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The Future of the Corporation: Economic Crisis, Long Energy Transitions and the Firm

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Abstract: This article further considers the consequences of long energy transitions for governance and the firm. Long energy transitions fundamentally challenge existing allocations of capital and render entire regions – and, indeed, some capitalist archetypes – less viable. If the present age is a crisis of market liberalism – most spectacularly illustrated by the lurid political and economic crises in the US and the UK – then the question arises as to what types of institutional fixes are likely to arise, and how bad things need to get for them to do so. The article advances an actor centred notion of complementarity, which explains the relative durability of specific sets of practices despite legislative change. Whilst this may have helped sustain market coordination, it may also make reforming market liberalism more challenging.

Keywords: Energy transitions, complementarity, coordination, populism

JEL Classification Numbers: B25, B52, F20

1. Introduction

In seeking to understand the contemporary capitalist condition, this article has three broad aims. The first is to provide a fuller understanding of the relationship between long energy transitions, different national sets of institutions, investor ecosystems and the firm. The second is to further explore the new period of political and macro-economic uncertainty which has engulfed the two largest liberal markets, and likely scenarios on how this will impact on, and reinforce, persistent difference in national institutions and firm practices.

Thirdly, the theoretical implications of these developments will be drawn out, building and extending the applicant's own work in comparative institutional analysis (Lane and Wood 2009) and on the relationship between long energy transitions and economic crisis (Wood 2015; 2016). Here, the aim will be to provide a more sophisticated mapping of the interlinkages between energy transitions, different national institutional regimes and political dynamics, corporate governance, firm finance and intra firm practice. In turn, this will facilitate in setting clearer signposts in mapping out agendas for future empirical and theoretical research on the future of the corporation in different settings and the role of the firm in society. It will also facilitate in the development of policy alternatives for moving firms onto more sustainable paths.

2. Epochopal versus endemic events

One of the great challenges faced by social researchers in the first half of the century was making a distinction between endemic and epochopal events, in other words, in trying to disentangle those sets of historical incidents which may be part and parcel of normal socio-economic life with world changing ones. The former would be either in reinforcing continuities, or in contributing to the regular process of quotidian societal evolution. The central problem is that world changing developments come unexpectedly, and it is very difficult to tell what their scale and scope is. If there is a large body of work which has confidently predicted seemingly terminal crises in capitalism (Holland 1975), there is another which consistently downplays or underestimates unexpected shocks (Hansmann and Kraakman 2000). The problem is further compounded by the extent to which world changing events may both be unexpected, yet unfold in an uneven and unpredictable fashion. Perhaps less predictable than Germany's drift to authoritarian rule in the 1930s is not why it happened, but the uneven manner in which it did, and how vestiges of a constitutional past persisted until quite late; not only did this help add legitimacy to the regime, but also it provided ample straws for optimists to hang on to.

There are two reasons for this difficulty. The first is how we understand history. Any sense of historical inevitability invariably leads to disappointment. A historical problem with the radical tradition is that a standard response to dark times has been a tendency towards being optimistic about the future, but with a desirable end state almost always somehow elusive. The risk is that quite small or even idiosyncratic events can be vested with much greater historical importance than they deserve; whilst symptomatic of the rot in the American polity, the undeniably damaging George W Bush presidency hardly represented a historical departure from longer term processes (whether the Trump one is or not is quite a different question). There is also a fundamental feature of capitalism: like some universities, capitalism is capable of weathering seemingly terminal crisis, emerging battered and altered, but recognizably the same in the case of some core features. In turn, the standard postmodern response of extreme pessimism, of the inevitability of an amorphous repression that is somehow central to the human condition (Baudrillard 2016) is not very helpful either. On the one hand, as Calhoun (2012) and Marx (1996) noted, much of human history is about the usage of forced labour. On the other hand, the experience of the modern welfare state is that, for all the limitations of the latter, it has proven perfectly possible to prosper without it, as was the case with at least some traditional societies (Diamond 2013).

So, how can one then understand the distinction between the endemic and the epochipal? The answer is really where one looks. Although there are certain common strands in human history, and one, for example, social inequality, may tell you a great deal about others, there is a need to more closely understand how different forces and features interact and intercept eachother. Although developing a definitive list of historically distinguishing features may represent a vain or elusive project, there are clearly a number of different elements which are identified in influential different strands of literature: political instability and ceasarism; reaching the limitations of environmental resources; and energy transitions; the growing prominence of globally articulated capital; and important developments in complementarity. In other words, a mix of the human generated, and products of the interface between humanity and the natural world. Of course, the two elements are closely inter-related. As Bourdieu (2005) reminds us, behaviour is moulded and framed by the habitus, the social environment in which the individual operates; however, the societal framing of an individual and how s/he conducts himself in turn, reflects the interface between society and the environment. On the one hand, it is widely recognized that we have entered an anthropocene era; where the sum of human activities has fundamentally changed the global natural environment (Lorimer 2017). However, some nations seem more concerned about the this state of affairs and indeed, are doing a great deal to ameliorate the worst of it, whilst others are hell bent on hastening it.

For at least fifteen years, we have been in a long energy transition; although demand for oil and gas remains robust, the proportion of oil and gas in the global energy mix has declined, and the costs of alternative energy sources now have the potential to undercut oil and gas (Röttgers 2017). Significantly, this has coincided with a period of economic crisis and uncertainty (Wood 2015; 2016). It is worth noting that the long crisis of the first half of the twentieth century was associated with a shift from coal to oil and gas. What we know about this long transition is that placed short term and highly mobile investors in an advantageous position, and left those with capital (physical or human) tied up in specific industries and processes in a worse one.

The present long energy transition poses similar challenges. However, the implications for short and long term capital are somewhat different. Unlike in the 1930s, highly mobile investors have a strong commitment to the old energy order; volatility in oil and gas prices, and the high debt leverage associated with unconventional sources is conducive to short term investors (Wood 2016). In contrast, longer term investors may find alternative energy, with high set up costs, but more stable revenue flows more attractive (OECD 2016). It is perhaps hardly surprising that the Western European Coordinated Markets have made the greatest progress in the adoption of alternative energies, and the two leading liberal markets are fiercly committed to towards fracking, generally supporting oil and gas firms, and the changes in the regulatory environment to make the adoption of alternative energy sources more difficult (Wood 2016; Brown and Hess 2016; Boersma and Johnson 2012; Jacoby et al. 2006; Reiner et al. 2012; Renn and Marshall 2016).

At firm level, an investment ecosystem dominated by short termism and speculation is one that is challenging to firms that have based their business model on large investments in physical and human resources, and conducive to ones that base theirs on the ability to draw in capital and leverage debt around anticipation of large future returns and/or the asset light retail of goods and services. It also seems beneficial to employment light technology firms that act as monopolistic interfaces between users and service providers, and, indeed, firms that can leverage political connections to secure oligopolies or monopolies in outsourced public services (Wood 2016; Wood and Wright 2015). In contrast, in settings where longer term investors are in a stronger position, national economies seem much better at supporting incrementally innovative manufacturing, and other areas of economic activity associated with stable returns and the generation of decent work. A larger pool of patient investors makes it much easier to secure funding – and government support – for renewable energy: the latter has initially high – but diminishing – set up costs but low running ones. The converse is true for unconventional hydrocarbons: for example, technological advances make it cheaper to frack, but new wells have to be constantly drilled to keep flows going (Heinberg and Part 2013). In turn, not only has the oil and gas industry become heavily financialised, but also it is also one characterised by boom, bust, and speculation, which reinforces any existing trends to this within specific national economies, and, indeed, helps make existing structural problems much worse. Hence, noted in my earlier work, whilst the present stage is one where liberal markets have become engulfed in crisis, coordinated markets generally have not, an inversion of what happened in the 1930s (Wood 2017). Of course, in an interconnected world, contagion can and does happen.

To add to this mix is that the two leading liberal market have both entered a period of political crisis that is closely bound up with economic developments, and a systematic incapability of generating and sustaining decent work (Wood and Wright 2016); in the 1930s, existential political crisis was similarly something that coordinated markets did. What emerges is that a series of world changing events are taking place, but that they are being felt unevenly. The economically driven political crisis in liberal markets and what it means for the firm constitutes the next section of this paper.

3. Political instability and Caesarism

Populism is a very broad catch all term, that refers to the political strategy and movement associated with individual politicians who seek to position themselves outside of the mainstream. This is in order to distance themselves from the existing political order and the perceived failings of the system. Ironically, populist leaders themselves often are political insiders and/or members of the economic elite, and whilst engaging in sometimes radical rhetoric, adopt policies geared to narrowly serving the agendas of the latter (Sawyer and Lackock 2009). In other words, although populist movements typically arise when political systems are not working for a large component of society, the accession of populists to high office, often makes things worse, rather than better for their constituents. How populists circumnavigate this challenge is through shifting unhappiness against a system that serves only a few towards horizontal conflicts between groupings competing for the same limited pool of resources. The very rich are far removed from the lives of the majority of society; many never engage in everyday social transactions, ranging from shopping to scheduled airline travel (c.f. Lasch 1996). They are also often remote from spatially rooted sites of production or accumulation, preferring committing between nominal tax haven domiciles and other desirable locales; this is very different to industrial magnates of the early C20, and amplifies their lack of commitment to, and empathy for, any set of commercial or industrial activities, or indeed, any other social grouping apart from themselves. This remoteness enables populists to construct illusions regarding members of this grouping: they are depicted as glamorous, somehow more talented, yet ever open to admitting into their ranks anyone with genuine capability. A failure to join is the fault of the individual, not of the status quo (Macdonald and Ruckert 2009).

In contrast, more familiar groupings: intellectuals, technocrats, ethnic minorities, foreigners, and, even, women and young people, are depicted as somehow having gained an unfair advantage which leaves the downwardly mobile - middle aged and elderly men from the traditional working and lower middle classes - worse off through no fault of their own (Lacy 2010). A second feature of populists is that they do not have to deliver - any failure can be blamed on the system or because any number of these internal enemies have not yet been dealt with decisively enough. In short, populist springs from downward social mobility, but presents the return of great class inequality as not the real problem.

In summary, it can be seen that populism is closely related to changes in material conditions. As predicted by classic deprivation theory (Davis 1959), when a significant component of society end up poorer, and can benchmark their decline against a previous sustained period of prosperity, and, indeed, other groupings which appear to be faring better (or at least, not facing the same decline in material conditions), then there are likely to be sustained challenges to the status quo. A more difficult question is why most – but not all – outbreaks of insurgent populism tend to be phenonomena of the far right, rather than the left. There are both societal and material explanations for this. At a societal level, vested interests have – as was the case in the 1930s – been quite successful in deflecting discontent horizontally or downwards; in other words towards relatively unprivileged or marginalised groupings who can be depicted for some or other reason (immigration, closed internal cultures, equality of opportunities) received an advantage that was previously denied to them, and, hence, in some or other manner unfair for past beneficiaries of the system. The second is the material dimensions. If certain resources have become more scarce and are not easily solved by policy fixes - for example, areas of the world where one can practice at least a subsistence level of agriculture and count on a basic degree of physical safety are diminished (Cumming et al. 2014), or ones where on has a fair chance of securing decent work (Barrientos et al. 2011) – then ultimately there will be intensified competition for them, and, following on this, a focus on distributional rather than productivity solution. This is not to suggest that right wing populism is all about immigration. However, by the same measure, global warming generated environmental collapse in the Sahel, and a proliferation of crises of the state in Africa, the Middle East and Latin America, then larger scale movements of people will inevitably take place (Abramitky et al. 2012). In turn, pressure on the number of safe locales intensifies, with inevitable struggles in terms of access to residency and citizenship. Taking immigration out of the picture, the energy crisis of the early 1970s seriously damaged to the delicate economic balance of the Keynsian model, again, making internal coordination and productivity solutions seem less feasible, again, driving a focus towards distributional contestations and, ultimately, populist promises of quick distributional fixes, typically promised through penalizing weak and marginalized underclasses, and through further outsourcing of core functions of what is depicted as an incapable and discredited state. In practice, the imposition of radical liberal market reforms made the problem much worse, rather than better.

Does this mean that productive solutions are no longer possible? By no means; however, it suggests that it may be increasingly difficult to sustain inward market coordination without some reflection of structural changes in the world about. For example, there is the question of migration. A national fortress model is not only difficult to sustain at times when populations age, but the usage of increasingly repressive measures to stem mass migration can damage not only the subjects, but indeed, the core values of wider society. If coordination is about forging compromises, the rejection of all compromise in a specific area means that coordination can never be all encompassing. Again, if most migration is illegal and yet demand for specific types of labour persists, the end result is the creation of an underclass of undocumented migrants, locked in debt peonage, with threat of exposure and deportation being the ultimate sanctions: in other words, rather than stemming human traffickers, national governments end up as their enforcers. This leaves the only alternative, dealing with crises of the global commons. On the one hand, it has proven very difficult to reach consensus between governments on coordinated action to combat global warming. On the other hand, the long energy transition away from oil and gas is well under way (Wood 2016; Brown and Hess 2016; Boersma and Johnson 2012; Jacoby et al. 2006); whilst this is not going to solve the problem of endemic drought in the Sahel in the short term, there remains some hope that global emissions will be sufficiently checked to avoid complete ecological collapse on a much broader scale than is presently the case. The second is that, whilst often bound up with environmental issues and famine (e.g. the Syrian civil war), misguided military intervention by Western powers (and above, all the two largest liberal markets) has often precipitated the temporary (Iraq, Syria) or seemingly permanent (Libya, Somalia, Afghanistan) collapse of strategically positioned states (Hughes, 2014); the simplest path to state building is not to destroy states in the first place. Of course, elites experimenting with war as a means of distracting attention from their own failings has dangerous echoes of the run up to the First World War.

Finally, if migration will inevitably take place, it is worth considering the quality thereof. Although this is often taken at the level of skills, a further issue is the impact of different types of migrant. Unlike poor migrants, rich prospective migrants who purchase property in the developed world distort property markets. Often these are intended as boltholes of last resort that are seldom if ever occupied: for example, there is a direct correlation between house prices in the notoriously dysfunctional London property market and the inflow of Russian hot money (Johnstone and Jones 2000; Budenbender and Golukchikov 2017). Again, a reliance on the inflow of hot money may fundamentally corrupt national institutions. Although it is possible for the very rich to buy their way into Britain, and a number of other developed countries, it can be argued that their impact on economy and society is substantially more adverse than the inflow of a larger number of the very poor.

Another manifestation of distributional tensions that lie at the heart of populism's causes is that between the elderly and the young. In ageing liberal, the elderly are both relatively wealthy, owning increasingly valuable housing stock and more generous pensions than are typically presently on offer to employees, and precarious. The latter would reflect challenges inter alia, securing health care, and the tension between having a place to live and the needs to release money through the sale or remortgaging of their houses. Although the young may have little to do with either of these dilemmas (unless in the case of helping their children into the housing market), insecurity and, perhaps guilt at being the last 'lucky generation', has led to a groundswell of anger towards the young, again fanned by reactionary sections of the media (c.f. Lazaridis, and Krasteva 2016). In addition to migrants and the young, the other major target of populist ire has been women; educated and independent women are depicted as both unnecessarily competing for a limited pool of good jobs and in eroding the authority of already disempowered males (Lacy 2010). This leads to the obvious question as to why this anger has not played out against unaccountable elites. The most obvious reason is their remoteness; it is easier to blame a highly visible others than those about which there is known little, other than popular media stories who hint at boundless glamour and success.

The present upsurge of mass migration can be at least in part traced to global warming, in turn, a product of present energy usage patterns; the other bogeymen (or rather, bogeypeople) in the populist demonology are largely the product of the extent to which a large proportion of the population in the liberal markets are becoming much worse off and are looking for someone to blame. However, in turn, the worse off typically lack transferable skills and highly fungible assets; in other words, they are the inevitable losers of long energy transitions that favour those who are able to cope with fundamental changes in the allocation of capital and the associated base of national competitiveness. Given, as we shall see, the investor ecosystem in liberal markets is ill equipped to cope with a shift away from oil and gas, this has clearly having particularly severe impacts on the polity; given this there are two paths such countries may follow. The first is a fundamental departure to a different model of capitalism. The second is the Latin Americanization of liberal market politics, towards an oligopoly tightly controlled by a closely knit elite, who rely on a range of constitutional and extra-constitutional mechanisms to sustain their rule (Winders and Page 2009).

In the present age, the accession to power by George W Bush was condemned pessimists as evidence of the final rot of the US model (Hacker and Pierson 2010), and the accession of Barak Obama as evidence of its capacity to renew itself (Dalton 2008; Dumbrell 2010). On one hand, there is a large body of opinion that Trump represents a very much worse outcome for the system than the now dangerously moderate Bush. On the other hand, Trump has faced serious obstacles in getting anything done, precisely because US politics have become so adversarial and dysfunctional (Mann and Ornstein 2016). Again, Brexit Britian is characterised not only by the extent to which right wing extremism has become mainstream, but by the sheer scale of bungling, incompetence and infighting within the ruling party (Wood and Wright 2016). What remains unclear is whether these developments are indeed, symptomatic of a great systemic crisis on par with the 1920s and 1930s (c.f. Arendt 1956); I am inclined to be believe they are. However, whatever the scale of the crisis, there is little doubt that it is both of historical (in other words, an extended period of instability within the global capitalist ecosystem) and spatial dimensions (above all, a crisis of market liberalism). The following sections draw out the implications of the uneven nature of crisis for the firm, and the creative manners in which different types of firm are responding.

4. Globally articulated capital

Highly mobile investors benefit from economic crisis. In common with MNEs, what I call globally articulated capital is only partially anchored within a particular institutional domain (c.f. Morgan 2012). In other words, investors do not always conform to the norms of a particular institutional domain. Importantly, the category of those encompasses a significant component of the alternative investor ecosystem: hedge funds, sovereign wealth funds and private equity. Some may be notionally domiciled or make extensive usage of tax havens, but are still subject to home country pressures and are socialised into particular patterns of behaviour associated with the same. Again, whilst they may wish to impose specific practices on target firms, the latter may and do respond in a creative way, for example, in forging alliances with other players in the financial ecosystem, to preserve the status quo (Haberly 2014). Again, host governments may devise non-regulatory solutions of their own to maintain or strengthen the existing system. For example, one response to incursions by Anglo Saxon private equity in France has been for the French government to promote domestic state aligned private equity (Brewster et al. 2017b; 2017c). My own joint research highlights the extent to which the latter adopt strategies to target firms that are closely similar to those traditionally followed by orthodox French investors (ibid.). In summary, not only may capital be highly mobile between national markets, but it also has become highly articulated.

5. Rethinking complementarity

On the one hand, there is little doubt that institutional arrangements can confer some or other complementarity: in other words, when encountered together, sets of institutional features both characterise a national capitalist archetype and make for better outcomes for at least some sets of players than would otherwise be the case. However, there are two issues that emerge with complementarity. First of all, it has become apparent that systems may reform in one area, but with other areas persisting or even strengthening, to such an extent that the existing model is reinforced or revitalised. Actors may forge new deals between eachother to hamper the unwanted effects of deregulation, and in doing so sustain the system: this has made it very difficult for private equity to make headway in Germany and hedge funds in Japan (Haberly 2014).

Secondly, complementarities may have a narrow or broad social footprint. In other words, they may work for a few players or many. This is a point often neglected in the literature on comparative capitalism. Just because a system does not work for many does not mean that it does not work very well for a few (Wood and Frynas 2006; Wood and Wright 2016). In other words, tinkering with complementarities may strengthen the existing functionalities of the system. An example would, again, be Trump's America and Brexit Britain. For example, nationalist paranoia is very good for domestic arms sales, and less ethical foreign policies for sales abroad. The rechannelling of anger at stagnant and lowering material conditions towards the even more vulnerable buys valuable time for low end service firm that might otherwise face greater regulatory pressure. Insider ties with populist leaders – for example, Mercer, Hand and other players in the more extreme side of the hedge fund ecosystem – again provides a valuable barrier against unwanted regulation; once more the kind of macro-economic volatility that populism brings is very lucrative (Wood and Wright 2016). It is the some of the same hedge funds that bankrolled Brexit that subsequently bet again against the pound (ibid.).

The existing literature on complementarity has tended to focus on the most highly visible features (e.g. German vocational training, Italian industrial districts) (Crouch 2004; Thelen 2010; Whitley 1999). The possibility of recombination and the fact narrowly based complemanterity have both been relatively neglected, as there is a tendency to focus on formal regulatory features, rather than informal rules and conventions. Perhaps, in some areas, formal regulation does not matter than much if key actors are willing and able to strategically devise solutions that enables them to carry on – and indeed intensify – what activities they are best at. In other words, I would argue for a stronger focus on the firm centred nature of complementarity and less for a formal regulatory one.

6. Conclusion

Clearly, we have are faced with an epochopal puzzle. In other words, is the present economic and political crisis, which, whilst not confined to the liberal markets, is most pronounced in them, of world historic importance or simply a minor aberration. On the one hand, the dysfunctionalities of the US and UK constitutional orders have made it very difficult for populists – despite attaining political dominance – to impose their agendas. On the other hand, if one links the problems that have bedevilled the world economy since the 1970s to economic long waves, and, ultimately to long energy transitions, then the epochopal argument is the more convincing one. Among the advanced societies, it is liberal markets that have been most associated with policies aimed to keeping the hydrocarbon based order on the road, most recently through the evangelical promotion of unconventional oil. In contrast, coordinated markets have generally been much quicker to promote and disseminate the usage of alternatives. To a large part, this would reflect the dominant investment ecosystem; more patient investors will naturally prefer renewables and more short termist ones the highly financialised oil and gas sector. However, this does not mean that systems are perfectly aligned; for example, the influential

German car industry has not greeted the move away from oil and gas with a great deal of delight. In practical terms, such phenomena suggest that the challenges of a long energy transition will be associated with costs worldwide. The propensity of the two largest liberal markets to official violence – war abroad and increased securitization at home – would suggest a policy propensity to seek to reconfigure the allocation of power and resources to sustain a system, which is always a dangerous and unpredictable business.

There also remains the omnipresent threat of contamination; notably, liberal market reforms in the Mediterranean economies have been associated with consmeasurate populist pressures. Although MNEs have often been identified as agents of liberalisation, recent empirical work suggests that this is not the case (Brewster et al. 2017a). Other partially institutionally rooted actors – most notably alternative investors – may be more credible candidates, but even here, recent work indicates their power is circumscribed by national institutions and associated conventions (Brewster et al. 2017b).

On the one hand, the gains of a move from hydrocarbons are infinite, if the well-being of all life on the planet is considered. On the other hand, this raises the question as to what will happen to liberal markets. As the historical institutionalists alert us, the building of new, and the radical reconstruction of existing institutional arrangements, is a relatively unusual event, and is only unlikely to take place when every other alternative is completely discredited, which, in turn, will only likely to happen in the event of near complete political and/or economic collapse (c.f. Sorge 2005). On the one hand, the existence of viable alternatives elsewhere may encourage the forging of political solutions conducive to adopting them. On the other hand, desperate elites may seek to break known alternatives by whatever means possible to help legitimise their own situation.

A further central question is on the nature of complementarity; it is evident that some liberal market reforms in some settings, have much less adverse effects than liberalisation in others. For example, contrary to the earlier pessimism of some writers (e.g. Streeck 2009), the German model has strengthened itself in some areas, even whilst liberalising in others (Thelen 2014). In contrast, liberal market reforms have been much more damaging in the Mediterranean world (Reynaut 2011); however, in such economies, the large informal sector and family based extended networks of support have still mitigated its worst effects. What such diversity indicates is that in focusing on formal regulatory shifts, the actor centred nature of complementarity is downplayed: even if some players in any contexts will inevitably be discontented agents of reform, others may close ranks to sustain the familiar ground they are most comfortable with for the benefits it confers. Whilst this may have helped sustain market coordination, it may also make reforming market liberalism more difficult.

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