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***Sine praejudicio?* Economics and the 2014 Scottish independence referendum**

Abstract

The purpose of this paper is to analyse the contribution of expert economic opinion to the 2014 referendum campaigns on Scottish independence. We argue that the input from economics to both sides of the debate, as well as to independent analysis, was constrained by a mainstream economics framing. The result was a focus on calculable outcomes predicated on unchanging institutions and behaviour, and the question of currency arrangements that assumes the status quo is an optimal currency area. As the consequences of constitutional change for institutions and behaviour are uncertain, an equilibrium framework treats anything beyond calculable prediction as a shock, inducing fear of the unknown. In contrast, a political economy approach is tailored to analysing uncertain developments and encompassing the broader issues relating to values, democracy and power, and is thus better suited to the analysis of constitutional change.

Keywords: Constitutional change; Argument; Keynes' weight of argument; Scottish independence referendum; political economy

JEL codes: A11; B41; B50; H77; P16; Z18

1. Introduction

Mainstream economics limits argument to questions of formal mathematical logic, and empirical testing with respect to what are viewed as objective facts. By contrast, policy questions are relegated to the application of values and “art” to this “science” (Colander and Kupers, 2016). We argue that the limitations of such an approach are particularly evident when policy debate becomes a matter for general public discourse, such as the recent referendum campaigns in the UK: the 2016 referendum on whether Britain should continue to be a member of the European Union (EU), and the 2014 Scottish independence referendum. The economic aspects of such discourse are represented along mainstream lines in terms of facts and quantified predictions of facts. However, the basis of these facts is predicated on a methodological approach that establishes narrow terms for debate.

We argue that the mainstream framing severely limits debate precluding critical questions relating to constitutional and institutional change. By constitution, we refer to the underlying system and principles of government and governance in a society. Our approach differs from the likes of James Buchanan (1990), who popularised the term “constitutional economics”. He was of the view that the constitution was a set of constraining rules on individual choice and actions, and has become associated with Austrian and Public Choice economics (for example, Hayek, 2006 [1960]; Mueller, 2003).

We take as a case study the 2014 Scottish independence referendum campaign. We argue that both sides were constrained by a mainstream economics approach, in terms of lacking a broader political economy perspective, pertinent to a more critical assessment of constitutional change, and in flaws in reasoning and knowledge claims. By mainstream or standard economics, we refer to the dominant branch of the discipline and profession that *broadly* accepts the following canons: equilibrium reasoning (precluding Keynesian/Knightian uncertainty and endogenous change); the ontological privileging of the individual (over institutions, which are conceived only as constraints); ahistoricism (in that historical contingencies have limited influence on analysis); power only features as market power, and there is a belief that models are value-neutral. For us, an alternative framing acknowledges the significance of evolutionary processes and historical contingencies (change is

endogenous and history matters); individuals and structures are mutually constituting (individuals are socially-embedded); the economy may be seen as a social provisioning process where power structures have important bearings on outcomes, such as distribution, and processes, and there is a questioning of the possibility of value-neutrality in analysis. We are sensitive to the controversies over various terms, in particular 'heterodox economics' (for example, Lawson, 2006; Hodgson, 2017; Morgan and Embery, 2017), and have no wish to become involved in this important discussion. This would distract us from our central purpose. Nonetheless, in identifying this set of alternative framing we draw from the works of the likes of Davis (2006, 2008), Lawson (2006), and Hodgson (2001) as well as others. Our preference here is to use the term *political economy* to signify a critical engagement with issues of value-neutrality and power through the invocation of the political.

The 2014 referendum campaign offered an interesting contrast to the popular denigration of the economics profession, following the financial crisis (e.g. Earle, *et al*, 2017). The media representation of the independence debate gave economists a prominent platform to focus the broader public debate on questions of public finance, optimal currency zones, and contrasting views over the impediments to sustainable future prosperity. Advocates of political independence argued that Scotland's economic potential could be better realized through self-government while unionists focused on what they believed to be the benefits of risk-pooling and resource-sharing of the present UK constitutional arrangement.

The paper argues that although mainstream economics provided the framework for both sides of the debate, it is inadequate for informing democratic discourse on constitutional change. The arguments made in the 2014 campaign may have been well-intentioned, but their theoretical basis was predicated on, at best, limited conceptualisations of institutions, power, knowledge, and uncertainty, dimensions central to any discussion of constitutional change.

The next section briefly outlines the background to the 2014 referendum, and is followed by a discussion of the nature of the economic arguments used by "Yes Scotland" (the pro-independence campaign) and "Better Together" (the pro-UK union campaign) as well as other interested, and non-aligned parties. From here, we analyse the relationship between mainstream economics and policy questions and the way in which this approach encourages the idea that economic arguments are separable from political ones. We consider the nature of argument, and how standard economics is confined to specific types of argumentation and reasoning that limit its analysis of constitutional change. This is contrasted with political economy. Space constrains us from exploring the political economy of each case. Rather our intention is to demonstrate the paucity of the standard approach adopted by both sides, and identify the grounds for a more promising political economy analysis. Section 7 offers a brief conclusion. In what follows, "iScotland" is shorthand for an independent Scotland, and "cUK" for continuing United Kingdom.

2. The road to the 2014 referendum

The 2014 referendum on Scotland's constitutional status was commonly viewed as an unprecedented event that engaged much of the electorate. The 85% turnout was the highest since the introduction of universal suffrage in Britain (Electoral Commission, 2014) with an impressive level of popular mobilisation, public discourse and collective learning. It was a remarkable time. The result was a win for the unionist campaign, but there remains doubt as to whether the victory was sufficiently decisive to settle the issue over the coming years, and indeed, it was notable that the campaign generated a considerable shift in public opinion in favour of independence. The Scottish Social Attitudes Survey recorded support for independence at 23% in 2010 (Curtice and Ormston 2012). This increased to 45% in the referendum, and generated a mass and diverse grassroots social movement for independence.

Unlike the other minority nations of the United Kingdom, Scotland has a history of independent statehood. In 1707, Scotland suspended its parliament to form a new political entity with England and Wales, the United Kingdom. The Treaty of Union designated the existing English parliament at Westminster as the site of the new union parliament. To all intents and purposes, the previous English parliament continued with an expansion to accommodate the new Scottish members with a further enlargement to incorporate Ireland in 1801.¹

Also important to understanding contemporary constitutional developments is the continuation of certain Scottish governance institutions. Under the Treaty of Union, Scotland's distinctive legal and educational systems and established church remained independent of English systems, and to some extent evolved differently. Given the relatively small size of the state in the eighteenth century, these institutions were to some extent defining features of a country. Scotland effectively became a "stateless nation" (McCrone, 1992) and a strong sense of national identity endured within the union². This distinctive national institutional configuration remained a challenge for the governance of the UK state, leading to successive attempts at constitutional innovation. In the late-nineteenth century, the Scottish Office was created as a central government department with growing administrative responsibilities, including; education, health, local government, and the legal system³. In 1997, the Scottish electorate voted "Yes" to the then Labour government's devolution proposals, which included the establishment of a Scottish Parliament with very limited economic policy discretion and no borrowing powers⁴. When the principal party advocating independence, the Scottish National Party (SNP) was elected as a majority government to the Scottish Parliament in 2011, it confirmed that it was committed to holding a referendum on independence. The "Edinburgh Agreement" between the British and Scottish governments in 2012 instituted the rules and franchise of the referendum, and confirmed its result as legally binding.

3. The application of economic arguments in the 2014 referendum campaign

3.1 Independent economic assessments

¹ There is an extensive historical literature on this union, and its motivations (see for example, Devine, 2012). The present UK dates from 1920 following the establishment of the Irish Free State and then the Republic of Ireland.

² The 2016 Scottish Social Attitudes survey noted that 52% of their sample identified as either "Scottish, not British", or "More Scottish than British". Those identifying as either "More British than Scottish", or "British, not Scottish" was 8%, and 29% stated they felt "equally Scottish and British". Moreover, the survey regularly records substantially higher levels of trust in the Scottish Government than the UK Government in acting in the "best interests of Scotland".

³ Arguably, the demand for greater autonomy grew from the 1980s following the continuing rejection of the Conservative government in successive general elections. Indeed, due to the vast difference in population size between England and the other constituents of the UK, the outcome of the overall UK result tends to be determined by voters in England. Of the thirteen general elections since 1970 (including 2017), the result in Scotland has reflected that of Britain on only five occasions. This has led to the notion that Scotland is subject to a democratic deficit (see, for example, Devine, 2012). This may have been exacerbated further following the result of the 2016 referendum on the UK's membership of the EU, when Scotland voted 62-38% to remain and the overall UK result was 52-48% to leave (Electoral Commission, 2017).

⁴ On a turnout of just over 60%, the question: "I agree there should be a Scottish parliament" was supported by 74% of those voting. The second question – "I agree that a Scottish parliament should have tax varying powers" – was supported by 63% (Pattie, *et al*, 1998).

During the independence referendum campaign economics and economists were highly prominent. Most independent commentators that expressed an opinion were generally reserved about independence.⁵ John Kay (2013: 7) argued that the debate should not focus solely on economic issues, but was typical in thinking of their separability from non-economic issues. Such framing was also evident in a number of the more influential studies. A prominent example was provided by the Institute for Fiscal Studies (IFS) (Johnson and Phillips 2012), which published a report on what they argued was the fiscal context of independence. This was a powerful narrative that was heavily referenced by the media⁶ as the IFS is frequently portrayed as an authoritative and objective source of expertise.

The IFS analysis identified that public expenditure in Scotland is £1,200 per capita higher than UK as a whole (2010-11). They noted relatively more generous welfare policy positions in certain areas, such as the abolition of undergraduate tuition fees and prescription charges, and free (at the point of consumption) personal services for the elderly in Scotland, as sources of higher government expenditure. The authors concluded that an iScotland's fiscal architecture would be heavily shaped by oil and gas tax revenues, and that there would be a tendency for greater fiscal strain in the "long-run" due to demographic trends: Scotland has a higher dependency ratio than UK (Johnson and Phillips, 2012). The analysis almost entirely concentrated on the "issue" of relative fiscal deficits between the UK and iScotland, and North Sea hydro-carbon tax revenues.

Other economic analyses from bodies such as credit-rating agencies were based on similar grounding, but produced conflicting conclusions. For example, Standard and Poor's (2014) expected an iScotland to be a rich and diversified country, which would be reflected in any investment grading of its sovereign debt. Moody's (2014) was far more reserved, noting that an iScotland would probably have a lower credit rating than the cUK, but that over time this rating could improve.

3.2 *The "Yes" campaign*

Although dominated by the SNP as the Scottish Government, the "Yes" campaign was composed of a variety of political parties, including the Scottish Greens and Scottish Socialist Party, and groups that held differing economic perspectives (for example, Hughes-Hallett, 2014; Foley and Ramand, 2014). Nonetheless, the "Yes" campaign focussed on national income figures, emphasising that Scotland is a wealthy country and could therefore "afford" political independence. For instance, without the North Sea sector (which is designated as a distinct British economic region) Scotland's GDP per capita was 99% of the UK's. Scotland had the highest Gross Value Added of British economic regions beyond London and the South East of England (for example, Office for National Statistics, 2015; Fiscal Commission Working Group of the Council of Economic Advisers (Fiscal Commission), 2013).

The campaign narrative also referred to public finances, and what was frequently portrayed as Scotland's lower deficit at the time relative to the UK (for example, Fiscal Commission, 2013). Also emphasised was Scotland's sustained relatively higher contribution in tax

⁵ There was only a limited number of surveys of economists during the referendum campaign. For example, the European-based Centre for Macroeconomics' (<http://cfmsurvey.org/>) survey in spring 2014 reported that most professional economists were sceptical of an iScotland's economic prospects (<https://www.ft.com/content/2f4ec73c-ed7e-11e3-8a1e-00144feabdc0>). Since the 2016 referendum on EU membership, some prominent economists have changed their opinion on Scottish independence (see, for example, Macpherson, 2016; Wren-Lewis, 2017).

⁶ With one exception, the print media were hostile to independence. Broadcast media were *prima facie* impartial, though the British Broadcasting Corporation (BBC) drew some criticism over its coverage of the campaign (for example, Robertson, 2014).

revenues to the UK exchequer as well as higher levels of public expenditure per capita (for example, Fiscal Commission, 2013). Relatedly, the campaign sought to allay fears that the Scottish economy was subject to a hydro-carbon resource curse. Scotland's economic structure was compared to that of the UK as well as small European economies, highlighting successful sectors, including food and drink, and biotechnology.

The "Yes" campaign sought to firmly establish the argument that Scotland is a prosperous country which is unable to meet its potential, in part due to its constitutional arrangement. Advocates of political independence attempted to maintain how poorly Scotland performed in productivity, innovation, health (especially the incidence of morbidity and mortality rates), inequality, and population growth terms in contrast to small European (especially Scandinavian) economies (for example, Cuthbert and Cuthbert, 2013; 2014). In particular, over the past three decades UK economic policy had been primarily tailored to the interests of the financial sector in the City of London (for example, Coutts and Gudgin, 2015; Cumbers, 2014; Cuthbert and Cuthbert, 2013; 2014; Konzelmann, 2014). With independence, economic policy could be bespoke and offer some counterweight to the centrality of prevailing UK policy within the context of continuing EU membership.

This is an intimation of a potential departure from mainstream reasoning as it is suggestive of the relationship between economic policy and political sovereignty and power, and raises the possibility of significant institutional reconfiguration. Yet there is a tension between this narrative and the desire for mainstream legitimacy through the fiscal responsibility and credibility tropes. The influential Fiscal Commission established by the Scottish Government was fairly typical.⁷ For instance, The Commission continually drew upon mainstream terminology regarding "fiscal sustainability", "policy credibility", and the desirability of an independent central bank:

"Fiscal frameworks require careful management of public sector deficits and debt. A transparent framework which delivers market confidence can also ensure a government's borrowing costs are minimised" (2013: 86).

That said, the Commission was also explicit in acknowledging evolutionary change, and on this basis advocated a flexible macroeconomic framework.

3.3 "Better Together"

Mainstream economic reasoning was more unequivocally at the core of the "Better Together" campaign. Notably, its economic case against independence was concentrated on: risks, uncertainty and instability, public finances, and currency. Typically, the campaign emphasised the uncertainties and costs of, and impediments to independence, all of which would weaken public finances and risk growth and prosperity (Darling, 2012A). In his speech at the launch of the "Better Together" campaign, former Chancellor Alistair Darling argued:

"Times are really tough at home. And really *uncertain*, especially in Europe where all the problems of a currency union are laid bare. We need more growth, more jobs and a more prosperous Scotland. These are the issues that Scotland should be focusing on. The last things we need are the new areas of *uncertainty*, *instability* and division that separation will involve. (Darling, 2012B, emphases added).

The more positive case for the union was made in relation to economies of scale and the benefits of resource sharing, risk-pooling and size of a state territory over the smaller entity

⁷ Fiscal Commission members included Andrew Hughes Hallett, John Kay, James Mirrlees, and Joseph Stiglitz.

(Treasury, 2013). Much emphasis was also placed on the notion that Scotland, as the most devolved region within the UK, enjoyed the “best of both worlds”: extensive existing powers (with further devolution promised) within the “safety” of a larger economy (Treasury, 2013).

For the sake of brevity, we note four examples of the “Better Together” campaign enlisting particular economic arguments from academic sources, the financial sector, and the Treasury. The Treasury’s (2014) analysis of the Scottish Government’s preferred option of a currency union between a cUK and an iScotland, formed a key plank of the “Better Together” campaign (hereon the Treasury ‘currency view’). Controversially, Sir Nicholas Macpherson, the then Permanent Secretary (the most senior civil servant) to the Treasury, published advice to the then Chancellor, George Osborne, that it would be economically damaging for the cUK to join a Sterling union with an iScotland. Macpherson (2014) and the Treasury (2014) argued that the risks to the cUK were too great. The basis of the case was that the financial sector in Scotland was too large relative to an iScotland’s national income. This would imply that an iScotland could not underwrite its financial sector, and therefore cUK would have to assume the role. Moreover, the Treasury estimated that there would be a divergence in fiscal trajectories, partly based on its appraisal of Scottish government public expenditure commitments and projected hydro-carbon tax revenues. On this basis Macpherson (2014: 2) asserted :

“If the dashing of Scottish expectations were perpetually blamed on continuing UK intransigence within the currency union, relations between the nations of these islands would deteriorate, putting intolerable pressure on the currency union”.

This view resonated with Ronald MacDonald’s (2014) academic analysis. He contended that a currency union would be subject to the disadvantages of a fixed exchange rate regime, such as, lacking the fiscal flexibility to adapt to a change in competitiveness. Moreover, as iScotland would be a substantial oil exporter, this would push the exchange rate in the opposite direction from the cUK, again increasing tensions within the currency union. MacDonald also dismissed “sterlingisation” (where iScotland would continue to use sterling, but without a central bank) on largely the same basis. He was also highly sceptical of a Scottish currency, surmising that it would be subject to extensive volatility, and potentially significant establishment costs, forcing an iScotland to acquire substantial currency reserves.

Some academic economists (Clark, *et al.*, 2014) also briefly outlined more general concerns, and forecast higher food prices; greater fiscal austerity (linked to the IFS Report referred to earlier); impediments to free trade (and hence higher costs); diminished credit rating (higher borrowing costs); oil price volatility; “set-up costs” of the new state – estimated at £2 billion by Alexander (2014),⁸ and the departure of financial institutions. The Chief Economist at Deutsche Bank, David Folkerts-Landau went further in comparing a “Yes” vote to the errors that led to the 1930s’ depression (<http://www.bbc.co.uk/news/business-29189320>).

In the main, economists endeavoured to provide what they doubtless felt was objective scientific opinion. Yet the hyperbole of some contributions does not fit easily with such an assessment. We now turn to an examination of how mainstream economics structures arguments relating to policy questions, and then focus on the nature of the economic discourse marshalled by both sides of the 2014 referendum campaign.

4. Mainstream economics and policy questions

⁸ In contrast, Dunleavy, *et al* (2014) estimated the costs of establishing a Scottish state at between £150 and £200 million, noting that transition costs would also be sensitive to negotiations between the two governments.

As economics emerged from political economy in the late nineteenth and early twentieth centuries, the position of the positive-normative dichotomy was solidified by at least three major factors. First, there was a positivist turn in science in the early part of the twentieth century, which Terence Hutchison imported into economics. Second, following this, Lionel Robbins's and Talcott Parsons's demarcation between economics and sociology became hugely influential, especially in the teaching of economics, such that economics became the science of choice presuming given ends (for example, Hodgson, 2001). Third, Milton Friedman (1953) provided some (questionable) justification for the pursuit of "as if" instrumental reasoning that is taken to be the appropriate scientific method. Friedman's instrumentalism attempted to render irrelevant a theory's truth (Caldwell, 1994), and hence any consideration of values was immaterial in the quest for predictive power. These influences fostered the establishment and maintenance of monism based on closed-system thinking in economics.

Of course, the facts-value dichotomy has been subject to sustained critique in much of philosophy (for example, Putnam, 2002). Yet it retains a foothold in standard economics. Nonetheless, the morphology of (standard) economics reveals particular values and moral philosophy, rooted in hedonism and utilitarianism. However, this formulation leads to a particular world-view (Boulding, 1969; Myrdal, 1969). Accordingly, Boulding (1969) and Myrdal (1969) famously proposed that economists should explicitly state their value judgements and underlying philosophy.

More recently, a wide range of commentators have argued that contemporary standard economics is associated with certain policies and approaches to policy. For instance, Zuidhof (2014) is among those who argue that "thinking like an economist" is framed by, and infused with neoliberal ideology since economics textbooks tend to view the market in naturalistic terms (also Boulding, 1969; Myrdal, 1969). Mirowski (2013) also draws attention to the relationship between neoliberalism and the pre-crisis macroeconomic consensus. More generally, Earle, *et al.* (2017) argue that there is a "democratic deficit" in that economics has become a language amendable only to a few. The authors echo Keynes (1993 [1936]) and DeMartino (2011) in contending that economics impacts on all areas of life, but in so doing it only offers a narrow basis of logic, "numerical alchemy". Consequently, by "pretending" the subject is the physics of the social world, economics has become de-democratised.

The purpose here is to examine these inadequacies in the context of a substantial constitutional debate. Of particular note is the mainstream economic exposition of equilibrium as *natural*; by implication anything disruptive of this is undesirable. Understood within the mainstream as a rise in quantifiable risk, uncertainty is potentially destabilising, challenging of equilibrium, but something which can be analysed in terms of stochastic processes. On the other hand, uncertainty understood as *unquantifiable* risk (following Keynes and Knight) can only be represented, within a closed-system model, as an exogenous shock (Dow, 2015). Therefore, far from being analysed by economists as an intrinsic feature of dynamic, evolving (capitalist) economies, uncertainty is regarded as something extrinsic and hence undesirable and, critically, beyond analysis. A political economy approach, by contrast, attempts to analyse the nature and consequences of dynamic change on institutions, social structures and behaviour (for example, Hodgson, 2001).

Keynes set out a system for building knowledge under the general conditions of uncertainty which pertain within social systems, setting aside quantifiable risk as a special case; the economy is *unlikely* to present the conditions whereby quantitative precision can present reliable evidence of the truth-value of proposition(s).⁹ In *A Treatise on Probability*, Keynes

⁹ Keynes was an early critic of Tinbergen's development of econometrics, primarily on the grounds that the structures taken to be stable for prediction purposes are rarely so. He argued that the onus was on the econometrician to persuade that the structure underlying relationships being analysed

(2015 [1921]) presented his “weight of argument” approach to establishing knowledge with varying degrees of reliability. In doing so, Keynes may partly reflect a tradition that stretches back to Smith by way of the likes of Hayek and Marshall, and resonates with the pragmatist philosophers, Dewey and Peirce, in that knowledge is argued to be partly socially constructed, and therefore relies on some form of consensus over legitimate questions and evidence. In his *History of Astronomy*, Adam Smith acknowledged that scientific processes of validation appealed to non-scientific sources. Smith’s allusion to science being the construct of the human mind and its imagination, which had to appeal to specific aesthetic principles (Kim, 2012), is an interesting example that invites consideration of argument and values. Indeed, this draws us into the territory of Thomas Kuhn and Imre Lakatos and the methods of science. Space precludes further discussion of this, but perhaps Alfred Marshall’s advocacy that analysis should be based on the real-world resulting in a predilection, “that it is better to be vaguely right than precisely wrong” (see Dow, 2002: 148) captures the essence of the argument¹⁰.

Given the foregoing, uncertainty in theoretical abstraction presents a conundrum. The phenomena or relationships we seek to apprehend and understand remain influenced by the entity from which we are abstracting. On this, Martins (2013) argues that “natural language” is more suitable in the process of abstraction than mathematics in that the former can more readily account for reality (see also, Dow, 2002). For Keynes, classical logic requires certainty as to the truth-value of premises, and therefore has extremely limited applicability. Rather our reasoned grounds for belief must draw on “human logic” (Keynes, 2015 [1921]), an incommensurate set of lines of reasoning, drawing on interpretations of such evidence as is available and applying theoretical perspectives (which necessarily embody a set of values), and intuition. Much of this reasoning and understanding of evidence is socially conditioned, allowing different beliefs within different social groups, and also the scope for discrete shifts in beliefs (for example, Boulding, 1969; Haack, 1995). The more evidence and lines of reasoning point in the direction of a particular conclusion, the more weight is attached to it. Nonetheless, more evidence may reveal the extent of ignorance, thereby reducing weight (as in the onset of crisis) (see Runde 1990, Gerrard, 2003). Inevitably, beliefs involve some degree of uncertainty.¹¹ Moreover, since conflicting beliefs will naturally arise depending on the understanding of evidence and the theoretical approach adopted, Keynes argued that debate was a matter of *convincing* one’s opponent of error rather than *convicting* them of error. Debate is therefore a matter of persuasion and not necessarily proof.

In pursuing a similar line, challenging the idea that there is only one approach to reasoning, Douglas Walton (1990) further refines the concept of argumentation as a dialectical social process conducted in diverse contexts. He states:

“*Argument* is a social and verbal means of trying to resolve, or at least to contend with, a conflict or difference that has arisen or exists between two (or more) parties. An argument necessarily involves a claim that is advanced by at least one of the parties. In an asymmetrical case, one party puts forward a claim, and the other party questions

were sufficiently stable to allow conclusions to be drawn. Yet these conclusions needed to be modified by bringing again to the fore those factors assumed away for the purposes of analysis.

¹⁰ In an interview with the British Academy (2014: 2), Nicholas Stern highlights how Hayek and Popper are among those who attempted to, “explain that the inability to predict is central, not just to the human condition, but also to the way in which economies work and function”. This is of interest in that Stern is a prominent figure in advising governments and international agencies, such as the World Bank and famously led the Stern Report on the economics of climate change. We are grateful to a reviewer for guiding us in this direction.

¹¹ Nonetheless, uncertainty can be managed by institutional change, either as an evolutionary process or as the deliberate actions of government (Dow, 2015).

it. In a symmetrical case, each party has a claim that clashes with the other party's claim. The claim is very often an opinion, or claim that a view is right, but it need not be" (1990: 411, original emphasis).

This implies a typology of contexts of argument, and therefore the need for evidence is relative to the context of the argument. On this, Walton defines four contrasting category pairs: (1) monolectical and dialectical; (2) alethic and epistemic; (3) static and dynamic, and (4) theoretical and practical. Monolectical refers to reasoning by a single individual, whereas dialectical reasoning involves the simultaneous participation of at least two individuals. Alethic reasoning is based on modalities of truth, such as necessity, contingency, or impossibility (for example, Crystal, 1985), whereas epistemic relates to some knowledge base and claims, and therefore the importance of alternative sources and theories that contribute to the growth of knowledge. Static reasoning refers to a set of fixed and unchanging premises, and in contrast, dynamic is where change can occur at each successive stage of reasoning or argument. Theoretical has a cognitive orientation and seeks to establish the truth or falsity of any proposition. Practical refers to goal-directed reasoning that aims to furnish a sensible path of action in a particular context or situation. On this basis, the central facets of mainstream economics correspond to the monolectical, alethic, static and theoretical categories (as in predictive power), whereas a political economy approach appeals to the alternatives in each pairing.

Further, the appropriate style of reasoning will vary with the context of the argumentative dialogue. Walton's distinction between inquiry, critical discussion and debate on the one hand, and expert consultation on the other is most relevant to our analysis. Importantly, standards of evidence vary across, and even within, the context of argument. Indeed, persuasion may not require recourse to evidence, but concern a better appreciation of another's position. Walton's reference to inquiry concerns a situation where "proof" is required; hence evidential standards are comparatively high. Yet even within this dialogue, there is latitude over what standard of evidence is acceptable either to be justificatory and/or persuasive: witness the variability of the legal standard of reasonable doubt.

Through its invocation of a particular type of argument, by its own reasoning, the standard economic approach claims to employ a relatively high-order of empirical evidence, which is almost exclusively quantitative in nature. Yet in practice, such evaluation is rarely entirely definitive at least partly due to the Duhem-Quine (DQ) problem. According to DQ, hypothesis testing is subject to a profound difficulty associated with the conjunction of auxiliary assumptions and *ceteris paribus* clauses. For instance, any of the auxiliary assumptions and clauses may be responsible for test results observed (for example, Hausman, 1992; McMaster and Watkins, 2006).

In policy debate, the standard approach usually commences from theoretical arguments taken to be proven (regardless of DQ), and presuming no structural change, and to focus on forecasts generated by that theory. Mainstream economists adopt a range of argumentative strategies in informal discourse, while presenting arguments in logical positivist form in formal discourse (McCloskey 1983). It is the former, which applies more to policy debate while the latter is the material of academic publications. Nevertheless, Colander (1992) argues that the informal discourse (the art of applied economics) should build on the conclusions of positivist theory, even if their foundation is a closed, static structure, which requires that uncertainty only be treated as a shock. For us, this approach risks incoherence whenever structural change is considered, particularly when it is a question of constitutional change.

5. Missing the point?

In assessing the weight of respective economic arguments in the 2014 referendum campaign, it is worth reflecting on the various participating bodies' instrumental objectives as means to achieving their ultimate goal. The "Yes" campaign probably had the more challenging task in seeking to advocate institutional change, which by its nature is open to contestation around uncertainty. Their argument sought to employ evidence intended to reassure and build confidence. As we noted in 3.1, above this concentrated on narrow forecasts, such as GDP comparisons and estimates of public finances extrapolating from the existing institutional structure. "Better Together" also employed simple (and easy to apprehend) forecasts relating to personal finances. Their intention was not to reassure, but to underscore the alleged benefits of the *status quo* and contrast them with the cost of change and the uncertainty, and hence instability anticipated from constitutional change treated as a source of unanalysable unknowns. Since risk was never quantified during the debate (for good reason according to a Keynesian view of knowledge), the terms 'risk' and 'uncertainty' tended to be used interchangeably as indicating unquantifiable (and unanalysable) risk. And yet the theoretical underpinnings of both sides did not include unquantifiable risk other than, if at all, as a shock. While both campaigns explicitly linked the constitution with the economy, this posed a particular challenge for standard economics, with its under-developed analysis of institutions and constitutional affairs. This is especially the case since the "rules of the game" are conceived only as a series of constraints (Hodgson, 2013), and changing these rules only as a source of disequilibrium.

Drawing on Walton's categories, the "Yes" campaign's economic-oriented exposition may be profiled as both alethic and epistemic. For example, evidence on what were considered to be more successful small, open economies, e.g. a Nordic model, was interpreted to imply that the principal difference from Scotland lay in their greater political autonomy. "Yes" also assembled practical arguments for a change in resource allocation, such as maintaining and enhancing comprehensive health and social services as opposed to renewing the Trident nuclear weapons system. There was thus a dynamic dimension in that the institutional change associated with independence would afford the prospect of pursuing an alternative system of values. Emotionally this resonated with hope and optimism, and uncertainty understood in a positive light.¹²

"Better Together" also drew upon alethic argumentation in the form of warnings of the vulnerability of an iScotland to global economic forces. The inference was that security from such forces could only be assured by being part of a larger economic entity, which could only be guaranteed by the current constitutional arrangement. Epistemic reasoning included appeals to evidence of more generous per capita public expenditure in Scotland under the *status quo*. Arguably, "Better Together's" concentration on economic insecurity and uncertainty was based on static argumentation, especially relating to then Chancellor Osborne's refusal to countenance a sterling currency union. In short, as independence meant

¹² Definitions of hope centre around outcomes that are perceived as desirable or consistent with an individual's aims (for example, Lazarus, 1991; Walker, 2006). Given its future orientation, hope can allude to possible, if not entirely expected, outcomes that are obviously subject to inherent uncertainty. In her work, Walker (2006) discusses hope as having both emotional and ethical qualities. She argues (2006: 42):

"Hope is both an individual and a social good; more than that, it is an individual and a social necessity. If you want to destroy people, or a people, you can take away those things that show that there is a future they can value".

Thus, hope is entwined with optimism in terms of the latter's hopefulness or confidence about a future state, and, following Walker, it is intricately associated with fear: fear in the form of a threat to being in a position to hope. Such arguments demonstrate some parallels with Wrenn's (2014) analysis of fear and neoliberalism.

change, it was a threat to prosperity. In economic terms, independence could be viewed as a disequilibrating force. Certainty required equilibrium. The alethic and static aspects reflecting the alleged impossibility of an iScotland attaining the same levels of prosperity and economic security as the UK. The modality of “truth” in this was that prosperity was conditional on being a part of the UK, and static in that the premises of the argument were fixed.

The work of some academic economists and the Treasury, in particular, further demonstrated interesting argumentation properties, as did the IFS report. For example, MacDonald’s (2014) criticism of the proposed currency union between an iScotland and cUK to some degree resonates with Walton’s alethic, static, and theoretical aspects. Thus, much in the same way as the Paretian preference for the *status quo*, both MacDonald and the Treasury ‘currency view’ appear to (tacitly) assume that the currently configured UK represents an optimal currency area. The alethic dimension of MacDonald’s and the Treasury’s argument seems to emphasise the impossibility of optimality beyond the current arrangement. Yet by the terms of the criteria, this seems tautological. Moreover, at an epistemic level the argument appears to be further flawed. As we argue below, the UK does not meet optimal currency area conditions.¹³

There is evidence in the history of the concept that the “bias of authors” and “political interests” have significant roles in developing theory and policy advice (Masini, 2014). In tracing the evolution of optimal currency area theory, Masini uses EU monetary integration to identify two basic positions: what he terms “exogenous” optimisation, where the criteria of optimality are exogenous to the decision to construct a currency zone through, for example, a currency union. By contrast, the “endogenous” view, mainly pursued by those advocating EU monetary union, argues that the political apparatus of a union will set in motion processes that result in an optimal currency area. Crucial in this is the role of a fiscal authority to ensure rebalancing throughout the union. From our perspective, the exogenous view, usually pursued by US sceptics of EU monetary integration (Masini, 2014), is that it is based on a static representation of whether a country’s circumstances are consistent with optimality conditions. By contrast, the endogenous position is more sensitive to the possibility of institutional and political changes fostering a particular evolutionary trajectory, akin to path creation. Clearly, considering the recent history of the Euro, the endogenous position is markedly optimistic in tone, whereas the exogenous is more sceptical. Yet by recognising the importance of institutional arrangements as potentially facilitating and creative, the endogenous perspective resonates with a more political-economy orientation. By contrast, the exogenous stance does not afford this level of importance to institutions, which may be seen only as constraints.

If an optimal currency area is as sensitive to an underpinning institutional framework as the endogenous view may suppose, then there is an epistemic basis in arguing that the UK cannot currently be regarded as an optimal currency zone. Yet, as noted, much of the referendum debate (on both sides) was conducted on the tacit assumption that it was (and is). Most notably, the UK has pronounced regional imbalances, among the largest in the EU in terms of earnings, wealth, and productivity (for example, Cumbers, 2014; Cuthbert, 2013). The economic geography is dominated by the financial sector concentrated in London, which skews asset values – especially house prices – and macroeconomic policy. This is not effectively compensated by regional policy or transfer payments, which have been eroded. Indeed, financial deregulation since the 1980s has reinforced the spatial divide with industrial and regional policy further marginalised, highlighting longer-term trends in favour of monetary

¹³ The criteria include; mobile labour and capital; wage/price flexibility counteracting transfer payments to address mismatching labour/capital flows and hence ensure regional balance; similar business cycles; similar productivity levels; and similar economic structures to ensure that monetary policy changes have similar impacts across the currency zone.

policy premised upon macroeconomic stability over a more developmentalist economic approach.

Given this, MacDonald's exogenous view of optimal currency areas may have an overstated "weight of argument". Moreover, the Treasury 'currency view', was subject to profound problems in that the claims made were unsubstantiated, misleading, or illogical (Young, 2014). Young, for example, also contends that the Treasury argument that the banking sector in Scotland is too large is based on mistaken reasoning that banks, such as the Royal Bank of Scotland (RBS) and Halifax Bank of Scotland (HBOS), would remain registered in an iScotland, exposing iScotland to disproportionate bail-out risk. However, due to wider bank agglomeration and concentration, these banks were no longer *de facto* headquartered in Scotland. Indeed, the Treasury's case was potentially inconsistent in that its various scenarios were predicated on different legal frameworks; yet the report and Macpherson's (2014) letter presented their case on the assumption of cumulative arguments assuming the same legal context (Young, 2014). In short:

"The Treasury claims are invalidated, not by errors of fact, but errors of logic ... only subtle logical error could have led [the] Treasury to claim ... that past risky behaviour by investment bankers in London, inadequately supervised by the Bank of England, somehow disqualifies an independent Scotland to be a currency partner of England (sic)" (Young, 2014: 1)

Further:

"Since the Treasury failed to substantiate any claim in any [part] of [its report], there is no substantive point here ... [L]oose analysis and misleading exposition have diverted the debate on a grave constitutional matter onto non-issues" (Young, 2014: 16).

The Treasury's neglect of the institutional arrangements underpinning its analysis reflects a broader issue of standard mainstream economic framing.

In a similar vein, the IFS analysis (Johnson and Phillips 2012) of the future fiscal position of an iScotland was underpinned by mainstream assumptions, including; Ricardian equivalence, key elements assumed to be constant (for example, no changes in the policy environment), and policy "credibility". In effect, a model with well-defined and measurable (and hence certain) relationships between its variables, was used to attempt to capture a more open-ended set of economic realities. While the IFS prospectus does identify possible patterns, as *partial* contributions to policy discussion, the weight of their argument is limited by the static basis of their reasoning.

Finally, Clark, *et al's* (2014) letter presents a rhetorical flourish in arguing that independence would *without doubt* cause substantially adverse economic circumstances. While a letter to a tabloid newspaper should not be judged in the same way as academic work, the authors appear to dispense with any requirement to buttress their headline-grabbing narrative. Clark, *et al* (2014) is not based on strong scientific evidence; it is mainly speculative following from specific assumptions, such as the cUK's continuing membership of the EU, and an iScotland's ejection from it with resulting barriers to trade. Moreover, while Clark, *et al* argue, perhaps not unreasonably that an iScotland's borrowing costs would rise relative to cUK's, should cUK not agree to a currency union, the assertion that an iScotland may not have the capacity to borrow on international markets is unsupported. This is, at best, highly speculative and belies the many examples of smaller European states. Indeed, Clark, *et al* are subject to the strong form of DQ in making *general* claims on the basis of a host of contestable auxiliary assumptions. Of course, strong DQ may also be applied to the more strident claims on the other side of the campaign divide; the issue is over arguments offered as expert academic advice. The

important point about acknowledging DQ is that – as inferred by Kay – it urges caution in articulating predictions and interpreting evidence.

6. Political economy to the rescue?

By confining economic argument to an approach founded on a quest for mathematical virtual-world solutions, both sides in the referendum debate presented circumscribed perspectives that overlooked a series of issues that an approach more sensitive to institutional dynamics would not. Young's (2014) observation about the Treasury inappropriately emphasising "non-issues" is a case in point. As argued in section 4, above, mainstream economics is methodologically aligned to Walton's notion of theoretical reasoning in that it seeks to establish the validity of a proposition on the basis of "what we know" (Walton, 1990: 405). There is no scope for uncertainty in such a framing. By-and-large, in its quest for mathematical tractability and veneer of value neutrality, standard economics appears to depart from Smith's argument that non-scientific factors partly shape science. Influenced by Friedman's (1953) instrumentalism, mainstream economic reasoning veers towards abandoning a search for explanation, restricting its analytical compass to predictive performance of surface level phenomena in formal closed system models. By contrast, a political economy approach is more open to the importance of uncertainty in socio-economic phenomena, and therefore, according to Walton's delineation of reasoning, is more practical in orientation. In effect, such reasoning concerns the practicality and prudence of a particular course of action, explicitly acknowledging change, uncertainty, and incompleteness of knowledge. Therefore, choice reflects specific objectives and the limited knowledge of one's circumstances (Walton, 1990). Moreover, such an orientation is responsive to the uncertainties associated with creativity, innovation, and the imagination. The standard account of allocative efficiency and equilibrium, for example, cannot encompass any of those factors intrinsic to human society. Instead, mainstream modelling, at least as it relates to the case we analyse here, rests on a sterile, unchanging society with a fixed institutional structure. The possibility of endogenous change is assumed away, as in the IFS model. Any disturbance to prevailing equilibrium is necessarily viewed as a shock, and therefore with suspicion.

"Better Together" employed mainstream economic reasoning with its framing of uncertainty versus certainty, where uncertainty is analysed as an exogenous shock that causes instability – a reason for fear. The predominant thrust of the arguments opposing independence juxtaposed the uncertainty and instability of change against the presumed stability of the British economy without acknowledgement of other potential sources of instability. For instance, the relative size of the financial sector in Britain (see, for example Hudson, 2015 on the destabilising properties of financialised economies); extensive income and wealth inequalities (see, for example, Atkinson, 2015, and Galbraith, 2012 on inequality and instability), and the possibilities of rescinding EU membership and the European single market. The argument for the union was articulated in such a way as to convey an exaggerated certainty (of economic security for individuals, households, and firms).

Many of the specific economic arguments, especially those employed by "Better Together", were not based on a strong scientific evidence base. In particular, the discussions around resource pooling and sharing were inadequately specified. There would be substantive differences in "pooling and sharing" between the *status quo* and a more devolved structure, as promised in a tabloid newspaper late in the campaign by the parties comprising "Better Together" (*Daily Record*, 2014), or indeed a federal structure. The "Better Together" campaign failed to acknowledge that "pooling and sharing" necessarily invokes institutional arrangements that may be flexible in nature and involve some sharing of sovereignty, as in the EU, and even bodies, such as the North Atlantic Treaty Organization (NATO). Rather, during the campaign, the issue was addressed in terms of monetary union requiring (unspecified) political union in order to facilitate more effective and credible policy (for

example, MacDonald's work refers to this area in general terms). There was not, as far as we can establish, any analysis of institutional frameworks, or consideration of co-operation between states on a host of areas. This was a missed opportunity.

By contrast, a more political economy framing, sensitive to the importance of historical contingencies, institutions and evolutionary change, uncertainty, and democracy and power, offers a prospective that is less enervated in scope. Earlier we argued that political economy demonstrates some affinity to Walton's (1990) notions of epistemic, dynamic, practical reasoning, offering a potentially more informative basis for economic analysis and argumentation in the context of constitutional and institutional change. A contrasting approach is exemplified by MacDonald's analysis of the proposed currency union between an iScotland and cUK; he presents his argument without reference to institutional change in terms of democratic and power relations – especially power as a capacity (Lukes, 2005). Weight of argument is strengthened by different strands of reasoning appropriate to the subject matter, which here includes institutional analysis.

Thorstein Veblen's emphasis on institutions and progressive change provides guidance for such analysis. For Veblen, institutions - as social-rule systems - have the power to shape or mould individuals' aspirations, propensities, beliefs, and capacities (Hodgson, 2004, 2013; Veblen, [1899] 1994). Accordingly, an insightful approach to considering the economics of constitutional change is to frame it in terms of an institutional re-configuration, with overt references to democracy and power. Mainstream economics is devoid of references to democracy beyond choice as an algorithm in constrained optimisation problems, as in consumer sovereignty, or welfare economics under the auspices of the Pareto criterion.

Joseph Schumpeter offers economists a more insightful foundation into the analysis of constitutional change than Pareto's welfare dictum:

“To try to force the people to embrace something that is believed to be good and glorious but which they do not actually want – even though they may be expected to like it when they experience its results – is the very hall mark of anti-democratic belief” (Schumpeter, 2005 [1943]: 237)

Here Schumpeter urges the expert to be respectful of democratic belief in articulating arguments that may inform such debate. This requires some openness about the nature of reasoning and argumentation in economics, which is offered by a political economy tradition that does *not* seek to masquerade as an entirely value-free and dispassionate science. Political economy typically centres on issues of the relationship between the constitution, institutional configurations, and therefore power and democracy and the economy.

7. A brief conclusion

So what are we to make of the economics contribution to the 2014 referendum campaign? As we noted in section 3, above, in one sense we agree with Kay's (2013: 7) claim that Scottish independence is “not primarily an economic issue”, at least as we understand *mainstream* economics. For us, it is most certainly a *political economy* issue, and one in which a political economy orientation offers insight by virtue of its intrinsic style of reasoning and argumentation. It is a great pity, but no great surprise, that economics' analytical involvement in the campaign was confined to discrete narrow issues of personal and public financial prospects, and currency, which were informed by a restrictive notion of equilibrium reasoning from which it was straightforward to project potentially exaggerated, misleading, and unwarranted claims. From the unionist perspective, the case of “pooling and sharing” came closest to engaging in what was arguably the *raison d'être* of the referendum. However, this was again informed by limited reasoning predicated on associating the *status quo* with

certainty and hence security. For those advocating political independence, there was a tendency to over-rely on mainstream economic argumentation, such as in reference to public finance, and indeed the Scottish government's proposed currency union. In effect, given the limited scope within this framework for discussing more radical institutional change, we could argue that the Scottish government campaigned for the more limited constitutional change of fiscal federalism. But our argument here is that the political economy approach would have allowed *both* sides to engage fully with issues of constitutional change.

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