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Indie economics: social purpose, lay expertise and the unusual rise of modern monetary theory

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ABSTRACT

We argue that the IPE literature on economic expertise has been characterised by 'methodological elitism' that makes it ill equipped to account for the influence of heterodox and grassroots forms of expertise. To remedy this, we posit a theoretical framework that emphasises the tensions between two forms of professional legitimacy. One is *internal legitimacy* and it is rooted in appeals to scientific objectivity, political neutrality and high professional barriers of entry. However, internal legitimacy may clash with *external legitimacy*, which is a function of a clear articulation of social purpose. Taking the surprising rise of Modern Monetary Theory as a case study, the paper makes two claims. First, its ideas did not coalesce into a distinctive heterodox brand of economics through traditional mechanisms like academic peer-review and citation networks, but through intense online activity. Second, the messaging that spurred MMT consistently combined constitutive claims with explicit declarations of social purpose. The result was an open project with a broad normative appeal, which successfully enrolled a large group of passionate followers and co-creators. To date, IPE scholars have been blind to such alternative forms of knowledge production.

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Introduction

While many forms of expertise have recently fallen on hard times (Nichols 2017, Eyal 2019), the crisis of macroeconomic science has been particularly acute (Caballero 2010, Stiglitz 2011). A range of challenges, including the Global Financial Crisis (GFC) and the policy exigencies of a green transition, have undermined the authority of mainstream macroeconomists and hampered their ability to gate-keep knowledge production as effectively as they previously did (Helgadóttir and Ban 2021). At the same time, the study of economic expertise within International Political Economy (IPE) has been enjoying a strong resurgence, examining how new forms of expertise gain currency across a host of institutional and academic contexts – often emphasising a renewed tug-of-war between Keynesian and new neoclassical economic ideas. Notably, IPE scholars working on this topic have borrowed heavily from various branches of sociology. Nevertheless, they have almost exclusively studied mainstream experts in restricted sites of knowledge production, eschewing the sociological emphasis on lay actors and co-constitution in alternative sites of knowledge production. This article departs from the assumption that this has generated important empirical blind spots and an inability to fully grapple with the deeper political causes and consequences of the ongoing 'crisis of expertise' (Eyal 2019).

To make a first cut at remedying this, we home in on an understudied set of alternative ideas known as Modern Monetary Theory (MMT). The key claim of MMT is that for governments that

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control their own money creation the only real fiscal constraints are inflation and spare capacity. More importantly for our argument, MMT was developed by a coalition of motivated lay actors and heterodox academic economists operating at the margins of the disciplinary mainstream. What is more, MMT initially spread and developed primarily through digital social media, before breaking into public consciousness in the late 2010s. It then quickly rose to mainstream visibility, supercharged by ties to the Bernie Sanders presidential campaign and the attentions of Democratic congresswoman Alexandria Ocasio-Cortez. In short order, MMT became a staple of debate in mainstream media. In 2020, Stephanie Kelton, the charismatic public face of MMT, made the New York Times non-fiction bestseller list with her book *The Deficit Myth*. She followed up with a TED talk that has nearly 2 million views, making it one of the most popular TED talks on the topic of economics. Then, just as prominent pundits were ready to declare that MMT was winning the public debate on deficits, the inflationary surge of 2021 hit, eviscerating the policy space within which MMT proposed to operate and pushing it out of the limelight. Despite this remarkable roller coaster ride, MMT, like other alternative economic ideas, has barely featured in the new IPE literature on economic expertise (for an exception see Baker and Murphy 2020).

While MMT had its moment in the sun, it was always very divisive. This is not surprising, given that it not only challenges core tenets of mainstream economics but also destabilises the case for policies held dear both on the political right (i.e. fiscal consolidation and balanced budgets) and left (i.e. progressive tax reform). However, this article does not set out to adjudicate on whether MMT is an empirically accurate description of money creation, an original contribution to economic thought, a viable policy tool, applicable outside of the US, or now redundant by dint of resurgent inflation – all topics on which there has been plenty of punditry. Rather, we sidestep the question of MMT's validity and viability entirely and instead set out to examine how this set of non-mainstream ideas became so prominent in public debates. Or, as Daniela Gabor recently observed: '... when #MMT gets on every business page, you shouldn't worry about its theoretical validity. You should ask what its rise tells us about the political context we live in.'¹

In trying to understand the ascendance of these alternative ideas and what they tell us about the political context we live in, this article makes three related claims. First, that the case of MMT highlights the potential for a trade-off between mainstream professional recognition and popular appeal: while the former calls for knowledge production that appeals to scientific objectivity and political neutrality and is subject to high barriers of entry, the latter can be a function of a clear articulation of social purpose and openness to co-constitution, especially when traditional expertise is in crisis. Indeed, we find that MMT's proponents' willingness to treat their work as an exercise in co-constitution contributed to its appeal among followers.

Second, that there is a natural affinity between the ability to disseminate knowledge in a way that allows for co-constitution and a clear articulation of social purpose and new sites of knowledge production: it is not incidental that MMT emerged mostly online, using interactive digital social media technologies. The flexibility and reflexivity that this afforded allowed MMT to enrol new users but also meant that when it dropped out of the rapid-fire news cycle it lacked a strong institutional basis to sustain it.

Third, and closely related, we argue that the currently narrow empirical scope and elite focus of the IPE of economic expertise risks underestimating the role that non-mainstream ideas and alternative sites of knowledge production, notably digital social media, are playing in destabilising mainstream expertise and changing economic orthodoxy. This can make us blind to the momentum behind alternative economic ideas, often characterised as 'populist', which for traditional political analysis seem to emerge 'out of nowhere'. A better understanding of such ideas is especially crucial during periods of crisis that strain public trust in macroeconomic science and policymaking, thereby opening opportunity structures for novel ideas (Blyth 2002, Hay 1996, Berman 2001, Schmidt 2020).

In the context of this special section, we engage with the question of how best to understand continuity and change in economic theories and concepts over time and show that the rise of MMT was a function of the interplay between the professional strictures of the economics discipline,

popular appeal, and technological and political opportunity structures. In order to make this case, our empirical analysis proceeds in three parts, examining MMT's rise, messaging, and reception, respectively. Our approach is an exploratory case study in line with what George and Bennett call 'within-case analysis' in that we aim at theory building rather than hypothesis testing (2005). We set out to study what we call 'indie economics' – or economic thought that is developed at least in part outside traditional settings of knowledge production and dissemination. We situate this as a contribution to a burgeoning IPE research agenda that takes the peculiarities of knowledge production in the digital age seriously (Farrell and Drezner 2008, Farrell 2012, Zhuravskaya *et al.* 2020, Atal 2020).

Our contribution is limited to a single set of ideas and as such it is suggestive rather than exhaustive; ideally, further study of indie economics would inductively examine economic ideas that are being produced in an array of alternative sites of knowledge production. Here it also bears emphasising that the professional/lay axis that we seek to capture is different from the orthodox/heterodox axis, which has been examined by a number of scholars (e.g. Spencer 2000, Mata 2009, Mudge 2015, Jackson 2018). Moreover, in highlighting messaging and reception, our goal is not to suggest that the positioning and network locations of MMT's advocates did not matter for the rise of their ideas. They almost certainly did, and in general the importance of such variables is well established (e.g. Helgadóttir and Ban 2021, Henriksen *et al.* 2022). Our goal is to complement rather than challenge work that emphasises this.

Background: birth of the first 'Extremely Online' theory of macroeconomics

Taxation and bond issuance are traditionally seen as the key funding mechanisms of states and a necessary precondition for state spending. By contrast, MMT argues that this is not how things work in practice. Rather, it maintains that states that control money creation can spend as they see fit and need only tax to manage inflation or reach the levels income distribution that they desire. As a result, there is no real hurdle in the way of large-scale investment of any kind, whether it is to provide full employment, which is a central feature of the MMT platform, or to e.g. affect a green transition and enhance welfare provision. For MMT, there are only two real constraints on state spending. First, spare capacity, or the labour and material resources needed for action, and second, demand-pull inflation, which takes off at full employment but can be managed via taxation and is accurately understood as a gauge of spare capacity. By this logic, austerity measures and attempts to balance budgets are entirely needless forms of fiscal pain. Similarly, there is no need to wage politically costly battles over taxation or bow to bondholders' preferences to fund state activities. In short, MMT makes the case that many of the perceived constraints on state spending are political fictions – self-imposed, unnecessary and often actively harmful.

While it is common to trace MMT's intellectual roots back to the work of a motley crew of thinkers including Adam Smith, John Maynard Keynes, idiosyncratic chartalist Georg Friedrich Knapp, post Keynesian functional finance scholar Abba Lerner, and financial instability theorist Hyman Minsky, the actual starting point of MMT as it exists today was a series of exchanges on a now defunct electronic mailing list on Post Keynesian thought, starting in the 1990s. This was where MMT founders including Warren Mosler, L. Randall Wray, William Mitchell, Scott Fullwiler and later Mathew Forstater and Stephanie Kelton discussed the ideas that would eventually coalesce into MMT (Abrahamian 2017, Henwood 2019).

This is a highly unusual origin story: influential macroeconomic ideas are traditionally honed on the pages of peer-reviewed journals or developed in dedicated research institutions such as the research divisions of central banks, ministries of finance, or international organisations. Their success is then often a function of the way they get picked up in scholarly circles, usually via the mechanism of citation (Latour 1987).² In a marked contrast to this standard, there are few peer-reviewed papers on MMT and those that exist tend to be in non-mainstream economics journals such as the *Journal of Post Keynesian Economics*, *Journal of Economic Issues*, smaller regional journals, or journals from disciplines

other than economics. Moreover, except for Wray, who has close to 15,000 citations on Google Scholar, most core MMT scholars have relatively few citations, though this is difficult to fully ascertain as many of them do not have Google Scholar profiles – which is also unusual.

The most notable early written accounts of MMT came from Mosler and Wray. Mosler, unlike the other founders of MMT is not an academic but a hedge fund manager and entrepreneur who has also bankrolled research on MMT since its early days. His self-published contributions, including ‘Soft Currency Economics’ (Mosler 1993) and ‘Exchange Rate Policy and Full Employment’ (1998) laid out some of the fundamentals of the new theory and remain available on his personal website, which is mostly dedicated to MMT. Wray’s full articulation of MMT was then put forth in two books, published in 1998 and 2004, respectively. Since then, books – a format where there is often less disciplinary gatekeeping than in journal articles – have played an outsized role in the exposition of MMT. A recent and by far the most successful example of this is Stephanie Kelton’s *The Deficit Myth* (Kelton 2020). Notably, the publishers of books on MMT are for the most part not academic university presses, but critical or commercial presses.

The institutional context in which MMT developed can also best be described as quasi-academic. Most of MMT’s earliest proponents are academics that hold faculty positions in universities, most notably in holdouts of heterodoxy like the University of Missouri-Kansas City (UMKC), Stony Brook University, and Bard College, especially its Levy Economics Institute (Abrahamian 2017). However, outside of this handful of sites, MMT is not widely represented in academia. Instead, much of the activity spurring MMT’s rise has taken place in alternative settings such as the Modern Money Network, a loose grouping of adherents, which has held dozens of symposia and conferences for public outreach. Moreover, and even more unusually, much of the intellectual ferment and social cross-pollination that eventually brought MMT to prominence took place online: on blogs, Facebook, Substack, Twitter (now X), and in podcasts. In other words, MMT’s rise doesn’t map onto any of the ‘usual suspects’ for influential economic expertise. Instead, and especially in its early stages, it passed through an often grassroots ecosystem of self-organisation and internet dissemination, making it the first ‘Extremely Online’ theory of economics. As such it has been all but completely ignored by IPE scholars and represents a gap in our understanding of how economic ideas gain traction.

Literature and analytical apparatus

The study of economic expertise is by no means a new topic in IPE (e.g. Hall 1993, Schmidt 1990, McNamara 1998, Blyth 2002, Best 2004), but recently its study has taken a markedly sociological turn. A new wave of IPE literature on economic expertise incorporates insights from the sociology of expertise and professions (e.g. Fourcade 2006, 2009, Medvetz 2012, Dezalay and Garth 2002, Bockman and Eyal 2002, Abbot 1988) and, to a lesser extent, Science and Technology Studies (STS) (Callon 2007, Muniesa *et al.* 2007, MackKenzie 2008) to emphasise professional dynamics such as consensus and dissensus within the economics profession (Farrell and Quiggin 2017, Helgadóttir 2021, Mudge 2018, Özgöde 2022, Van Gunten 2017); competition and boundary work amongst different professions with claims to economic expertise (Seabrooke 2014, Seabrooke and Tsingou 2014, Mudge and Vauchez 2012, Seabrooke and Henriksen 2017, Kranke 2020); the influence of various forms of professional resources in ideational battles (Mandelkern and Shalev 2010, Mandelkern 2015, Ban 2016, Litzo-Monnet 2017, Ban and Patenaude 2019, Helgadóttir and Ban 2021, Baccini and Re 2024); the role of unifying norms within the economics profession (Chwieroth 2015, Djelic and Quack 2010, Hirschman and Popp Berman 2014, Christensen 2017, Tsingou 2015); and the methodological and disciplinary constraints under which economists labour (Popp Berman 2022, Henriksen 2013, Clift 2019, 2023, Helgadóttir 2016).

While the imprint of the sociology of expertise/professions and STS on much of this new scholarship is clear, a central insight of these literatures has nevertheless gone missing in translation: this sociological literature stresses that experts need not be the bearers of expertise; rather, lay actors can play a central role in the development and dissemination of new forms of expertise. In fact,

once expertise is divorced from experts, it stands to gain more influence and resilience through mechanisms that Eyal (2013) refers to as ‘generosity’ and ‘co-constitution’, which serve to enrol new actors and expand networks (see also Jasanoff 2004).

Sidestepping this insight, the IPE literature on economic expertise has almost exclusively focused on elite actors – often policymakers and academics – in restricted sites of knowledge production such as political office, international organisations, or top-tier research institutions. This has resulted in a failure to engage with the role of alternative sources of economic knowledge production and lay actors, even when the influence of outsider ideas on political discourse and policymaking has been apparent. It should be noted that there have been a few deliberate attempts to eschew this emphasis on elites and restricted sites of knowledge production, but even these studies tend to focus either on how widespread popular ideas shape or constrain elite policymaking (Diessner 2022, Hopkin and Rosamond 2018) or on how elite actors communicate with or conceptualise ‘the public’ (Braun 2016, Moschella *et al.* 2020, Ailon 2021), so that what results is a kind of elite ‘theory of mind’ for the general population rather than actual study of alternative sites of knowledge production.³

Not only has the elite emphasis of the IPE literature on expertise ‘needlessly narrowed the lens of inquiry to pre-established sets of ideas originating from economic theory (Diessner 2022, p. 317)’, it also means that in its current state, the IPE literature on economic expertise lacks the theoretical tools to adequately study and explain the rise of under-institutionalised alternative ideas. MMT is an ideal case to counter this tendency not just because its founders, though they are for the most part working academics, do not hail from elite institutions or contribute to mainstream debates, but primarily because its political momentum came from a strong grassroots movement of highly motivated lay actors using new platforms and technologies, allowing it to break into public debate in a way that is rare for non-mainstream economic thought.

To make the rise of MMT legible, this article posits an analytical framework that appeals to a bifurcated definition of legitimacy.⁴ Specifically, it distinguishes between two kinds of professional legitimacy – *internal and external* – and argues that they are currently at cross-purposes in the macroeconomics discipline: protecting *internal legitimacy*, or the esteem of the mainstream of the profession, requires a style of knowledge production and communication that appeals to value-neutral objectivity and scientised formalism (Fourcade 2006, 2009, Weingart 1999, Best and Widmaier 2006, Jackson 2018, Helgadóttir 2021). In short, for economists ‘political influence depends on their ability to control the framing of political debates and define issues as “technical” (Rilinger 2022).’ However, this prevailing professional norm can come at a steep cost to *external legitimacy*, or the ability to communicate a sense of political and normative purpose to the general public and enrol new actors. This is especially important during periods of recurrent and cumulative crises that strain public trust both in the institutions of economic governance and in macroeconomic science *per se* (Braun 2016, Blyth and Matthijs 2017, Lonergan and Blyth 2020, Schmidt 2022). Indeed, during periods of prolonged economic crisis, the prevalent form of economic expertise becomes especially vulnerable to external disruption (Ban 2016, Blyth 2002, Widmaier *et al.* 2007).

To better flesh out the distinction between internal and external legitimacy, this article appeals to Andrew Baker’s work on social purpose. Baker defines social purpose as

a systemic vision, which specifies the purpose, function and contribution of the financial system, in wider economic and social terms, derived from combinations of empirical and normative reasoning, that is communicated publicly and explicitly to build an inter-subjective consensus concerning appropriate economic goals, principles, values and activities. (2018, p. 294)

While we take this definition as a point of departure, we also further Baker’s analytical apparatus by making the case that currently there is an explicit trade-off between internal legitimacy in economics and a clear articulation of social purpose. As is, internal legitimacy doesn’t just eschew the clear articulation of social purpose but rests on its active rejection through appeals to value-neutral objectivity and, its corollary, formal modelling for knowledge production. By contrast, articulating social purpose stands to lay bare the normative core at the heart of any form of socio-economic knowledge

production, undermining claims to value-neutral objectivity and unbiased formalisation, and opening new space for co-constitution. However, we expect that while prolonged crisis conditions can open opportunity structures for alternative expertise to unsettle the mainstream of the economics profession, this is likely to be met with strong censure from the mainstream of the profession.

Not only can using social purpose as an analytical lens help us understand these competitive patterns, we suggest that it also serves to clarify the mechanisms of enrolment put forth in the sociology of expertise and STS. For example, Eyal's seminal piece on the sources of the autism 'pandemic' traces deinstitutionalisation back to changes in knowledge production: a move away from experts and towards expertise, in which lay actors, notably the parents of autistic children, participated (Eyal 2013). While this is not Eyal's emphasis, we suggest that the fact that the lay actors were *parents* is not immaterial. It is safe to assume that parental attachment gave these key players in Eyal's account both a deep emotional motivation and a firm grasp of the social purpose of their project. Accentuating this can add a new explanatory dimension to the sociology of expertise and STS. For this scholarship, influence is usually a function of the ability of networks of expertise to enrol a wide range of different actors, ideas, and devices. However, such accounts of influence, enrolment, and network expansions can have a curiously asocial flavour: stacking black boxes on black boxes and creating new assemblages that bring together heterogeneous actors and instruments can help explain *how* new social phenomena take root and are normalised but tells us less about *why* it happens. By contrast, bringing in a fuller account of the human condition – including the affective, normative and social logics that are fundamental to it – can help deepen the analysis.

Methods and data

This article uses process tracing and close reading and draws on a combination of data from secondary sources, social media, and eight semi-structured interviews. We approached a host of potential interviewees that are prominent in Twitter debates on MMT or that have featured in mainstream media debates on MMT and spoke to all who answered our inquiries, while also using snowball sampling. While this does not yield a representative sample, it is nevertheless indicative of the dynamics we are interested in: the goal of the interviews was to get at subjects' beliefs about the nature of the macroeconomy and MMT's role within it. Moreover, we used interviews to probe our theoretical claim that MMT's appeal to users was different from that of mainstream expertise, and to examine whether its anti-mainstream stance was in fact part of that appeal. We deliberately chose interviewees that are not MMT founders or part of its inner circle, but rather part of the broader ecosystem of lay actors that has been active in its ongoing development and dissemination, as this fits our analytical frame. Occupationally, our interviewees were in the IT-sector, finance, community organising, journalism, politics, and academia (in disciplines other than economics). All interviews were online and lasted between one and two hours.

The empirical section that follows is broken down into three subsections. First, we reconstruct MMT's entry into mainstream public debates through secondary sources. Second, we take Kelton's Twitter communication as a proxy for MMT messaging. In early 2023, Kelton had approximately 145,500 Twitter followers. We selected tweets based on the number of 'likes' they have received, taking 1000 as a cut-off point.⁵ We did the same for an illustration of the total development of Kelton's 'likes' during the crucial period from 2017 to 2023, which we present to show the overarching trend in her social media interactions. While MMT is by no means a univocal movement, we took Kelton as the basis of analysis for the simple reason that she has been its most visible spokesperson. Third, in order to assess the reception of MMT by lay actors we relied on data drawn from our interviews.

The rise (and fall) of MMT: breaking into the mainstream

In its early days, MMT was very much a fringe phenomenon. This began to change in the aftermath of the GFC, with growing interest in alternative monetary thought. This provided a crucial opening for

MMT's proponents, who had by that point been honing their message for years. It was also at this point that Stephanie Kelton started to emerge as the public face of MMT and a media star in her own right, writing and appearing in mainstream media outlets including *The New York Times*, *The Los Angeles Times*, MSNBC, and NPR. In late 2014, Kelton was appointed the Chief Economist of the Democratic Minority Staff of the Senate Budget Committee. In early 2016, she left this post to become an economic advisor to the Bernie Sanders campaign. These were her first decisive steps into politics and moves that significantly raised her public profile. Another decisive step in this direction came in early 2019 when Congresswoman Alexandria Ocasio-Cortez, arguably at the peak of her star power, stated that MMT should be 'a larger part of our conversation' on how to fund a Green New Deal and Medicare for All (Relman 2019).⁶ In Kelton's words, '[t]here was something of an Oprah effect when she did that ... People immediately probably started Googling "modern monetary theory" to find out what she was referring to (Horsley 2019).'⁷

As predicted by our analytical framework, along with this new public visibility came a barrage of criticism from notable figures in mainstream macroeconomics. The opening salvo came a few weeks after Ocasio-Cortez's comment, when Nobel laureate Paul Krugman penned the first of a series of op-eds criticising MMT. Kelton replied to Krugman's criticism and the exchange culminated in a Twitter thread in which Krugman concluded: 'Mainstream Keynesians have been coddling the MMTers, basically trying to find ways their views might make sense. It's looking more and more like a losing game; their hearts may be in the right place, but their heads really aren't.' Out of the more than two-dozen comments on this thread, nearly all were supportive of Kelton and critical of Krugman in terms that ranged from respectful and substantive to outright name-calling. This exchange was, in other words, a succinct illustration of MMT's strange combination of low internal legitimacy (Krugman's judgment) with high external legitimacy (commentators' support).

In a further demonstration of this dynamic, over the course of the next few months, several other prominent mainstream voices joined the fray: testifying before the Senate Banking Committee, Chairman of the Federal Reserve Jerome Powell said that MMT was 'just wrong'. Former Harvard President and Chairman of the National Economic Council Lawrence Summers called MMT 'voodoo economics' in a Washington Post op-ed. Fellow Harvard economist Kenneth Rogoff dismissed MMT as 'nonsense' in a Project Syndicate article. In a Bloomberg interview Laurence Fink, the CEO of BlackRock called MMT 'garbage'. More diplomatically, former Chairman of the Federal Reserve Janet Yellen declared herself 'not a fan' when speaking at a Credit Suisse conference.

At the height of this wave of criticism, in mid-March 2019, the University of Chicago's Booth School of Business Initiative on Global Markets polled its panel of forty-two US experts on their views on MMT. The expert group that participated in the open poll is a who's who of the economics profession, with members coming exclusively from a handful of top-tier American universities. Of the 38 participants that responded all disagreed or disagreed strongly with the assumptions of MMT.⁸

By contrast, the reception in financial media was warmer. Early on, a limited but influential part of the financial media took an active interest in MMT. FTAlphaville, the Financial Times sometimes ram-bunctious, younger-sibling-style financial blog gave significant space to MMT and MMT-adjacent thinking, including arguments to 'mint the coin'. Most noteworthy, however, was Joe Weisenthal, veteran financial journalist and co-host of the widely esteemed Bloomberg podcast *Odd Lots*. Weisenthal's openness to MMT became something of a running gag on the podcast, with his 'straight man' co-host Tracy Alloway asking when he was going to bring up MMT, regardless of the topic at hand. In 2018, Weisenthal mounted a defense of MMT on his Twitter account saying:

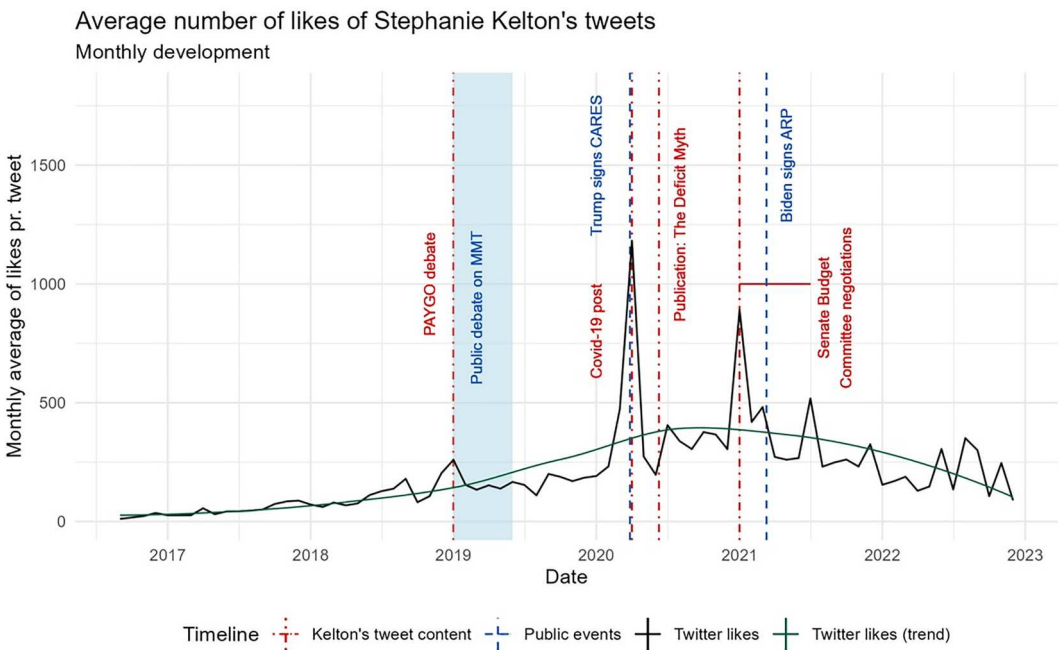
... all of the "we've already known all this stuff" arguments miss the point that nobody was making any headway before. As far as I can tell, there was basically zero progress being made in the public sphere to counter fear mongering on government debt. None. Now if the point of economics is just to publish papers or whatever, and critique other people's papers then that's fine. But if the point of economics is to change people's minds and change the debate and open up pathways to better policies, then people were failing before. But thanks to MMT (and MMT alone) there's a real effort to shift the debate about the dangers of government debt, and also to treat fiscal policy as the primary economic stabilization tool (as opposed to monetary policy). And

that's starting to show up in how politicians talk ... Until someone was willing to package these ideas under a name, call it something and make a real effort to change our language and our metaphors, then it wasn't going to go anywhere. And that's what folks like @StephanieKelton and many others are successfully doing. /fin⁹

The exogenous shock of the Covid-19 pandemic marked another crucial turning point for MMT. Initially, the large US stimulus packages passed at the beginning of the pandemic, first by Trump and then by Biden, seemed to prove the proponents of MMT right: money that was needed to deal with an unexpected societal shock really had just been created with a few keystrokes. While there is a debate to be had about whether these fiscal injections (and quantitative easing before them) should be considered MMT or not, it was clear that the political debate and the analytical understanding of what tools were at governments' disposal had fundamentally shifted. In a twist on Nixon's famous quip, commentator after commentator concluded that, 'we are all MMTers now'.¹⁰ By 2021, Weisenthal, formerly on the defense when discussing MMT, was arguing that it had 'completely won the debate ... there is a big fiscal stimulus, a historic deficit and ... it really feels like the entire debate is happening on MMT terms or in MMT language'.¹¹ However, as inflation continued to climb, this conclusion seemed more precarious. While MMT's proponents argued that fiscal stimulus did not drive inflation and that their proposed safeguards against it had not been heeded, critics now had plenty of fodder to remount their offensive. As a result, just as the supporters of MMT were completing their victory lap, their momentum began to wane.

Communicating the message: marrying repeated explanation with social purpose

As noted above, MMT's growing visibility has been punctuated by a series of exogenous events and reactions. The illustration below tracks the development of the number of 'likes' Kelton's tweets have received over time and shows that notable peaks can often be attributed to such factors, including pay-as-you-go debates in the US, Covid-19 policy junctures, and Senate Budget Committee negotiations. Peaks aside, the overarching trend was towards rapidly increasing levels of interaction until late 2020–early 2021, with likes then tapering off as inflation continued to bite.



But what was the content of the tweets driving these interactions? Looking at the thirty-two tweets on the topic of MMT that received more than 1000 likes, three clear trends emerge. First,

Kelton's insistent repetition of the basic tenets of MMT: seventeen, or exactly half of the tweets, included statements on how economies work according to MMT (i.e. 'Your periodic reminder that the Federal Reserve's computer keyboard is standing by, ready to power the next relief package. Newly-created digital dollars will spring forth to fund whatever Congress decides to spend. In a deeply depressed economy we can safely do many trillions.' 'Q: Can we afford a #GreenNewDeal? A: Yes. The federal government can afford to buy whatever is for sale in its own currency.' 'I promise to stop when the battle is won. Until then, here's another attempt to improve understanding and shift our broken thinking about government "deficits."')

Second is the common use of explicitly normative claims, emphasising the social purpose behind the MMT project. Sometimes normative claims were combined with constitutive claims, while other times they appeared by themselves. In total, nineteen of the thirty-two tweets had a normative dimension. In three cases the appeal was to general wellbeing (i.e. '... Show us how you will make *better use* of deficits to improve the human condition.'), but sometimes it was to more specific issue areas.¹² Here the most common target was economic inequality,¹³ which was the topic of 7 tweets (i.e. 'No one makes a billion dollars. You TAKE a billion dollars. You take it from your workers (Hi, Jeff, Jim, and Alice!). You plunder it from the environment (What up, Charles & David?). You strip it using patents/protections (Lookin' at you, Bill.)'). The second most common theme was health care (4), followed by climate change (3), and employment (2).

A third theme was Kelton's performative use of elements of orality, including agonistic, informal, and playful speech forms like irony (i.e. 'I am very concerned that we are headed into a climate catastrophe that will make the US economy more inflationary and less resilient.') This matters both because this style has been shown to generate far greater attention in terms of likes and retweets than more formal speech (Stewart 2016) and because it underscores the case for the internet as the natural habitat of MMT. But if this was the signal – an irreverent mixture of explanation and normative claims – how was it being received? This is the question to which the next section turns.

Receiving the message: descriptive accuracy, agency, and co-constitution

The eight people interviewed for this article came to MMT in a variety of ways. The most common route was intellectual dissatisfaction with mainstream economics – particularly after the GFC – which led to an active search for or general openness to alternatives (i.e. 'I was hungry for critical political economy' 'I was taught that the Great Depression was a freak of nature that couldn't happen again.'). In one case, this sense of dissatisfaction was very much spurred by real-life experiences during the GFC. ('Our community members were losing homes, we helped families with foreclosure and evictions. Meanwhile, Obama was hosting bankers ... this drew me towards understanding macro and finance, not just personal finance.') Alternatively, one interviewee came to MMT from a broader sense of scepticism of mainstream expertise, starting with nutritional advice, and found out about MMT in online groups discussing such topics. In most cases the internet, and in particular social media, including Facebook, Twitter and message boards, but also podcasts, were the gateway to learning about MMT. The excitement of actively contributing to online debates, whether collaboratively or contentiously, was an important draw.

In terms of what made MMT substantively attractive to interviewees, three broad themes emerged. First, the sense that MMT provided, often for the first time, what felt like an understandable analysis of how macroeconomics works, as well as an empirically accurate description of money creation. ('I like it because it is true.' 'That makes sense!' 'It is unafraid of explaining basic mechanics.' 'It is tragic that we are fighting about basic facts, MMT simply describes what happens.' 'It is a coherent and true theory.'). Often this was perceived as revelatory. ('I was absolutely floored, my jaw dropped to the floor.' 'When I really grasped MMT, I got it ... Oh wow, we already have this power, we are just not harnessing it.')

Second, all respondents were drawn to the sense of political agency that they associated with MMT: (i.e. 'It changes the calculus around what is possible. We can change the world.' 'We aren't lone individuals confronting a sublime storm, no, we are making the world.' 'It is a mission oriented economic framework.' 'It is a mindset ... a narrative to shatter the household analogy.' 'We are only constrained by real resources, that is the real power.' 'We can afford to do anything we are able to do.' 'Labor may be scarce, resources may be scarce, but one thing isn't: money!') In most cases, this sense of possibility was closely tied to a left-wing political vision: (i.e. 'People want a vision of the world where we aren't constantly at war with each other for basic necessities.' 'We can have healthcare, jobs, benefits, safe neighborhoods.' 'It provides a complete narrative break from the neoliberal/neoclassical hegemony and this idea that there is nothing we can do, we will leave it to the market.')

For one interviewee, MMT also represented a potential corrective to the legacy of racialised austerity politics:

Americans are okay spending when recipients are not of color. Between 1930 and 1950 we had no problem spending. We still have no problem spending on bullets, banks, CEOs, and corporations ... But after the civil rights movement, it wasn't okay to be overtly racist anymore and those opposed to equality needed a different discourse to explain the exclusion of descendants of slavery ... Economics amongst other things became that, and it appears neutral ... but deficits became a strategy for those who opposed equality, the obsession with counting 'tax payer dollars', it is a dog whistle.

By contrast, one interviewee lamented the association of MMT with the left, primarily because he saw it as politicising what for him was first and foremost an analytical and empirical contribution to the state of knowledge.

The third trend that emerged was the extent to which interviewees felt part of a project or movement and were invested in spreading and/or developing MMT. Some wanted to incorporate MMT into other disciplines including theology, humanities, and accounting. Others were interested in debating or developing various assumptions and conclusions. Many were dedicated to disseminating MMT ideas in a variety of ways. Here, an obvious accusation of selection bias could be made, since interviewees were chosen *because* they were invested in MMT. Yet, if we compare these impulses to those of adherents of, for example, neoclassical economics, the difference becomes apparent: where neoclassical economics is a circumscribed corpus of ideas and methods with high barriers to entry, MMT is, for its enthusiasts, a 'generous' project of co-constitution and this seems to have played a clear role in its spread.

Conclusion

The GFC was one of the rare events 'that lift the veil that conceals money during normal times (Braun 2016, p. 1065)'. Responses to this glimpse behind the veil took many forms, one of which was growing popular interest in alternative economic thought. This article makes the case that given this, scholars of IPE would do well to take more seriously the various new forms of economic expertise that have emerged from this critical juncture, especially the neglected role that lay actors and alternative sites of co-constituted knowledge production have played in their formation. This would require the new wave of IPE literature on economic expertise to engage more fully with insights from the various branches of sociology that they already draw on: the sociology of science and its various successors have been concerned with the insider/outsider dynamics that shape scientific expertise at least since the 1960s (Kuhn 1962, Merton 1972) and lay expertise has been at the heart of both the sociology of expertise and STS. Yet, to date, this is not a feature of the IPE literature on economic expertise.

While this article has focused on the case of MMT to shed light on this phenomenon, the rise of indie economics is by no means limited to MMT: Donald Trump built the popular case for a trade war with China on Twitter; the cryptocurrency bubble was fueled by an online ecosystem that developed its own techno-libertarian economic philosophy, the lynchpin of which was a critique of fiat currencies presided over by states; the GameStop short squeeze, which led to losses of \$5 billion for hedge funds, was orchestrated on Reddit and justified by anti-finance ideas. Similar examples abound.

Failure to take seriously these and other economic ideas developed outside of traditional expert settings leaves us with a dangerously limited understanding of important sources of both policy change and market behaviour.

Theoretically, we make use of a framework that combines Andrew Baker's work on social purpose with a novel conception of professional legitimacy, which we divide into internal legitimacy and external legitimacy. Especially when they articulate a strong sense of social purpose and are open to co-constitution, such forms of knowledge can have widespread popular appeal while being vehemently rejected by the economics profession. This means that policy-makers must examine not just the potential of alternative expertise *per se* but also weigh the appeal of the two forms of legitimacy against one another. As a result, this framing can help us understand the complex and sometimes non-linear trade-offs associated with upstart forms of expertise.

Yet, this framing also leaves open crucial questions, that should be addressed by future research on the rise of indie economics. Indeed, as a broader field of 'lay experts' emerges, potentially challenging and undermining the more centralised form of knowledge production that has been dominant over the course of the long twentieth century, we will need to grapple with new questions of quality control. Science has always had to contend with tensions between scientific rigour and creativity and has developed mechanisms such as peer review to deal with it. But the changes we now face are altering the nature of this trade-off: co-constitution and the enrolment of lay actors can open new intellectual frontiers and democratise science, but they can also open the floodgates for manipulation, pseudoscience, and misinformation of various forms. Future research should explore the mechanisms of quality control (or lack thereof) that are evolving to navigate this new reality.

To return to Daniela Gabor's question from the introduction, the rise of MMT shows in no uncertain terms we are in a political climate in which trust in mainstream economic knowledge is desperately frayed and – given this lack of trust – anti-establishment credentials become a crucial source of appeal. The rise of alternative forms of economic expertise is menacing to mainstream macro not just to the extent that it competes with it for finite attention, but also in that it is a symptom of the deeper malaise of the discipline and its failure to prove itself fit for social purpose in the face of interlinking crises.

Notes

1. <https://twitter.com/danielagabor/status/1125332887124041728>
2. With notable exceptions: e.g. the Laffer curve.
3. Swedberg's 'folk economics' (2018), Vivien Schmidt's 'discursive institutionalism' (2008) and John Campbell's 'public sentiments' can be seen as exceptions here, though they do not engage with *specific* forms of heterodox knowledge production, looking instead to the general public.
4. For reasons of space we will not review the extensive literature on legitimacy in IPE here, but for some useful overviews see e.g. Schmidt (2013) and Scharpf (2012).
5. There is no agreed upon definition of virality but we chose 1000 likes as a cut-off point both because the drop-off below that is quite steep.
6. <https://www.businessinsider.com/alexandria-ocasio-cortez-ommt-modern-monetary-theory-how-pay-for-policies-2019-1?r=US&lR=T>
7. <https://www.wabe.org/this-economic-theory-could-be-used-to-pay-for-the-green-new-deal/>
8. <https://www.igmchicago.org/surveys/modern-monetary-theory/d>
9. <https://twitter.com/TheStalwart/status/1054394021941002240>
10. <https://www.wsj.com/articles/modern-monetary-theory-isnt-the-future-its-here-now-11637446538>; <https://www.businessinsider.com/coronavirus-pandemic-politicians-economists-ceo-government-mmt-modern-monetary-theory-2020-3?r=US&lR=T>; <https://www.epsilontheory.com/were-all-mmters-now/>; <https://medium.com/@jcfurlan19/stimulus-bill-historic-paradigm-shift-we-are-all-mmters-now-6e35f8d89817>
11. Odd Lots with Stephanie Kelton.
12. When more than one issue area appeared, we chose the most pronounced one.
13. we put claims about debt cancellation and redistribution under this header.

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References

- Abbott, A., 1988. *The system of professions: an essay on the division of expert labor*. Chicago, IL: The University of Chicago Press.
- Abrahamian, A.A., 2017, May 8. *The Rock-Star appeal of modern monetary theory*.
- Ailon, G., 2021. 'Life is about risk management': lay finance and the generalization of risk thinking to nonfinancial domains. *Socio-economic review*, 19 (2), 469–86.
- Atal, M.R., 2020. The janus faces of silicon valley. *Review of international political economy*, 28 (2), 336–350. <https://doi.org/10.1080/09692290.2020.1830830>
- Baccini, A., & Re, C., 2024. Who are the gatekeepers of economics? geographic diversity, gender composition, and interlocking editorship of journal boards. *Review of political economy*, 0 (0), 1–28. <https://doi.org/10.1080/09538259.2024.2303654>
- Baker, A., 2018. Macroprudential regimes and the politics of social purpose. *Review of international political economy*, 25 (3), 293–316.
- Baker, A., and Murphy, R., 2020. Modern monetary theory and the changing role of Tax in society. *Social policy and society*, 19 (3), 454–69.
- Ban, C., 2016. *Ruling ideas: how global neoliberalism goes local*. Oxford: Oxford University Press.
- Ban, C., and Patenaude, B., 2019. The professional politics of the austerity debate: a comparative field analysis of the European Central Bank and the International Monetary Fund. *Public administration*, 97 (3), 530–45.
- Berman, S., 2001. Ideas, norms, and culture in political analysis. *Comparative politics*, 33 (2), 231–50.
- Best, J., 2004. Hollowing out Keynesian norms: how the search for a technical fix undermined the Bretton Woods regime. *Review of international studies*, 30 (3), 383–404.
- Best, J., and Widmaier, W., 2006. Micro- or macro-moralities? economic discourses and policy possibilities. *Review of international political economy*, 13 (4), 609–631.
- Blyth, M., 2002. *Great transformations: economic ideas and institutional change in the twentieth century*. West Nyack, NY: Cambridge University Press.
- Blyth, M., and Matthijs, M., 2017. Black Swans, Lame Ducks, and the mystery of IPE's missing macroeconomy. *Review of international political economy*, 24 (2), 203–31.
- Bockman, J., and Eyal, G., 2002. Eastern Europe as a laboratory for economic knowledge.
- Braun, B., 2016. Speaking to the people? Money, trust, and central bank legitimacy in the age of quantitative easing. *Review of international political economy*, 23 (6), 1064–92.
- Caballero, R.J., 2010. Macroeconomics after the crisis: time to deal with the pretense-of-knowledge syndrome. *Journal of economic perspectives*, 24 (4), 85–102.
- Callon, M., 2007. What does it mean to say that economics is performative? In: D. MacKenzie, F. Muniesa, and L. Siu eds. *Do economists make markets? On the performativity of economics*. Princeton, NJ: Princeton University Press.
- Christensen, J., 2017. *The power of economists within the state*. Stanford, CA: Stanford University Press.
- Chwieroth, J.M., 2015. Professional ties that bind: how normative orientations shape IMF conditionality. *Review of international political economy*, 22 (4), 757–87.
- Clift, B., 2019. Contingent Keynesianism: the IMF's model answer to the post-crash fiscal policy efficacy question in advanced economies. *Review of international political economy*, 26 (6), 1211–37.
- Clift, B., 2023. *The office for budget responsibility and the politics of technocratic economic governance*. Oxford: Oxford University Press.
- Dezalay, Y., and Garth, B.G., 2002. *The internationalization of palace wars: lawyers, economists, and the contest to transform Latin American states*. Chicago, IL: University of Chicago Press.

- Diessner, S., 2022. The promises and pitfalls of the ECB's 'legitimacy-as-accountability' towards the European parliament post-crisis. *The journal of legislative studies*, 28 (3), 402–420. <https://doi.org/10.1080/13572334.2022.2107813>
- Djelic, M.-L., & Quack, S. eds. 2010. *Transnational communities: shaping global economic governance*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511778100>
- Eyal, G., 2013. For a sociology of expertise: the social origins of the autism epidemic. *American journal of sociology*, 118 (4), 863–907.
- Eyal, G., 2019. *The crisis of expertise*. 1st ed Cambridge: Polity.
- Farrell, H., 2012. The consequences of the internet for politics. *Annual review of political science*, 15, 35–52. <https://doi.org/10.1146/annurev-polisci-030810-110815>
- Farrell, H., and Drezner, D.W., 2008. The power and politics of blogs. *Public choice*, 134 (1/2), 15–30.
- Farrell, H., and Quiggin, J., 2017. Consensus, dissensus, and economic ideas: Economic crisis and the rise and fall of keynesianism. *International studies quarterly*, 61 (2), 269–283. <https://doi.org/10.1093/isq/sqx010>
- Fourcade, M., 2006. The construction of a global profession: the transnationalization of economics. *American journal of sociology*, 112 (1), 145–94.
- Fourcade, M., 2009. *Economists and societies: discipline and profession in the United States, Britain, and France, 1890s to 1990s*. Princeton, NJ: Princeton University Press.
- George, A. L., & Bennett, A. 2005. *Case studies and theory development in the social sciences*. Cambridge, MA: MIT Press
- Hall, P.A., 1993. Policy paradigms, social learning, and the state: the case of economic policymaking in Britain. *Comparative politics*, 25 (3), 275–96.
- Hay, C., 1996. Narrating crisis: the discursive construction of the 'winter of discontent'. *Sociology*, 30 (2), 253–77.
- Helgadóttir, O., 2016. The Bocconi boys go to Brussels: Italian economic ideas, professional networks and European austerity. *Journal of European public policy*, 23 (3), 392–409.
- Helgadóttir, O., 2021. How to make a super model: professional incentives and the birth of contemporary macroeconomics. *Review of international political economy*, 0 (0), 1–29.
- Helgadóttir, O., and Ban, C., 2021. Managing macroeconomic neoliberalism: capital and the resilience of the rational expectations assumption since the Great Recession. *New political economy*, 26 (5), 869–84.
- Henriksen, L.F., 2013. Economic models as devices of policy change: policy paradigms, paradigm shift, and performativity. *Regulation & governance*, 7 (4), 481–95.
- Henriksen, L.F., Seabrooke, L., and Young, K.L., 2022. Intellectual rivalry in American economics: intergenerational social cohesion and the rise of the Chicago school. *Socio-economic review*, 20 (3), 989–1013.
- Henwood, D. 2019. *Modern Monetary Theory isn't helping*. (n.d.). Retrieved February 22, 2023, from <https://jacobin.com/2019/02/modern-monetary-theory-isnt-helping>.
- Hirschman, D., and Popp Berman, E., 2014. Do economists make policies? on the political effects of economics. *Socio-economic review*, 12 (4), 779–811. <https://doi.org/10.1093/ser/mwu017>
- Horsley, S. (2019, July 17). This economic theory could be used to pay for the green new deal. *WABE*. Retrieved May 27th 2024 from <https://www.wabe.org/this-economic-theory-could-be-used-to-pay-for-thegreen-new-deal/>
- Hopkin, J., and Rosamond, B., 2018. Post-truth politics, bullshit and Bad ideas: 'Deficit fetishism' in the UK. *New political economy*, 23 (6), 641–55.
- Jackson, W.A., 2018. Strategic pluralism and monism in heterodox economics. *Review of radical political economics*, 50 (2), 237–51.
- Jasanoff, S., 2004. *States of knowledge: the Co-production of science and the social order*. Oxford: Routledge.
- Kelton, S., 2020. *The deficit myth: Modern monetary theory and the birth of the people's economy*. New York, NY: PublicAffairs.
- Kranke, M., 2020. IMF-world bank cooperation before and after the global financial crisis. *Global policy*, 11 (1), 15–25. <https://doi.org/10.1111/1758-5899.12743>
- Kuhn, T., 1962. *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Latour, B., 1987. *Science in action: how to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.
- Litton-Monnet, A., 2017. Expert knowledge as a strategic resource: International bureaucrats and the shaping of bioethical standards. *International studies quarterly*, 61 (3), 584–595. <https://doi.org/10.1093/isq/sqx016>
- Lonergan, E., and Blyth, M., 2020. *Angrynomics*. Newcastle Upon Tyne: Agenda Publishing.
- MacKenzie, D., 2008. *An engine, not a camera: how financial models shape markets*. Cambridge, MA: MIT Press.
- Mandelkern, R., 2015. What made economists so politically influential? governance-related ideas and institutional entrepreneurship in the economic liberalisation of Israel and beyond. *New political economy*, 20 (6), 924–941. <https://doi.org/10.1080/13563467.2014.999762>
- Mandelkern, R., and Shalev, M., 2010. Power and the ascendance of new economic policy ideas: lessons from the 1980s crisis in Israel. *World politics*, 62 (3), 459–95.
- Mata, T., 2009. Migrations and boundary work: Harvard, radical economists, and the committee on political discrimination. *Science in context*, 22 (1), 115–143. <https://doi.org/10.1017/S0269889708002093>
- McNamara, K.R., 1998. *The currency of ideas: monetary politics in the European Union*. Ithaca, NY: Cornell University Press.
- Medvetz, T., 2012. *Think tanks in America*. Chicago, IL: University of Chicago Press.

- Merton, R.K., 1972. Insiders and outsiders: a chapter in the sociology of knowledge. *American journal of sociology*, 78 (1), 9–47. <https://doi.org/10.1086/225294>
- Moschella, M., Pinto, L., and Martocchia Diodati, N., 2020. Let's speak more? How the ECB responds to public contestation. *Journal of European public policy*, 27 (3), 400–18.
- Mosler, W., 1993. Soft currency economics. <https://moslereconomics.com/mandatory-readings/soft-currency-economics/>
- Mudge, S.L., 2015. Explaining political tunnel vision: Politics and economics in crisis-ridden Europe, then and now. *European journal of sociology / Archives Européennes de Sociologie*, 56 (1), 63–91. <https://doi.org/10.1017/S0003975615000041>
- Mudge, S.L., 2018. *Leftism reinvented: western parties from socialism to neoliberalism*. Cambridge, MA: Harvard University Press.
- Mudge, S.L., and Vauchez, A., 2012. Building Europe on a weak field: law, economics, and scholarly avatars in transnational politics. *American journal of sociology*, 118 (2), 449–92.
- Muniesa, F., Millo, Y., and Callon, M., 2007. An introduction to market devices. *The sociological review*, 55(2_suppl), 1–12. <https://doi.org/10.1111/j.1467-954X.2007.00727.x>
- Nichols, T., 2017. *The death of expertise: the campaign against established knowledge and why it matters*. New York, NY: Oxford University Press.
- Özgöde, O., 2022. The emergence of systemic risk: the Federal Reserve, bailouts, and monetary government at the limits. *Socio-economic review*, 20 (4), 2041–71.
- Popp Berman, E., 2022. *Thinking like an economist: how efficiency replaced equality in U.S. public policy*. Princeton, NJ: Princeton University Press.
- Relman, E., 2019, January 7. Alexandria Ocasio-Cortez says the theory that deficit spending is good for the economy should “absolutely” be part of the conversation. Business Insider. Retrieved May 27th 2024 from <https://www.businessinsider.com/alexandria-ocasio-cortez-ommt-modern-monetary-theory-how-pay-for-policies-2019-1>
- Rilinger, G., 2022. Discursive multivocality: How the proliferation of economic language can undermine the political influence of economists. *Socio-economic review*, 20 (4), 1991–2015. <https://doi.org/10.1093/ser/mwac004>
- Scharpf, F.W., 2012. Perpetual momentum: directed and unconstrained? *Journal of European public policy*, 19 (1), 127–139. <https://doi.org/10.1080/13501763.2012.632152>
- Schmidt, V.A., 1990. *Democratizing france: The political and administrative history of decentralization*. Cambridge: Cambridge University Press.
- Schmidt, V.A., 2008. Discursive institutionalism: The explanatory power of ideas and discourse. *Annual review of political science*, 11, 303–326. <https://doi.org/10.1146/annurev.polisci.11.060606.135342>
- Schmidt, V.A., 2013. Democracy and legitimacy in the European Union revisited: Input, output and ‘throughput’. *Political studies*, 61 (1): 2–22.
- Schmidt, V.A., 2020. *Europe's crisis of legitimacy: Governing by rules and ruling by numbers in the Eurozone*. Oxford: Oxford University Press
- Schmidt, V.A., 2022. European emergency politics and the question of legitimacy. *Journal of European public policy*, 29 (6), 979–93.
- Seabrooke, L., 2014. Epistemic arbitrage: transnational professional knowledge in action. *Journal of professions and organization*, 1 (1), 49–64.
- Seabrooke, L., and Henriksen, L.F., 2017. *Professional networks in transnational governance*. Cambridge: Cambridge University Press.
- Seabrooke, L., and Tsingou, E., 2014. Distinctions, affiliations, and professional knowledge in financial reform expert groups. *Journal of European public policy*, 21 (3), 389–407.
- Spencer, D., 2000. The demise of radical political economics? An essay on the evolution of a theory of capitalist production. *Cambridge journal of economics*, 24 (5), 543–564. <https://doi.org/10.1093/cje/24.5.543>
- Stewart, B., 2016. Collapsed publics: orality, literacy, and vulnerability in academic Twitter. *Journal of applied social theory*, 1 (1), 1.
- Stiglitz, J.E., 2011. Rethinking macroeconomics: what failed, and how to repair it. *Journal of the European economic association*, 9 (4), 591–645.
- Swedberg, R., 2018. Folk economics and its role in Trump's presidential campaign: An exploratory study. *Theory and society*, 47 (1), 1–36. <https://doi.org/10.1007/s11186-018-9308-8>
- Tsingou, E., 2015. Club governance and the making of global financial rules. *Review of international political economy*, 22 (2), 225–56.
- Van Gunten, T.S., 2017. Washington dissensus: Ambiguity and conflict at the International Monetary Fund. *Socio-economic review*, 15 (1), 65–84. <https://doi.org/10.1093/ser/mwv032>
- Weingart, P., 1999. Scientific expertise and political accountability: paradoxes of science in politics. *Science and public policy*, 26 (3), 151–61.
- Widmaier, W.W., Blyth, M., & Seabrooke, L., 2007. Exogenous shocks or endogenous constructions? The meanings of wars and crises. *International studies quarterly*, 51 (4), 747–759. <https://doi.org/10.1111/j.1468-2478.2007.00474.x>
- Zhuravskaya, E., Petrova, M., & Enikolopov, R. 2020. Political effects of the internet and social media. *Annual Review of Economics*, 12, 415–438. <https://doi.org/10.1146/annurev-economics-081919-050239>