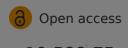


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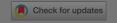
Articles

# From performativity to political economy: index investing, ETFs and asset manager capitalism

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# **ABSTRACT**

As a discipline, political economy has often been reluctant to engage with the details of market devices and practices. This weakens the microfoundations of its analysis of capitalist macro-dynamics and cedes unnecessarily large stretches of intellectual territory to economics. The performativity approach developed by Michel Callon offers a

theoretical way out of this dual dilemma. It allows political economists to study 'the

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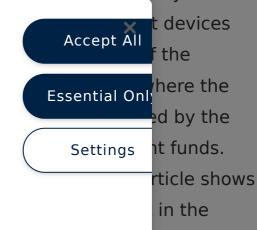
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the recently resurgent notion that the two approaches are incompatible, this article insists that the micro-sociological study of market devices fosters the analytical capacity of political economy by opening up new perspectives on the macro-dynamics of contemporary capitalism. In the case at hand, it brings into sharp relief the contours of the emerging constellation of 'asset manager capitalism'.

Q KEYWORDS: Performativity financialisation investment chain passive investing exchange-traded funds (ETFs) asset manager capitalism patient capital

# Introduction: let's study the economy!

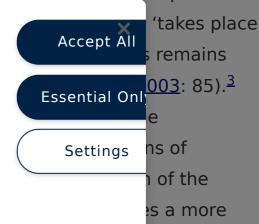
After a brief period of doubt following the global financial crisis of 2008–9, economics seems to have consolidated its spot in the sun at the top of the 'implicit pecking order among the social sciences' (Fourcade et al. 2015: 89). 'The Superiority of Economists' documented by Fourcade, Ollion and Algan lends new urgency to the long-standing question of how political economy should position itself vis-à-vis economics. Responding to Fourcade et al., some economists have offered a simple explanation for their discipline's political influence – policy-makers prefer economists' advice on economic issues 'probably because ... drumroll ... economics is the discipline that studies the economy' (Smith 2014; original emphasis). Although polemical, statements such as this touch upon a sensitive point: precisely when 'the economic' attained hegemonic status in human affairs, 'Parsons' Pact' made non-economist social scientists surrender the study of the economy to economics (Stark 2009: 7), suffering an intellectual land grab as a result. This article argues that the reason why political economy has since been less successful than economic sociology in reclaiming some of that lost territory lies in the former's adherence to a narrow conception of the political.

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capitalism' feature not only as epiphenomena, but as sites of politics. In a world in which markets 'increasingly set the conditions under which social institutions can develop and function' (Beckert and Streeck 2008: 7), the tendency to analytically prioritise the actions of policy-makers over those of market participants is problematic. Markets and market devices matter for political economy, not only as participants in or objects of political struggles over (de-)regulation, but as sites of politics in their own right.

A series of recent contributions have called on political economists to engage more directly with market structures and dynamics, especially in the financial sector (Drezner and McNamara 2013, Hardie et al. 2013, Green and Hay 2014, Seabrooke and Wigan 2014, Thiemann 2014). The current article argues that the performativity approach offers a promising framework for political economists to study the economy directly. The argument is empirically illustrated through a study of the part played by financial innovation, in the form of exchange-traded funds (ETFs), in the 'performation' of the 'passive investor'. Crucially, the analysis highlights the connection between these micro-level market practices and the ongoing transformation of the investment industry, and indeed of the dynamics of financialised capitalism more generally. In making this link, the article addresses the primary objection against the microsociological approach pioneered by Michel Callon and Bruno Latour and subsequently applied to finance by MacKenzie and others - the objection that obliviousness to the structural features of capitalism and secret collusion with economists render the performativity approach incompatible with the project of a critical political economy (Roberts 2012, Noys 2014, Koddenbrock 2015). Drawing on arguments recently advanced in economic sociology (Beckert 2013b) and economic geography (Christophers 2014), this article conceptualises practices at the micro-level of markets and the political economy of capitalism as too inextricably linked for their analysis to be disciplinary lines. The empirical challenge compartr is to show

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and macro levels by exploring the consequences of the performative transformation of investment practices for the broader political economy of what it describes as 'asset manager capitalism'. In doing so, it complements important recent research on the pension fund industry (Naczyk 2013, McCarthy 2014) and reiterates the call for a stronger mutual engagement between comparative political economy and the financialisation literature (cf. Estevez-Abe 2001).

The argument is developed over three sections. In order to show why political economy has much to gain from a deeper engagement with the performativity approach, the first section offers a systematic reconstruction of Callon's work on performativity, placing particular emphasis on the processual nature of performativity and the questions of causality and agency. The second section outlines the materialist critique of the performativity approach, but rejects it on the grounds that practices at the micro-level of market devices are key to the understanding of the macro-dynamics of capitalism. The third section substantiates this argument using an empirical study of the performative transformation of the investment industry as a result of the rise of passive investing strategies. The conclusion discusses the theoretical lessons from the case study and, using the topical example of 'patient capital', indicates how a micro-funded understanding of the investment chain opens up new perspectives on the broader political economy of asset manager capitalism.

# What it means to say that economics is performative

Challenging the then-dominant approach in economic sociology, Callon emphasised that instead of being embedded in society, the economy was embedded in economics, which 'performs, shapes and formats the economy, rather than observing how it

functions' (Callon 1008h: 2) While Callon's work was widely influential its impact was

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In the program that I propose the idea that economics can have an influence on behaviours or worldviews is meaningless. I don't think that norms, values and conceptions of the world can be made autonomous in order to establish them as intermediary variables through which abstract economic theories could act upon real economic agents. My question concerns the production of agencies and the spaces in which they circulate and meet. (Callon 2005: 13)

In other words, the hallmark of Callon's performative conception of the economic is the collapsing of the epistemological distinction between ideational and material structures. In political economy, this insight has been fruitfully applied to the performative constitution of both professional (De Goede 2005, Clarke 2012) and everyday financial spaces, imaginaries and subject positions (Aitken 2007, Langley 2010). Crucially, however, these pioneering contributions have mainly focused on the cultural and political performance of financial activities and identities, rather than on the devices and practices that create and sustain those markets on the – actual or virtual – trading floor. If 'contemporary political economy ... treats the economy as a black box' (Streeck 2011: 138), the performativity literature has peeked under the lid while leaving the box mostly intact. The purpose of the following overview is to show that Callon's approach offers a framework for political economists to fully open the box and study the economy directly.<sup>6</sup>

Saving Callon from Austin: the genealogy of Callonian performativity

'Saving Austin from MacKenzie' is the title of a recent critique of the 'sociological performativists' by Mäki (2013). Contrary to Mäki's view, this section maintains that it really is MacKenzie and Callon who need saving from Austin. Indeed, MacKenzie was very clear about his theoretical allegiances when he revoked his earlier use of the term 'Austinian performativity' on the grounds that the term 'had the disadvantage of being

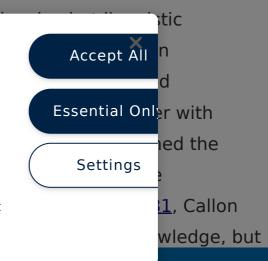
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intellectual genealogy, Callon's subsequent turn to performativity represented not so much a radical theoretical departure than an extension of his earlier work to a 'science' that had not previously been looked at by STS – the academic discipline of economics (Callon, cited Barry et al. <u>2002</u>: 285).

If Callon's intervention was informed by STS and ANT, the intellectual opponent was the 'new economic sociology' and its Durkheimian insistence that homo oeconomicus was 'little but an artificial man of reason', and that economic actors and markets were, like all actors and institutions, embedded in society (Durkheim 1974 [1888], cited Smelser and Swedberg 1994: 11). While the project of criticising and enriching homo oeconomicus stands little chance of formulating a critique of the assumptions of economics 'that has not been expressed somewhere or other by an economist' (Bourdieu 2005: 15), the more serious problem is that it does not allow for the possibility of the 'artificial man of reason' not being a myth but an – in principle – realisable programme of economics. <sup>7</sup> Callon, by contrast, provocatively suggests that 'homo oeconomicus really does exist', and that sociology needs to come to terms with 'his simplicity and poverty' (Callon 1998b: 50).

As a form of calculative agency that exists in the real world, homo oeconomicus cannot, of course, be conceptualised simply as a clever version of homo sapiens. Instead, economic agency takes the form of 'socio-technical agencements' – heterogenous configurations of human and non-human elements that enable or facilitate calculative behaviour (Callon 2007: 320).8 'The economy', then, is the sum of the socio-technical agencements 'that qualify themselves as economic' (Callon 2009: 20). From here, the empirical agenda of the performativity approach is straightforward – identify economic agencements, study the processes through which they are assembled and examine their effects (Çalışkan and Callon 2010: 10). In short, performativity scholars 'recognize economics not as a (misguided) science of capitalism but as its technology, that is, as

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to capture 'the dynamics involved in reconfiguring entities and networks of entities' (Callon, cited Barry et al. 2002: 292, 294). This emphasis on dynamics stands in contrast to a narrow understanding of performativity as a remoulding of economic reality in the image of economic theory, which implies a static comparison of two states of the world. If anything, Callon's emphasis on the processual nature of performativity has increased over the years, as his has language shifted from (dis-)entanglement to 'performation', and, most recently, to 'economization'.

The metaphors of (dis-)entanglement and framing are meant to capture the activities that configure calculative agencies and spaces. Drawing on Erving Goffman, Callon (1998a: 249) defined a frame as a structure that 'establishes a boundary within which interactions ... take place more or less independently of their surrounding context'. To put it simply, this boundary is the result of the disentanglement of certain relations from others, and of the imposition of a frame to keep that separation in place. The subsequent introduction of the notion of 'performation', defined as 'the process whereby socio-technical arrangements are enacted' (Callon 2007: 330), was explicitly intended to clarify that the performativity programme was not about the economy being 'created entirely by economics', but about the 'interventions' that allow knowledge to become effective (2009: 19). This emphasis on intervention and practice became even more pronounced in a pair of articles on 'economization', which placed particular emphasis on the 'processes that constitute the behaviours, organizations, institutions and, more generally, the objects ... qualified ... as "economic" (Çalışkan and Callon 2009: 370, 2010). From this perspective, 'marketizing' activities - activities geared towards the establishment of markets - are but one category of economisation, albeit it a central one.

Crucially, however, framing is never complete. 'Leaks' allow excluded relations to spill over into the frame, or included relations to flow out into the wilderness of non-

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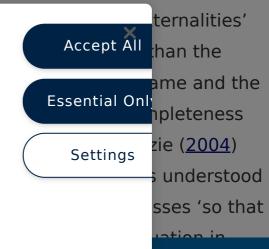
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which the use of an economic model undermines its empirical accuracy (MacKenzie 2006: 19).

## Causal mechanisms and performative agency

In an article that has done much to popularise Callon's work in the management literature, Ferraro et al. (2005) use Robert K. Merton's notion of self-fulfilling prophecies as a synonym for performativity. This is problematic, as it short-circuits the question of the causal mechanisms at play. Defined as 'a false definition of the situation evoking a new behaviour which makes the originally false conception come true' (Merton 1948: 195, original emphasis), the standard example is that of a bank run – even though depositors may be wrong in thinking that an imminent insolvency of the bank puts their savings at risk, their combined cash withdrawals make their originally unfounded fears come true. In contrast to this solely belief-based mechanism, however, performative processes generally require the insertion of economic theories not only into human minds but also their material realisation in the technological infrastructure of markets (MacKenzie 2006: 19, Callon 2007: 323). The case discussed below illustrates this very clearly: Starting from the original academic case for index investing, it took decades before the socio-technical agencement of the 'passive investor' was finally assembled.

The compelling nature of MacKenzie's account of the Black–Scholes–Merton case has arguably contributed much to the (misleading) impression of performativity being about economic theories miraculously coming 'true'. <sup>10</sup>In the article quoted above, Mäki rejects the notion of performativity in the economic sphere on the grounds that 'using an economic model goes well beyond just recognizing it uttered or written down ... Use involves taking further action' (Mäki 2013: 447–8). Yet this argument misses the target – the insight that '[t]he effectiveness of economics rests on what it does, not on what it says' (Mitchell 2007: 245) is not a critique, but an affirmation of the performativity

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cognition; (3) the things which are being valued whose materiality influences the modes of valuation that are possible.

In short, then, 'discussing performativity in the economy is more than discussing the performativity of economics' (Muniesa <u>2014</u>: 28).

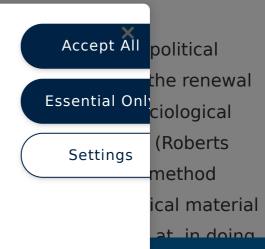
And yet, it remains true that Callon's reluctance to distinguish between 'those who arrange' and the 'things that have been arranged' (Callon 2007: 320) makes it 'hard to fill in the dance card with identifiable protagonists' (Mirowski and Nik-Khah 2007: 203). What should one make, for instance, of Mirowski and Nik-Khah's point that Callon's (2007: 336) 'economists in the wild' often act as 'hired guns'? Re-evaluating an episode that has featured prominently in the performativity literature (Guala 2001), Mirowski and Nik-Khah (2007: 211) ask whether the Federal Communications Commission (FCC) auctions of spectrum licences in the USA were a case of performativity or of economists masking the pecuniary interests of their employers behind 'a fog of learned disputation and superfluous mathematics'. Inclined towards the latter interpretation, they argue that Guala's account neglects the powerful interests of the telecoms, who - partially by employing game theorists - managed to change the auction procedure to the point where it barely still resembled the original congressional mandate given to the FCC. Ultimately, however, Mirowski and Nik-Khah's persuasive argument does not invalidate the performativity approach. As illustrated by the protracted performative effects of economic arguments in favour of passive investing, an economic innovation is never self-performing – if it fails to 'muster enough institutional and political support' it may have no performative effects at all (Fourcade 2011: 1724-5).

# Performativity and the interdisciplinary project of a critical and microfounded political economy

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according to this point of view, 'are refractions of, and fold into, abstract and immanent capitalist processes' (Roberts 2012: 36). In other words, the focus on the 'concrete and contingent' obscures the tendency of the real historical constellation of capitalism to impose its 'necessary' logic and contradictions on society. It is futile to study the configuration of socio-technical agencements as long as alternative configurations do not change the underlying model of capitalist accumulation.

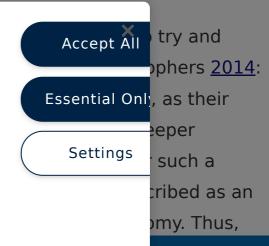
One does not have to take at face value the rhetorical bonmots that capitalism 'does not exist' (Latour 1993: 173) except as 'an invention of anti-capitalists' (Callon, cited Barry et al. 2002: 297) in order to agree with the critics that '[c]apitalism as a historically specific social system of accumulation does not ... figure in Callon's narrative' (Roberts 2012: 46). Yet it would be premature to jump to the conclusion that the micro-focus of ANT is fundamentally incompatible with the study of the macro-conflicts that are the domain of political economy. Indeed, Callon has argued that it was precisely the non-homogeneity of capitalism – well-established in the critical political economy literature (Nölke and Vliegenthart 2009, Bruff 2011, Jessop 2014) – that underpins the critical potential of his approach:

If you accept the diversity of what is usually called capitalism, you are led to recognize that in some markets you have constant discussions or negotiations about ethical or political questions. The manner in which answers are found differs from one market to another one, from one country to another country and so on. So describing capitalism, even for the purposes of criticism, as something which is homogeneous is a way of maintaining this idea of the impossibility of social actors to act on the organization of economic activities because it implies that there is simply a choice between completely destroying the organization of economic activities or accepting them as a whole. (Callon, cited Barry et al. 2002: 297)

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Beckert (2013b: 325) has emphasised that in order to 'comprehend the "expansive dynamism of capitalism", one needs an understanding of the micro processes underlying macro outcomes'. And while the sociology and social psychology of actors' decision-making processes under conditions of uncertainty constitute one pillar of this microfoundation (Beckert 2013a, Braun 2015, Chong and Tuckett 2015), the analysis of the performative constitution of the contexts in which such decision-making occurs – namely markets – constitutes a necessary second pillar. Economic geographer Jamie Peck, for instance, calls for the 'still-disarticulated network of small-e economic heterodoxies' to move on from the critique of economics to developing 'positive intellectual programs' that aim to contribute directly to the study of economies, suggesting that the notion of 'heterogeneous markets' may serve as an analytical focal point for the coordination of these efforts (Peck 2012: 114, 128). The idea that markets differ, geographically and in other ways, is at the heart of Christophers' (2014: 12) recent call for a mutual engagement between political economy and what he calls ""techno-cultural" approaches to the economy'.

To sum up the argument so far, a micro-sociological focus on socio-technical agencements is relevant because the diversity of certain (key) markets underpins, and interacts with, the diversity of capitalism, which has long been at the centre of political economy. Therefore, to the extent that they view some varieties as more desirable/acceptable than others, political economists will benefit from studying 'the implications of contemporary market dynamics for the laws of motion of capital' (Christophers 2014: 17). In order to make the most convincing case for a Callonian microfoundation of political economy, the remainder of this article focuses on the investment industry as the machinery powering this 'motion of capital'.

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the argument that the micro-analysis of markets and the study of the political economy of capitalism complement rather than contradict one another.

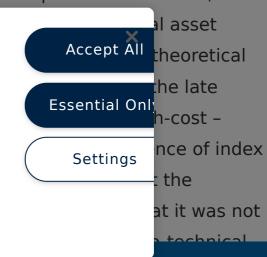
Traditionally, the business model of the investment industry is built on investors' willingness to pay for 'active' asset managers to 'beat the market' by selecting outperforming stocks and bonds. 11 Roughly since the turn of the century, however, the share of 'passive' investment mandates has been growing rapidly. While no investment strategy can ever by 100 per cent passive - any index represents an ultimately arbitrary subset of the market portfolio - passive investment mandates are defined here as those that aim to track, rather than to beat, the performance of a benchmark index. Passive (or index) investing has surprisingly only become a significant phenomenon guite recently. According to data from the Investment Company Institute (2000: 14), total index funds assets stood at only \$3 billion in 1990, compared to total mutual fund assets of almost \$1 trillion. Although growing rapidly over the ensuing decade, in 1999 \$383 billion in index fund assets still accounted for no more than 5.5 per cent of US mutual fund assets. It was only in the subsequent decade that passively managed capital reached a significant proportion of total assets. Towers Watson (2014) reports that the largest fund managers saw their passive assets grow at an average annual rate of almost 14 per cent between 2003 and 2013, compared to overall asset growth for the 500 largest fund managers of only six per cent. As of 2013, capital worth \$14 trillion is managed passively, accounting for almost one-fifth of global assets under management. 12 Recent high-profile cases that clearly illustrate this trend include two of the world's largest public sector pension funds, CalPERS (California) and PFZW (Netherlands), withdrawing their entire hedge fund allocations – \$4 billion and €4.2 billion, respectively - citing high fees as the primary reason (Financial Times 2014, 2015a).

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agencement of the 'passive investor' that the transformation of the investment industry into a low cost, 'universal owner' system really gained purchase.  $\frac{13}{2}$ 

Extracting (analytical) value from the investment chain: the central role of asset managers and the puzzling persistence of active investment strategies

Political economists are accustomed to approaching the capital market from a production-centred perspective, that is, as a market in which firms compete for capital to finance their activities. <sup>14</sup> While suitable for the study of the relationships between varieties of capital markets and other economic institutions (Hall and Soskice 2001), a birds-eye view of the interactions between firms and investors arguably obscures the 'microfoundations of financialization' (Watson 2009) – especially that segment of the capital market in which intermediaries compete for and invest other people's money. For the purpose of the present argument, the key distinction is between two types of intermediaries – institutional investors, such as insurers, mutual and pension funds, and professional asset managers, such as hedge funds, the wealth management arms of large international banks, and giant asset managers like BlackRock or PIMCO (IMF 2015: 94). This subdivision of the investment industry into two categories of intermediaries – although not always clear-cut in practice – is crucial for the present argument.

In the words of Mehrling (2005: 59), the rise of institutional investors represented '[t]he most significant development in financial markets in the two decades after World War II'. Today, assets under management with institutional investors continue to grow not only as a result of the growing number and wealth of 'high net-worth individuals', but primarily because the global push for pension privatisation, increased life expectancy, and income growth in emerging economies fuel the growth of pension savings. In the member countries of the Organisation for Economic Co-operation and Development

(OECD), pension funds held a total of \$24.7 trillion in assets in 2013, which accounted

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investment chain. Instead of investing their clients' capital directly, they place large parts of it (the ratios vary between and within countries) with asset management firms. As of the end of 2013, global assets under management at the 500 largest asset managers stood at \$76.5 trillion, 41 per cent of which were concentrated in the 20 largest firms (Towers Watson 2014). With asset managers now 'the dominant players in the investment chain' in the words of one leading voice (Kay 2012: 11), the Chief Economist of the Bank of England suggests that the world has entered 'the age of asset management' (Haldane 2014). Because this additional layer of intermediation in the investment chain tends to be eclipsed by the term 'pension fund capitalism', for the purpose of the present argument 'asset manager capitalism' makes for a more fitting descriptor. 15

The existence and business model of asset management is important due to what John Bogle, founder of Vanguard and life-long advocate of indexing, calls the 'the elemental arithmetic of investing': 'Gross return in the financial markets, minus the costs of the system, equals the net return actually delivered to investors' (Bogle 2008: 98). Even if the fees charged by pensions funds are low, the fees charged by active asset managers, which add to the 'costs of the system', are not. 16 According to one frequently cited study for the period from 1980 to 2006, 'investors spend 0.67 per cent of the value of all NYSE, Amex, and NASDAQ stocks each year trying to beat the market', which by a 'conservative estimate' amounts to 10 per cent of annual returns on the market portfolio (French 2008: 1538). A perhaps more intuitive gauge of 'the costs of the system' are the 2013 bonus figures for Allianz-owned PIMCO, the world's largest bond investment house. According to a report by Bloomberg, then-CEO Bill Gross and then-CFO Mohamed El-Erian received \$290 million and \$230 million, respectively, with the total top-management bonus pool amounting to almost \$1.5 billion (Ritholtz 2014). The sheer volume of the assets under management at firms such n small variations in the price thes as PIMCO

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only a fraction of the costs of the services of (presumably) market-beating asset managers. Why, then did active management persist?

As indicated above, the business model of active asset managers is built on the belief that the best fund managers are able to deliver 'alpha' - an excess return over the relevant segment of the market - and that diligent research is able to identify such 'star managers' in advance (Holmes 2009). This financial practice has been fundamentally at odds with the teachings of financial theory for almost half a century. There is no need here for a detailed recounting of the story of how Harry Markovitz, Jack Treynor and William Sharpe, among others, pioneered modern financial economics in the 1960s (Bernstein 2005, Mehrling 2005, MacKenzie 2006). What matters is that the case against active investing on behalf of mutual fund shareholders goes all the way back to Treynor's and Sharpe's work on the capital asset pricing model (CAPM), which showed that the 'efficient' portfolio was the market portfolio, and therefore was the same for all investors. With regard to the empirical measurement of actual mutual fund performance, the key implication of the CAPM was that investors had to account for the market risk their fund's portfolio was exposed to. Applying such a framework to measure the performance of 115 mutual funds over the 1955-64 period, then-PhD student Michael Jensen found that once exposure to market risk was taken into account, there was no statistically significant evidence for even a single fund having outperformed a randomly selected portfolio (Jensen 1968: 415).

It was on the basis of increasingly solid theoretical and empirical arguments put forward by financial economics that Paul Samuelson, the preeminent economist of his day, published a ringing endorsement of indexing, suggesting 'that most portfolio decision makers should go out of business', and that the time had come for 'some large foundation [to] set up an in-house portfolio that tracks the S&P 500' (Samuelson 1974: 18). Indeed, as documented by Bernstein (2005: 240–52) and spelled out by MacKenzie

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Bogle (1997) has emphasised the importance of the contributions of economists such as Samuelson and Malkiel in paving the way for Vanguard's first open-end index fund in 1976.

To the extent that these and other early index funds lived up to the promise of delivering the market return at very low costs to investors, the ability of active asset managers to defend their market share should be expected to decline as a result of market competition. And yet, as documented above, index funds remained a marginal phenomenon as late as the 1990s. It was not until the early 2000s that passive investing became a mass phenomenon. This points towards index mutual funds' younger, more complex and more tradable cousins – ETFs – as the game-changing market device. The next sub-section takes a closer look at this financial innovation, which does not feature in either Bernstein's or MacKenzie's accounts, and which has largely escaped the attention of political economists.

Completing the socio-technical agencement 'passive investor': ETFs

The first index ETF was introduced on the Toronto Stock Exchange in 1990. It was followed three years later by the launch of 'Spider', which tracked the Standard & Poor's 500 index and was traded on the American Stock Exchange. But it was only when 'Cubes', which tracked the Nasdaq-100, was introduced in 1999 that the ETF market really took off (Deville 2008: 68–70). As shown in Figure 1, both the number of ETFs and their assets under management have exploded over the past decade. Having more than tripled since 2008, global ETF assets are currently estimated to stand at close to \$2.9 trillion.

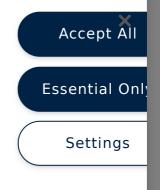
Figure 1. Global ETF assets (\$ billion) and number of ETFs.

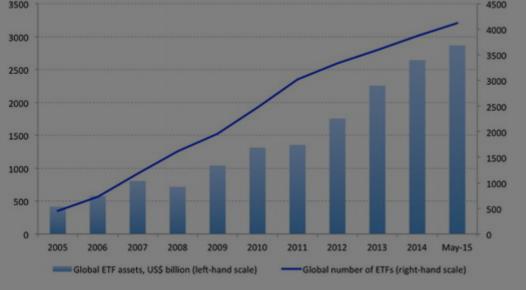
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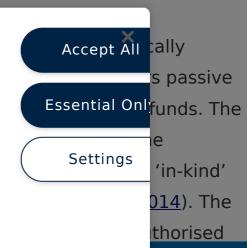
ETFs provided an innovative solution to the two central challenges of indexing, both of which stem from the problem of index replication - transaction costs and share creation/redemption. As a result of fluctuations in individual stocks and changes in index composition, index funds need to conduct transactions to keep the composition of their portfolio in line with the composition of the index. Due to market liquidity costs such as bid-asks spreads, buying and selling securities is costly. A trade-off therefore exists between minimising 'tracking error' and minimising transaction costs (Frino and Gallagher 2001: 45-6). The problem is exacerbated for open-end index mutual funds, which allow investors to buy or redeem shares (in the fund) on a daily basis. Both inflows and outflows are associated with trading costs - a net inflow of cash must be invested in the securities that constitute the index, while a net outflow that cannot be met with cash reserves requires the liquidation of existing security holdings (Kostovetsky 2003: 82). There is no intraday trading in mutual index funds, whose investors can purchase or redeem shares only at the end of each trading day and at the market value of the underlying basket of securities, or (per-share) net asset value (NAV).

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by supplying the basket of securities that constitute the index (this requires large blocks of usually 50,000 shares, so-called 'creation units'). Since these creation/redemption transactions only take place at the fund's NAV (calculated at the end of the trading day), the price of the continuously traded shares typically deviates from the per-share NAV over the course of a day. The mechanism that prevents deviations beyond a narrow transaction cost bound is arbitrage: as the two prices diverge, APs can lock in a profit by selling high while simultaneously buying low. For instance, if shares in the secondary market trade below the NAV, APs can make a profit by acquiring the underlying basket of securities in the open market and by trading them for newly created shares in the fund. In the US context in particular, the tax efficiency of this structure constitutes yet another advantage for investors. This is due to the fact that whereas mutual funds are obliged to distribute to investors any capital gains made as a result of share redemptions, the in-kind redemption mechanism of ETFs avoids such taxable capital gains.

While this covers the basic structure of plain-vanilla ETFs, a series of further innovations and applications complicate the picture. Thus, while 'physical' ETFs lend out securities for extra income, 'synthetic' ETFs do not hold the index constituents at all but replicate index returns via total return swaps and other derivatives. <sup>18</sup> There are now leveraged and inverse ETFs, which offer magnified or inverse exposure to the index. Moreover, their liquidity and low cost have made ETFs a popular hedging vehicle for hedge funds, the least 'passive' of all investors. These developments, in conjunction with ETFs' role in the 'flash crash' of 6 May 2010, have alarmed financial regulators to the potential financial stability implications of the liquidity and counterparty risks that arise from the ETF trading structure in combination with their often significant size in relation to index market capitalisation (IMF 2011: 69-71, Ramaswamy 2011, Foucher and Gray 2014: 42-3). These are important issues that warrant further attention.

Ultimately however this has no impact on this section's key massage namely, that

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This article began by noting that those who defend the 'superiority of economists' on the grounds that only economists 'study the economy' may not, after all, have it all wrong. For while political economists agree that processes such as the liberalisation and disorganisation of capitalism have expanded the scope and reach of markets (Streeck 2011: 139), they have been slow to adjust the scope and reach of their own research agenda to that (not so) new reality. In a world in which the political dimension of markets is not exhausted by their participation in the struggle – still taking place mostly in the halls of governmental power – over how to regulate them, but are sites of politics in their own right, the narrow association of 'politics' with the 'identifiable actions of states and policy-makers' is problematic (De Goede 2003: 85). In theoretical terms, then, this article has argued that (1) the diversity of market devices and practices are key to the understanding of the diversity of (in this case: asset manager) capitalism; (2) the study of market practices therefore constitutes a cornerstone in the microfoundation of political economy; (3) the performativity approach as developed by Michel Callon offers a powerful analytical tool to take on this task.

Relating the insights from the analysis of the performative transformation of the investment industry back to these theoretical arguments, it should be noted that while the preceding empirical analysis is cursory, its silence regarding the 'identifiable actions of states and policy-makers' reflects a conscious analytical decision. For while a more comprehensive empirical study would need to account for policy changes – for example, the regulatory push, in some countries, for a fee-based remuneration model for financial advisers (Financial Times 2015b) – the objective of this article was precisely to show that there is 'politics' not only in the regulation of the marketising practices of the investment industry, but in those practices themselves. The investment industry's (initially) successful resistance against pressure from within the market to move towards a low cost, passive model of asset management illustrates Callon's argument that markets are political aronas in which (the strangest that is the best

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the cost of investing to the benefit of savers and at the expense – in relative terms – of asset managers.

This question of distribution within the investment chain is important, and there is an urgent need for further empirical research on the fee and incentive structures in the investment intermediation sector. Crucially, however, the micro-analysis of sociotechnical investment devices is linked to the political economy of capitalism in a way that transcends the distribution issue and opens up the possibility of a more profound dialogue between comparative political economy and the financialisation literature. A case in point is the question of the provision of long-term financing for non-financial firms, which looms large on the agenda of economic policy-makers (Group of Thirty 2013), in particular in the context of the European Commission's new flagship project, 'Capital Markets Union' (European Commission 2013, 2015). Here, comparative political economists are used to associating 'patient capital' with 'coordinated market economies' and bank-based financial systems (Hall and Soskice 2001, Culpepper 2005). As shown in this article, however, the 'patience' of institutional investors' financial capital may vary considerably with the mandates these investors assign their asset managers - even and especially in market-based financial systems. In other words, under asset manager capitalism, devices and practices in the investment intermediation market become increasingly important pieces of the long-term financing puzzle. With holdings increasingly resembling the market portfolio as a result of index investing, institutional investors and their asset managers, as 'universal owners', 'should have a natural and compelling economic interest in the performance of the economy as a whole', rather than with the performance of individual firms or stocks, thus increasing their time-horizon as investors (Hawley and Williams 2007: 416). Certainly, 'impatient capital', epitomised by high-frequency traders and activist hedge funds, continues to thrive. At the same time, however, an economy dominated by asset exposure to the market portfolio m managers principle, open up

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### Disclosure statement

No potential conflict of interest was reported by the author.

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# Notes

1. For two recent studies on economists' political influence, see Hirschman and Berman (2014) and Mandelkern (2015).

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engaging directly with the latter. This applies even to the Open Economy Politics (OEP) approach, despite its wholesale adoption of the theoretical and methodological framework of economics (Cohen 2008: 41–4).

- 4. The concept of performativity has gained popularity also in the (mostly business school-based) fields of marketing, management, organisation and consumer studies. For an overview, see Muniesa (2014: ch. 2).
- 5. Note that this is true even of constructivist political economy, which generally treats economic ideas as intervening variables acting on the identities and interests of pre-existing agents within pre-existing spaces the result being that 'rather than asking questions about the social construction of economic relations and dynamics, it instead takes these off the table all together' (Samman and Stanley 2014: 17).
- 6. Moreover, performativity opens up an analytical perspective that is not available to economics, the methodological framework of which has arguably prevented it from acknowledging, let alone studying, the performative dimension of key parameters of economic action in market economies, such as prices (Muniesa 2007), value (Stark 2009), interest rates (Boy 2014) or the very 'laws' of supply and demand (Mitchell 2011: 174).
- 7. For a discussion of the agreements and disagreements between the performativity approach and the new economic sociology, see Çalışkan and Callon (2009: 381-4).
- 8. The term is borrowed from Deleuze and Guattari with the intention of avoiding the unwelcome connotation, in terms such as 'arrangement' or 'assemblage', of a 'divide between human agents (those who arrange or assemble) and things that have been arranged' (Callon 2007: 320).

9. More recently. Callon used Judith Butler's notion of 'misfires' to denote instances of

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have seen rapid growth over recent years, with Vanguard's passive Total Bond Market Index overtaking PIMCO's active Total Return Fund as the largest bond fund in the world in mid-2015 (Financial Times 2015c). As for ETFs, the share of fixed-income assets of total assets under management was 16 per cent in 2013, compared to 83 per cent in equity (IMF 2015: 125).

- 12. These numbers do not reflect the increasingly significant phenomenon of 'closet indexing', whereby asset managers, in order to minimise the downside risk for their 'relative performance', pursue passive index-tracking strategies even though 'those who appointed [them] were seeking and paying for active management' (Kay 2012: 41). The phenomenon has led to the development of an 'active share' measure (Cremers and Petajisto 2009), which active managers increasingly publicise in order distinguish themselves from closet indexers.
- 13. Note that whereas 'high finance' has been at the centre of much of the literature on financial innovation (Engelen et al. 2010; Nesvetailova 2015), the present study focuses on innovation at the interface between the asset management industry and the 'low finance' world of households investing directly or via pension funds for retirement (cf. Seabrooke 2006, Langley 2008).
- 14. Much of the discussion in this literature revolves around the shareholder value model of corporate governance, which has an important performative dimension. In particular, Jensen and Meckling's (1976) writings on the principal-agent model of corporate governance, a key driver and element of the shareholder value model, 'had a more rapid, and more thorough, effect on corporate managers than any other theory hatched in academia' (Dobbin and Jung 2010: 36).

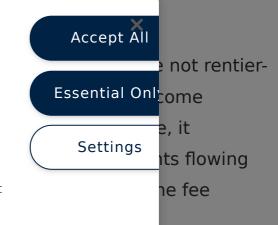
15. Note that Minsky's 'money manager capitalism' resembles 'pension fund capitalism' in that Minsky describes the 'new layer of intermediation' that prompted him to coin

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17. When awarding him the Sveriges Riksbank Prize in Economic Sciences, the Nobel Committee (2013: 43) highlighted the importance of Fama's work in the establishment of the index fund industry.

18. US-based ETFs generally rely on physical replication due to regulatory constraints (IMF <u>2011</u>: 68). Following regulatory concern and bad press, synthetic ETFs have seen their European market share decline over recent years. It had fallen to just below 30 per cent at the end of 2014 (Morningstar <u>2014</u>: 11).

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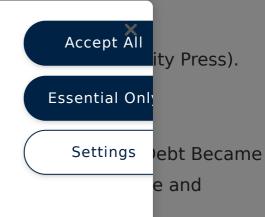
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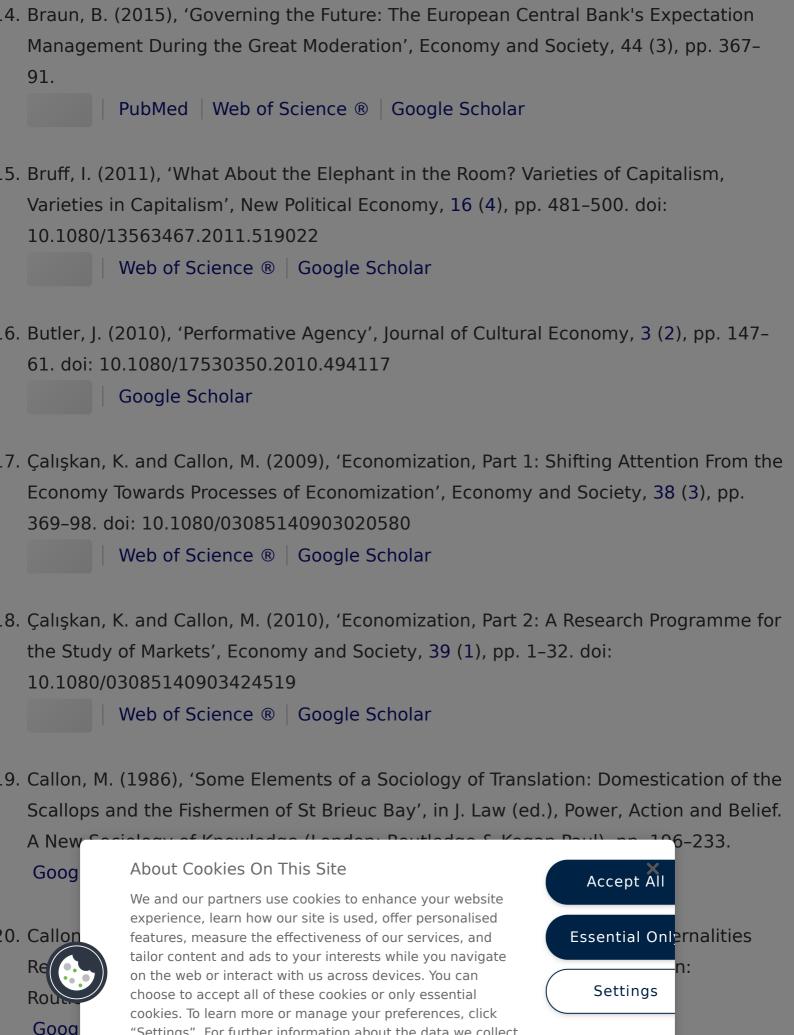
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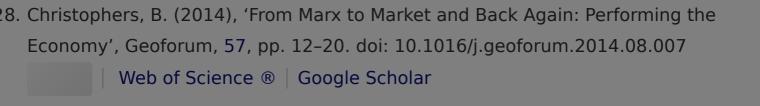
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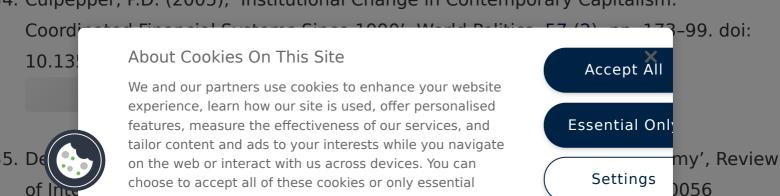
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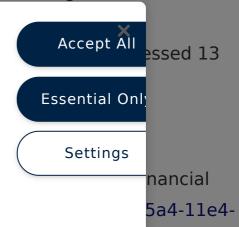
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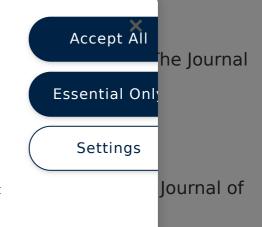
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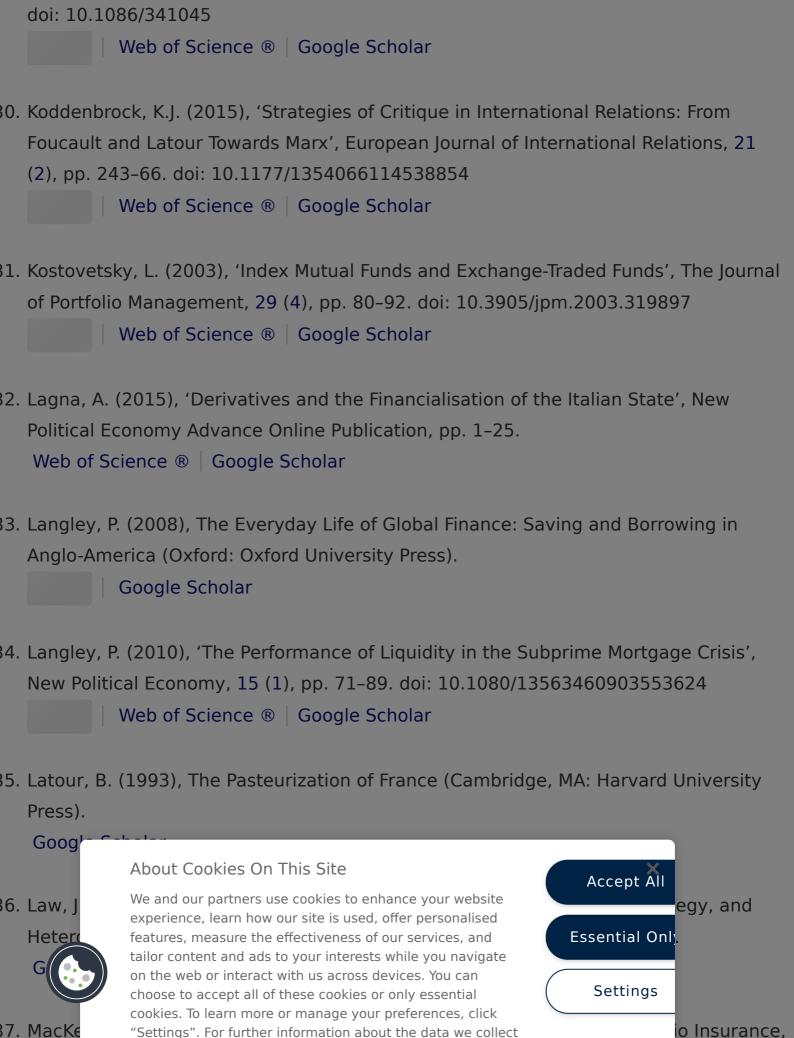
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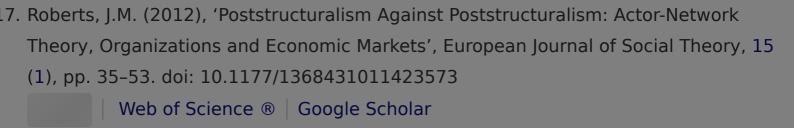
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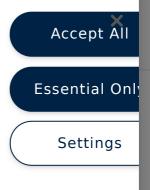
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