

Producing Airpower:

The Rise and Fall of Neo-Liberalism's Defence Agenda

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By

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Abstract

Neo-liberalism stands out as one of the most potent contemporary political philosophies. Neo-liberal governments re-fashioned states' economies and neo-liberal ideas came to dominate international financial organizations. Perhaps nowhere are the challenges of translating neo-liberal theories into policy more apparent than in defence. The existing institutions and practices whereby states produce military power are often anathema to neo-liberal concepts of efficiency. Bureaucratic armed forces and national champion defence firms, within this context, clash with neo-liberalism's ideological hostility to hierarchical-bureaucratic systems and belief that market mechanisms generate efficiency. Neo-liberal governments therefore developed policies for applying the philosophy's economic formulae to defence. Two broad categories of reforms—enhancing inter-firm competition for contracts and outsourcing activities to the private sector—emerged as central to the neo-liberal defence agenda. Surprisingly, in light of neo-liberal policies' adoption by militarily active states, no study has systematically examined these reforms' content and impact. My article fills this lacuna by examining the state—the United Kingdom—that most consistently enacted neo-liberal defence reforms. To preview the conclusion, neo-liberalism did not prove the panacea that proponents espoused. This agenda's internal logic nevertheless drove policymakers, from Prime Minister Margaret Thatcher's regime (1979-90) onwards, to compensate for the negative externalities generated by one set of neo-liberal reforms by introducing further market mechanisms. Neo-liberal policies' initially disappointing outcomes thus resulted in further neo-liberal reforms rather than a reassessment of the philosophy's suitability to this domain. Nevertheless, each of the neo-liberal defence agenda's two pillars suffered from internal contradictions that ultimately stymied their application.

Introduction

Neo-liberalism stands out as one of the most potent contemporary political philosophies. Neo-liberal governments re-fashioned states' economies and neo-liberal ideas came to dominate international financial organizations. Lying at neo-liberalism's core is the notion that the rule of law must take precedence over governments' ability to autonomously pursue objectives. Neo-liberals consequently argue for: the privatization of state-owned industries, the diminution of government-run welfare programs, and an end to governmental

planning of the economy. Free markets and capitalist competition will, in principle, better fulfil these functions than the state. This philosophy's practical application, however, is complicated by many neo-liberal theorists' assertion that governments must actively create self-regulating markets, rather than simply relying on laissez-faire dynamics to generate them.

Perhaps nowhere are the challenges of translating neo-liberal theories into policy more apparent than in defence. Defending society against external threats constitutes one of a small number of essential functions that neo-liberal theorists agree government ought to fulfil. National security consequently occupies a privileged position in neo-liberal thought as a domain where the state legitimately plays the primary role.

The existing institutions and practices whereby states produce military power, however, are often anathema to neo-liberal concepts of efficiency. Bureaucratic armed forces and national champion defence firms, within this context, clash with neo-liberalism's ideological hostility to hierarchical-bureaucratic systems and belief that market mechanisms generate efficiency. Neo-liberal theory's treatment of national security is thus characterized by the paradox that while defence is regarded as a privileged arena for state action, the mechanisms that modern societies have developed to fulfil this need are considered inefficient. Neo-liberalism's founding philosophers offered little advice about resolving this contradiction. It therefore fell to neo-liberal governments to develop policies for applying the philosophy's economic formulae to defence.

Two broad categories of reforms—enhancing inter-firm competition for contracts and outsourcing activities to the private sector—emerged as central to the neo-liberal defence agenda. Although rarely presented as such, these reforms present a significant intellectual challenge to the hitherto predominant statist model for military power's provision. These policies were warmly embraced by governments in Britain, Australia, Canada and the United

States, and have been partially adopted further afield. Surprisingly, in light of neo-liberal policies' adoption by militarily active states, no study has systematically examined these reforms' content and impact. My article fills this lacuna by examining the state—the United Kingdom—that most comprehensively and consistently enacted neo-liberal defence reforms.

To preview the conclusion, neo-liberalism did not prove the panacea that proponents espoused. This agenda's internal logic nevertheless drove policymakers, from Prime Minister Margaret Thatcher's regime (1979-90) onwards, to compensate for the negative externalities generated by one set of neo-liberal reforms by introducing further market mechanisms. Neo-liberal policies' initially disappointing outcomes thus resulted in further neo-liberal reforms rather than a reassessment of the philosophy's suitability to this domain. Nevertheless, each of the neo-liberal defence agenda's two pillars suffered from internal contradictions that ultimately stymied their application.

Competition policies initially obliged firms to provide better bids. Government failed, however, to hold firms to the resultant fixed-price contracts because corporations' credible threats to declare bankruptcy would have deprived the state both of needed weapons and suppliers from whom to acquire them in the future. The competition policy, meanwhile, also incentivized firms to consolidate into monopolies, which narrowed the scope for future competition. Competition thus followed a parabolic trajectory, with ever higher volumes of contracts being awarded competitively from the early-1980s until the mid-1990s, when industry consolidation led to a reversal of the trend and an uptake in non-competitive contracts. Ultimately, it was a Conservative government that tacitly conceded competition's failure and developed new guidelines for uncompetitive contracts.

Defence outsourcing, meanwhile, followed an analogous trajectory. Outsourcing simple functions to private firms yielded unambiguous gains, but such outsourcing's scope was

structurally limited because most defence functions involve complex combinations of hardware and personnel. Government therefore sought to expand outsourcing's scope by developing new market mechanisms—including private finance initiatives (PFI) and public private partnerships (PPP)—whereby firms could compete to provide ever more complex services. The economics and risks of these complex outsourcing efforts proved increasingly problematic, such that the most ambitious initiatives either generated financial losses or collapsed.

Neo-liberalism's application to defence thus stands out as a political, rather than military imperative. Despite consistent efforts by committed policymakers, neo-liberal reforms failed to generate unambiguous benefits and arguably resulted in less efficient outcomes than the statist practices they sought to overturn.

Neo-Liberalism's Reform Agenda

Neo-liberalism emerged in the 1930s as a philosophical reaction to socialist and social democratic theories about how governments should steer economies and provide social welfare. Neo-liberals feared that over-powerful governments would inadvertently destroy personal liberty even if they began by pursuing noble objectives.¹ Their prescribed antidote was the notion that governments should restrict themselves to providing a legal framework and competitive markets within which individuals can freely pursue their ends. While neo-liberal thinkers focused primarily on freedom, their philosophy also has clear implications for how governments interact with economies. Three fundamental ideas—distrust of civil servants, a

¹ F.A. Hayek, *The Road to Serfdom* (London: Routledge, 1944), 54-65.

belief in markets, and scepticism about state-planned industrial policies—can therefore be said to constitute the core of neo-liberal economic reforms.²

Central to neo-liberalism is its founders' scepticism of civil servants. In sharp contrast to notions of a "public service ethic" and technocracy, neo-liberals regard civil servants as guided by self-interest rather than any sense of public responsibility. According to James Buchanan and Gordon Tulloch, this leads civil servants to expand their bureaucracies' size and the resources they command.³ Bureaucracy's creeping expansion inevitably comes at society's expense, according to neo-liberals, because civil servants lack the same incentive to act efficiently that the fear of bankruptcy provides in the private sector.

If neo-liberals distrust civil servants, they emphatically value competitive markets. For neo-liberals, markets distribute the economic factors of production—labour and capital—more efficiently than any form of central planning. A population as a whole will consequently benefit from the marketization of as many functions as possible, including commodities and futures, because competition within markets incentivizes innovation. Ludwig von Mises makes this point most powerfully, arguing that "entrepreneurs" innovate and generate growth in competitive market systems while risk-adverse "managers" steer companies in uninspired directions in statist systems.⁴

Neo-liberals advance other reasons for reducing governments' economic role besides faith in markets and distrust of civil servants. Milton Friedman, for example, argues that governmental expenditure "crowds out" private investment, rather than stimulating economic

² Raymond Plant, *The Neo-liberal State* (Oxford: OUP, 2010), 113-71.

³ James Buchanan and Gordon Tulloch, *The Calculus of Consent: Logical Foundations of Constitutional Democracy* (Ann Arbor: Michigan UP, 1962), 11-39.

⁴ Ludwig von Mises, *Human Action: A Treatise on Economics* (London: William Hodge, 1949), 701-06.

growth. This postulate, central to monetarist economics, overturned the dominant Keynesian view that governments should ensure full employment.⁵ Public choice economists, meanwhile, argue that government-led industrial policies fail because corporate lobbying and emoluments “capture” politicians and bureaucrats.⁶ Industrial policies, under these circumstances, redistribute resources to well-connected, yet un-innovative firms.

The question of how to translate neo-liberal philosophy into concrete blueprints for reforming societies, however, divides neo-liberal theorists.⁷

One tradition, pioneered by F.A. Hayek, asserts that self-regulating markets do not spring into existence *ex nihilo* and that governments must proactively create them.⁸ Thinkers from this school, which Philip Mirowski terms “market constructivism” accept that substantial areas of human endeavour may suffer from market failure or be inherently difficult to marketize.⁹ For Hayek, the solution lies in replacing traditional bureaucracies with regulatory agencies dedicated to enforcing “rules of property, tort and contract.”¹⁰ Hayek accords the state, through agencies such as these, a central role in curbing monopolistic practices.¹¹ Much

⁵ Milton Friedman and Anna Schwarz, *A Monetary History of the United States: 1867-1960* (Princeton: Princeton UP, 1963), 639-700.

⁶ Francesco Forte, *Principles of Public Economics: A Public Choice Approach* (Cheltenham: Edward Elgar, 2010), 218-237.

⁷ Rune Stahl, “Economic Liberalism and the State: Dismantling the Myth of Naïve Laissez-Faire,” *New Political Economy* (2018): DOI: doi.org/10.1080/13563467.2018.1458086.

⁸ Hayek, *The Road to Serfdom*, 18.

⁹ Philip Mirowski, “Defining Neoliberalism,” In Philip Mirowski and David Plehwe, eds., *The Road from Mont Pèlerin* (Cambridge: Harvard UP, 2009), 417-451.

¹⁰ F.A. Hayek, *Law, Liberty and Legislation, Vol. 1* (Chicago: Chicago UP, 1973), 107.

¹¹ F.A. Hayek, *Law, Liberty and Legislation, Vol. 3* (Chicago: Chicago UP, 1979), 84.

of the challenge of governance, for market constructivists, can thus be reduced to “address[ing] market failures by providing additional market elements where they were missing.”¹²

While Hayek and other market constructivists represent one neo-liberal tradition, Milton Friedman and his disciples constitute another, more laissez-faire one.¹³ In contrast to Hayek, laissez-faire neo-liberals are more confident in markets’ self-generating and self-regulating capacity, and more sceptical about governmental oversight’s impact. Friedman’s description of Hong Kong under British rule as an ideal-type case of markets, entrepreneurship and affluence emerging unaided within a minimally-regulated environment exemplifies this vision of a polity achieving prosperity under a minimal state.

Neo-liberal philosophy, taken as an ensemble, thus provides certain common prescriptions for reforming economies. Governments should privatize state-owned industries, withdraw from industrial policymaking and eschew Keynesian efforts at mitigating unemployment. Beyond these areas of agreement, though, neo-liberals disagree as to the state’s role, with market constructivists asserting the need for activist governments to create and uphold markets, while laissez-faire neo-liberals argue the virtues of a more minimal state.

Neo-Liberalism’s Defence Paradox

National defence occupies a complex and paradoxical position in neo-liberal theory. Neo-liberals, in common with classic liberals before them, regard defence as one of a small number of essential functions that government must fulfil. Producing military power is thus a

¹² Rachel Turner, *Neo-Liberal Ideology: History, Concepts and Policies* (Edinburgh: Edinburgh UP, 2008), 130.

¹³ Stahl.

legitimate core role of the state. The institutions that modern states have developed to fulfil this function are, however, rife with vices according to neo-liberal theory. Armed forces are archetypal hierarchical-bureaucratic organizations of the sort that neo-liberals regard as inherently inefficient, while defence industries' close relationship to the state are redolent of the central planning that neo-liberals abhor. This raises the question, about which neo-liberal theorists wrote remarkably little, as to how the defence sector should be governed.

Although liberal and neo-liberal theorists differ as to government's core functions, they agree that defending society against external threats constitutes one of those functions. The eighteenth century liberal, Adam Smith, set the tone for subsequent neo-liberal thinking when he placed defence amongst the three roles that government must fulfil, along with administering justice and providing certain public goods. In Smith's words, "According to the system of natural liberty, the sovereign [i.e. state] has only three duties to attend to... first, the duty of protecting the society from the violence and invasion of other independent societies."¹⁴ Subsequent neo-liberals reiterated this vision of defence as a core governmental responsibility and an exception to their desire for an otherwise restricted state. Hayek, for example, argued that, "When an external enemy threatens... powers of compulsory organization, which normally nobody possesses, must be granted to somebody [i.e. government]."¹⁵

Defence thus constitutes a privileged domain for governmental activity. Core elements of neo-liberal philosophy, however, are intrinsically anathema to the military institutions that modern states possess, which themselves evolved over centuries and in response to warfare's functional requirements. Modern armed forces, for example, are quintessentially bureaucratic and hierarchical organizations, which future commanders join at comparatively young ages and

¹⁴ Adam Smith, *The Wealth of Nations* IV.ix.51.

¹⁵ Hayek, *Law, Legislation and Liberty*, Vol. 3, 124.

then progress within over the course of their military careers. The industrial organizations that produce armaments for these militaries, meanwhile, evolved in such a manner as to insulate them from ordinary market pressures.

One reason armaments diverged from other market sectors was militaries' desire to exploit technological opportunities they considered promising, rather than relying on markets' vagaries for suitable weaponry. Historian William McNeil refers to governments' efforts to foster war-winning technologies as having transformed armaments into a "command technology" rather than a conventional technology shaped by supply and demand dynamics.¹⁶ During the Second World War, this governmental involvement in defence technology spurred the so-called genesis of "big science," with government-owned or funded laboratories pushing science's boundaries in pursuit of better weaponry.¹⁷

A second, related reason for armaments' distinctiveness lies in governments' need to secure adequate supplies of weaponry. Adam Smith, within this context, argued that states should protect and foster defence firms rather than trusting to laissez-faire dynamics.¹⁸ However, since states are frequently too small to sustain enough suppliers for competitive market dynamics, the sector is often dominated by strategic interactions between monopsonist consumers and monopolistic or oligopolistic producers. As Merton Park and Frederic Scherer opined in a seminal work, this ubiquity of market failure means that, "a market system in its entirety can never exist for the acquisition of weapons."¹⁹ This recognition of armaments'

¹⁶ William McNeill, *The Pursuit of Power* (Chicago: Chicago UP, 1982), 262-383.

¹⁷ James Baxter, *Scientists Against Time* (Cambridge: MIT Press, 1968).

¹⁸ Fanny Coulomb, "Adam Smith: A Defence Economist," *Defence and Peace Economics* 3/9, (1998), 299-316.

¹⁹ Merton Peck and Frederic Scherer, *The Weapons Acquisition Process: An Economic Analysis* (Cambridge, MA: Harvard Graduate School of Business, 1962), 57.

distinctiveness has led specialists to characterize it as a unique “meso-system” only tangentially connected to other economic sectors.²⁰

Modern militaries’ hierarchical-bureaucratic character and central planning’s centrality to armaments’ production are therefore both inimical to neo-liberal conceptions of efficient governance. How then should neo-liberals reconcile the apparent contradiction wherein defence is both a critical governmental function, yet states’ ways of fulfilling that function are otherwise anathema to neo-liberals? Neo-liberalism’s founding theorists largely glossed over these contradictions and offer little advice on reforming defence.

Ludwig von Mises, within this context, provided the most influential, yet still unspecific advice. According to Mises, “There is no record of a socialist nation which defeated a capitalist nation.... If the efficiency of capitalism is directed by governments toward the output of instruments of destruction, the ingenuity of private business turns out weapons which are powerful enough to destroy everything.”²¹ Although Mises refrained from suggesting how to improve war-making, his statement implies that states could do so by introducing more competitive market dynamics into the process. Aside from Mises’ non-specific exhortation, other neo-liberals largely refrained from advocating defence reforms.

Conscription alone constitutes a defence issue about which multiple neo-liberals expressed opinions. A former Hayek student, Ronald Hanow, initiated the conscription debate when he argued that mandatory military service was incompatible with individual liberty and criticized his former mentor for implying that conscription was one of the forms of

²⁰Claude Serfati, « Le méso-système de l’armement et son impact sur le système productif de la France », *Ares* 13 (1992), 51-84.

²¹ Von Mises, 824.

“compulsory organization” that the state can legitimately pursue for its defence.²² Hayek responded by defending conscription in the following terms, “[T]he use of so severe a form of coercion as conscription may be necessary to ward off the danger of worse coercion by an external enemy.”²³ Milton Friedman, finally, interjected himself into the conscription debate by arguing that conscription constitutes an illegitimate “tax in kind” on draftees’ labour under ordinary circumstances, but is justifiable when states face existential threats.²⁴

Neo-liberal theorists rarely advanced specific propositions on defence outside this conscription debate. Milton Friedman and Anna Schwarz provide one counter-example when they argued against using defence spending to stimulate economies, a practice known as military Keynesianism.²⁵ Otherwise, only one other early thinker associated with neo-liberalism, Ayn Rand, proposed a significant reform and her proposal, to finance the military by levying fees on legal procedures, received short-shrift from peers.²⁶

Neo-liberal theorists’ comparative silence on defence should not, however, be construed as signalling disinterest. Many had endured personal experiences that made them acutely sensitive to such matters. Both Hayek and Mises fought in the Austro-Hungarian military in the First World War and later fled abroad to escape Adolph Hitler’s regime when Germany annexed Austria. Hayek goes so far as to cite the First World War as inspiring his study of economics, to understand how such catastrophes occur. Friedman, meanwhile,

²² Ronald Hanow, “Hayek’s Concept of Freedom: A Critique,” *New Individualist Review* 1/1 (1961), 28-30.

²³ F.A. Hayek, “Freedom and Coercion,” *New Individualist Review* 1/2 (1961), 28.

²⁴ Milton Friedman, “Why Not a Volunteer Army,” *New Individualist Review* 4/4 (1967), 3-9.

²⁵ Friedman and Schwarz, 546-638.

²⁶ Ayn Rand, “Government Financing in a Free Society,” In *The Virtue of Selfishness: A New Concept of Egotism* (New York: New American Library, 1964), 135-40.

worked for the Treasury Department during the Second World War and helped develop the payroll withholding system to finance the war.²⁷ Neo-liberalism's founders should thus not be regarded as uninterested in defence, but rather their restraint was the product of their hesitancy to pronounce themselves on a domain that they knew to be complex.

Taken as an ensemble, neo-liberals' views of national defence and efficient public policy create an intellectual imperative for reform. Neo-liberals regard defence as one of governments' essential and incontestable functions. The bureaucratic armed forces and state-steered defence firms that fulfil that function, however, are inimical to neo-liberal concepts of efficiency. Despite the yawning gap between neo-liberals' prioritization of defence and their theories' scepticism about how states defend themselves, neo-liberalism's founders refrained from advocating specific reforms. It therefore fell to policymakers to articulate the contours of a neo-liberal defence agenda.

Neo-Liberal Governments and Defence Reform

Reconciling how neo-liberal theory could be applied to the practical question of managing a state's defence therefore had to await neo-liberal governments' election. Although a coalition of Swedish neo-liberal parties, known as the "bourgeois" block, formed a coalition government in 1976, corporatist institutions prevented Sweden's neo-liberals and their compatriots in other coordinated market economies from enacting broad reforms.²⁸ It therefore fell to those neo-liberal parties that achieved power in states that already possessed liberal

²⁷ Milton Friedman and Rose Friedman, *Two Lucky People: Memoirs* (Chicago: Chicago UP, 1999), 122–23.

²⁸ Desmond King and Stewart Wood, "The Political Economy of Neoliberalism: Britain and the United States in the 1980s," In Herbert Kitschelt et al., *Continuity and Change in Contemporary Capitalism* (Cambridge: Cambridge UP, 1999), 371–380.

market economies to translate their ideology into policy. Britain paved the way in this regard, with Margaret Thatcher forming a Conservative government in 1979, but the United States, Australia, Canada and New Zealand soon followed suit.

The challenges inherent in managing defence during the 1970s and 1980s, when neo-liberal parties were winning elections, made the sector appear ripe for reform. Technological developments were driving military platforms' costs upwards at rates of 6-10% per annum.²⁹ This cost trend posed a grave challenge to defence planners since a 10% annual increase effectively doubles weapon costs every 7.25 years. Electronics and electronic integration account for most of this growth.³⁰ Avionics' role in fighter aircraft and electronics' role in tanks, for example, increased from 10% in the 1950s to over 50% five decades later.³¹

Weaponry's ever increasing complexity generated acute planning and management challenges. Rational budgeting and financial planning, within this context, suffered as weapons programs ran over-budget and behind schedule. Britain's Cabinet Efficiency Unit diagnosed this problem's gravity, calculating that defence projects ran on average 66% over budget, but with high levels of variability between projects.³² Militaries, meanwhile, often struggled to maintain and use the new, more sophisticated equipment. The United States' adoption of a

²⁹ D. Kirkpatrick, "Trends in the Costs of Weapons Systems and the Consequences," *Defence and Peace Economics* 15/3 (2004), 259-73.

³⁰ Philip Pugh, "The Procurement Nexus," *Defence Economics* 4/2 (1993), 179-94.

³¹ Ray Whitford, *Fundamentals of Fighter Design* (Marlborough: Crowood, 2004), 20-21; and Jean-Paul Hébert, *Production d'armement : Mutation du système français* (Paris: documentation Française, 1995), 141.

³² G. Jordan et al., *Learning from Experience: A Report on the Arrangements for Managing Major Defence Projects in the Procurement Executive* (London: HMSO, 1988).

new tank, for example, sent readiness levels plummeting until the US Army developed new technical specialties and invested in expensive diagnostic equipment.³³

Given their ideology, neo-liberals diagnosed the roots of states' defence management problem as lying in armed forces' hierarchical-bureaucratic nature and the role of state planning in the armaments sector. Thatcher's government in the United Kingdom led the way in developing neo-liberal remedies to these problems when it began elaborating its policy, labelled *Value for Money in Defence Procurement* in 1981. Gradually, however, neo-liberal governments in the United States, Australia, Canada and New Zealand followed suite.³⁴ Neo-liberal governments' real-world commitment to reforming defence inspired experts in fields such as public choice economics, the New Public Management and Austrian economics to examine what neo-liberal defence reforms would actually consist of.³⁵ This drive to reform defence began in parallel with neo-liberal efforts to re-imagine other services, such as utilities, health care and prisons, where government also traditionally played a primary role.

In their efforts to reform defence, neo-liberal policymakers consistently sought to reduce hierarchical-bureaucratic organizations' role and to introduce more market dynamics. Over time, this effort has given us an entire lexicon of buzzwords representing distinct reform efforts, such as "lead-systems integrators," "value-for-money," and "smart procurement." Although those neo-liberal defence initiatives bear a wide range of names, they can be

³³ Chris Demchak, *Military Organizations, Complex Machines: Modernization in the U.S. Armed Services* (Ithaca: Cornell UP, 1991), 41-131.

³⁴ Henry Ergas and Mark Thomson, "More Guns Without Less Butter: Improving Australian Defence Efficiency," *Agenda* 18/3 (2011), 31-52; and David Detomasi, "The New Public Management and Defense Departments: The Case of Canada," *Defense & Security Analysis* 18/1(2002), 51-73.

³⁵ Trevor Taylor and Keith Hayward, *The UK Defence Industrial Base* (London: Brassey's, 1989); and Lawrence Jones and Fred Thompson, *Public Management: Institutional Renewal for the Twenty-First Century* (Stamford: JAI, 1999).

functionally divided into two broad categories; measures for increasing competition for defence procurement and efforts to outsource defence functions.

Enhanced competition, according to neo-liberalism, obliges defence firms to offer innovative products at better prices.³⁶ Although armaments are a sector where competition is notoriously difficult to achieve, developing new market mechanisms can, in principle, resolve such challenges. Market contestability can be promoted, for example, even when only one domestic firm can produce a system, by encouraging foreign and non-defence corporations to bid for contracts.³⁷ Outsourcing functions to private contractors, meanwhile, fulfils the neo-liberal objective of reducing hierarchical-bureaucratic organizations' role in defence. For neo-liberals, private entrepreneurs' greater flexibility and the pressures to win bids should produce cost savings and improve military readiness.³⁸

These neo-liberal defence reforms' intellectual coherence and their compatibility with the economic philosophy that dominated the 1980s and 1990s was such as to recommend them to the aforementioned Anglophone states. Those states that once adopted neo-liberal reforms, moreover, have largely continued down this path and academic support for such reforms, particularly amongst economists, has grown. The extent to which neo-liberal reforms called for states to revisit military institutions, which were a product of a long historic evolution, however dissuaded many governments from adopting them, including those of France, Italy,

³⁶ Jean-Jacques Laffont and Jean Tirole, *A Theory of Incentives in Procurement and Regulation* (Cambridge: MIT, 1993).

³⁷ William Baumol, "Contestable Markets: An Uprising in the Theory of Industrial Structure," *American Economic Review*, 72/1(1982), 1–15; and Cedric Laguerre, "Is the Defence Market Contestable? The Case of Military Aerospace," *Defence and Peace Economics*, 20/4 (2009), 303-326.

³⁸ Keith Hartley, "The economics of military outsourcing," *Public Procurement Law Review* 5(2002), 287–297.

Germany, Japan and South Korea. Surprisingly, in light of this divergence in how democracies produce military power, no study to date assesses whether neo-liberal reforms actually strengthened states' military capabilities.

This study fills this gap by assessing each neo-liberal armament reform's impact on a single state; thereby making it possible to evaluate each reform's individual effects. The United Kingdom and its air power in particular furnish an ideal case for evaluation. Britain's Conservative Party embraced neo-liberalism in 1975 as its primary economic ideology and began implementing neo-liberal policies after winning power in 1979.³⁹ The United Kingdom thereafter embraced the two neo-liberal reforms—competition and outsourcing—sooner and more comprehensively than other neo-liberal states. The nature of British cabinet government, as opposed to the United States' system of divided government, furthermore permitted British governments to enact neo-liberal policies more consistently than their American counterparts.⁴⁰

An examination of British complex weapons management can, therefore, draw on better data, over a longer timeframe, than alternative cases. This study exploits primary sources, including declassified documents from the National Archives (TNA), House of Commons (HC) debates, House of Lords (HL) debates, the Ministry of Defence (MoD) and National Audit Office (NAO) studies to provide the fine-grained detail required to assess British reforms' impact.

Competition Policy's Rise and Fall

³⁹ Richard Wade, *Conservative Party Economic Policy: From Heath in Opposition to Cameron in Coalition* (Basingstoke: Palgrave, 2013), 21-31.

⁴⁰ King and Wood, 371-397.

Prime Minister Margaret Thatcher’s defence advisors regarded competitive “free market” dynamics as central to reforming the acquisition process. For these officials—who included John Nott, Michael Heseltine and Peter Levene—British procurement’s fundamental flaw was an excessively “cosy” relationship between the Defence Ministry and arms producing firms.⁴¹ They excoriated British managers’ inefficiency, which they attributed to complacent beliefs that the Defence Ministry would compensate them when projects ran over budget and guarantee their solvency with contracts awarded via an informal rotational system known as “Buggin’s turn”.⁴² Thatcher’s officials also decried the government’s and, by extension, the civil service’s role in military research. For these reformers, government scientists wasted resources on impractical research that contributed little to military power.⁴³

Given this analysis, neo-liberal reformers championed market dynamics’ introduction into the acquisition process. The reasons British neo-liberals believed that competition would improve efficiency were deeply rooted in neo-liberal theory. Perhaps foremost amongst these was their faith in Mises’ proposition that capitalist competition would generate military innovations and economic efficiencies. Competitive bidding for fixed price contracts would therefore, in principle, spur companies to offer more innovative products and cut their production costs.⁴⁴ As a corollary to pushing firms to innovate, planners anticipated that firms would invest more of their own funds into research and development (R&D) and that

⁴¹ TNA T 496/39 Discussion with Mr. Bourn-AUS(P), 23 October 1981.

⁴² TNA T 496/39 J. Macauslan to M. Hansford, 30 October 1981.

⁴³ TNA T 499/349 Capital Contract: Cost Analysis and Forecasting, 30 January 1987.

⁴⁴ Keith Hartley, “Defence Procurement in the UK,” *Defence and Peace Economics* 9/1-2 (1998), 48-50.

corporations' R&D departments would operate more efficiently than the Defence Ministry's existing research laboratories.

Policymakers also calculated that fixed-price contracting mechanisms would resolve the moral hazard problems they believed afflicted defence contracting whereby firms failed to manage program costs responsibly because they knew the Defence Ministry would bare the financial costs when programs ran over budget. Fixed price contracts could purportedly solve this problem by shifting projects' financial risks onto firms, which would thereby be incentivized to behave more efficiently.⁴⁵ As part and parcel to these changes, policymakers also sought to transform Britain's procurement agency from the sort of hierarchical-bureaucratic organization that neo-liberals abhor to a regulatory agency of the type Hayek championed. Thatcher's advisors' slogan was that they would transform the Defence Ministry from a "hands on" to an "eyes on, hands off" approach, which encapsulated their goal of disengaging the Defence Ministry from "managing" projects to have it rather simply monitor contracts' fulfilment.⁴⁶

Drafting this policy, entitled *Value for Money in Defence Procurement*, began during Nott's tenure as Defence Minister in 1981. In theory, Britain would unlock its military-industrial potential by shifting the responsibility for managing projects from the government to firms, and then obliging these firms to compete. Nott's successor, Heseltine, estimated that this policy would save 10% of Britain's procurement budget.⁴⁷ Procurement Chief Levene, meanwhile argued that by tendering competitively, on a fixed-price basis, government would

⁴⁵ John Schank et al., *Learning from Experience, Vol. 3* (Santa Monica: RAND, 2011), 11.

⁴⁶ Ibid.

⁴⁷ Trevor Taylor and Keith Hayward, *The UK Defence Industrial Base: Development and Future Policy Options* (London: Brassey's, 1989), 78.

force industry to become more “commercially minded” and provide greater “value for money.”⁴⁸ Britain’s reformers further anticipated that their policy would also incentivize private companies to enter the sector and invest in defence R&D.⁴⁹

Levene demonstrated the government’s commitment to reform when he revisited an uncompetitive 1977 cost-plus contract for British Aerospace and GEC to develop the Nimrod Airborne Early Warning (AEW) aircraft. When project costs rose, Levene opened the AEW program to competitive bidding and insisted that the new contract be a fixed-price one. Levene encouraged America’s Boeing to bid since Britain lacked other manufacturers capable of supplying AEW aircraft. Ultimately, Boeing won the contract in 1986 with its E3D and the Defence Ministry cancelled the Nimrod after investing £600 million in it.⁵⁰

Heseltine and Levene subsequently extended competition to a wider range of contracts. Whereas 70% of British procurement contracts were non-competitive in 1984-85, 66% were allocated competitively by 1986-87 and 80% by the 1990s.⁵¹ Competition’s advocates soon claimed success, pointing to the growing range of fixed-price contracts. Levene claimed he achieved 10% efficiency gains in British procurement spending while the NAO postulated that competition was saving the government £1 billion per year.⁵²

⁴⁸ Michael Bell, “Leaving Portsoken - Defence procurement in the 1980s and 1990s,” *The RUSI Journal*, 145/4 (2000), 30-36

⁴⁹ *The United Kingdom Defence Programme: The Way Forward*, 13.

⁵⁰ HC Deb (1986) 107 col. 1351-9.

⁵¹ Paul Bishop, “Competition and Collaboration in the Provision of Public Services: The Case of the UK Defence Sector,” *Journal of Finance and Management in Public Services* 3/1 (2003), 16; and Bell, 32.

⁵² Gordon Macdonald, “Reform of UK Defense Procurement and State/Industry Relationships during the 1980s and 1990s,” *Defense Analysis* 15/1 (1999), 11.

The competition policy, however, carried within itself the seeds of its eventual demise. By shifting projects' research burdens and financial risks from governments to firms, this policy incentivized defence firms to consolidate. Indeed, only larger firms could bear the financial risks associated with many projects.⁵³ This, for example, became a conundrum when the Defence Ministry selected the small, but experienced firm Ferranti to build sophisticated airborne radars, but Ferranti's size undermined its ability to credibly bear the project's financial risks. Ferranti responded by merging with another defence electronics firm, GEC.⁵⁴ This solution had the virtue of creating an entity large enough to bear the program's risks, but also created a de facto defence electronics monopoly. Similar dynamics played themselves out throughout the Thatcher years, with firms consolidating as a hedge against financial risk and to establish domestic monopolies. Although defence firms also grew larger in other states, the trend towards gigantism was more acute in neo-liberal ones.⁵⁵

Firms' consolidation into domestic monopolies rendered further competition impossible. Already, only a minority of aerospace contracts could be tendered competitively by the late-1980s and competition thereafter became problematic for land and naval systems as well.⁵⁶ Britain's neo-liberal policymakers responded to this narrowing of competition's scope by enticing new firms, including both civil non-defence firms and foreign defence firms, to enter Britain's market. The Defence Ministry consequently published an advice pamphlet, *Selling to the MoD*, and established a Small Firms Advice Office in 1986 to convince non-

⁵³ Chin, 104-125.

⁵⁴ PREM 19/2935 Tom King, EFA Radar, 22 January 1990.

⁵⁵ Chin, 139-140.

⁵⁶ Steven Schofield, "The Levene Reforms: An Evaluation," *Defense Analysis*, 11/2 (1995), 154.

defence firms to bid for defence contracts.⁵⁷ Despite the Ministry's efforts to reach out to civil sector firms, few bid and fewer won major contracts because either they lacked the requisite technologies or their business models proved a poor fit for defence.

Britain's Defence Ministry compensated for civil firms' reluctance to enter the market by encouraging defence firms from other European states to compete for British contracts and championed the so-called 1988 "Action Plan on a stepwise development of a European Armaments Market" as a means for doing so.⁵⁸ When competition occurred after this point it largely depended on foreign manufacturers bidding. These competitions, however, featured hypothetical British systems vying against mature foreign ones. British firms responded by submitting unrealistically low bids and optimistic performance targets to obtain contracts, hoping to later renegotiate prices upwards.

Levene's successor described this tendency, "The company decides they just have to win and perhaps you get into a position where they almost want it too much because the consequences of the contract getting into trouble several years downstream, ghastly as they are, are far less ghastly than not getting the contract."⁵⁹ More cynically, BAe Systems' CEO admitted that, "The Company consistently underbid for contracts knowing that it could recover the true costs when the project was underway."⁶⁰

⁵⁷ Taylor and Hayward, 75.

⁵⁸ W. Walker and P. Gummet, "Britain and the European Armaments Market," *International Affairs* 65/3 (1989), 419-442.

⁵⁹ Defence Committee Second Report Session 1999-2000, HC 158, *Ministry of Defence Annual Reporting Cycle*, Evidence Q 509.

⁶⁰ HC Public Accounts Committee, Oral Evidence (23 February 2004), ev.3.

The “firm” fixed prices agreed at contracts’ beginnings therefore proved ephemeral and prices subsequently rose in most cases.⁶¹ Large domestic projects, such as the ALARM missile and Tucano trainer, suffered this fate.⁶² The Defence Ministry, in turn, failed to enforce fixed-price contracts because Britain’s defence contractors’ status as domestic monopolists mean that they were functionally “too big to fail” insofar as their bankruptcy would both deprive the military of important weapons as well as the only domestic supplier capable of providing that category of system.⁶³

Competitions pitting domestic firms against foreign rivals also created situations where contracts were not decided on a “value for money” basis. The Defence Minister concluded in certain instances that British industry would lose strategic technical competency if contracts were awarded to foreign, rather than domestic, bidders. Defence Ministers consequently overruled the procurement organization on six occasions between 1985 and 1995, ordering domestic systems despite foreign bidders offering greater value for money.

One case involved the government dictating a mixed procurement of indigenous EH101 and American Chinook helicopters, rather than the more cost-effective purchase of Chinooks alone.⁶⁴ Similarly, the government dictated a mixed policy of purchasing C-130 transport aircraft and joining the collaborative Future Large Aircraft project, rather than a more

⁶¹ Bishop, 16.

⁶² “Report Slams UK Tucano Procurement,” *Flight International* (5 August 1989), 12; and Schofield, 170.

⁶³ Keith Hartley, “UK Defence Inflation and Cost Escalation,” *Defence and Peace Economics* 27/2 (2016), 184-207.

⁶⁴ Bell, 31.

economical purchase of C-130s alone.⁶⁵ Table 1, below, illustrates the difficulties the Defence Ministry faced in applying competition to aerospace projects.

Table 1:			
UK Aerospace Contracts			
No Competition	Competition, but winner selected politically	Competition, but price increases / renegotiation	Competition
Eurofighter (Coll) Sea Harrier MLU (OD) Tornado MLU (OD) Harrier T10 (OD) Tristar Batch 1 (OD) AMRAAM (Imp) EH101 ASW (OD) F-35 (Coll)	EH101/CH-47 (Coll/Imp) FLA/C-130J (Coll/C-130J)	ALARM (OD) Tucano (LM) A400M (Coll)	Apache (LM) E3 AEW (Imp) ASRAAM (OD) C-17 lease (Imp)
Coll=collaborative projects; Imp=imports; LM=manufacture under license; OD=original development; MLU=mid-life upgrade			

Scholars reassessed competition in light of the governments' increasing difficulties soliciting competing bids and concluded, overall, that the policy had failed to generate gains.⁶⁶ Competition yielded gains on certain projects, such as the Apache helicopter acquisition. However, it failed in cases when government either imposed domestic winners or felt obliged to renegotiate contracts. Moreover, the competitive process was inherently expensive. Competitive tendering cost companies 3-5% of the value of the contracts they won—amounting to £400 million per year—and the Defence Ministry's costs for managing the competitions equated to 0.5% contracts' values.⁶⁷ In one competition alone, that for a Maritime

⁶⁵ Macdonald, 14.

⁶⁶ Schofield, 147-74.

⁶⁷ R. Matthews, and J. Parker, "Prime Contracting in Major Defense Contracts," *Defense Analysis*, 15/1 (1999), 27-42; and Macdonald, 12.

Patrol Aircraft, the competitive process cost participants a collective £100 million and took two years to complete.⁶⁸ Despite these contracting costs, the procurement effort failed because BAe Systems underbid to win and the costs subsequently escalated until the project was cancelled 199% over budget.⁶⁹

At the same time as competition's underlying mechanisms—competitive bidding and fixed-price contracting—frequently broke down, evidence mounted that the competition policy was failing to induce the positive changes in firms' behaviour that neo-liberals anticipated. While policymakers initially intended that competition would spur firms to invest more corporate revenues on R&D, the obverse occurred in practice. Anecdotal evidence for this emerged early, with it being argued during Parliamentary debates that “all our major defence contractors are quite unwilling even to put pencil to paper on a design unless they were paid in advance.”⁷⁰ By 1987, Britain's Treasury concluded that the competition policy led “to firms playing safe and using conventional rather than advanced technology to meet requirements with a corresponding knock-on effect in firms' ability to undertake research and development in the advanced areas.”⁷¹

Over time, the competition policy arguably produced the opposite of what was intended in terms of corporate R&D. Comparative data collected in 2012 demonstrates that Britain's largest defence contractor, BAe Systems, invested a smaller proportion of corporate revenues (0.9%) on R&D than other Western defence manufacturers.⁷² Moreover, rather than being an

⁶⁸ Bell, 33.

⁶⁹ Toby Fenwick, *Promoting Effective Competition in UK Defence Procurement: The Case of UK Maritime Patrol* (London: CentreForum, 2014), 6.

⁷⁰ HL (1984) 457 col. 1454.

⁷¹ TNA T 499/349 M.L. Taylor to D.J. Seammen, 27 January 1987.

⁷² Hartley, *The Political Economy of Aerospace Industries*, 154.

idiosyncrasy unique to BAe Systems, the same data demonstrate that defence-aerospace firms in neo-liberal states consistently invested less in R&D than their equivalents in statist and corporatist states.

The precise mechanisms whereby Britain's competition policy deters corporate R&D investments remains, however, open to debate. In principle, competition and fixed-price contracting's uneven application may have disincentivized firms from committing R&D funds to projects *ex ante*, before being awarded the contract. Such would logically occur if firms regard their ability to win contracts as unaffected by their R&D investments, but rather determined by governmental decisions about whether to procure a weapon domestically. Alternatively, corporate strategies that privilege short-term profits by acquiring subsidiaries in less risky markets rather than investing in domestic R&D could also account for British firms' inadequate R&D investments.⁷³

Regardless of the causes, British firms' anaemic R&D efforts and the government's difficulty in sustaining competitive bidding gradually reached such a level as to threaten the competition policy as the centrepiece of British defence procurement. Prime Minister Tony Blair's Labour Party government, which won power in 1997, hired the management consulting firm McKinsey & Company to examine Britain's weapons acquisition system. McKinsey, in turn, drew attention to an over-emphasis on competition and inadequate project management on the Defence Ministry's part.⁷⁴ Blair's government responded by reducing competition's scope to simpler weapons. The government consequently unveiled its new Defence Industrial Strategy in 2005, which favoured long-term partnerships between the Defence Ministry and

⁷³ RUSI Focus Group, "Acquisition Focus Group and the Defence White Paper," *RUSI Defence Systems* (Spring 2012), 16.

⁷⁴ Bill Kincaid, *Dinosaur in Permafrost* (Walton-on-Thames: Saurus, 2002).

domestic firms, rather than competition, to sustain critical defence-industrial capabilities. Aerospace loomed large—particularly aircraft, UAVs, helicopters and guided weapons—in this partnership scheme.⁷⁵

Blair’s pragmatic de-emphasis of competition, however, suffered a set-back with Prime Minister David Cameron’s Conservative government’s election in 2010. Ideologically committed to Thatcher’s legacy, Cameron’s Conservatives felt uncomfortable with the partnership initiative. They therefore promulgated a White Paper, entitled *National Security Through Technology* in 2012, which stridently reaffirmed Thatcher’s competition policy. This document proclaimed, “wherever possible, we will seek to fulfil the UK’s defence and security requirements through open competition in the domestic and global market.”⁷⁶

This rhetorical reinstatement of a policy widely regarded to have failed sparked widespread criticism from Britain’s procurement community. A focus group organized by the Royal United Services Institute encapsulated this sentiment when it declared, “influential ministers whose ideological commitment to competition is such that they are incapable and/or unwilling of seeing its negative aspects in the specific defence sector.”⁷⁷ The competition policy’s seeming resurgence proved short-lived however. The same Conservative government that issued the 2012 White Paper had already appointed an eminent economist, David Currie, to spearhead an inquest into non-competitive contracts.⁷⁸

⁷⁵ *Defence Industrial Strategy* (London: TSO, 2005).

⁷⁶ MoD, *National Security Through Technology* (London: HMSO, 2012), 8.

⁷⁷ RUSI Focus Group, 16.

⁷⁸ David Currie, *Review of Single Source Pricing Regulations* (London: HMSO, 2011), 70-74.

Currie's study, which was transmitted to Parliament in October 2011, highlighted non-competitive contracting's steady growth. At the time of Currie's report, 45% of Defence Ministry contracts were awarded non-competitively.⁷⁹ The actual proportion of major equipment contracts awarded non-competitively was much higher, however, since competitively-tendered service contracts constitute a large proportion of the procurement budget as a result of the government's outsourcing policy. Competitively awarded equipment contracts, for example, accounted for only 11% and 7% respectively of Defence Ministry contracts with BAe Systems and Rolls-Royce by this time.⁸⁰

Currie, moreover, argued that Britain managed these non-competitive contracts poorly because the Defence Ministry's focus had been on competition for thirty years. The Ministry, indeed, had not updated its procedures for overseeing non-competitive projects since 1968, which meant that these had not been updated to take into account weaponry's growing complexity or the defence industry's consolidation.⁸¹ Currie consequently exhorted Cameron's government to reform non-competitive procurement practices, which already comprised most major projects; a process that ultimately bore fruit in the Defence Reform Act of 2014, which created a new statutory framework for managing non-competitive procurement and established a Single Source Regulations Office to oversee such contracts.⁸²

Cameron's government's adoption of this Act thus signalled the end of Britain's three decade long neo-liberal competition policy. Although competition and fixed-price contracts

⁷⁹ Ibid, 99-104.

⁸⁰ Hartley, *The Political Economy of Aerospace Industries*, 153.

⁸¹ Currie, 18-36.

⁸² NAO, *Improving Value for Money in Non-Competitive Procurement of Defence Equipment* (London: HMSO, 2017), 23-29.

appeared to yield substantial gains early on, industry consolidation and the government's inability to enforce contracts once programs ran over budget soon vitiated these accomplishments. Subsequent efforts to revitalize competition by introducing new market mechanisms, such as enticing non-defence and foreign firms to bid, failed to salvage the policy. In recent years, indeed, the value of British defence contracts awarded non-competitively has reached 65-75%, equivalent to those under the pre-Thatcher years of Labour governments.⁸³

Outsourcing's Promise and Limits

The Thatcher government pioneered the second major pillar of its neo-liberal reform agenda—outsourcing—even as it launched its competition policy. Initiated in 1983, outsourcing, like competition, is predicated on a belief that private entrepreneurship and competitive bidding can deliver military support services more efficiently than state bureaucracies. After generating tangible, yet modest savings through a first generation of outsourcing, British neo-liberal reformers expanded outsourcing's scope to more complex activities. Britain's Defence Ministry consequently unveiled a succession of new outsourcing mechanisms, including: lease-back schemes, private finance initiatives (PFI), public private partnerships (PPP) and government-owned contractor-operated (GOCO) facilities. Defence outsourcing's subsequent growth, however, generated disappointing economic outcomes, yet retains policymakers' normative support.

Defence outsourcing has as its foundation the neo-liberal belief that private sector firms can fulfil most roles more efficiently than hierarchical-bureaucratic organizations, such as

⁸³ Ibid, 17-21.

armed forces.⁸⁴ Neo-liberal reformers concede that state-organized armed militaries are necessary to defend polities and compel soldiers to risk their lives. They, however, argue that the private sector can more efficiently fulfil the multitude of ancillary tasks needed to train and support combat units. Proponents of defence outsourcing consequently aim to disengage state bureaucracies from these functions and supplant them with contractors.

Although the argument for defence outsourcing is rooted in neo-liberal economic theory, it runs contrary to how militaries evolved over preceding centuries. Western military history has indeed rather featured the in-sourcing of hitherto private functions by states' hierarchical-bureaucratic militaries. In-sourcing's logic lies, in turn, in militaries' need to assure their control over vital support functions.

Governments first gradually in-sourced combat units during the late-Renaissance and Early Modern periods, forming their own infantry regiments rather than hiring mercenary bands.⁸⁵ Louis XIV's France then led European states in establishing permanent military engineering and provisioning bureaucracies.⁸⁶ It was finally, however, in the nineteenth century that most militaries replaced civilian teamsters with military personnel to haul artillery onto battlefields.⁸⁷ Britain's neo-liberal out-sourcing drive thus tested whether this prior trend of in-sourcing was a product of functional battlefield needs or, rather, an unnecessary over-reach by state bureaucracies.

⁸⁴ Gordon Tullock, *The Politics of Bureaucracy* (Washington DC: Public Affairs, 1965).

⁸⁵ Jean Chagniot, *Guerre et société à l'époque moderne* (Paris: PUF, 2001), 29-67.

⁸⁶ *Ibid*, 99-130.

⁸⁷ Byron Farwell, *The Encyclopedia of Nineteenth Century Land Warfare* (New York: W.W. Norton, 2001), 264.

Thatcher’s government embraced outsourcing as part of its neo-liberal critique of government. For Thatcherites, government departments are in-house monopolies that provide public services inefficiently. The absence of competitive pressures and profit incentives are the alleged reasons for public actors’ inefficiency. To solve this, Defence Minister Heseltine promoted the outsourcing of military support services beginning in 1983. His belief in the private sectors’ superiority inspired him to decree that support services should be outsourced “unless it was operationally necessary or more cost-effective to keep the work in-house.”⁸⁸

By 1989 the Ministry outsourced 120 activities. Many of these impacted the Royal Air Force (RAF) and Fleet Air Arm, including: bird control, weather balloon flying, airbase engineering and range support. The outsourcing of activities such as these is comparatively straightforward since service levels can be specified and competitive bidding organized. Table 2, below, details this first generation of outsourced activities.

<p>Table 2:</p> <p>Simple British Outsourcing Related to Airpower</p>
<p>Bird control</p> <p>Airbase engineering and supplies</p> <p>Weather balloon flying</p> <p>Range support</p> <p>Catering and cleaning</p> <p>Availability contracting for combat aircraft</p>

This first generation of outsourcing yielded economies, averaging 5 to 40% per contract. Although this represented large relative savings on each activity, outsourcing’s aggregate scope remained small. Simple services only constitute a miniscule proportion of militaries’ inputs and most support functions depend on the provision of services requiring the coupling of skilled

⁸⁸ *Statement on the Defence Estimates 1989* (HMSO, London, 1989), 35.

labour and complex equipment. Consequently, this first outsourcing drive generated only £50 million annually in savings; less than 1% of the Defence Ministry's equipment budget.⁸⁹

The clear efficiency gains, yet negligible overall impact of these first outsourcing efforts led British policymakers to expand outsourcing's scope. The challenge facing British neo-liberal reformers was, however, to develop mechanisms for firms to compete to fulfil more complex functions that combine services with costly capital assets. Governmental officials in the late-1990s and early-2000s consequently developed four distinct, yet inter-related policies for achieving this.

The first of these, known as lease-back, involved the Defence Ministry selling physical infrastructure to corporations and then leasing-back the use of the facilities it had sold along with the associated services. Prime Minister John Major's Conservative government introduced the second outsourcing mechanism, private finance initiatives (PFI), in 1996. Firms engaged in PFIs would raise capital in equity markets with which they would purchase the military equipment needed to provide the armed forces complex services. Firms, in effect, would "rent" their capital assets, such as buildings, satellites and transport aircraft, to the armed forces along with services.

Prime Minister Blair's Labour government sought to innovate upon PFIs in 1997 when it introduced public private partnerships (PPP).⁹⁰ PPPs' main conceptual advance on PFIs is the notion that contracting firms can lease their excess capacity, beyond that contracted for by the armed forces, to other clients. The fourth and final outsourcing mechanism developed by

⁸⁹ Keith Hartley, "The Economics of military outsourcing," *Defence Studies* 4/2 (2004), 199-206.

⁹⁰ Keith Hartley, *The Future of Outsourced Services in the UK Defence Sector* (The Business Services Association, 2015), 14.

British neo-liberals was the government-owned contractor-operated (GOCO) facility.⁹¹ In GOCO schemes, the government owns costly physical infrastructure, but contracts with firms to provide the services associated with that infrastructure.

In principle, these four mechanisms—lease-back, PFIs, PPPs and GOCOs—offered vehicles for outsourcing more complex defence services. The economic case for this outsourcing, however, is less straightforward than that for the simpler outsourcing that preceded it. States with good credit ratings, such as the United Kingdom, can borrow money at far lower interest rates than private sector corporations.⁹² Outsourcing, consequently, only results in savings if firms generate efficiencies of such a scale that they outweigh their higher costs of raising capital.

While higher interest rates pose one problem, asset specificity poses another. Neo-liberals' vision of outsourcing producing economies is rooted in their belief that government can sustain a competitive tendering process. The field of transaction cost economics suggests, however, that competition breaks down when actors invest in highly specific assets for their commercial relationships. The equipment associated with complex outsourcing—airial refuelling aircraft, roll-on roll-off ships and fighter simulators—meet these criteria and have limited non-military applications. Transaction cost economists argue that sustaining competition for contracts involving such assets is fraught because the signing of one outsourcing contract reduces the scope for subsequent competition because “once substantial

⁹¹ Louisa Brooke-Holland, *In brief: Outsourcing defence procurement* (London: House of Commons Note, 2013).

⁹² Hartley, “The Economics of military outsourcing,” 203.

investments in transaction-specific assets are in place... what was a large numbers bidding condition at the outset is effectively transformed into one of bilateral supply thereafter.”⁹³

Complex outsourcing’s success consequently hinged on neo-liberals’ dual assumptions that firms’ superior efficiency would outweigh their greater costs for raising capital and that policymakers could develop means for sustaining competition despite high levels of asset specificity. Britain’s Defence Ministry first applied these new mechanisms to outsource military housing. Defence Minister Malcolm Rifkind appointed a team of neo-liberal advisors in 1994 to develop plans to sell the Ministry’s 55,000 family accommodation blocks to a private firm, which would then rent them back to the Ministry.⁹⁴

Neo-liberal reformers anticipated that this lease-back scheme would deliver accommodation more efficiently to the armed forces. However, the Defence Ministry’s own accounting office predicted, based on economic modelling, that the lease-back scheme would prove less efficient than retaining and managing accommodations in-house. Britain’s Conservative government chose, nevertheless, to proceed with the lease-back plan and invited firms to tender in November 1995.⁹⁵ Ultimately, 19 firms tendered, of which Annington Property Limited prevailed, purchasing the Ministry’s housing stock for £1.66 billion and concluding a 200-year contract with Britain’s government.⁹⁶

Regardless of outsourcing’s long-term impact, the accommodation lease-back scheme generated a short-term financial windfall, which spurred reformers to pursue more complex

⁹³ O.E. Williamson, *The Economic Institutions of Capitalism* (New York: Free Press, 1985), 61.

⁹⁴ NAO, *Ministry of Defence’s arrangement with Annington Property Limited* (London: HMSO, 2018), 18.

⁹⁵ *Ibid*, 19.

⁹⁶ *Ibid*.

outsourcing. The next such endeavour addressed the United Kingdom's need to sea-lift combat forces to conflict zones. Britain's Conservative government first envisioned contracting for the use of two roll-on roll-off (known as "ro-ro") ships through a PFI.⁹⁷ The election of Prime Minister Blair's Labour government in 1997, however, led to an expansion of this initiative. Rather than securing the use of two ro-ro ships through a PFI, Blair's Defence Minister Geoff Hoon contracted for six through a PPP, in which the firm's ability to rent the ships to other clients when not being used by the armed forces, would purportedly compensate for the higher cost of acquiring more ships.⁹⁸

Complex outsourcing's scope continued expanding after this ro-ro ship initiative and came to embrace services ever more essential to military efficiency. In 2003, Britain concluded a £2.5 billion contract for Airbus to furnish satellite communications for expeditionary military operations via four corporate-owned satellites (Skynet 5) and 150 satellite reception terminals.⁹⁹ In 2004-07, the Ministry concluded further contracts valued at £3.6 billion, that shifted aircraft depot maintenance from an in-house RAF activity to one conducted by contractors. These contracts changed the metrics for conducting maintenance from the number of repairs implemented to the availability of the aircraft fleet.¹⁰⁰

Then, in 2008, the Ministry signed two massive PFI/PPP contracts. One of these, a £6.8 billion contract, outsourced the armed forces' core flight training to a private consortium

⁹⁷ HC Deb (2000) 355 col. 411-12.

⁹⁸ Ibid.

⁹⁹ "Skynet 5: UK MoD's Innovative SATCOM Solution," *Defense Industry Daily* (September 2015), accessed at: <http://www.defenseindustrydaily.com/skynet-5-uk-mods-innovative-satcom-solution-06244/> (accessed June 2016).

¹⁰⁰ NAO, *Transforming logistics support for fast jets* (London: HMSO, 2007).

for 25 years.¹⁰¹ The other contract, even larger at £10.5 billion, provided for a private consortium, AirTanker, to supply the Defence Ministry’s air-to-air refuelling and passenger air transport needs for 27 years.¹⁰² Table 3, below, details Britain’s complex outsourcing contracts as they pertain to air power.

Table 3:
Complex British Defence Outsourcing Related to Airpower
RAF base family quarters E3D Simulator Light aircraft flying training Hawk trainer simulation facility Medium helicopter aircrew training facility Lynx helicopter aircrew training service Defence helicopter flying school Attack helicopter training UK Military Flying Training System Satellite communications (Skynet 5) Airborne tanker and transport fleet

Consequently, private firms now train British pilots, house their families, service their aircraft, furnish satellite communications for military interventions and refuel aircraft before they strike overseas targets.

The new mechanisms developed by neo-liberal reformers were thus achieving their objective of opening up an ever wider range of defence functions to private firms. Economist Peter MacDonald, indeed, calculates that defence outsourcing grew on average by 3.6% per

¹⁰¹ NAO, *Military Flying Training* (London: HMSO, 2015).

¹⁰² NAO, *Delivering Multi-Role Tanker Aircraft Capability* (London: HMSO, 2010).

year, between 1996 and 2008, during this era of complex outsourcing.¹⁰³ This outsourcing's aggregate impact was such that by 2013 Britain's Defence Ministry was spending 27% of its budget on outsourced services, which dwarfed Europe's other major powers, whose outsourcing expenditures averaged 0-2% of their defence budgets.¹⁰⁴ British outsourcing's scope also outpaced that of the United States, which had launched its own neo-liberal outsourcing drive in 1985, only two years after Britain. An Anglo-American conference consequently concluded that "the UK had been more aggressive than the USA in pursuing such private sector involvement."¹⁰⁵

Britain's accomplishment at outsourcing ever more functions, however, came even as its highest profile outsourcing arrangements began revealing their inherent drawbacks. The lease-back contract for military housing, for example, slowly proved a financial debacle. Having become the monopolistic provider of British military housing, Annington underinvested in property maintenance to improve its profit margins, which resulted in over half of military families reporting themselves dissatisfied with the state of the Addington-provided accommodations.¹⁰⁶ The Annington contract's increasing cost, combined with the opportunity costs associated with the Ministry having sold off its housing estate, led Britain's NAO to calculate that lease-back cost the Defence Ministry £4.17 billion in losses.¹⁰⁷

¹⁰³ Peter MacDonald, *Economics of Military Outsourcing* (York: York University Doctoral Thesis, 2010), 116.

¹⁰⁴ EDA, *National Defence Data 2013 of the 27 EDA Member States* (Brussels: EDA, 2015), 41-43.

¹⁰⁵ RAND, *Public-Private Partnerships: Proceedings of the US-UK Conference on Military Installations, Assets, Operations and Services* (Santa Monica: RAND, 2000), viii.

¹⁰⁶ NAO, *Ministry of Defence's arrangement with Annington Property Limited*, 31-33.

¹⁰⁷ *Ibid*, 23-29.

At the same time as the accommodation lease-back scheme cast doubt on out-sourcing's economics, the mid-air disintegration of a contractor-maintained Nimrod reconnaissance aircraft over Afghanistan in 2006, killing all 14 crewmembers, raised questions about its military viability. The ensuing investigation found that the contractors—BAe Systems and QinetiQ—cut corners to meet budgetary targets. According to the report,

BAE Systems bears substantial responsibility for the failure of the Nimrod Safety Case. Phases 1 and 2 were poorly planned, poorly managed and poorly executed, work was rushed and corners were cut. The end product was seriously defective.... These matters raised question marks about the prevailing ethical culture at BAE Systems.... There was a shift in culture and priorities in the MOD [Ministry of Defence] towards 'business' and financial targets, at the expense of functional values such as safety and airworthiness.¹⁰⁸

Although only a single incident, the mid-flight breakup of such an aircraft is exceptional enough to raise concerns. Analysts consequently argued that the Nimrod crash demonstrates inherent problems in relying on contractors when their behaviour is difficult to monitor and firms have incentives to reduce costs.¹⁰⁹

Neither the unfolding controversy over the housing scheme nor the Nimrod's disintegration dampened neo-liberal reformers' enthusiasm for complex outsourcing. Britain's Government, indeed, concluded its largest PPP deal—the £10.5 billion airborne tanker and transport contract—in 2008, two years after the Nimrod's disintegration. This contract's high capital cost, involving the acquisition of 14 tanker aircraft, cast doubt however on private firms' ability to generate efficiencies sufficient to counterbalance their high capital costs. Both the Defence Ministry's accounting office and the NAO, indeed, calculated that a straightforward tanker purchase by the air force would have been more cost-effective, less complicated, and

¹⁰⁸ House of Commons, *The Nimrod Review* (London: TSO, 2009), 11-13.

¹⁰⁹ Tony Mason, *British Air Power* in John Olsen (ed.), *Global Air Power* (Washington DC: Potomac, 2011), 61-62.

would have provided more flexible capabilities.¹¹⁰ Governmental ministers' normative belief that the private sector can deliver services more efficiently, however, led them to over-ride their own specialized agencies and outsource aerial refuelling.¹¹¹

While the refuelling deal set new records for a contract's size, it was Prime Minister Cameron's subsequent Conservative government that attempted the boldest outsourcing effort yet. The competition policy's failure and, most specifically, the government's inability to hold firms to their fixed-price contracts, generated a situation whereby future anticipated defence expenditures outpaced Britain's planned defence budgets by a considerable margin. Rather than reassess Britain's procurement programs, however, Cameron's government blamed this "overheated" procurement environment on a state bureaucracy, the Defence Equipment and Supply (or DE&S) organization.¹¹²

Defence Minister Philip Hammond consequently advanced the ambitiously neo-liberal idea of outsourcing the management of British defence procurement to the private sector. The specific scheme he proposed in 2013 was to replace the Defence Ministry's DE&S with a government-owned contractor-operated (GOCO) entity, wherein the Ministry would own the physical infrastructure, but a private firm would assume responsibility for assuring that weapons were delivered at price and on time.¹¹³ Britain's Treasury considered the proposal "highly risky" and the NAO doubted whether it was economically advantageous given contract labourers' higher costs compared to civil servants.¹¹⁴

¹¹⁰ NAO, *Delivering Multi-Role Tanker Aircraft Capability*, 5.

¹¹¹ *Ibid*, 8-9.

¹¹² MoD, *Better Defence Acquisition* (London: HMSO, 2013), 6.

¹¹³ *Ibid*, 10-22.

¹¹⁴ NAO, *Reforming Defence Acquisition* (London: HMSO, 2015), 14-18.

Conservative ministers, however, overruled these dissenting opinions and pushed forward the GOCO proposal as the Defence Ministry's official position in July 2012.¹¹⁵ The Defence Ministry, indeed, spent £33 million on developing the GOCO idea and developing contractual tools for managing such an arrangement.¹¹⁶ This bold outsourcing effort collapsed, however, despite unflagging governmental support because private sector firms regarded it as too potentially risky. Only one firm, indeed, submitted a bid for the contract in December 2013 and, in the absence of the slightest competition, Britain's cabinet reluctantly concluded that it could not persevere with the GOCO.¹¹⁷

Britain's defence outsourcing experience highlights, in sum, the possibilities and limits of this neo-liberal policy. Simple support services—such as catering, depot maintenance and ancillary activities—can be provided more efficiently by the private sector than the state. Services that meet these criteria, however, comprise a miniscule proportion of modern states' defence budgets. Neo-liberal reformers nonetheless pioneered mechanisms—lease-backs, PFIs, PPPs and GOCOs—for outsourcing more complex activities. While these policy innovations enabled neo-liberals to expand outsourcing's scope, private firms failed to provide the anticipated efficiency gains. The prior historic trend of in-sourcing, whereby governments undertook an increasing variety of defence-related tasks in-house, thus appears validated for the wide range of defence tasks, which involve costly capital goods and where contracts are difficult to monitor.

¹¹⁵ MoD, 12.

¹¹⁶ NAO, *Reforming Defence Acquisition*, 16.

¹¹⁷ *Ibid.*

Conclusion

Neo-liberal policymakers, in sum, enacted the late-twentieth century's boldest attempt to redefine how democracies provide for their defence when the United States, Britain, Australia and Canada embraced neo-liberal reforms. The political leaders who backed these reforms drew upon neo-liberalism's broader framework, including distrust in civil servants and faith in competitive markets, to develop their policy initiatives. The result was a reform agenda centred on subjecting firms to greater competitive pressures and outsourcing defence functions to the private sector. This reform effort's promulgation, in turn, reveals much about both the relationship between neo-liberal theory and policy, and about the distinctive nature of defence as a particular form of public good.

One of this study's revelations is the disjuncture between neo-liberal theorists and practitioners. Neo-liberalism's founding theorists—Hayek, Mises and Friedman for example—regarded defence as one of government's central responsibilities and they normatively accorded it greater powers of compulsory organization than in other domains. Most neo-liberal theorists also likely joined Mises in believing that government can generate military power more efficiently by tapping firms' competitive impulses.

These founding theorists, however, refrained from advocating specific defence reforms. To a degree, their own personal experiences with war's complexity and tragedy may have instilled in them a certain modesty about defence. The indeterminacy of neo-liberal economic models for a sector such as defence, where public procurement, finance, and transaction cost scholars advanced countervailing arguments, may also have dissuaded them from claiming more intellectual authority over this domain.

Neo-liberal politicians and policymakers, however, exhibited none of this restraint once they won elections and formed governments. In power, neo-liberals operationalized and built-

upon neo-liberal economics' precepts to promulgate a far-reaching reform agenda. Faith in competition, distrust in civil servants and a belief in the necessity to transform hierarchical-bureaucratic organizations into regulatory institutions suffused their reforms. The result has been a three decade long neo-liberal drive to transform defence. This drive's two components—enhancing inter-firm competition for contracts and outsourcing activities to the private sector—run contrary to how defence had evolved in modern democracies. Western military history, indeed, had largely been one of states' hierarchical-bureaucratic militaries insourcing an ever larger number of functions and governments developing close collaborative relationships with arms producing firms.

Neo-liberal defence reformers' efforts therefore unknowingly raised the philosophical question as to whether defence institutions, as they stood, were the result of warfare's functional necessities, as expressed through repeated conflicts, or the expansionist instincts of self-interested military bureaucracies. That neo-liberal reforms produced significant adverse consequences when pursued beyond a certain minimal level consequently suggests that the former is more correct than the latter.

Finally, although the above study focused on the United Kingdom's neo-liberal defence reforms, the British experience is broadly reflective of those of other neo-liberal states. The United States, for example, initiated neo-liberal defence reforms in 1985, several years after the United Kingdom, with the logistics civil augmentation program (LOGCAP). America's Defence Department under Donald Rumsfeld later sought to shift responsibility for weaponry programs onto firms with the lead systems integrator (LSI) initiative and expand outsourcing to combat tasks. As with their British counterparts, these policies either failed or became mired in controversy. The LSI initiative collapsed when its highest profile projects—the Army's Future Combat System and Coast Guard's "Deep Water" program—ran dramatically over budget. The United States' outsourcing drive, meanwhile, generated immense controversy as

private military companies' activities in Iraq and Afghanistan led to civilian deaths and raised troubling questions about armed contractors' accountability.

Despite neo-liberal reforms' failure to positively transform defence, it would be premature to conclude that neo-liberalism's epoch as an inspiration to would-be defence reformers is over. Neo-liberal policymakers, indeed, can oftentimes rationalize one set of reforms' failure by arguing that new market mechanisms must be developed and introduced. The conceptual answer to neo-liberal policy failures thus oftentimes lies in more neo-liberalism. Mirowski demonstrates how this intellectual flexibility enabled neo-liberalism to broadly survive the 2008 Financial Crisis as a potent ideology and there are no reasons for assuming it will be less resilient in the defence sector.¹¹⁸

¹¹⁸ Philip Mirowski, *Never Let a Serious Crisis Go to Waste: How Neoliberalism Survived the Financial Meltdown* (London: Verso, 2013).