at the Federation's lack of leverage and acumen and their tardiness in seeking to the LME's initiative:

... prior approval [by the LME] had, in fact, been obtained from the Bank of England, the Board of Trade and Exchange Control authorities so that it's highly unlikely that this authority will be withdrawn at this late date. Since the Industry Minister has no legal authority to block the new LME aluminum contract, if he was won over by the Aluminium Federation, the most he can do is to "request" that the committee and board of the LME reconsider their decision to trade aluminum. (Memo from Besso, Pechiney US to Castera, Pechiney, 1978, IHA)

The EPAA moves in Europe were similarly thwarted by the European Commission's competition directorate (DGIV) who supported the LME and pursued anti-trust action against primary producers until 1985. The failure of the industry in the UK and the continent to block the LME's floating of aluminium exposed the shortcoming and fragility of extant structures to meet growing challenges in a rapidly changing global market (Bertilorenzi, 2018; *Financial Times*, August 1978).

The LME's launch of Aluminium Futures was followed within a few years by BACo's demise and its merger with Alcan Aluminium UK. BACo's near bankruptcy resulting from the power contracts to the short-lived Invergordon smelter (1971–1981) and the failure of the new Hunterston B AGR to be completed on time and meet the energy costs that were anticipated for it (Utiger, 1995). These events highlighted an ongoing concern for the industry about energy costs, which linked to pressing campaigns with government and in parliament. With Alcan's merger with BACo on the table by the autumn of 1982, the *Financial Times* observed on Tuesday 26 October: 'Tomorrow's annual dinner of the Annual Federation at the Savoy, London, promises to be an interesting affair when suitors, their intended, and fascinated onlookers sit down together' (Bertilorenzi, 2021; *Financial Times*, October 1982, p. 20; Perchard, 2012).

The industry was also facing controversies arising from claims made about the flammability of aluminium in warships, following the Falklands War (April–June 1982). Misinformation had first started to spread about the flammability of aluminium after a fire on US Navy cruiser USS Belknap during which its aluminium superstructure collapsed following a collision with the USS John F. Kennedy in the Mediterranean in November 1975. After the sinking of British Type 42 destroyers HMS Sheffield (4 May) and HMS Coventry (25 May) and Type 21 Frigates HMS Antelope and HMS Ardent (21 and 23 May) by bombing during the Falklands War, media outlets suggested that aluminium had caught fire on these vessels and was responsible for their sinking (The Times, 25 and 26 May 1982; The Guardian, 1982, 1984). The subsequent Royal Navy (RN) and Ministry of Defence (MoD) enquiries into the sinking of these vessels did not support the assertions either of aluminium's flammability or other shortcomings. The MoD's subsequent report, released in December 1982, concluded of aluminium: 'there is no evidence it has contributed to the loss of any ships' (MoD, 1982, p. 19). While the chair of the MoD Working Party on ship design reported to the press that same month: 'I am not aware of any evidence to suggest that any ship was lost because of the use of aluminium in its construction, nor was there any evidence that aluminium or aluminium alloys had burned or suffered from a series of small explosions' (Crum et al., 2012; Royal Navy, 1982).

ALFED's response to these stories exposed their lack both of in-house public relations experience and influence within the media. Their first statement rebutting the negative stories came on 28 May 1982 - three weeks after the sinking of HMS Sheffield and the first negative coverage, and a week after Ardent and Antelope - and was neither picked up widely nor driven home with persistent refutations even though the captain of the Sheffield and initial leader of the investigation team had publicly rejected suggestions that aluminium was to blame (BBC TV, 1982; *Financial Times*, December 1982). Moreover, despite rebuttals by the US Aluminium Association, BACo and Reynolds Metals, and the MoD and RN findings, the industry failed to effectively refute the story and it rumbled on for several years after. This underlined ALFED's ineffectiveness in managing such stories and their understanding of news cycles, and as such their lack of influence within media circles, an essential element of their public affairs function. Part of this reflected the fact that Matthews, like his

predecessor, though highly knowledgeable about the technical side of the industry, lacked the contacts in, and experience with, the media to address such stories. These shortcomings also starkly exposed that many of the global majors chose to keep their public affairs functions in-house or use public relations firms, which meant that such capabilities within ALFED were underdeveloped and underlined broader failings to plan for such eventualities.

While Utiger's comments to fellow industry members in Oslo in 1981 may have been preoccupied with immediate events, it was far sighted; within 30 years, several of the industry's global majors would either be taken over by larger mining conglomerates or disappear, and the centres of primary production would shift to the Middle East and China. The years between 1978 and 1982 were pivotal for the UK and global aluminium industries in highlighting two glaring facts: the global industry was changing fast; and its public affairs and business-government relations could not be left in the hands of the global majors whose power and influence were waning. The reforms pressed upon ALFED's leadership by its broader membership helped in starting to build greater confidence in the organisation as representative of and lobbyist for its membership, although disgruntlement about the representatives from the majors ignored the value of figures like Margraf, Elton, Utiger, Charles, and Norland, in building global networks and influence. This became important as ALFED participated in supranational bodies including European Aluminium Association (EAA) and Eurométaux. The EAA's formation in 1981 reflected the recognition that growing European harmonisation of trade, as well as legislation on competition, energy, and the environment, required a cooperative voice and one with representation in Brussels (European Aluminium, 1981). However, ALFED was ill-prepared in terms of its public affairs capabilities and political coordination; the very means necessary to promote the industry's influence and power waned as the majors declined in influence, and a new coordinated response was required. Over the next 20 years, ALFED would rapidly overhaul its strategy and capabilities to address the changing dynamics of the industry and assert its influence more clearly.

1984–2010: climactic changes

Whilst tracing the anatomy of corporate political activity and business influence presents challenges, several events and policy issues help to shed light on the development of ALFED's strategy after the early 1980s. The development of ALFED's capabilities and power was informed by the specific experiences of the fallout from the smelter contracts and Falklands War, as well as the LME's launching of Aluminium Futures, European harmonisation and globalisation. By the early 1990s, a further factor affecting the industry was the flooding of European markets with cheap ingot and other aluminium products following the collapse of the Soviet Union (ALFED, 1992; Perchard, 2012). ALFED's changing membership and governance reflected the industry's shifting dynamics. Those were acutely evident following the change of Secretary General in 1988 when Dr David Harris took over from Paddy Matthews. Harris had previously joined ALARS as a technical officer before becoming its company secretary. He represented a shift in balance away from the dominance of the global majors and business-government relations conducted in traditional terms. Harris had also accumulated some experience of business-government relations at ALARS, which would stand him in good stead through work and connections with government departments, MPs and in public relations work. Such experiences also prompted Harris to hire a full-time press officer, Richard Mahoney, who brought with him an understanding of news cycles and a network of contacts within the media. Harris recalls working more closely with parliamentary procedure and politicians: 'If I wanted a Minister to take particular note of an issue I used to draft a letter for one of the Lords to send it in their name. The Minister is then required to give the letter his personal reply and the staff member who drafted the letter for the Minister made jolly sure that it was spot on before the Minister signed it' (Harris correspondence, 2022).

The change in ALFED's governance and approach was reflected amongst its elected office holders with a growing number drawn from downstream national producers (Harris correspondence, 2022; Bennett, 1964). This also mirrored the need for ALFED to demonstrate effectiveness to retain and build up membership, as David Harris recalled of his initial meeting with ALFED staff on taking up the reins:

During my first staff meeting I explained that we were a service organization that worked on behalf of the industry to make the member companies more efficient, more safe, more profitable, more knowledgeable, more sustainable and more productive to ensure, as far as we could, that the aluminium products were more saleable, of the highest quality and more fitting for the markets we served. I told them that the Aluminium Federation was like a shop to which aluminium companies came for information, advice, a place where experiences could be shared in committees and interest groups, a place that could represent the whole industry to the wider world of government, the media, education at all levels and to the general public. I told them that if companies didn't like what we had to offer they would go to a different shop (Harris correspondence, 2022).

Harris' speech to ALFED staff reflected the enduring problems with finances and retaining membership but also his acute understanding coming from ALARS and the need to be more proactive in protecting members across different fronts.

ALFED's more marked professionalism in its conduct of public affairs was evident both in its development of its networks within Westminster and Whitehall and through environmental policy and change and its response to the Kaprun fire in 2000. Though ALFED had always invited constituency MPs and specific officials in technical branches of government to its annual dinners to maintain cordial relationships, it had not sought to systematically cultivate networks amongst parliamentarians, ministers, and officials. In large part, this reflected the dynamics of corporate political activity with the dominance of the global majors and the personal contacts between those firms and ministers and officials. With the dynamics of the industry changing, it called for a different approach. From the late 1980s through the 1990s, ALFED, with the aid of the well-connected Labour peer, Lord Shackleton, and Labour MP Helen Southworth, sought to increase their influence through increasing invitations to the annual dinner and by establishing a Federation House of Lords lunch (commencing in 1989) and the All Party Parliamentary Group on Aluminium (APPG) (set up in 1997). Lord Shackleton was a former RAF officer, Deputy Leader of the House of Lords and Minister of Defence and Paymaster General in Harold Wilson's first Labour government, and the son of the famous Artic explorer Sir Ernest Shackleton.

One of Shackleton's early speeches in the Lords had been to intervene in the debate over takeovers in the aftermath of the British Aluminium takeover in 1959. As a former chairman of Anglesey Aluminium, Shackleton also developed a close knowledge of the sector and issues around energy supply and policy, proving to be a stalwart supporter of the industry and ALFED and sponsor of the annual industry House of Lords lunch. Something of the appetite for the industry can be seen from the attendance by a spread of attendees from both parliamentary chambers at these events, and ALFED's preparedness, with Lord Shackleton's assistance, in extending its network of influence (ALFED, 1991; Harris letter to Shackleton, 1992; Ritchie letter to Shackleton, 1992; Hansard, 1959). An illustration of this was in setting up access to members of key parliamentary committees, such as Lord Shackleton's instructions in advance of the 1989 Lords lunch: 'As for the list I notice that they are roughly the same as before... However, I enclose a list of names on the House of Lords Select Committee on Science and Technology, any one of whom would be suitable to invite' (Shackleton letter to Herald and Harris, 1989).

Both during the dinners and lunches, and after, ALFED cultivated several key messages reinforced to parliamentarians with briefing notes following. An illustration of this provided by a perusal of the 1992 ALFED House of Lords lunch at which the Federation's president Douglas Ritchie (of Alcan) reinforced the precarity of UK aluminium chiefly as a result of cheap Russian imports speaking both to constituency MPs but also ministers and officials present:

The effect on the UK industry has been alarming. The above-mentioned problem, coupled with the recession in the UK, has affected the profitability of the industry and the supply of funds for investment. I estimate that the UK industry has lost 5,000 jobs since 1990. Capital investment is down sharply, and many of the Aluminium Federation members are making losses. Nevertheless, we remain a significant economic force with sales of £3 billion last year and a workforce totaling some 40,000 people. Our exports in 1991 were approximately 290,000 tonnes, a rise on the previous year and significant contribution to the UK balance of payments (Ritchie speech, May 1992).

Ritchie's speech clearly drove home both pressing concerns at local and national level and designed to appeal to ministers' constituency interests and policy concerns. David Harris followed this with a letter to all the attending parliamentarians with a briefing on energy taxation and CO2 emissions to reinforce the point (Harris letter and briefing note, 1992).

Such events, as well as ALFED annual reports and briefing notes, also used the opportunity to drive home the industry's commitment to recycling and establishing their burgeoning environmental credentials. Along with tackling energy efficiency and emissions (such as BACo's modernisation of its Lochaber smelter between 1978 and 1982) this was driven chiefly both by market and regulatory considerations, with competition from plastics, rising energy costs and regulatory compliance. It was also informed by a recognition that aluminium packaging was a major contributor to consumer waste. However, by the 1980s and 1990s, the industry was ahead of its competitors. British Alcan spent £28 m (around £64 m in current prices) on launching the 55,000mts recycling plant at Warrington in 1991 (Morel, 1992; Perchard, 2012; Zimring, 2017), the largest plant of its kind in Europe at the time and in Helen Southworth's constituency. The UK aluminium industry (as in the rest of Europe and in North America) took significant steps in the 1980s and 1990s to clean up emissions and reduce energy consumption, driven both by the need to reduce costs and to meet European compliance levels. In primary production, aided to some degree by the fact that metal reduction was powered from renewable sources (mainly hydro-electricity), it required considerable investment in new furnace technology, fume abatement and water treatment to try to eliminate other emissions (such as polyaromatic hydrocarbons) (Morel, 1992; Perchard, 2012).

The industry also recognised that certain elements of the supply chain were much more vulnerable to power supply from hydrocarbons (this included one out of the then four smelters remaining in the UK, Lynemouth, which derived its power from a nearby colliery) and that environmental impact was about far more than primary aluminium emissions and recycling; as David Harris noted at the Federation's House of Lords lunch in 1993:

However, the environmental debate is now much wider than merely the control of emissions. We need as an industry to examine the availability of the inputs of raw materials into our processes, the inputs of energy, the efficiency with which we use that energy, and, of course, we have to evaluate the extent and effect of the emissions from those processes... Clearly it's a quide to the industry to pin-point areas where the industry can improve its environmental performance, and it's also a guide to consumers, to environmentalists, to legislators and to the media, on how aluminium performs in terms of its green credibility and its environmental friendliness. (Harris speech, 1993)

Such public commitments were motivated by a combination of factors, including building ALFED's capital and trust with policymakers and in projecting an industry seen to be committed to leading environmental initiatives. In committing to recycling and emissions reduction, it allowed ALFED to seek extra time for its members to modernise plant while competing against plummeting prices on the LME especially with the influx of cheap metal from the former Soviet Union (Barbour speech, 1990; House of Lords Lunch, 1992). ALFED committed considerable resources to achieve significant influence within parliament and government, as well as the public, over both in the last decade of the 20th and into the twenty first century.

The challenges and opportunities presented by championing recycling also underlined the importance of ALFED and the industry cooperating with others to promote a step change in consumer behaviour over recycling. By 1992, ALFED boasted that 60% of aluminium in use in the UK was recycled. However, consumer recycling remained significantly behind that of industry; while recycling in sectors such as construction and transport had risen to 70% and 90% respectively, household recycling hovered around 5% still by the late 1990s, leaving the UK one of the poorest performers amongst the EU15 at the time. However, combined publication education campaigns and investment in recycling points significantly improved this by the 2000s. Concurrently ALFED sought through various initiatives to educate and improve upon the industry's environmental image, such as through the 2003 sustainable development report, published with support from the Department of Trade and Industry and the Non Ferrous Alliance, demonstrating across a number of emissions measures how dramatic an improvement had been made between the late 1990s and early 2000s (ALFED, 1992; Financial Times, November 2003; Perchard, 2012). This was accompanied by publicity campaigns, such as ALFED's 1998, Aluminium for Future Generations, which sought to highlight the value in recycling (ALFED, 1988). Each of these showed a form of soft power exercised by ALFED across its different constituencies.

ALFED's combined lobbying in parliament and publicity served the industry well when it came to negotiations over the Climate Change Levy (CCL) and subsequent amendments. They also provided fertile ground in increasing influence within government and winning significant concessions. It also aided ALFED to cement support amongst its membership for decades to come. The UK's Climate Change Levy came into force in April 2001 placing a charge on business for their energy use which was offset by a reduction in employers' National Insurance contributions. ALFED conducted a public campaign not just to press the government for rebates on costs but also over the administrative burden, inclusion of the full supply chain (not just primary aluminium) and timing of implementation based on progressive modernisation from an industry committed to tackling emissions but confronting intensified competition. At the centre of this campaign for hearts and minds was then an impetus for the industry to demonstrate recycling credentials and emissions abatement credentials, drawing on its links with other associations and universities. These were also set against the context of Chinese competition, offering significantly lower priced aluminium ingot produced almost exclusively using hydrocarbons, and mergers and contraction amongst European and North American headquartered majors (Financial Times, May 2000 & November 2002). This message then recognised that the CCL initiatives were driven by security of supply and social welfare considerations, as well as by environmental ones, but chiefly using market instruments (Helm et al., 2003).

Privately, ALFED's case was aided through connections within government, with Helen Southworth now serving as Parliamentary Private Secretary to the then Chief Secretary at HM Treasury, Paul Boateng MP. Both the public appeals and the influence built up within Parliament and government saw the Chancellor Gordon Brown both conceding lower CCL rates and offering extensive grant-in-aid for energy efficiency schemes (Harris correspondence, 2022). This afforded the primary aluminium producers further space to upgrade, leading to The Times crowning Gordon Brown in its 11 December leader as 'the Aluminium Chancellor', with ALFED Secretary-General David Harris remarking in a reply that considered the title appropriate: 'An appropriate description of one who is strong yet flexible, optimistic, promoting science and research and even pushing for deregulation in the EU' (The Times, 11 & 16 December 2003). ALFED persisted in lobbying for changes in the effectiveness of the CCL after it assumed responsibility for managing the scheme on behalf of the industry Lords Select Committee, 2005). Beyond the clear gains it had leveraged (up to 80% rebates for some firms) from its influence within government and public, the CCL adjustments also had a lasting effect in shoring up membership. Former ALFED President (2014–2015), and MD of the UK's largest aluminium roller, Bridgnorth Aluminium, and former UK Metals Council Chair (2016–2018), Simon MacVicker observed:

It's not that it's never questioned in the essence of it's not totally blind faith but it's important for us as a company to be in a trade association. Then we can have some advocacy with government, we can get things going for the promotion of the material, we can help each other with sort of best practice on safety and then there's things like the Climate Change Levy where you need to be part of an industry agreement. So, you know it makes sense, so it just makes sense on a number of different levels to be members... (MacVicker interview, 2022).

Another public relations coup further shored up membership support highlighting both the lessons learned since the Falklands and its influence was evident from the Federation's response to the Kaprun fire. In November 2000, 159 people were killed in a fire on an alpine train caught in a tunnel near the Austrian ski resort of Kaprun. BBC News ran a story hinting that the train's aluminium casing had also caught fire. This time, ALFED reacted quickly to rebut the story and demand a retraction, demonstrating an understanding of news cycles and the influence to do so. This was also run in a coordinated fashion with other international partner organisations (Harris letter to BBC, 2000; Harris memo to AA, 2000). This effectively rebutted the story, promoted aluminium as a material and reinforced the benefits of ALFED membership to industry players. Harris recalls: 'the BBC got a rocket and were made to apologise for erroneous remarks about aluminium burning. Over the years at ALFED I found the BBC to be devious and biased, almost to the point of being dishonest, and I took them to the Press Complaints Commission every time' (Harris correspondence, 2022).

Out of the setbacks of the late 1970s and 1980s, which demonstrated the shortcomings of business-government relations conducted by global majors whose power was starting to wane and the effect this had on ALFED's capabilities in a fast-changing global industry, the gradual reforms started in the 1970s then pursued much more effectively by the late 1980s, professionalised ALFED and bought it real influence and profile. This was demonstrated markedly through negotiations over the CCL and response to media stories following the Kaprun fire, where the benefit of social capital and networks arising from groundwork through enhanced organisational capabilities and the advent of the social events, the APPG bought real influence. This multi-layered approach displayed an astute understanding of demonstrating competence, leadership and commitment to parliamentarians, ministers, and officials alike, as well as mastering public narratives and raising the organisations profile, as key factors in influencing policymaking.

Conclusion

ALFED's development built on a history of cooperation within the domestic and global aluminium industry and demonstrates how the conduct of business-government relations in the industry changed in response to shifting global market dynamics, particularly after the launching of Aluminium Futures on the LME in 1978, and with greater emphasis on supranational cooperation. Those changes were additionally driven from within by a membership discontent with the global majors set against the gradual but waning power and influence of many of these first movers in the industry. Nevertheless, the experience of staff from those global majors was vital to ALFED's participation and profile in transnational aluminium bodies, such as Eurométaux and European Aluminium which in turn helped it build its own capabilities. The failures to block the launch of Aluminium Futures and the failed public relations response to the stories about fires on naval vessels during the Falklands War starkly exposed ALFED's then lack of influence and the need for a change in strategy and the capabilities and resources. In contrast, the investment in these during the late 1980s and 1990s demonstrated ALFED's rise and their demonstration of power and influence, as highlighted by negotiations over CCL and its response to the Kaprun fire. The Federation's approach to public and business-government relations became more nuanced and sophisticated during this period and set it up for a much more effective use of business power which was proactive and often subtly deployed.

Our analysis demonstrates that the nature of corporate political activity and businessgovernment relations can be strongly influenced by industry dynamics and imprint, as well as distinctions of interest in different segments in the supply chain. In this case, the rise of ALFED reflected less industry concentration and more significantly the diminution in the power of the integrated global majors. It was also promulgated by the agency of section of the membership discontented with the influence of the global majors. As the reaction to the CCL indicates, ALFED's political action both proactively and reactively could be prompted by regulation but ultimately, for upstream as for downstream producers in the industry, the ALFED's strengthening was as much a defensive mechanism to various external threats to the industry (looming large the LME floating of aluminium futures but also the shock of Invergordon's closure and BACo's collapse and criticisms of aluminium's safety). For this reason, public affairs more broadly in the industry promotional and educational activities were significant areas for capability building. There was also a promotional and positive driver to ALFED's enhanced role as seen over campaigns for recycling and environmental responsibility.

The aluminium industry ultimately drew on a long tradition of cooperation in both national and international arenas. Business power is not a constant - its nature and complexity and the arena and actors that perform it all change over time. Contrary to any notion of trade associations as something new, Finer highlights that the UK already boasted a lively environment for industry bodies by the time that ALFED was born, although at the beginning much business-government negotiation in the UK aluminium industry was conducted independently by the vertically integrated global majors on discrete matters. By the 1990s, ALFED as the industry association had become a far more important player more fairly representing its entire membership at all stages of the supply chain. The former relied heavily on the elite networks and capital evident in what Neil Rollings identified as the 'twilight world of business politics' (Rollings, 2014), which came with its own problems as the case of the UK's dominant producer, British Aluminium, revealed (Perchard & MacKenzie, 2021). This also reflected tendencies in the global industry. This was to continue into the twenty first century. By 2022, ALFED grew to 176 corporate members representing an industry directly employing 37,000 and calculated to contribute £2.7bn in GVA to the UK economy (ALFED/FoAl 2021 & 2022). ALFED illustrates the complexities of attempting to chart business power and influence through a single identifiable end rather than through a complex array of activities contingent upon market and political factors. Concurrently they demonstrate the importance of understanding the changing internal institutional politics of trade associations and their capabilities and resources. In terms of national economic models, it also demonstrates the importance of viewing business-government within the changing historical landscape; in UK terms, why its attribution to certain characteristics as an Anglo-Saxon economy, need to be more carefully charted beyond the assumptions forged by the Thatcher period (Lazonick & O'Sullivan, 2000).

The story we tell here is that ALFED developed its power and influence over the last sixty years in a counterintuitive way - when it had fewer but larger members it had little power and was effectively a technical advisory body. However, over time as the power of the larger corporates waned in the UK as the industry increasingly moved its operations overseas, ALFED responded by professionalising and recognising the strength in its increasingly diverse membership, and more effectively handled its role and activities in responding to events. This suggests that business power fluctuates and can be influenced heavily by industry changes as well as capabilities building in trade associations such as ALFED. Taking this cue, future research may wish to consider the imprint of industry dynamics on analyses of power and what the means for our understanding of how industries change and how business-government relations evolve.

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