

# Book reviews

Philipp Staab · 2024

## Markets and Power in Digital Capitalism.

Manchester: Manchester University Press

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Post-neoliberalism is en vogue. Contrary to those who rely on short-lived political conjunctures, the German sociologist Philipp Staab speaks about another popular (sociotechnological and socioeconomic) dimension of the present transformation to demolish the belief in neoliberal continuity. His book on digital capitalism deals with relevant structural transformations of corporations and markets. The key witnesses of his account of digital capitalism and post-neoliberalism are Schumpeter and arguably Gordon Tullock and Anne Krueger, but not Marx. I first agree with the book's main aim of focusing on the global political economy of digital capitalism and lead corporations at the center

of a profound economic transformation. Proceeding to the author's claim of the arrival of a post-neoliberal era because of a new dimension of corporate control of market relationships, I present a few challenges related to neoliberal theories of markets and monopoly.

### Digital capitalism and the end of neoliberalism

The widely perceived threat of (arguably unprecedented) market control of the global tech corporations, which led to intense campaigning in support of regulatory efforts in digital markets in many countries, is the basis of a theoretical argument pertaining to epochal change of capitalist social relations in the work of Philip Staab, whose German-language book on digital capitalism has now been revised and published in English. Objecting to a descriptive narrative of the digital transformation of capitalism and Silicon Valley and to the argument of a reinforcement of American cultural hegemony, Staab observes a relative divorce of the state and corporate leadership. He emphasizes the ownership structures of leading tech firms both in the United States and China – GAFAM (Google, Amazon, Facebook, Apple, Meta) and BAT (Baidu, Alibaba, Tencent), respectively. These are the corporations that control much of the *commercial internet* (author emphasis throughout) and thereby are also considered the main drivers of the transformations of many traditional markets, from retail to car manufacturing. Although Staab does acknowledge the joint public-private *security state* action involving the tech giants, he argues that the state has given up economic policy leadership in digital markets, thence the need to speak about digital capitalism, and not about digital hegemony.

Staab explains the *economic conditions* for the rise of *meta-*

*platform companies* with supply-side *economies of scale* and demand-side *network effects*, which enable the new lead companies to engage in *monopolistic competition*, subjecting lesser competitors to subordinate positions in a new corporate hierarchy. Referring to Schumpeter's entrepreneurship theory, Staab considers monopolistic competition not all bad in contrast to neoclassical theory. Not fully following the Harvard economist's historical perspective of the rise of managerialism, however, Staab seems to miss Schumpeter's irony about fundamental changes likewise expressed in his presentation of communism as an elite affair, void of proletarian dictatorship. Staab wants to go beyond Schumpeter by drawing a greater distinction between Schumpeter's age of economic production under conditions of scarcity and the present era of digital capitalism and its logic of superabundance. For Staab, the lead companies constitute proprietary markets, which are driven more by rent-seeking than by entrepreneurship. "The objective is not to maximise production but to derive profit from goods that are actually superabundant" (p. 8). Gordon Tullock (1967) and Anne Krueger (1974) thus are more central to his argument than Schumpeter, even if the state is no longer blamed for the outcome.

Beyond economies of scale and networks, in addition to the relevance of likewise superabundant risk capital – Staab speaks about some continuity of financial capitalism in chapter 3 – in the evolution of the commercial internet, he insists on "a system of proprietary markets" (p. 8) as the operational core of digital capitalism, although he does ask if this is not just a return of previous forms of monopoly capitalism. Surprisingly, he refers to corporations characterized by "natural monopoly" (p. 9) dimensions in the telecom

and railway sectors according to liberal welfare economics rather than the more generic monopoly categories discussed by Hilferding ([1910] 1981), for example, and the rise of financial capital in particular. His choice to focus on technical dimensions serves Staab again to distinguish the digital monopolies from the *capital-intensive* infrastructure-related corporations of past centuries. Digital lead companies do not create a monopoly due to capital intensity but to a very comprehensive ownership of and identity with the markets they are, and hence design and shape at will. Monopolistic profits in such proprietary markets are generated by way of access control (gatekeeper) and provisions paid for access (p. 109f.). Staab claims that firms can set prices at will (hence rents) and additionally take systematic advantage of their control by inviting competitors to the platform if a product is considered too expensive. However, would finance capital not be in the same position in many a market, enabling competitors to enter if interest paid on the money lent for investment is considered likely to meet expectations?

Staab emphasizes “product” abundance and the specific (digital) market ownership to argue for a completely new era of digital capitalism, which he conceives as a radical break with neoliberal capitalism. Starting a historical narrative of the emergence of digital capitalism with still fairly traditional ways to establish monopoly, Staab considers the Windows-Intel partnership (WINTELISM) to be a preview of what was coming, even if it was about controlling the PC market only. He holds that the present digital lead companies operate on a much larger and diversified scale, however, and are thereby enabled to gain more control over producers and consumers alike. The ownership of digital

meta-platforms allows the lead companies to expand in ever more markets like entertainment, media, and gaming, or employment services and retail. The meta-platforms thereby allegedly turn from marketplaces into the market as such, aiming to prevent producers and consumers alike from switching to competing platforms and services. The meta-platforms thus strive to become universal venues for economic transactions (p. 20).

In contrast to a prospect of decentralization and open source collaboration, the commercial internet is all about concentration of power and control, much like finance, according to Staab, albeit presently subject to intense oligopolistic competition. Again similar to finance are secondary uses of data (derivatives in finance, commercial advertising in digital markets) and the capitalization of time (credit and speculative utility of advertising, respectively). Digital capitalism in this way is considered to be similar to the neoliberal age of speculative finance: specifically, the risk capital invested in prospective gatekeepers is considered an example of the crisis-prone character. But digital risk capitalism is not controlled by the large financial institutions, according to Staab, but by the established gatekeepers: finance capital online. The book does not offer much insight into the relationship between big finance and big tech, unfortunately. More important appears to be the turn against the continuity of neoliberalism: the new system of proprietary markets.

#### Post-neoliberalism?

Although in Staab’s view there is not yet a full-fledged new mode of regulation in digital capitalism, the old mode of neoliberalism is under ultimate pressure to disappear due to the development of proprietary markets.

The key difference lies in lead companies no longer acting as producers operating in markets but as markets on which producers interact. Contrary to typologies of different platform business models, Staab insists on the hierarchy of the lead firms as gatekeepers that control secondary companies (and potentially everything else). The proprietary “eco systems” are the core of the post-neoliberal accumulation regime and its emerging mode of regulation. They are considered meta-platforms because of their core position in the wider universe of digital capitalism. They maintain their central position of power by way of four control mechanisms (p. 82f.): (1) information control (data extractivism); (2) access control to the market (gatekeeping); (3) price control (by adding competitors); and (4) performance control (via customer evaluation). Due to the exercise of these control mechanisms, the core/lead firms have managed to establish a presence without alternative.

The only limiting factor of their rentier model is the non-exclusive character due to the oligopolistic competition among themselves. While Silicon Valley neoliberals may dream of the ultimate singular monopoly, the tech giants still come in (small) herds. The key difference to the neoliberal order is nevertheless in plain sight for Staab. Instead of a mode of regulation based on constant expansion of markets and commodification, the new era has removed the principle of market neutrality (p. 129) allegedly common to all varieties of neoliberalism. While Staab knows that market neutrality has been a fiction, the principle of market openness and access is key to neoliberal ideology, according to him, and no longer compromised to some degree only. The era of digital capitalism undermined the traditional market regime with a new system of privatized mercantil-

ism (p. 121f.). Staab meanwhile acknowledges that many policies and management approaches continue to be characterized by neoliberal ideas and concepts, and the forces fighting against and in defense of neoliberalism continue to exist. Still, Staab regards these troops as fighting in the “smoking ruins” of a system that has already ceased to exist.

Staab certainly does have a powerful argument about the new tech giants, even if he does not address the wider phenomenon of assetization and rentier capitalism (Christophers 2020) and many aspects of the relationships between the economics of abundance and the real-world economics of scarcity that continue to be relevant in the age of digital capitalism and arguably remain outside the scope of controls exercised by the tech firms. In fact, he may be considered to have fallen victim to Hayek’s own deflection of real-world economics (of scarcity) by intellectually transforming the whole of the economy into a system of price signals and information processing (Mirowski and Nik-Kah 2017), which has been a convenient way to avoid considering the human–nature relationship, or, in Staab’s case, the relationships of superabundant information products and the real world of scarcity economics. Staab’s claims about neoliberalism rest entirely on a principle of market neutrality, by which he is probably referring to market openness and acknowledging its fictive character in real life (in contrast to neoclassical theoretical assumptions). However, neoliberalism in fact moved away from neoclassical ideal types of market operations and demanded a much lesser degree of market openness than Staab seems to believe. Neoliberals regarded the state as a much greater threat to the functioning of the price signals than even the biggest corporation, and they continue to do so (Colton 2021). According to Hayek, it is

“desirable not only to tolerate monopolies but even to allow them to exploit their monopolistic position – so long as they maintain them solely by serving their customers better than anyone else, and not by preventing those who think they could do still better from trying to do so” (Hayek 1979, 73). Considering the US restrictions on Chinese competitors of GAFAM, Hayek even seems to have a point that it is government intervention that undermines economic constraints of tech monopolies.

The struggle over the regulation of digital markets meanwhile provides some evidence of both the ongoing effort to limit the “market ownership” strategy of the tech companies and the efforts of tech and other big corporations to limit the regulatory impact of the antitrust authorities. Staab is right to suggest that the regulatory approach in the EU continues to rely on neoliberal hopes of market competition, but he fails to discuss the new Brandeisian moment in US antitrust and belittles the considerable attacks of both EU and US antitrust authorities on digital monopolies as well as neoliberal consumer efficiency arguments in recent cases. Neoliberalism does not lose if the digital corporations control rather than “own” (some, certainly relevant,) markets, but it wins if private capital cannot be significantly restricted and directed in its endless search for profits. Comments of other corporations and their business associations on new (ex ante) antitrust tools of competition authorities should give Staab food for thought with regard to the new hierarchy he claims to observe. Instead of support for the state to keep digital markets open, other big firms and their spokespeople are worried about more powerful antitrust authorities, not about the tech companies.

Overall, Staab’s book makes a contribution when it comes to

highly relevant transformations in a global political economy that is driven by a set of new lead corporations in control of platform assets, and the resulting shake-up of corporate hierarchies. But he misses key aspects of contemporary neoliberalism with its unwavering defense of property rights and ownership structures, which turns privately controlled forms of rentier capitalism into the rule rather than the exception in the shape of digital platforms.

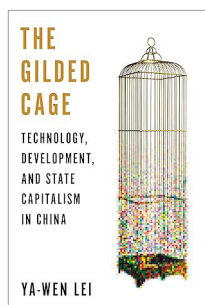
## References

- Cayla, David. 2022. “How the Digital Economy Challenges the Neoliberal Agenda: Lessons from the Antitrust Policies.” *Journal of Economic Issues* 56 (2): 546–53.
- Christophers, Brett. 2020. *Rentier Capitalism: Who Owns the Economy, and Who Pays for It?* London: Verso.
- Colton, Caroline Kate. 2021. “The Imitation Economy: How AT&T’s Contestability Doctrine Transformed the Neoliberal Project.” PhD diss., University of Technology Sydney.
- Hayek, Friedrich A. 1979. *The Political Order of a Free People*. Vol. 3 of *Law, Legislation and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy*. Chicago: University of Chicago Press.
- Hilferding, Rudolf. (1910) 1981. *Finance Capital: A Study of the Latest Phase of Capitalist Development*. Edited by Tom Bottomore. London: Routledge & Kegan Paul.
- Krueger, Anne O. 1974. “The Political Economy of the Rent-Seeking Society.” *American Economic Review* 64 (3): 291–303.
- Tullock, Gordon. 1967. “The Welfare Costs of Tariffs, Monopolies and Theft.” *Western Economic Journal* 5 (3): 224–32.
- Mirowski, Philip, and Edward Nik-Khah. 2017. *The Knowledge We Have Lost in Information: The History of Information in Modern Economics*. New York: Oxford University Press.

Ya-Wen Lei · 2023

## The Gilded Cage: Technology, Development, and State Capitalism in China.

Princeton: Princeton University Press

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*The Gilded Cage* is a breathtakingly ambitious book. Most sociological monographs today “choose their battles wisely” – they drive home a small number of conceptual points, establish methodological novelty in one or two respects, or provide empirical illumination in a clearly delimited space of problems. Lei’s new book does it all at once, and does so not just in any problem space, but in one of the most relevant and contested contemporary fields – 21st century Chinese capitalism.

Just a few of the things the book succeeds at: *The Gilded Cage* rescues Daniel Bell’s theory of power in the postindustrial society from the dead; it establishes the existence of a new developmental regime in China called techno-developmentalism; it reconstructs the emergence, geographical diffusion, and internal contradictions of that regime historically; it demonstrates how “technological development” has become an almost mind-numbing cultural scheme in Chinese society, overriding most other concerns; it reconstructs the rise and current societal role of Chinese Big Tech; and it documents ongoing mergers between party-authoritarian

governance, industrial policy, faith in quantification and indicators, and data-based social control. The book is not just a macrosociological account, but traces all of these issues down to the shopfloor and street levels and to the everyday experience of administrators, citizens, managers, and workers, with a keen eye on contradictions and social conflict. Almost all of the book is based on a huge amount of original archival, ethnographic, and interview data, which are meticulously documented and discussed.

Perhaps most remarkable, *The Gilded Cage* does all this and still reads fluently as a coherent whole – it is remarkably well-crafted and well-written. The metaphor holding Lei’s account together is that of the *birdcage*. In that vision of state-economy relations, the state nurtures desirable economic forces as “birds” in a “cage” of political-administrative control and selective intervention. At its narrative core, the book demonstrates how symbolic notions of desirable and obsolete, new and old, rising and declining “birds” have changed over time – with far-reaching consequences for administrators as well as subjects of the “bird”/“cage” logic.

The book is structured into eight major chapters, two of which reconstruct the historical emergence of techno-developmentalism and six of which take readers through the major arenas of this new socioeconomic regime.

Chapter 2 documents that the ideational and structural seeds of techno-developmentalism were already present in China’s labor surplus-driven accumulation regime. Key features the chapter finds dormant in China’s “factory of the world” era are widespread elite beliefs in the scientific management of development, strong popular beliefs in the beneficial nature of science and technology, and

an indicator-heavy control structure of the political-administrative system. Lei speaks of an emerging “scientization of statecraft” (p. 64).

Chapter 3 shows how the surplus labor- and manufacturing-intensive developmental regime increasingly fell out of fashion after the Great Financial Crisis. Change was led by coastal regions in reaction to the economic and environmental limits of the old growth model as well as by key elites, such as Xi, who, Lei shows, had a history of experimenting with science and technology-oriented developmental interventionism. Of particular force are the chapter’s illustrations of how the techno-developmental logic seeped into indicator-based evaluation systems for citizens, firms, and local administrators. Lei demonstrates how state favors, financial and political access, and plain citizenship rights are now deeply tied to the goal of furthering science and technology and technological upgrading.

Chapters 4 and 5 move down to the shopfloor and regional level to show how this developmental logic changes the lived experience of capitalists and workers now deemed “obsolete” or in need of being “upgraded.” Lei documents selective regulatory overenforcement and systematic harassment to root out “old birds.” The level of open discontent is surprisingly limited – often on the basis of a consensus around national upgrading goals. Particularly in the field of policies around “robotization,” the chapters also highlight the irrationalities of the process when street-level administrators, managers, and workers try to find creative ways to bring together unrealistic robotization goals with actual economic practice. “From the process, I have realized that the human body is magic,” one of Lei’s informants summarizes the experience with robotization on the ground (p. 147).

Chapters 6 to 8 trace the regime into the digital economy. The book gives a deep account of the rise of China's big tech sector as an incremental "para-public" amalgamation between the state's interests in instrumental power and technological upgrading and big corporations striving for data-based accumulation. In the sphere of work, Big Tech's rise implies that surplus labor is increasingly absorbed by precarious gig and platform work, rather than by the factory. Again, Lei documents widespread disillusionment but a resilient consensus with catch-up developmental policies, even among those vastly underprivileged in China's digital economy. Following up on Daniel Bell's thoughts about knowledge elites in post-industrial society, Lei also investigates privileged digital economy workers with prestige technical education – what she calls "Coding Elites." Yet, even here the book documents ambivalence and the human grind techno-developmentalism inflicts on Chinese society.

*The Gilded Cage* is more than a book for regional or subject specialists. It pushes the agenda for economic sociology and political economy in several respects. One key move that should prove instrumental to a wide range of socioeconomic scholarship concerns Lei's innovative coupling of comparative historical macrosociology with shopfloor- and street-level qualitative analyses. The book deploys analyses of micro- and meso-arenas not just for illustrative purposes, but to guide macrosociological description and theory-building. This style of shopfloor-grounding of work on socioeconomic regimes used to be at the core of comparative work in economic sociology, and Lei's book shows why it is well worth revisiting. In particular, recently revived work on industrial policy and the developmental state – which in

large part is driven by analyses of declarative elite material – would benefit from a return to microsociology, not least to work out that not all that is gilded is gold in 21st century developmentalism.

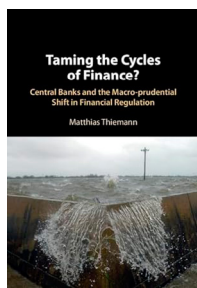
Matthias Thiemann · 2024

## Taming the Cycles of Finance? Central Banks and the Macro-prudential Shift in Financial Regulation.

Cambridge: Cambridge University Press

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In the almost two decades that have passed since the global financial crisis, scholars have repeatedly returned to the question of what lessons policymakers have learned from the crisis that shocked the world economy and imposed heavy costs on governments. Have policymakers adequately revised their approach to financial markets? Have they sufficiently reformed and rewired regulation to prevent the renewed buildup of pressures that so violently erupted in 2007 and 2008? While most scholarly work focuses on assessing, comparing, and explaining the regulatory responses of international and national authorities since the crisis, Matthi-

as Thiemann's *Taming the Cycles of Finance?* places more emphasis on exploring the intellectual route that led policymakers to those choices. In a sense, it takes the question of what lessons have been learned quite literally, by carefully documenting how, after the crisis, policymakers rethought what they thought they knew about financial markets to arrive at the current regulatory regime. *Taming the Cycles of Finance?* meticulously traces the debates and the research programs that marked the departure from the pre-crisis "vision of finance" (p. 45), founded upon the efficient market hypothesis, towards a regulatory framework that would incorporate Minsky's and Kindleberger's "macro-prudential" vision of how financial markets operate. It chronicles the arduous, disjointed, and incomplete process that has characterized the shift from one policy paradigm of financial regulation to another in the years that have passed since the crisis.

This methodical process-tracing approach allows Thiemann to paint a more nuanced picture of just how much has changed in the world of financial regulation since the crisis than previous accounts, while also accurately depicting the fragmented, uneven nature of the progress made so far. Thiemann rejects views that write off regulatory changes as cosmetic, incremental, or smoke-and-mirrors. Instead, he highlights the immense efforts expended in building the epistemic foundations of a new paradigm, points to instances of significant change, and seeks to explain the lack of improvement in areas where reform has encountered the greatest obstacles. He argues that a substantial shift has occurred in regulatory thinking towards acknowledging the need for regulators to monitor and limit *systemic* risks that build up across financial markets (a significant move away

from the micro-prudential thinking that had focused on individual, rather than systemic, failures prior to the crisis), which resulted in meaningful regulatory interventions on that front. At the same time, he notes that regulators have been reluctant to embrace intervention against the *cyclical* risks that build up in the financial system across time.

Thiemann explains this contrast by pointing to differential developments in what he calls “regulatory science”: the epistemic underpinnings of regulatory action through the generation of data, models, early warning systems, and actionable indicators produced by applied economists to convince technocrats and politically appointed regulators that intervention is both necessary and possible within the confines of regulatory intervention that technocrats face within their respective polities. Whereas the policy community arrived at a consensus on actionable metrics regarding systemic (cross-sectional) risks fairly early on, action on counter-cyclical (cross-temporal) regulation has been hampered by the fact that the models, indicators, and rules of thumb required to build the confidence of technocrats and politically appointed regulators in counter-cyclical intervention have taken much longer to produce and have only recently reached their full potential.

Thiemann uses extensive evidence from interviews and policy documents to meticulously trace the debates taking place both in the global regulatory community and in the national regulatory spheres – comparing developments in the United States, the United Kingdom, and the European Union. In doing so, he contributes greatly to our understanding of the fascinating process by which a change in economic ideas leads, sometimes incompletely and unevenly, to par-

adigmatic changes in policy. He documents the messy process by which “third-order” changes (Hall 1993) in policy happen, and thereby illustrates with rich empirical detail what Best (2020) called the “practical life of ideas.” But while Thiemann explicitly addresses the literature on the role of ideas in the political economy of policymaking, he fails to tease out the ways in which his story also resonates with the public policy literature on framing, agenda setting, and narratives. This omission is unfortunate not only because the painstaking mapping out of the interactions of applied economists, technocrats, and political appointees in *Taming the Cycles of Finance?* is a brilliant modern case study of Kingdon’s (1984) classic “policy streams” framework that would deserve a place on every public policy syllabus, but also because engaging with the public policy literature would have allowed Thiemann to even more effectively parse the ways in which ideas are shaped and wielded strategically to achieve deeply political ends.

Thiemann’s analysis builds primarily on Hall’s (1989) distinction between the economic, bureaucratic, and political viability of ideas to structure his discussion on the ways in which applied scientists interact with technocrats and political appointees in shaping new policy paradigms. This analysis yields fascinating insights on the immense efforts that applied economists invest not only in producing incontrovertible evidence on the need to act but also in repackaging their knowledge in simple indicators and rules of thumb in order to make action palatable to technocrats as well as to political appointees. Yet, the focus on economists’ efforts to build the necessary “ideational infrastructure” (p. 11) to make their policy ideas viable on the bureaucratic and political levels implicitly sug-

gests that there is an objective end point to such endeavor – where the evidence is incontrovertible and the indicators simple and clear enough to make policy proposals succeed – and Thiemann’s framework cannot effectively account for instances when economists’ very best efforts fail (especially under conditions very similar to what helped such efforts succeed before). Insurmountable opposition from lobby groups or vetoes from rival regulatory authorities often crop up unexpectedly in the narrative to cut a detailed story of intellectual efforts short.

It is in explaining these unexpected defeats of intellectual efforts that it would have been particularly useful to employ the conceptual toolkit of the public policy literature describing how actors within the policymaking arena strategically deploy competing policy frames and rival policy images, and tactically choose policy venues to further their goals. The empirical evidence offered in the book provides fascinating insight into this – for example when discussing the persistent worry of technocrats that their actions might be framed as unduly discretionary and, therefore, political by the subjects of their regulatory intervention, or when referencing the conflicting policy images that rival regulatory authorities set against the initiatives of macro-prudential regulators – but explicit use of the theoretical framework would have allowed the author to map out the strategic use of the different frames, policy images, and venues by different actors to better explain the eventual outcomes.

More systematic attention to the strategic use of ideational devices would have also allowed *Taming the Cycles of Finance?* to problematize the ways in which not only the knowledge generated by “ideational infrastructures” but also ignorance might be deployed

by different actors within the policymaking sphere to protect themselves and further their objectives. *Taming the Cycles of Finance?* depicts the heroic efforts of applied economists to build an “ideational infrastructure” to enable policymakers to confidently act. In doing so, the narrative adopts the premise that a key explanation for inaction is what Best (2022) calls “external ignorance” (i.e., the gaps in knowledge produced by uncertainty and the unknowability of the world), and that mitigating external ignorance would make action more likely. However, the narrative never engages with the possibility that the claim of ignorance is also a convenient excuse not to act, an example of what Best (2022) would call “practical ignorance,” which allows policymakers to avoid facing up to policy failures they are not prepared to tackle. One illustration of such strategic choice to remain ignorant is described in chapter 6: officials at the Federal Reserve decided to forgo using the early warning model developed by their own researchers – which was later adopted by the IMF as the central element for its Financial Sector Assessment program – with the excuse that the model did not sufficiently predict tradeoffs with other policy goals (p. 151). Such examples of technocrats’ rejection of the knowledge produced by economists beg for more explicit analysis on how far expert knowledge can go in the struggle for policy change.

The narrative also suggests that important actors involved in the debates about macroprudential regulation might exhibit – and perhaps strategically use – what Best (2022) calls “ideational ignorance,” i.e., ideological blind spots and assumptions that prevent them from embracing and acting upon the new knowledge generated by economists. One example of such “ideational ignorance” in the

narrative is the recurring theme of policymakers claiming that it is impossible for them to better identify cyclical developments than markets do (chapters 4, 5, 6, and 7). Such cropping up of evidence of a persistent commitment to premises of the efficient market hypothesis – which the crisis supposedly definitively refuted – also implies that the proponents of macroprudential reform are confronted with more than simply the need to build adequate ideational infrastructure for employing the macroprudential vision of finance – an insight that would have been worth exploring further to make this captivating analysis of policy learning and ideational change even more comprehensive.

*Taming the Cycles of Finance?* provides an intriguing look into the political economy of the struggle to reform financial regulation according to the tenets of a fundamentally new paradigm. It is essential reading not only for all finance specialists who want to know the history of macroprudential regulation since the crisis, but also for non-specialists who want to better understand the arduous process through which economic ideas are transplanted into the sphere of policymaking. Scholars and students of public policy will also find the book an engrossing read with fascinating empirical material on the interaction among policy experts, technocrats, and political actors, and their strategic use and neglect of advances in economic knowledge.

## References

- Best, Jacqueline. 2020. “The Quiet Failures of Early Neoliberalism: From Rational Expectations to Keynesianism in Reverse.” *Review of International Studies* 46 (5): 594–612.
- Best, Jacqueline. 2022. “Varieties of Ignorance in Neoliberal Policy: Or the Possibilities and Perils of Wishful Eco-

omic Thinking.” *Review of International Political Economy* 29 (4): 1159–1182.

Hall, Peter A. 1989. “Conclusion: The Politics of Keynesian Ideas.” In *The Political Power of Economic Ideas: Keynesianism across Nations*, 361–92. Princeton: Princeton University Press.

Hall, Peter A. 1993. “Policy Paradigms, Social Learning and the State: The Case of Economic Policymaking in Britain.” *Comparative Politics* 25 (3): 275–96.

Kingdon, John W. 1984. *Agendas, Alternatives, and Public Policies*. Boston: Little, Brown.

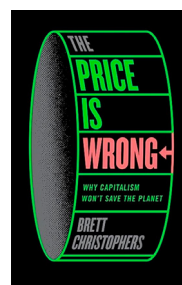
Brett Christophers · 2024

## The Price is Wrong: Why Capitalism Won't Save the Planet.

London/New York: Verso

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Due to power price upheavals and the centrality of electrification for decarbonizing economies, electricity markets have been subject to ever closer scrutiny by policymakers and the broader public in recent years. In (mostly Western) countries, where markets are liberalized, there have been fierce debates about whether the predominant model is still fit for purpose. However, given the technical and economic complexity of electricity markets, understanding what is at stake is anything but straight-

forward. Against this backdrop, Brett Christophers' timely new book offers a uniquely accessible tour-de-force through the world of electricity markets, focusing on their (in-)ability to bring about the renewable energy installations necessary to reach net zero. In view of the widespread narrative – which anyone only remotely engaging with climate policy news will have encountered – that renewable electricity production costs have fallen below those of fossil fuel-based power thanks to technology cost improvements, Christophers' book asks why government support for renewable energy is (or is at least seen to be) still indispensable for the deployment of wind and solar power. While many commentators and public discussions currently focus on bureaucratic obstacles to renewable energy, Christophers problematizes the *economics* of renewable energy investments under the private finance-led energy transition paradigm.

The book makes two basic arguments on the matter. The first takes the second-order observation that those who assume markets to be able to bring about sufficient clean energy installations are following a misguided understanding of the economics of renewables investments. Prevalent in the public and political debate is a focus on price, but the relevant parameter is in fact profitability. The second argument holds that renewable energy is not profitable enough on the market to yield investments at the scale needed. It consists of two parts: on the one hand, profits are too volatile and uncertain; on the other, their total volume is not large enough.

As the author duly acknowledges, the first part of his lack-of-profitability argument – renewable energy's profit volatility – has long been understood by policymakers and market experts. In a merit order pricing system, which most

liberalized electricity markets have, the marginal cost of the most expensive unit feeding electricity into the grid sets the market price received by all active participants in any given bidding period (usually one hour). When many low marginal cost renewable energy assets enter the market, this may cause very low power prices during periods of high renewable energy production – a phenomenon referred to as “price cannibalization” – and relatively high prices during periods of low renewable power production. Christophers argues that, as banks perceive this price volatility as risky, it increases the capital costs at which projects active in these markets can lend. Given the high capital intensity of renewable energy projects, such a risk premium on capital costs can quickly render them unprofitable. Governments around the world have responded to this issue by stabilizing the revenue of renewable power with various support schemes, as Christophers explains (chapters 8 and 9).

The second component of Christophers' lack-of-profitability thesis is more controversial. He argues that the downward pressure that renewable energy installations exert on power prices not only leads to increased profit volatility but also reduces the total return on investments in renewable energy projects. Christophers provides little data evidence to back this argument, since it is very hard to prove. This is not only because revenues, and therefore profitability, vary greatly across locations, but also because his argument that renewables cannot be profitable on a pure market basis relies on a counterfactual: there simply are not so many subsidy-free renewable energy projects and the few that do exist will hardly be representative of the population of potential investments. Nevertheless, given that, according to Christophers,

renewables investments compete with fossil fuel-based investments that are also subsidized, the fact that reported returns on investments in renewable power are a multiple higher than returns on fossil fuel investments (IEA 2021) seems to contradict his line of argumentation.

To avoid such numerical comparisons Christophers argues that it is the *expected* profitability that counts for whether a project will materialize or not. If, however, it really is the bankers – as Christophers claims – on whose expectations about a project's profitability it depends whether it will come to fruition or not, one may wonder why total profits are deemed so important in his account. After all, bankers can be assumed to be satisfied with any positive return on investment if it is steady enough for the project owners to be able to adhere to their scheduled repayments. But, as Christophers shows, this is an important *if*: prices in electricity markets with a high and quick penetration of renewables will become more volatile almost unavoidably. This demonstrates that the profit uncertainty component is much more important to Christophers' story than the profit volume component. What he basically points to is the gap between short-run marginal prices and long-run marginal cost. Because spot market prices are determined by scarcity, they may undermine the positive effect of long-run marginal cost improvements on investment profitability.

This relates to his other key argument, that the focus on price is misleading if one is to assess the attractiveness of renewable energy investments (chapters 4 and 5). More precisely, Christophers – often using the terms price and cost interchangeably – takes issue with the public debate's focus on the *levelized cost of electricity* (LCOE), which expresses the discounted electricity



production costs of a generation asset averaged over its entire lifetime, as a measure of comparison. His argument here is as simple as it is powerful: LCOEs do not provide for a balanced comparison as they are “rendered in temporal as well as spatial abstraction” (p. 155). Both factors, time and place of production, are highly consequential for the revenues earned by renewable power plants, which is why another measure, so-called system cost (Ueckerdt et al. 2023) is more frequently used as a metric, e.g., for policy design purposes. Because of the “price cannibalization” dynamic, the revenue actually received by intermittent renewable generation assets for each dispatched unit of electricity (the “capture price”, to put it in energy policy terms) will on average be lower than that of “dispatchable” fossil fuel-based power plants, which can react to price signals at will. It makes intuitive sense, then, that renewable energy investments are not becoming more profitable as long as their cost improvements vis-à-vis fossil fuel-based power is overcompensated by higher volatility and lower total revenue. As such, Christophers’ argument implies that we should, indeed, look at price – the prices captured on the market by each renewable energy investment – and set it in relation to cost, in order to assess renewable energy profitability, which is the key metric driving investment decisions.

There are various reasons behind renewable energy’s profitability problem, which Christophers elaborates to an impressive degree of detail (especially in chapters 6 and 7). At the most basic level, it comes down to two interrelated aspects: the way electricity markets are designed, on the one hand, and insufficient demand in hours of high renewable power production, on the other.

Because the intermittent generation of renewable energy is

volatile and relatively difficult to predict, electricity systems with a high penetration of clean energy are more frequently seeing an *insufficient level of demand* for the large amounts of renewable electricity produced during some periods. Christophers notes that there is in principle a range of technological solutions to this problem, but he discounts them as not sufficiently mature to aid the profitability problem of wind and solar. While he is right that storage technologies are not installed at the pace needed, market design is more likely to blame for this than technological immaturity (Qin et al. 2023). But even more importantly, another technological infrastructure Christophers barely touches upon can serve as remedy, coming at a low level of technical complexity: grid expansion (IEA 2023). Of course, there are intricate political obstacles to the expansion of grids, but transmission bottlenecks – causing large price differentials between different electricity trading zones in times of a geographically unequal distribution of power supply and demand – are primarily a result of the lack of coordination between the development of generation and transmission capacities. This problem could be alleviated with measures improving regulation, planning capacities, and the exchange of information between the production and the transport level of the electricity value chain (Cremona and Rossloe 2024).

As Christophers points out, *electricity market design* is the outcome of a series of path-dependent policy decisions to restructure the electricity industry since the neoliberal heyday of the 1990s (chapter 2). Electricity markets are therefore genuinely political constructs; prices and profits “as much a matter of external institutional intervention [...] as of supply and demand” (p. 362). The author emphasizes this in particular to highlight that

the profits of renewables generators are “un-‘natural’”, given that “they are the product of continual, ongoing and, ultimately, rather haphazard efforts by policymakers” (p. 363). Insofar as Christophers acknowledges the political malleability of electricity markets, it comes as a surprise to the reader that he only sees two alternative conclusions potentially to be drawn from his analysis: either “it is essential that governments continue to provide the same fulsome support that they historically have” or the market is “the wrong model” (p. xxxii) altogether. From the assumption that the economics of electricity are largely a function of politics, should it not follow that the rules of the market can be shaped for the better?

To assess this suggestion – paralleling the likely objection of any committed marketeer to Christophers’ argument – a deeper engagement with alternative electricity market design conceptions, such as those on the table in recent debates around electricity market design, could serve as a starting point. Long-term contracts (e.g., power purchase agreements), as Christophers shows, have proven to incentivize renewables buildout in markets without revenue stabilization policies, including the United States. He dismisses them, arguing that “there are few credible, bankable off-takers” (p. 258). However, the consensus among market experts that there is insufficient demand for PPAs seems to be less clear, if not pointing in the opposite direction (Collier 2023). In addition, solutions pooling smaller consumers demand can extend the circle of buyers beyond large corporates (e.g., EnergiDanmark 2023). If Christophers is still right (which he likely is) that demand under the current setup does not suffice to bring about the scale of investments needed, there have also been more sweeping proposals for the outright overhaul

of (European) electricity markets. Greece's proposal (Government of Greece 2022) to separate the electricity market into a renewable and a conventional segment, for example – however viable it may be – has been described by a group of energy economists as “the end of electricity markets as we know them” (Romano et al. 2022). A more thorough discussion of such proposals would have strengthened Christophers' case for more public ownership even more.

Theoretically, Christophers' bifurcated solution alternatives out of the clean energy investment malaise reflect a somewhat watered-down reading of the economic ontology of Karl Polanyi (1944), who is brought in during the last chapter and appears as an interlocutor in the background of the book's entire argument. Going beyond the scope of Christophers' already incredibly dense, empirically focused book, a consistent Polanyian perspective may hold that every separation of economics and politics amounts to an illusion, given that all economic outcomes of electricity markets are – and always will be – politically “crafted” (Vogel 2018). Seen in this light, any argument dismissing the ability of markets to bring about renewable energy investments on the basis of comparisons between the current market setup, including government support for renewables, and the shadow of a hypothetical economic reality absent these interventions, seems pointless. Not only renewable energy subsidies would have to be taken as political choices, but also the less visible mechanisms and societal conventions supporting fossil fuels that

electricity markets are embedded in. Why are efficiency losses from subsidized fossil fuel-based power production tolerated, when the curtailment of renewable power plants is sanctioned by the regulator? Is there any good argument to make electricity consumers pay for redispatch costs arising from transmission capacity shortages during periods of renewable energy overproduction, but finance large parts of the construction works necessary to build a highway out of the public budget? Most of all, why are carbon emissions not priced higher even though there is excess demand for their release?

These and the many other questions arising from Christophers' book would each deserve coverage in book length on their own. *The Price is Wrong* has sparked a debate that will deepen the level of engagement with the intersection of technological, economic, and political questions of the clean energy transition and is essential reading for anyone interested in these questions.

## References

- Collier, Rob. 2023. “Competition for PPAs Is Fierce: Here's How Buyers Can Succeed,” LevelTenEnergy, August 9. <https://www.leveltenenergy.com/post/competition-vppa-how-buyers-succeed>
- Cremona, Elisabeth, and Chris Rosslowe. 2024. *Putting the Mission in Transmission: Grids for Europe's Energy Transition*. Ember, London. <https://ember-climate.org/insights/research/putting-the-mission-in-transmission-grids-for-europes-energy-transition/#supporting-material>
- EnergiDanmark. “12 Companies in a Pool PPA.” Accessed April 25, 2024. <https://www.energidanmark.com/one-stop-shop/references/12-companies-in-a-pool-ppa/>
- Government of Greece. 2022. “Proposal for a Power Market Design in Order to Decouple Electricity Prices from Soaring Gas Prices.” Council of the European Union, Brussels. <https://data.consilium.europa.eu/doc/document/ST-11398-2022-INIT/en/pdf>
- IEA (International Energy Association). 2021. *Clean Energy Investing: Global Comparison of Investment Returns*. International Energy Association, Paris. <https://www.iea.org/reports/clean-energy-investing-global-comparison-of-investment-returns>
- IEA (International Energy Association). 2023. *Electricity Grids and Secure Energy Transitions*. International Energy Association, Paris. <https://www.iea.org/reports/electricity-grids-and-secure-energy-transitions>
- Polanyi, Karl. 1944. *The Great Transformation*. Boston, MA: Beacon Press.
- Qin, Xin, Bolun Xu, Ioannis Lestas, Ye Guo, and Hongbin Sun. 2023. “The Role of Electricity Market Design for Energy Storage in Cost-Efficient Decarbonization.” *Joule* 7 (6): 1227–40. <https://doi.org/10.1016/j.joule.2023.05.014>
- Romano, Valentina, Christoph Maurer, Ingmar Schlecht, and Lion Hirth. 2022. “The Greek Market Design Proposal Would Be the End of Electricity Markets as We Know Them.” [www.euractiv.com](http://www.euractiv.com), July 28, 2022. <https://www.euractiv.com/section/electricity/opinion/the-greek-market-design-proposal-would-be-the-end-of-electricity-markets-as-we-know-them/>
- Ueckerdt, Falko, Lion Hirth, Gunnar Luderer, and Ottmar Edenhofer. 2013. “System LCOE: What Are the Costs of Variable Renewables?” *Energy* 63 (December 2013): 61–75. <https://doi.org/10.1016/j.energy.2013.10.072>
- Vogel, Steven Kent. 2018. *Marketcraft*. Oxford: Oxford University Press.