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# The Capital as Power Approach

# An Invited-then-Rejected Interview with Shimshon Bichler and Jonathan Nitzan

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**Keywords**: capital accumulation, capitalization, interview, Marxism, modes of power, stagflation, systemic fear, value theory

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<sup>&</sup>lt;sup>1</sup>This interview was first posted in June 2020 as a *Working Paper on Capital as Power* here. The current version contains minor modifications/corrections and updates the data in the figures. Shimshon Bichler and Jonathan Nitzan teach political economy at colleges and universities in Israel and Canada, respectively. All of their publications are available for free on *The Bichler & Nitzan Archives* (http://bnarchives.net). Work on this interview was partly supported by the SSHRC.

Dedicated to F.D. and his colleagues, whose science and humanity made this work possible.

#### **Preface**

Accumulation and Politics: Approaches and Concepts' to be published by the *Revue de la régulation*. We submitted the text in March 2020, only to learn two months later that it won't be published.

The problem, we were informed, wasn't the content, which everyone agreed was 'highly interesting and stimulating'. It was the format. To begin with, the text was suddenly deemed 'too long'. Although the length was agreed on beforehand, the special-issue editors — or maybe it was their bosses on the Editorial Board — now insisted that we cut it by no less than two-thirds. They also instructed us to make our answers more 'interview-like' and 'personal'. Finally, and perhaps most tellingly, they demanded that we change our 'tone', which they found 'unfair' and 'one-sided'. Translation: we should take a hike.

This encounter with two-minded editors wasn't our first. In another *Review of Capital as Power* paper, titled 'Manuscripts Don't Burn', we sketch our history with Jekyll & Hyde editors who often used 'length' and 'tone' to reject articles they had invited but couldn't stomach.

But first, the original interview, in full.

1.

You are both known for having proposed a new way of envisaging the role played by accumulation within capitalism: the Capital as Power thesis, or CasP. Could you restate the main arguments of the CasP thesis?

**Bichler & Nitzan.** The CasP approach is radically different from conventional political economy. In the conventional view, mainstream as well as heterodox, capital is seen a 'real' economic entity engaged in the production of goods and services, and capitalism is thought of as a mode of production and consumption. CasP rejects this framework. Capital, it argues, is not a productive economic entity, but a symbolic representation of organized societal power writ large, and capitalism should be analysed not as a mode of production and consumption, but as a mode of power.

These are foundational claims. They go to the very heart of political economy, and they have far-reaching implications. So far-reaching, in fact, that if we accept them, we have to rewrite, often from scratch, much of the theory, history and possible futures of the capitalist order.

CasP questions the key building blocks of political economy: the underlying units of utils and socially necessary abstract labour; the anthropological starting points of the individual (liberalism), class (Marxism) and state (fascism/statism); the bifurcations of economics from politics and the real from the financial sphere of the economy; the Marxist distinction between material base and superstructure; the use of equilibrium in the study society; the driving forces of utility and profit maximization. The list goes on.<sup>2</sup>

Replacing these building blocks with CasP's often reveals a very different capitalist reality. Take inflation. Most political economists think of it as growth-driven and therefore see stagflation — i.e., inflation in the midst of stagnation — as anomalous. CasP puts this view on its head. It shows that inflation almost always appears with some measure of stagnation and crisis, which means that stagflation is not an outlier, but the general rule. The difference between these two views comes from their opposing starting points. In received convention, inflation is an aggregate economic phenomenon determined by excess aggregate demand (relative to aggregate supply), validated by growing liquidity (too much money chasing too few commodities) and ultimately neutral in its impact (having no lasting effect on the so-called real economy). CasP's view is completely different. Inflation, it argues, is neither aggregate nor neutral. Rather than an alienated economic phenomenon, it is a broad societal regime that leverages sabotage and stagnation in order to restructure capitalized power through the systemic redistribution of income and the differential accumulation of assets.<sup>3</sup>

Or consider the penal system. Whereas conventional political economy treats jails and the correctional population as 'social entities' that connect only indirectly and often marginally with the 'economy', in CasP the penal system is an important form of strategic sabotage that secures growing inequality and in so doing propels — and becomes part of — the differential capitalization of power.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup>We avoid postist discourses of race, gender, ethnicity and culture that deny the very possibility of universal science.

<sup>&</sup>lt;sup>3</sup>Nitzan (1992) and Nitzan and Bichler (2000b; 2002: Ch. 4; 2009: Ch. 16).

<sup>&</sup>lt;sup>4</sup>Bichler and Nitzan (2014b).

Another example is Middle East 'Energy Conflicts' (our term). These conflicts are usually examined separately, often by different social sciences, to yield discipline-based, episode-unique explanations. On the oil side, energy policies, the intrigues of politicians and the activities of state officials are usually dealt with by international relationists; oil production, prices and trade are monopolized by macroeconomists; individual corporations and sectors are handled by applied microeconomists and finance specialists; and the interaction between oil, religion and ethnicity is dominated by experts of culture. Similarly on the conflict side of military spending and the arms trade: the interaction of armament, interstate bellicosity and the balance of power belongs to international relations specialists; the effect of armament on overall trade, the balance of payments, employment and growth rates is the domain of economists; and the impact of armament on domestic strife is the purview of political scientists and culturalists. Every aspect of these conflicts seems tucked within its own protected niche, mediated by its own concepts and methods and dominated by its gatekeeping experts.

CasP research subsumes all of these unique features under the unifying logic of global differential accumulation, showing how, over the past half-century, the relative profits of the leading oil and armament companies have systematically predicted — and in turn have been fuelled by — these very conflicts, regardless of their singularities.<sup>5</sup>

Similarly with the ongoing 'blockbusting' of modern cinema. Liberals tend to classify this process as an aspect of culture, while Marxists see it mostly as part of the superstructure or the capitalist production of culture. By contrast, CasP research shows it to be a leading driver of differential accumulation, demonstrating how the major entertainment conglomerates have learned to use blockbusters to kill the uncertainty of artistic creativity, and all that to reduce their differential risk and boost their differential capitalization.<sup>6</sup>

For CasP to become a viable theory, this type of research must penetrate and re-examine every corner of capitalism, so it's a huge undertaking — and, in that sense, one that has barely begun. True, the CasP project has grown significantly over the past decade, attracting new researchers, generating important studies

<sup>&</sup>lt;sup>5</sup>Bichler and Nitzan (1996b, 2015b, 2017a), Bichler, Nitzan and Rowley (1989), Bichler, Rowley and Nitzan (1989), Nitzan and Bichler (1995; 2002: Ch. 5), Nitzan, Rowley and Bichler (1989), Rowley, Bichler and Nitzan (1989).

<sup>&</sup>lt;sup>6</sup>McMahon (2013, 2015, 2018).

and giving rise to novel theoretical ideas.<sup>7</sup> But it is yet to achieve critical mass. Not too many people know about it, and relatively few engage with and debate it. Although highly ambitious and in our view promising, it remains overshadowed by liberalism, Marxism and the vast sprawls of postism.

However, this situation can change, and pretty quickly.

The reason is that political economy these days suffers from acute schizophrenia: most of its practitioners recognize that power is everywhere, that it matters a great deal, and that it must be incorporated into their explanations — yet, their theoretical framework prohibits them from doing so: they cannot make the full spectrum of power *truly integral* to their analysis. They do bring power in, of course; they have to in order to remain relevant. But they do so in a limited way and only from the *outside*, as an 'exogenous' entity that 'distorts' the power-free aspects of their theory.

And that's a patch up, not a remedy. As we see it, the schizophrenia is rooted in the very foundations of conventional political economy and in that sense is incurable. The only way to eliminate it is to build political economy on new foundations. And since power is growing more rather than less important, the need for new foundations becomes ever more acute. Sooner or later something will have to give — and when it does, CasP will suddenly become the obvious, 'we-have-known-it-all-along' solution.<sup>8</sup>

<sup>&</sup>lt;sup>7</sup>For a detailed overview, see Bichler and Nitzan (2018).

<sup>&</sup>lt;sup>8</sup>There is a famous saying — attributed in various versions to Arthur C. Clarke, William James, Arthur Schopenhauer, Leo Szilard and Sidney Webb, among others — that goes like this: every new truth passes through three stages. In the beginning the experts ridicule it as 'nonsense'. Then they dismiss it as 'trivial'. And in the end we learn that they 'knew it all along'.

2.

Could you explain this schizophrenia in some detail? To start with, why does political economy have to integrate power into its very core? Why can it not keep it as an 'external distortion'?

**Bichler & Nitzan.** Because capitalism in general and capital in particular are *constituted* by power.

Of course, being constituted by power is not unique to capitalism. All modes of power — from the ancient city states and empires of the Near East, to feudalism, to communist dictatorships, to capitalism — are constituted in this way, by definition. But whereas all other hierarchical regimes glorify power, capitalism denies it. According to its ideologues, the very nature of capitalism — its quest for wellbeing and freedom combined with its disciplining competition — serves to defuse power, if not destroy it altogether.

But historical perspectives change. The capitalist annulment of power, which seemed like a great promise in the days of John Locke and Adam Smith, was later pronounced hypocritical by Karl Marx and nowadays echoes like a bad joke. Contrary to the expectations of early liberals, power is nowhere limited and contained; on the contrary, it's omnipresent and it expands. Capitalist corporations are highly hierarchical, bigger than ever before, bundled into large coalitions and networked with various non-corporate entities. Similarly with governments. They too are hierarchical, large and growing. Their direct expenditures account for 20-40% of GDP, depending on the country, and if we add their various transfers, the overall numbers are even bigger. Complement these spending and transfers with the full range of policies, regulations, litigation, policing, wars, propaganda and education, and you find government power embedded in every aspect of capitalism.

And that's just for starters. Modern forms of communication, computation and modelling enable these power structures — whether private, public or governmental — to surveil, map, predict and shape the hearts and minds of their subjects. Also, over the past century, the levers of hierarchical power have multiplied dramatically: whereas in the past, this power relied mostly on threat and violence, nowadays it's greatly boosted by temptation and co-optation. Lastly and crucially, the all-encompassing ritual of capitalization relentlessly penetrates and continuously incorporates more and more aspects of human

activities into its fold. It locks even the ruling class — indeed the *ruling class more than anyone else* — into a power trajectory that they feel powerless to counteract. The autonomous subject of the liberal enlightenment has become a manipulated object of the capitalist megamachine.<sup>9</sup>

Power is not an 'exogenous' sideshow. Every dollar's worth of production, income and spending is mobilized by power, while capital, the totalizing institution of capitalism, is a direct expression of power. And since political economy is the study of these processes and entities, it must fuse power, directly and explicitly, into its very theoretical core — that is, *into capital itself*.

Granted, few political economists would frame the problem in these stark terms. Nonetheless, many now realize that something is fundamentally wrong with their discipline. Over the past decade, we have heard more and more calls for a major rethinking if not a complete rewriting of conventional political economy. The 2007-08 global financial crisis and the threat of ecological disasters, these critiques argue, have shown political economy, particularly its mainstream, as being unable to predict, let alone explain and address, basic socio-environmental processes from financial instability and economic crisis, to growing income inequalities and societal disparities, to climate change and ecological degradation.

Of course, theoretical deficiencies and urgent calls to address them are not new. They first surfaced in the late nineteenth century, came into sharp focus in the wake of the Crash of 1929 and the Great Depression of the 1930s, and led to major revisions — some say 'revolutions' — including Keynesianism, administered prices, neo-Marxism and critical theory. The thing is that these revisions did not solve the conceptual problem, and we very much doubt that newer revisions will either.<sup>11</sup>

<sup>&</sup>lt;sup>9</sup>The concept of the 'megamachine' — invented by Lewis Mumford to analyse the social mechanization of the ancient delta civilizations (Mumford 1967) and the modern state (Mumford 1970) — is extended to the study of capital in Nitzan and Bichler (2009: Ch. 13).

<sup>&</sup>lt;sup>10</sup>A random sample of discontent, from both left and right, includes Bowles and Carlin (2019), Chang (2010), *Economist* (2009), Fullbrook (2010, 2019), Graeber (2019), Keen (2011, 2017), Lavoie (2018), Mason (2015), Morgan and Fullbrook (2019), Orrell (2018), Piketty (2015), Romer (2016), Smith (2016), Stiglitz (2017), Varoufakis (2009) and Vine and Wills (2018).

<sup>&</sup>lt;sup>11</sup>Judging by the frameworks offered by various anti and alter social movements, it seems that, so far, the twenty-first-century round of alternatives falls far shorter than those that failed to solve the problem in the twentieth. The sad truth is that most activists these days cannot be bothered with developing a new theoretical framework, let alone with engaging in novel, painstaking research. They much prefer to cut and paste from what is already on offer, with the inevitable result being that their struggle is co-opted into the same conceptual framework they seek to abolish. See Bichler and Nitzan (2003) Bichler, Nitzan and Di Muzio (2012), Bichler, Nitzan and Dutkiewicz (2013) and Debailleul, Bichler and Nitzan (2018).

3.

What about approaches such as the regulation and social structures of accumulation (SSA) schools, behavioural economics and institutionalism more generally? Do they not incorporate power into their analysis?

**Bichler & Nitzan.** Yes, they certainly incorporate power, and often extensively. But they retain a bifurcated worldview. They continue to see capital itself as a material-economic entity and therefore end up using power to explain the wrong explanandum.

Beginning with Quesnay and the Physiocrats, political economists made it a habit to construct various 'production functions', as they later came be known, to explain why the economy grows and who deserves to receive what part of its output. In constructing these functions — be they qualitative or (pseudo)quantitative — the theorist would typically identify the important 'factors' of production, (claim) to figure out their distinct productive 'contributions' and then correlate (figuratively speaking) these (alleged) contributions with the factors' respective incomes. Positive correlations would support the current class structure of society, while negative correlations would be used to trash it.

The classicists usually took the side of capital, but their theory was deficient: it treated capital as a mere auxiliary to the true factors of production, labour and land, and therefore found it difficult to rationalize profit. This glitch was eventually fixed by the neoclassicists, whose refurbished production function, courtesy of J.B. Clark, christened capital as a full-fledged third factor on par with labour and land — and then, inverting cause and effect, cited the large incomes of capitalists as 'proof' that the capital they owned was highly productive. . . . Contrary to the liberals, both classical and neoclassical, Marx insisted that there was only one productive factor, namely labour, and that the incomes of landlords and capitalists represented not the productive contributions of their assets (which were nil), but the economic exploitation and political oppression of their workers.

Focusing specifically on capital K, we can generalize these debates in reference to Equation 1. In this equation, accumulation  $\Delta K/K$  is seen as a function F of different factors of production — or economic inputs  $e_i$  — and the main contention is over the relevant factors to be included and the precise functional form through which they fuel the growth of capital.

$$\frac{\Delta K}{K} = F(e_1, e_2, e_3, \dots e_n) \tag{1}$$

By the early twentieth century, though, the debates broadened beyond the economy proper. Marxists such as Gramsci, Lukács and members of the Frankfurt School realized that, although ownership of the means of production and the production process more broadly remained paramount, the power relations associated with legitimation, and with culture more generally, were also crucial. Moreover, these power relations, the critics argued, were not mere addenda to, let alone simple derivatives of, the so-called productive base. They had their own autonomy — a point that Marcuse would later extend, dialectically, to make artistic creation the centrepiece of human autonomy more generally.

Eventually, these insights, together with the existentialist revival of the human subject and the growing disillusionment with the Soviet Union, helped breach the economic determinism of capital accumulation. If during the 1950s the Communist Party excommunicated Hegelian heretic Henri Lefebvre for daring to make 'urban space' — previously an aspect of the superstructure — an autonomous historical entity, by the 1970s such transmutations were no longer frowned upon. By then, Louis Althusser was already busy 'overdetermining' materialist history with additional, non-economic factors — including 'ideology', which he shifted from the superstructure over to the productive base. And this relocation, unthinkable during the Party's Stalinist era, was just the beginning. One of Althusser's students, Nicos Poulantzas, endowed the state with 'relative autonomy', while another, Michel Foucault, abandoned economic determinism altogether in favour of ergodic power. In parallel, Dependency and World-Systems theorists such as Gundar Frank, Arghiri Emmanuel, Samir Amin and Immanuel Wallerstein anchored the history of capital accumulation and capitalism more generally in the global military expansionism of the European superpowers. The Regulation and SSA schools took these conceptual expansions a step further by adding to the equation a far broader extra-economic input — the 'mode of regulation' or 'social structure of accumulation'. Similarly with institutionalism, which argues that economic agents are only partly autonomous (if at all), and that their inclinations and behaviour, rational and irrational, are shaped by the slowly evolving social institutions into which they are born.

With these multiple breaches, theorists found many more things to argue about. Accumulation nowadays is seen as determined not only by traditional economic inputs  $e_i$ , but also by a broad range of extra-economic relations of power  $ee_j$ , all mediated through an augmented function AF, as shown in Equation 2:

$$\frac{\Delta K}{K} = AF(e_1, e_2, e_3, \dots e_n; ee_1, ee_2, ee_3, \dots ee_m)$$
 (2)

But one thing remains unchanged. With the bygone exception of Thorstein Veblen, all users of Equation 2 — be they neo-Marxists, Gramscians, Regulationists, Dependency and World-Systems analysts, poststructuralists, institutionalists or behavioural economists — continue to treat capital K itself as a productive-economic entity and its power determinants as external to accumulation proper. In our view, this bifurcation between production and power isn't about to change on its own. And as long as it remains, its adherents will keep barking up the wrong tree.

4.

Why are you so doubtful of change?

**Bichler & Nitzan.** Because the bifurcation is structural: you cannot make power at large integral to a theory whose very framework makes such integration impossible to start with.

To understand this impossibility, we need to backtrack to the birth of political economy in the seventeenth and eighteenth centuries. Political economy was conceived as the first science of society. Rooted in the mechanical worldview of the new secular sciences and the capitalist contestation of feudal power, it was and remains built on three related foundations: (1) a separation of economics from politics (or more broadly, a distinction between the objective world of production and wellbeing and the subjective passions of hierarchical power and violence); (2) a mechanical, self-equilibrating model of the economy; and (3) a value theory that breaks the economy into 'real' and 'nominal' spheres and uses the quantities of the former to explain those of the latter. These foundations, we argue, prevent power from being fully integrated into political economy.

Begin with the first foundation: the *duality of economics versus politics*. <sup>13</sup>

<sup>&</sup>lt;sup>12</sup>The origins and consequences of these foundations are articulated in Bichler and Nitzan (2012b).

<sup>&</sup>lt;sup>13</sup>Cf. Nitzan and Bichler (2009: Ch. 2).

Most people take this duality as natural and obvious. It's neither. Historically, the separation of economics from politics can be traced back to the twelfth century in Northern Italy and Flanders, where there emerged a new class struggle between an oligarchy of merchants and financiers in the growing burgs and the feudal nobility of the agrarian countryside. <sup>14</sup> The two groups represented totally different modes of power and, indeed, totally different concepts of power. Whereas the feudal mode of power legitimized hierarchical privilege sanctified by religion and backed by naked force, the nascent capitalist mode of power boasted the notion of a flat civil order based on rational productivity. While the feudal lords earned their income through the forceful redistribution of a fixed agricultural pie, the would-be capitalists generated theirs through the ongoing growth of industry and commerce.

Initially subservient to the feudal state within which they emerged, the burgs quickly started to demand and obtain differential exemptions — or *libertates* — from feudal rule. In today's lingo, we could say that they fought to separate and liberate their bourgeois 'economy' from feudal 'politics', and it is this bygone conflict that continues to echo whenever we contrast these two terms today.

Liberals tend to see this separation in black and white: 'economy — good; politics — bad'. And that's hardly a caricature. In the liberal cosmology, the economy — namely the processes of production, consumption, technology, trade, prices and income — is the fertile source of society. This is the horizontal realm of individualism, utility, productivity, frugality, rationality, dynamism and freedom, the sphere where personal initiative and mutually beneficial exchange propel society forward. By contrast, politics — namely the state and its bureaucracies, the law, the police and army — is the vertical domain of authoritarianism and conformism, power and coercion, waste and irrationality, corruption and manipulation.

Prone to mischief, politics should be restricted as much as possible. Ideally, its role should be to assist the economy by providing law and order and filling in for the occasional market failure — and that's it. In practice, though, politics always ends up doing more than it is supposed to, causing havoc in the process. According to liberals, politics as such cannot produce anything; it can only appropriate and redistribute. And since the economy is assumed efficient to

<sup>&</sup>lt;sup>14</sup>Note that we are not siding here with the so-called 'Smithian approach' to the origins-of-capitalism debate — or with any of the other approaches for that matter. In fact, we are not at all concerned here with the 'origins' debate, which is entirely about *economics* (production versus trade in the early Sweezy-Dobb exchange, and forces versus relations of production in the subsequent Brenner Debate). Instead, our discussion deals with the prior question of what *separated* the concepts of economics and politics to start with.

start with, political intervention cannot but distort and undermine this efficiency, making the overall economic pie smaller. The obvious antidote for this mishap is *laissez faire*: for liberals, the best society is one with the biggest 'free' economy and the smallest and least 'interventionist' polity.

The Marxist view is different, but not entirely. Like liberals, Marxists too distinguish economics from politics (or base from superstructure). And they too see the economy, particularly production, as the prime mover of capitalism — the sphere where labour creates both the use value that sustains society and the surplus value that capitalists appropriate to propel accumulation. Unlike liberals, though, Marxists view the political sphere not as a hindering distortion, but as a built-in requirement. The formal separation of economics from politics, they argue, legally alienates private property from public control in order to ensure and legitimize the class superiority of capitalists over the rest of society. In this way, economics and politics stand as the two essential pillars of the capitalist regime — the former generates its exploitation, while the latter secures its oppression.

So, we have a rather unseemly convergence. Although liberals and Marxists reject each other's framework, they appear to agree (albeit for different reasons) that economics and politics are — and must be — *distinctly constituted*, and that the *economy leads with production and politics reacts with redistribution*.

And the question is why? Why do political economists right and left insist on retaining the anachronistic separation of economics from politics and the notion that the former dominates the later? You can say that liberal defenders of capitalism benefit from this separation and prioritization, but what do Marxist critiques of capitalism stand to gain from upholding the same view? The answer is largely *analytical*. As they stand, neither school can afford to rock the boat. Without the a priori separation and pecking order of economics and politics, their ability to model — and even describe — the social reality breaks down.

The reason for this breakdown relates to the second foundation of political economy: the *mechanical, self-equilibrating view of the economy itself*.

This view emerged together — and remains deeply intertwined — with the mechanical cosmology of the seventeenth century. Throughout history, human beings, perhaps as a way of alienating themselves from nature, have tended to *politicize* their cosmos, imposing on their natural environment the power structures of their own society. And this politicization continues in the liberal-capitalist order.

Think of the mechanical world, articulated since Machiavelli by Kepler, Galileo, Descartes, Hobbes, Locke, Hume, Leibnitz and above all Newton. The gods of this liberal cosmos represent absolute rationality, or natural law. The structure of this natural law is numerical and its language mathematical. The universe it gives rise to is flat. The particles that populate it have no inherent hierarchy. They don't obey or submit, but freely interact through attraction and repulsion. Their actions and reactions are dictated not by a lineage of differential obligations, but by universal gravity. They are tuned not to the willful caprice of the Almighty, but to the structured relations between force and counterforce and the invisible power of equilibrating inertia.

This flat universe mirrors the flat ideals of liberal society. Reduced to its bare essentials, the liberal cosmos is a perfectly competitive market, populated by particles — or actors — each of which is too small to significantly affect the overall outcome. The actions of these particles — namely the market's producers and consumers — are determined not by patriarchal responsibilities, but by scarcity — the gravitational force of the social universe. They are repelled from and attracted to each other not by feudal obligations, but through the universal utilitarian functions of supply and demand. And they obey not the dictates of hierarchy, but the equilibrating force of the invisible hand.

These mutual reflections help explain why politics and economics must remain distinctly constituted, and why politics must be seen as subservient to economics: if they are not, the arbitrary character of politics — and of power more generally — is bound to distort if not totally annul the rational-mathematical automaticity of the perfectly competitive economy; with mathematical rationality gone, liberals lose their universal laws of the economy and Marxists their capitalist laws of value, if not of motion; and with these laws defunct, political economy can no longer claim to be the science of society.

And then there is the third foundation of political economy: *value theory*. <sup>16</sup>

<sup>&</sup>lt;sup>15</sup>On the politicized cosmologies of ancient Egypt and Mesopotamia, see Frankfort *et al.* (1946), Kramer (1956, 1961) and Jammer (1957).

<sup>&</sup>lt;sup>16</sup>Cf. Nitzan and Bichler (2009: Part II) and Bichler and Nitzan (2015a).

Capitalism is a system denominated, organized and regulated by prices. Any attempt to theorize capitalism hinges on the theorist's ability to understand those prices, which is why liberalism and Marxism are each based on a specific theory of value — the *utility* theory of value and the *labour* theory of value, respectively.<sup>17</sup>

As they stand, both value theories rely on a basic distinction, first popularized by David Hume, between the 'real' and 'nominal' spheres of the economy. The real sphere is the domain of production and consumption, utility and wellbeing, labour and exploitation. The nominal sphere is the realm of money, prices and finance. The common assumption is that everything of import happens in the real sphere, which is why economics textbooks, both liberal and Marxist, are denominated almost exclusively in 'real terms'. The nominal sphere is considered a mere reflection (and sometimes a facilitating lubricant) of that 'reality' and therefore merits little or no attention.

There is only one tiny problem: in reality, the 'real-term' quantities of the real economy are completely unreal.<sup>18</sup>

The native quantities of the real sphere are *qualitatively different* from each other. Apples can be measured in bushels, steel in tonnes, cars in numbers, loans in dollars and computer programmes in lines of code.<sup>19</sup> But these quantities have no common denominator. Apples cannot be added to loans, steel to computer programmes, and machines that make microchips to those spewing fast-food chips. And since these magnitudes cannot be added, there is no straightforward way to aggregate them into larger bundles such as 'real investment', 'real GDP' and the 'real capital stock'.

The economists, though, remain unfazed. Every science has its own elementary particles — the units that everything else is made of — and so does the science of economics, or so they argue. The elementary particle of the liberal universe is the 'util', a term coined by Irving Fisher to describe the basic unit of hedonic pleasure. In the liberal world, all goods and services, regardless of their qualitative differences, can be counted in terms of the utils they generate. For instance,

<sup>&</sup>lt;sup>17</sup>Note that only classical Marxism offers a value theory. Neo-Marxian economics has no value theory as such, while the cultural and state-theory branches of Marxism reiterate the classical version or eschew value theory altogether.

<sup>&</sup>lt;sup>18</sup>For more on this unreal reality, see Nitzan (1992: Ch. 5), Nitzan and Bichler (2009: Ch. 8), Bichler and Nitzan (2015a) and Fix, Bichler and Nitzan (2019).

<sup>&</sup>lt;sup>19</sup>In principle, the differences can be refined further and further: there are many types of apples, steel, cars, loans and computer programmes, so each type can be differentiated and redifferentiated all the way down to its underlying molecules and atoms. These finer distinctions only strengthen our point here, so we disregard them.

if a tractor generates 10 times the utils of a particular software package, its quantity is 10 times larger. And since, according to liberals, all commodities are produced and consumed for their utility, we can use their util-generating capacity, countable in universal utils, to quantify, relate and aggregate their magnitudes in 'real' terms.<sup>20</sup>

Marxists make a similar claim. Their elementary particle is *SNALT*, or socially necessary abstract labour time. In their view, commodities can be counted, related and added based on the SNALT it takes to produce them. In our example here, the tractor might take 10 times more SNALT to produce than the software package, and therefore has 10 times the quantity.

Armed with these universal quantities, economists then posit a quantity-to-quantity mapping, with money prices in the nominal sphere determined by the universal magnitudes of the economic reality: in the liberal utility theory of value, prices are proportionate to utils, whereas in the Marxist labour theory of value they are proportionate to SNALTs.<sup>21</sup> If a liberal tractor generates 10 times the utils of a software package, its price will (or should) be 10 times higher, and if a Marxist tractor takes 15 times more SNALT to make, its price will (or should) be 15 times higher.

And it is here that value theories fall into a trap — in fact, two traps. And both have to do with power.

First, even if these quantity-to-quantity value theories are correct and nominal prices are indeed determined by real quantities (and that's a big if), this determination works *only* in a self-equilibrating perfectly competitive economy whose mechanical laws of supply and demand ensure that the real quantities of utils or SNALT indeed map onto actual money prices. If we deviate from this setup, though — that is, if we allow politics, social constraints and the full spectrum of power more generally into the picture — the model's automaticity disintegrates, the real-to-nominal mapping dissipates and the utility and labour theories of value break down. Their values no longer explain prices.

<sup>&</sup>lt;sup>20</sup>Note that for utils to be universally comparable and additive, consumers must be *identical drones* (to make their utilities interchangeable) and be possessed by *income-invariant preferences* (so measurement is distribution-neutral). These assumptions underpin the infamous Sonnenschein–Mantel–Debreu theorem (SMD) that economists happily use to salvage their demand-supply-equilibrium framework. Of course, those prerequisites make both liberalism and radical autonomy utterly meaningless — though it seems that users of 'real' economic data, including Marxists, are perfectly OK with sacrificing those ideals so they can quantify them (if that sentence makes any sense).

<sup>&</sup>lt;sup>21</sup>For simplicity, we ignore here differences in Marx's 'organic composition of capital'.

And then there is the second, more basic and much more embarrassing difficulty. Unlike the underlying quantities of physics (distance, time, mass, electrical charge and heat), utils and SNALT are *fictitious* quanta. Of course, all quantities are creatures of our imagination. But whereas those of physics can be observed/examined directly or indirectly, utils and SNALT can never be. They are forever a matter of belief — a trait that may befit religion and postism, but has no place in science.

The issue here is not that utils and SNALT tax credulity as such; the categories of physics are often freakier. But whereas physicists continue to discuss, debate and test their categories and whether they still fit their theories — witness the relationship between the ether and light, the Higgs boson and mass, the cosmic microwave background radiation and the Big Bang, and cosmic rays and the earth's clouds and climate — political economists no longer deliberate theirs. '[I]n the interest of science', writes Albert Einstein, 'it is necessary over and over again to engage in the critique of these fundamental concepts, in order that we may not unconsciously be ruled by them'. 22 Value theorists, though, remain unimpressed. While the underlying categories of physics are, potentially, always in flux, those of economic value haven't changed since Karl Marx and Irving Fisher. And the reason is simple: whereas every physicist with the right equipment and creative acumen can measure and challenge the basic quantities of physics, no economist, even the most original, has ever been able to measure the util or SNALT content of any commodity whatsoever, let alone in a way that all other economists consider objective, or at least refutable.

This inability is detrimental, to put it politely: without utils and SNALT conventional political economy cannot quantify the so-called real economy; without such quantification it cannot explain prices; and without a measurable real economy and an explanation for prices, it cannot understand capitalism.

Now, if this were the case in physics — i.e., physicists trying to measure gravity without mass, or velocity without time — their theories would be scrapped in no time. But not so in political economy. Instead, political economists got used to arguing in *reverse*: rather than using unobservable utils and SNALT to explain readily observable nominal prices, they deploy nominal prices to explain (read justify) their utility and SNALT theories of value! Instead of positing that the util-

<sup>&</sup>lt;sup>22</sup>Einstein (1954: xiv).

generating capacity of commodities determines their prices, liberals claim that commodity prices reveal to us their util-generating capacity.<sup>23</sup> Similarly with Marxists: to get their version of this inversion, simply replace 'util-generating capacity' with 'SNALT'.<sup>24</sup>

Of course, given that utils and SNALT cannot be observed and examined, let alone measured, these inverted claims are irrefutable. Moreover — and crucially for our purpose — since actual prices are 'contaminated' by politics and power more generally, there is no reason why they should be proportional to utils and SNALT to start with — although this proposition too is conveniently untestable. . . .

All in all, then, we have a foundational 'barrier to integration': power is everywhere and its full spectrum must be incorporated into the core of political economy — yet the very foundations of political economy make such incorporation impossible. If we fuse power at large into existing political economy, we eliminate the economy's presumed automaticity and in so doing annul its liberal economic laws and Marx's capitalist laws of motion. Moreover, in doing so we also pull the rug from under the util and SNALT theories of value. Finally, and most embarrassingly, we make it impossible for political economists to quantify and therefore describe their 'real economy' to start with.

5.

Have political economists made any progress addressing this impasse?

**Bichler & Nitzan.** Not really. At the moment, they're still trying to have their cake and eat it too. They endorse *both* the fiction of perfect competition and the reality of power — but they keep the two sides *separate* so the contradiction between them remains invisible.

To illustrate, take the 'dynamic stochastic general equilibrium models' (DSGEs) popular among central bankers and economic Nobelists alike. These models typically begin with a perfectly competitive setting, which is then 'augmented' with afflictions such as (inefficient) government policies, various (frictional)

<sup>&</sup>lt;sup>23</sup>Samuelson (1938; 1948).

<sup>&</sup>lt;sup>24</sup>A recent illustration is offered by Tonak (2019) in his paper 'The Rate of Exploitation (The Case of the iPhone)'. The article, which derives its various SNALT-based Marxist categories directly from observed market prices, justifies the inversion as follows: 'It should be pointed out that any attempt to empirically calculate Marx's labour theory of value must necessarily make assumptions that simplify reality', adding that, 'In our view, however, these assumptions — such as that *prices reflect values* — can be justified and that these simplifications do not exaggerate the results' (p. 31, emphasis added).

costs and assorted (irrational) habits. These additions, though, are considered *external* to the economy, unfortunate 'shocks' that distort its pristine simplicity from the outside. And since the added misfortunes are assumed exogenous, their modellers feel it's perfectly OK to speak of their power-laden predictions as spontaneous 'equilibrium' outcomes.

And the same happens in classical Marxism. Marx and his followers don't deny the presence of power as such. On the contrary, they emphasize that the class basis of capitalism means that seemingly 'equal' market relations are in fact exploitative and therefore inherently unequal, and that what passes for 'voluntary' competitive behaviour is often the consequence of coercion and oppression.<sup>25</sup> But the real-to-nominal mapping of their value theory applies only to an economy whose material base stands separately from its superstructure and that gets equilibrated, automatically, by the invisible hand of pure competition. In this context, the introduction of power at large (i.e., beyond the abstract contours of exploitation/oppression) typically involves moving from the first 'transformation problem' (of labour values to competitive prices) to the second (competitive to market prices). This shift brings in a plethora of power relations that quickly decimate the real-to-nominal mapping of values to prices (which, incidentally, is why neo-Marxism, including its Monopoly Capital, Dependency and World-Systems variants, has abandoned such mapping). And yet, if these power relations can be assumed particular (external) rather than inherent (internal), it is still possible — or so it seems from the writings of classical Marxists — to speak of the system's long-term laws of motion.

Most modellers, though, don't realize how deeply contradictory their hybrid models are: they continue to assume self-equilibrating automaticity despite the admitted presence of arbitrary power; and they continue to measure their 'real' economic quantities of utils and SNALT using actual prices, even though this inverted mapping is meaningful (if at all) only if their power-augmented economy is . . . untouched by power!

The consequence of this schizophrenia is a highly unstable, top-heavy pyramid. The narrow base of this pyramid is a perfectly competitive economic model in which power is either totally absent (in the liberal case) or limited to built-in exploitation (the Marxist version), and on which the modellers then erect a top-heavy superstructure of ad hoc, extra-economic power relations. Although specific power relations are often assumed ephemeral, the power superstructure as a whole tends to grow and eventually overshadows its competitive economic base.

<sup>&</sup>lt;sup>25</sup>For recent restatements, see Palermo (2016) and Mau (2023).

Judging by the contemporary literature, the expansion of this power super-structure seems to have accelerated in recent decades. Mainstream economists nowadays are busy uncovering more and more 'distortions' and 'imperfections', such as rising market power, <sup>26</sup> the undue expansion of intellectual property rights<sup>27</sup> and excessive inequality, <sup>28</sup> while many contemporary Marxists are shifting their focus from the 'reality' of labour and production to the 'fiction' of financialization. <sup>29</sup> And as these unsettling discoveries multiply and the power superstructure continues to expand, the theoretical role of the idealized perfectly competitive base becomes unclear and its elementary particles of utils and SNALT — the basic building blocks that everything else is supposedly made of — dissipate.

This dissipation may explain why so few mainstream economists mention, let alone employ, utils in their research, and why only a handful of Marxists study SNALT. But then, no science can ignore its own elementary particles and remain a science, at least not for long. So the writing is on the wall.

6.

So, in your view, mainstream and radical political economists have gotten themselves into a trap. How does CasP avoid this trap?

**Bichler & Nitzan.** By inverting the top-heavy pyramid so that power, instead of hanging in the air, becomes the basis that everything else stands on and stems from.

CasP sees power not as an ad hoc addition to the material base of production or an external distortion of the *laissez fair* economy, but as the very foundation of capitalism — and therefore views capitalism as a whole not as a mode of production and consumption, but as a mode of power. Capital in our approach is not a 'real' productive entity, but an 'operational symbol' of organized power

<sup>&</sup>lt;sup>26</sup>For example, De Loecker and Eeckhout (2017, 2018) and Diez Leigh and Tambunlertchai (2018).

<sup>&</sup>lt;sup>27</sup>Cardoza et al. (2006), Corrado, Hulten and Sichel (2006) and Kurtz (2017).

<sup>&</sup>lt;sup>28</sup>Auto et al. (2017), Debla-Norris et al. (2015), Gans et al. (2019) and McKinsey & Company et al. (2016).

<sup>&</sup>lt;sup>29</sup>For instance, Bryan, Rafferty and Wigan (2017), Epstein (2005), Foster (2007), Krippner (2005), Magdoff and Sweezy (1985), Mann (2010), Mavroudeas (2018), Roberts (2018) and Sweezy (1991, 1994).

at large.<sup>30</sup> It is the totalizing power institution that defines and perpetuates capitalism to start with, the logic that tells capitalists what their interests are and then forces them to impose those interests on society. Capital, we posit, exerts its power not over 'economic' groups and classes, but over the whole of humanity. Quantified as finance on the various asset markets, capital represents not economic means of production, raw materials, past labour or technical knowhow, but the multifaceted power of capitalists, operating against opposition, to *creorder* — or create the order of — society as a whole.<sup>31</sup>

And there is more. As noted, CasP rejects not only the real/nominal duality of the economy, but the very bifurcation of politics and economics. By distinguishing armies from corporations, elections from supply chains and geopolitics from foreign investment, conventional theories condition us to see the 'economic' base of accumulation as definitionally distinct from its 'political' superstructure. But from a CasP perspective they are inseparable. Accumulation, we argue, happens not in the productive realm of economics, but in the capitalized domain of power. By rejecting the dualities of the real/nominal and economics/politics, CasP allows the full spectrum of power to assume centre stage. Every aspect of institutionalized power — regardless of its formal classification as 'political', 'economic', 'cultural', 'international' and so on — is a potential feature of capital.

Note that this last claim has nothing to do with the postmodern plurality of 'capitals'. Contrary to Hanifan, Becker and Bourdieu, capital does *not* come in different flavours. There is no such thing as 'economic capital' — just as there is no such thing as 'social capital', 'cultural capital', 'natural capital', 'human capital', 'symbolic capital', 'academic capital', 'technological capital', 'military capital', 'religious capital', 'spiritual capital', 'emotional capital', 'recreational capital' or 'whatnot capital'. Like the Almighty, capital is a singular hierarchical totality that embodies and reflects all of its earthly manifestations. There is one type of capital, and one type only: a unified operational symbol that constantly discounts and fuses different forms of power into a single capitalized entity.

<sup>&</sup>lt;sup>30</sup>Ulf Martin (2019) differentiates between three types of symbols: (1) magical (the symbols and the 'reality' they symbolize are the *same*); (2) ontological (the symbols are *distinct* from the 'reality' they symbolize); and (3) operational (the symbols *create/render* the very 'reality' they symbolize). Capital, Martin argues, is an operational symbol: it creates and renders capitalism.

<sup>&</sup>lt;sup>31</sup>The term *creorder* was introduced in Nitzan and Bichler (2009) to denote the paradoxical fusion of Zeno and Heraclitus — of being and becoming, state and process, stasis and dynamism.

<sup>&</sup>lt;sup>32</sup>Hanifan (1916), Becker (1964) and Bourdieu (1984, 1986).

And this comprehensive, non-disciplinary reduction of multiple powers into a single entity means that, unlike conventional political economy, which nowadays tends to ignore its conceptual building blocks of hedonic pleasure (utils) and productive labour (SNALT), every piece of CasP research is a study of power, by definition.

Capitalist power — which includes every form of power that bears on accumulation — is manifested in and reduced to the quantity of capital. According to CasP, this quantity is finance and only finance. For capitalists — and therefore for everyone else, including us as theorists — capital appears as *capitalization*: the present value of risk-adjusted expected earnings. <sup>33</sup> Capitalization is the operational symbol of capitalism, the algorithmic ritual that constantly creorders and quantifies capitalist power writ large, and with it the entire capitalist mode of power. This creordered quantification is where the study of capital as power begins.

7.

How does your notion that capital is 'finance and only finance' relate to the debate over 'varieties of capitalism' and the financialization of their accumulation regimes? Have you sought to contribute to this debate, or to decentre it? Does your approach offer other means of comparing the diversity and the transformations of capitalism?

**Bichler & Nitzan.** There isn't much overlap between the varieties-of-capitalism and financialization literatures on the one hand and CasP on the other, and the main reason is that they ask totally different questions based on totally different frameworks.

The varieties of capitalism literature, sparked by the work of Hall and Soskice, examines differences in the coordination of capitalist economies, including the relationship between capital, labour and the state, the pattern of corporate governance and the nature of corporate finance.<sup>34</sup> Originally, this approach began by identifying the distinct features of two ideal types — liberal market economies (LME) and coordinated market economies (CME) — features that were then combined, in various dosages, to generate a whole spectrum of hybrid models. One of these features — the nature of corporate finance — was picked up by theorists of financialization, who claim, for various reasons, that capitalism is becoming increasingly 'financial' — namely, that financial markets,

<sup>&</sup>lt;sup>33</sup>For simplicity, we use 'earnings' and 'profits' interchangeably.

<sup>&</sup>lt;sup>34</sup>Hall and Soskice (2001).

motives, institutions and elites are gaining prominence; that profit and accumulation increasingly rely on finance rather than on production and trade; and that financial returns, because they aren't being ploughed back into the real economy, end up creating chronic stagnation.<sup>35</sup>

Begin with the varieties literature. Capitalism can certainly organize somewhat differently in different contexts. Indeed, from a CasP perspective, it has to. Unlike in the varieties literature, where these differences are seen as aspects of *coordination*, in CasP they are viewed as features of *capitalized power*. And given that, as a dialectical relationship, capitalized power is always imposed against and indeed creates its own opposition, it must, almost by definition, develop with some permutations across different societies.

But these differences must be put in historical context.<sup>36</sup> Take the LME of the U.S., the CME of Germany and the emerging market of China. The differences between them are far smaller today than they were a century or even ten years ago, and they become insignificant when contrasted with those that existed two centuries ago. In many respects, capitalism enforces convergence.

Much of this convergence is imposed by the ritual of capitalization. According to CasP, power that affects the level and pattern of earnings gets capitalized, and this capitalization occurs — and here is the key point — *regardless* of whether the society in question is labelled LME, CME or some in-between hybrid. Moreover, power gets capitalized into *every* type of asset — be it the privately held shares of unlisted firms such as Vitol, Huawei and Cargill, the equities of listed corporations like ICBC, Deutsche Bank and Apple, the debt of companies such as Volkswagen, AT&T and SoftBank and the assets of state-owned enterprises like Aramco and Sinopec — as well as the holdings of various NGOs, legal and illegal alike. Finally, and equally if not more importantly, it gets capitalized into the debt of governments — i.e., into the capitalist ownership of the state's power to tax, borrow and print money — and in that sense enforces convergence on governments as well.<sup>37</sup>

Furthermore, and crucially, capitalized power — just like non-capitalized forms of organized power — tends to self-propagate. According to Ulf Martin, the very attempt by capitalists to 'rationalize' society through the capitalization of power generates resistance to this rationalization; this resistance, which from

<sup>&</sup>lt;sup>35</sup>For precursors and more recent contributors, see Baran and Sweezy (1966), Magdoff and Sweezy (1983), Williams *et al.* (2000), Froud, Johal and Williams (2002), Krippner (2005), Epstein (2005), Foster (2007), Hudson (2010) and Dutta (2018).

<sup>&</sup>lt;sup>36</sup>See Bichler and Nitzan (2010).

<sup>&</sup>lt;sup>37</sup>For CasP analyses of debt in general and public debt in particular, see Di Muzio and Robbins (2015) and Hager (2016).

a capitalist viewpoint seems 'irrational', calls for more capitalization to reign in the newly emergent irrationality; this additional capitalization leads to more resistance and therefore further capitalization; and so on in a never-ending 'autocatalytic sprawl'.<sup>38</sup> And as this self-propagation crosses borders, it results in further convergence.<sup>39</sup>

The autocatalytic sprawl of capitalization — i.e., the discounting to present value of more and more expected future income flows — is often described as 'financialization', though in our view that description is deeply misleading for at least two reasons. First, unlike financialization, capitalization is hardly new. As we shall see, it started not in the late, middle or even early twentieth century as theorists of financialization often suggest, but in the European burgs of the fourteenth century. Second, unlike capitalization, which is a universal, unambiguous algorithm abided, with great exactitude, by billions of followers, financialization is a vague, theoretically loaded concept that lacks a clear definition.

Contemporary notions of financialization are closely related to theories of productivity, particularly Marx's.<sup>40</sup> When it comes to productivity, neoclassicists consider finance as productive as any other economic activity (or more accurately, as productive as its income implies). Not so with Marx. In his theory, accumulation unfolds through expanded reproduction, such that:

$$M \to C \to P \to P' \to C' \to M'$$
 (3)

In this process, financial capital (money M), turns into commercial capital (commodities C), to be transformed into industrial capital (work in progress, or productive capital P), producing more industrial capital (P'), converted again into commercial capital (more commodities P') and finally into financial capital (more money P'). Although this expanded reproduction is a single process, during the nineteenth century each of its circuits appeared to be dominated by a different group, or fraction of the capitalist class: the conversion P'0 was dominated by the financial fraction, P'1 by the commercial fraction and P'2 by the industrial fraction. Of these, the industrial fraction was

<sup>&</sup>lt;sup>38</sup>Martin (2019).

<sup>&</sup>lt;sup>39</sup>For instance, over the past several decades, many LMEs have seen the delisting-throughmerger of many firms, while CMEs and emerging markets have witness a sharp rise in the listing of previously private firms. See for example Nitzan (1996) and Doidge, Karolyi and Stulz (2017).

<sup>&</sup>lt;sup>40</sup>The remainder of this section draws on Nitzan and Bichler (2009: Ch. 7 and pp. 253-262).

deemed productive: it was considered the engine of accumulation, the site where value was determined and surplus value created. The financial and commercial circuits-fractions, by contrast, were seen as unproductive, deriving their profit through an intra-capitalist redistributional struggle.

This theoretical framework continues to underpin much of heterodox political economy, including its non-Marxist branches, and it is the linchpin of the modern financialization literature: the  $M \to M'$  circuit/fraction, goes the argument, grows 'on account' of the  $P \to P'$  (and some argue also the  $C \to C'$ ) one, and this relative expansion is said to undermine productivity growth, increase inequality and breed stagnation.

In our view, the problem with this argument is threefold. The first difficulty is conceptual. For Marx accumulation is a 'real', backward-looking process denominated in dead labour. For capitalists, though, accumulation is a financial, forward-looking undertaking counted in discounted expected future earnings. From the latter's viewpoint, all capital and all capitalists are financial by definition, capitalism was therefore financial from the word go, and the notion of 'financialization' as a historical progression is meaningless.

The second problem is practical. The process of diversification — at the corporate level (where firms operate in many different sectors) and at the portfolio level (where individual capitalists own many different companies) — makes it difficult if not impossible to separate so-called financial capital and capitalists from productive and commercial ones.

The third problem is theoretical. As it stands, there is no objective way to identify 'productive' activity and therefore no easy way to delineate it from 'unproductive' finance (and commerce). According to Marx, productive activity is performed only by productive labour, but how do we know which labour is productive? Fine and Harris, for instance, state that, 'If labour directly produces surplus value it is productive; if not, it is unproductive' — but how can we identify surplus value when we see it? Alternatively, they suggest that 'only labour which is performed under the control of capital (on the basis of the sale of labour-power from workers to capitalists), and in the sphere of production, is productive' — but if our ultimate purpose is to identify the sphere of production, how can we pretend to know what constitutes this sphere before we have even started?<sup>42</sup>

<sup>&</sup>lt;sup>41</sup>Recall our discussion of the never-ending modifications of the 'production function'.

<sup>&</sup>lt;sup>42</sup>Fine and Harris (1976: 56).

With these limitations in mind, some orthodox Marxists, such as Duménil and Lévy, throw in the towel, at least for the time being, admitting that there is no pratical way to delineate financial from non-financial activity, conceeding that the term 'finance' should be used to describe capitalist owners in general, and hoping that these Marxist distinctions can be validated at some future date. <sup>43</sup>

We think they can't be — not within conventional political economy, anyway. The challenge here was well summarized by Paul Sweezy in his reflections on *Monopoly Capital*, a book he coauthored in 1966 with Paul Baran:<sup>44</sup>

Why did Monopoly Capital fail to anticipate the changes in the structure and functioning of the system that have taken place in the last twenty-five years? Basically, I think the answer is that its conceptualization of the capital accumulation process is one-sided and incomplete. In the established tradition of both mainstream and Marxian economics, we treated capital accumulation as being essentially a matter of adding to the stock of existing capital goods. But in reality this is only one aspect of the process. Accumulation is also a matter of adding to the stock of financial assets. The two aspects are of course interrelated, but the nature of this interrelation is problematic to say the least. The traditional way of handling the problem has been in effect to assume it away: for example, buying stocks and bonds (two of the simpler forms of financial assets) is assumed to be merely an indirect way of buying real capital goods. This is hardly ever true, and it can be totally misleading. This is not the place to try to point the way to a more satisfactory conceptualization of the capital accumulation process. It is at best an extremely complicated and difficult problem, and I am frank to say that I have no clues to its solution. But I can say with some confidence that achieving a better understanding of the monopoly capitalist society of today will be possible only on the basis of a more adequate theory of capital accumulation, with special emphasis on the interaction of its real and financial aspects, than we now possess.<sup>45</sup>

Note that Sweezy correctly recognized that the problem lies in the very definition of capital — yet remained hostage to the very real/financial bifurcation that created this problem in the first place. And that's where CasP comes in. To reiterate, capital — whether it appears as JPMorgan Chase equities, Airbus

<sup>&</sup>lt;sup>43</sup>Duménil and Lévy (2005: 21-22).

<sup>&</sup>lt;sup>44</sup>Baran and Sweezy (1966).

<sup>&</sup>lt;sup>45</sup>Sweezy (1991: emphases added).

debt, or Cargill's family holdings — is financial and only financial, irrespective of the economic activity it is formally associated with. Its capitalized quantity derives not from the underlying productivity of its owned artefacts (assuming that artefacts can have individual productivity to start with), but from the ability of its owners to leverage these artefacts, along with other institutions, processes and organizations, in exerting redistributional power. And it is this capitalized ability to exert power that underpins the diversity of capitalism and drives its historical development.

8.

So what exactly do you mean by capitalization? Can you explain it in some detail?

**Bichler & Nitzan.** As cogs in the capitalist megamachine and bearers of its larger logic, capitalists are conditioned to look forward into the deep future. They price, or 'capitalize', assets here and now by 'discounting' to 'present value' the earnings they expect these assets to yield all the way to eternity. Their discounting algorithm first emerged in the European burgs of the fourteenth century, or even earlier, and has since developed into a full-fledged ritual with complex scriptures, a bloated financial clergy and billions of followers. The basic principle, though, is simple and can be expressed by a short formula. Equation 4 shows our own version of this formula, with *K* on the left denoting the asset's capitalized value and the four elementary particles on the right representing its basic determinants:<sup>46</sup>

$$K = \frac{\pi \times H}{\delta \times nrr} \tag{4}$$

Let's look more closely at this expression. The expected future earnings being discounted are the product  $\pi \times H$ . The first item,  $\pi$ , measured in dollars, is the actual, ex post future earnings flow (say per annum) that will become known as the future unfolds. The second item, H, is hype. Expressed as a decimal, it measures the excessive optimism/pessimism of investors here and now regarding those ex post future earnings. For example, if the actual future earnings flow  $\pi$  will turn out to be \$10 billion/year, and if investors here and now, being overly optimistic, expect those earnings to be \$20 billion/year, then their hype H is 2 (= \$20bn ÷ \$10bn).

<sup>&</sup>lt;sup>46</sup>This particular formula assumes a fixed, perpetual flow of future earnings.

The discount rate is the product  $\delta \times nrr$ . The first component,  $\delta$ , is the risk factor that investors associate with the asset's expected earnings. The second component, nrr, is the normal rate of return that investors think they deserve for riskless assets. For instance, if the normal rate of return is 5 per cent a year, or 0.05, and the risk associated with the particular asset in question is 2, the overall discount rate is 0.1 (= 0.05 × 2).

Using this particular example, an asset with an ex post earnings flow  $\pi = \$10$  billion/year, a hype factor H = 2, a risk factor  $\delta = 2$  and a normal rate of return nrr = 0.05 will be capitalized at \$200 billion (=  $(\$10\text{bn} \times 2) \div (2 \times 0.05)$ ). Over time, the magnitudes of these elementary particles change and so does the asset's capitalization — which is exactly what we observe in the equity and debt markets.

9.

As it stands, the capitalization 'ritual', as you call it, seems rather technical. But you argue that this seemingly technical ritual is in fact all about power. Can you explain and illustrate how?

**Bichler & Nitzan.** The first to explicitly articulate the modern concept of force/power was probably Johannes Kepler.<sup>47</sup> Until Kepler, force/power was a *stand-alone qualitative entity* on par with other basic elements such as matter and fire. Kepler redefined it as a *quantitative relationship between entities* — and according to CasP, that's how capitalists — and therefore everyone else — view capitalization: as a quantitative relationship between entities.

The capitalization of any given asset, we argue, never stands on its own. To be meaningful, it must be expressed relative to the capitalization of other entities. And since capitalism is about the accumulation of capital, its driving force must be understood relatively. The ultimate goal is not absolute accumulation, but differential accumulation. And to accumulate differentially means to increase differential capitalization.

Equation 5 shows the differential capitalization  $K_D$  of an arbitrary entity — i.e., the ratio of the entity's own capitalization to that of some benchmark.

$$K_D = \frac{\pi_D \times H_D}{\delta_D} \tag{5}$$

<sup>&</sup>lt;sup>47</sup>Jammer (1957) and Koestler (1959).

The entity in question can be a person, partnership, corporation, government, NGO, international organization, religious group, terrorist organization, criminal gang or some grouping of one or more of these entities — and so can be the benchmark to which the entity is compared. For example, we can compute the differential capitalization of Jeff Bezos relative to Warren Buffet, Amazon relative to FANG (Facebook, Amazon, Netflix and Google), FANG relative to the S&P 500, Norway's Government Pension Fund Global relative to the FTSE All-World Index, ISIS relative to Saudi Arabia, the Yamaguchi-gumi relative to the Yakuza as a whole, Kuwait Finance House relative to the S&P BSE 500 Shariah Index, etc. 48

According to CasP, the magnitude  $K_D$  is a quantitative representation of power — the power of the entity's owners relative to those who own the benchmark. Furthermore, and crucially, this representation is a *linear*, 'one-to-one' mapping. It is linear in the comparative sense that an entity with a  $K_D = n$  is n times more powerful than its benchmark. And it is linear in the temporal sense that an entity whose  $K_D$  rises by m times is m times more powerful than it was.

The linearity stems from the undiscriminating nature of capitalization. (1) Capitalization is owner independent — i.e., it is the same for all owners. Unlike in neoclassical political economy, where income is ultimately earmarked for hedonic pleasure and therefore (should be) discounted based on the owner's individual utility, in CasP income is earned for its societal power and therefore discounted in the same way regardless of who owns it. (2) Capitalization is assettype independent — in other words, it is the same for all types of assets. Since each capitalized dollar already accounts for future earnings, hype and risk, the social power it represents is the same regardless of the entity's legal organization (private/governmental/NGO, listed/unlisted, industrial/commercial/financial, etc.) and regardless of the financial instruments being used (equities, debt, commodities or cash). And (3) capitalization is asset-size independent — namely, it is the same for big and small entities alike. For any given combination of hype and risk, the first dollar of an entity's earnings is discounted in exactly the same way as its last, which means that small and large entities discount their earnings in much the same way. All in all, then, capitalization is totally 'democratic', in that every capitalized dollar represents the same quantum of power.

<sup>&</sup>lt;sup>48</sup>The differential habit of thinking has spread to all aspects of capitalism: nowadays, everything from the size of the army and the growth of GDP, to Internet presence and media ratings, to artistic and academic achievements seems driven not by 'whose is big' but 'whose is bigger'.

The magnitude of  $K_D$  — that is, the differential power of the entity's owners — is determined by the elementary particles on the right-hand side of the Equation 5, which we derive from Equation 4, only that here we express them differentially, as a ratio to the corresponding magnitudes of the benchmark (hence the subscript D). These particles comprise differential earnings  $\pi_D$ , differential hype  $H_D$  and differential risk  $\delta_D$ . Since the normal rate of return is the same everywhere, the differential normal rate of return  $nrr_D = 1$  and therefore drops from the equation.<sup>49</sup>

The quest for higher-differential-capitalization- $K_D$ -read-greater-power goes hand in hand with CasP's notion of *dominant capital* — the largest, state-embedded corporate coalitions at the centre of the political economy.<sup>50</sup> The differential accumulation of these coalitions both drives and reflects their struggles against lesser corporations and the rest of society, as well as the development of the capitalist mode of power more broadly and the conflictual evolution of its ruling class.

This, of course, is not the received view. Theories of political economy, both liberal and Marxist, stipulate that capitalists large and small seek to maximize their *absolute* profit so as to achieve the highest possible net worth. But that's not what we see around us. Capitalists nowadays — and certainly the dominant ones — rarely if ever speak of, let alone care about, *maximization* (not least because nobody knows what that maximum might be). Instead, they are obsessed with *relative* performance, seeking to 'beat the average' and 'exceed the normal rate of return'. Their goal is to have their capitalization grow *faster* than that of others — or, in our lingo, to accumulate differentially. And this is not some sort of psychological quirk or a habitual affliction. Capitalists are conditioned and compelled to behave this way. Those who succeed become dominant, whereas those who don't are quickly taken over or reduced to irrelevancy by those who do.

To accumulate differentially, capitalists must increase the magnitude  $\pi_D \times H_D / \delta_D$ . This is what the ritual in Equation 5 dictates. And that increase — and here we come to our key point — *depends on and represents power and nothing but power*.

<sup>&</sup>lt;sup>49</sup>Occasionally, limits on the vendibility/movement of capital generate different normal rates of return in different situations and jurisdictions, resulting in  $nrr_D \neq 1$ . We ignore these cases here

<sup>&</sup>lt;sup>50</sup>The concept of dominant capital is explained in Nitzan and Bichler (2002, 2009).

To illustrate, take Apple Inc., and start with the first elementary particle: its differential future earnings  $\pi_D$  relative to some broad benchmark — say the S&P 500. In order to increase  $\pi_D$ , Apple will need to operate on many fronts. Working with and against others, it will need to affect domestic and foreign legislation, policies, subsidies and taxes in ways that will favour its own earnings relative to those of the S&P 500; restrict wages, input prices, borrowing rates and other costs while inflating its selling prices relative to those of the S&P 500; protect its own intellectual and other property rights while violating those of others, including those of other S&P 500 firms; threaten governments with 'relocation' to increase its differential tax breaks; influence local conflicts and international relations in ways that advance its own earnings over those of the S&P 500; shape school curricula to boost the high-tech workforce; condition consumers, both private and governmental, to increase the purchase of Apple products and services relative to the S&P 500; the list goes on. And Apple is hardly unique. A similar list of differential tasks can be drawn for any other capitalized entity — and in all cases, we argue, achieving these tasks depends entirely on power.

In this connection, it is important to note another CasP point, namely that raising one's differential earnings — and differential capitalization more generally — is a *double-sided* process. An entity like Apple can achieve it by increasing its *own* earnings faster than those of its benchmark (in this case, the S&P 500). But it can also do so by making the *benchmark's* earnings fall more rapidly or rise more slowly than its own.

This double-sidedness is highly important — and totally ignored by political economists. As noted, liberals and Marxists both focus on absolute gain (the maximization of profit or net worth) — and therefore concentrate only on what accumulators can do to improve their *own* situation. But with differential gain, reducing or restricting the gains of *others* can have the same effect. Of course, individual entities — even as large as Apple — might find it difficult to affect their benchmark, particularly if it represents a much larger grouping such as the S&P 500. But that is no longer the case for dominant capital coalitions and large alliances. Our analysis of Middle East Energy Conflicts, for example, has shown how the Weapondollar-Petrodollar Coalition of large armament and oil firms

leveraged regional wars to boost its own earnings while lowering those of the Fortune 500.<sup>51</sup> Similar two-prong processes affected the differential earnings of Israel's leading conglomerates,<sup>52</sup> South Korea's key Chaebols,<sup>53</sup> and the world's largest agricultural commodity traders.<sup>54</sup>

The two-pronged path to differential earnings highlights the crucial importance of what Veblen called strategic sabotage.<sup>55</sup> It demonstrates our contention that, contrary to received convention, accumulation is not synonymous with growth. It is true that increasing one's *own* earnings can sometimes happen in the context of rising production and employment; but, according to CasP, undermining the earnings of *others* always implies some measure of restriction and stagnation. And this last point is cardinal: as the logic of differential accumulation takes over and capitalized entities grow in size and importance, undermining others become imperative, strategic sabotage takes over, overall growth decelerates and 'accumulating through crisis' (our term) slowly becomes the norm.

So far, we have focused only on differential earnings. But the same arguments apply to the other elementary particles of differential accumulation — namely, differential hype and differential risk.  $^{56}$  In the late 1990s, for instance, high-tech capitalists were able to increase their differential hype  $H_D$ , with the resulting dot-com boom causing their differential capitalization relative to the societal average to grow exponentially — a strategy that has been used to enrich numerous capitalist groups ever since the early 'manias' of the Mississippi and South Sea Bubbles. The key point here is that the effect of manipulating hype has nothing to do with production. It is an organized act of deception, pure and simple, and organized deception depends wholly and only on the manipulators' power.

Similarly with differential risk  $\delta_D$ . Take the early British colonial expansion into South Africa led by the likes of Cecil Rhodes and Nathan Rothschild.<sup>57</sup> The initial benefit for the colonial investors came from rising differential earnings, but also — and often more so — from falling differential risk. As the South African natives were subjugated, ownership was rationalized and centralized

 $<sup>^{51}</sup>$ For instance, Nitzan and Bichler (1995), Nitzan and Bichler (1996b) and Bichler and Nitzan (2015b).

<sup>&</sup>lt;sup>52</sup>Nitzan and Bichler (2002).

<sup>&</sup>lt;sup>53</sup>Park (2016).

<sup>&</sup>lt;sup>54</sup>Baines (2017).

<sup>&</sup>lt;sup>55</sup>Veblen (1904, 1923). A refinement of Veblen's concept is offered in Bichler and Nitzan (2017b: fn. 3, pp. 3-4).

<sup>&</sup>lt;sup>56</sup>See Nitzan and Bichler (2009: Cf. Part III).

<sup>&</sup>lt;sup>57</sup>For a differential CasP analysis of South Africa's diamond business, see Cochrane (2015, 2016).

and greater stability was imposed, the risk coefficient dropped and the imperialists' differential capitalization rose accordingly. Here too, the process had little to do with production and everything to do with power. And this power path to differential accumulation not only remains in use today, but is traversed with much greater vigor. Take Hollywood. Over the past half-century, its net profits have merely met the average, yet its differential capitalization has risen continuously. And the reason, just like with Rhodes and Rothschild, is risk reduction. The leading film companies have learned how to substitute blockbuster predictability for artistic creativity, and as their strategic sabotage has intensified and their movies have grown duller, their differential risk has declined and differential capitalization has trended upward.<sup>58</sup>

So capital is quantified power throughout: a differential magnitude whose elementary particles — differential earnings, hype and risk — are manifestations of power and nothing but power. The process of capitalizing power is simple and abiding: owners of assets actively creorder and leverage power to increase or decrease the elementary particles of their capital as the case may be; every power aspect of society that affects those particles gets capitalized; and once capitalized, that aspect of power becomes an integral part of their capital.

And that, mind you, is how it was from the very beginning of capitalization in the burgs of Medieval Europe. <sup>59</sup> In our view, capitalist finance — and capitalism more generally — was born as an attempt to bypass feudal power. Bills of exchange, letters of credit and maritime insurance, along with the proto-corporate commenda and compagnia, were invented partly as means to transcend feudal territoriality. From there, finance diversified into 'real estate' — the traditional seat of feudal power — with mortgages and mortgage banks gradually wrestling control away from the landed aristocracy. It also branched out into war finance, with the Lombardian city states issuing future tax-backed bonds whose current proceeds paid for the soldiers and weapons with which they waged increasingly successful campaigns against barter-backed knights. The territorial princes and kings, initially hostile to the latter arrangement, found the temptation of fightnow-pay-later irresistible. Eventually, they began to borrow the methods and money of the bourgeoisie, with the result being a growing interdependency and eventually a bondage — between the territorial sovereign and the exterritorial capitalists. In due course, this alliance would develop into a new mode of power, a social space we now call the 'capitalist nation-state'.

<sup>&</sup>lt;sup>58</sup>McMahon (2013, 2015, 2018).

<sup>&</sup>lt;sup>59</sup>Nitzan and Bichler (2009: Ch. 13).

And it is in this context that we see the first systematic, forward-looking capitalization of power: the 'government bond'. Monarchs and princes, needing cash to finance their increasingly expensive military campaigns, found themselves forced into issuing discounted notes to lending capitalists. The notes, backed by expected future taxes and war booty, represented 'shares' in the organized violence of society. They capitalized the violent power of the feudal state and in so doing inseminated a new one — the state of capital. Marx famously stated that 'Force is the midwife of every old society pregnant with a new one. It is itself economic power'. <sup>60</sup> In our opinion, though, this statement is far too restrictive and ultimately misleading: force and power more generally are the hallmark of *every* mode of power, old and new — and indeed, they today permeate capitalism no less, and possibly much more, than they did when it first emerged.

The differential reduction of power into capital resembles a Fourier Transform. Mathematically, any arbitrary shape can be Fourier transformed into a series of trigonometric functions with different frequencies — and vice versa. Differential capitalization works in a similar way. It takes the qualitatively different relations of power that constitute a given capitalized entity and combines them into a single, universal magnitude: a pure number representing the entity's differential capitalization vis-à-vis its benchmark.

Conventional political economy is totally impervious to this Fourier-like transformation. It does recognize power, but only as an *external* force that distorts or assists the productive-utilitarian essence of capital. Power that does not bear on this productive-utilitarian entity — even if it has a major impact on capitalization — is considered irrelevant for 'real' accumulation. And this antiquated view of reality, we argue, leads to a dead end. Since util- and SNALT-denominated capital is a totally fictitious entity, political economists end up upholding an unworkable theory that seeks to explain a real economic entity that is not only impertinent to real capitalists, but doesn't even exist.

<sup>&</sup>lt;sup>60</sup>Marx (1909: 824).

<sup>&</sup>lt;sup>61</sup>You don't have to be a mathematician to enjoy the beautifully animated Fourier transformations of Ptolemy's epicycles and Homer Simpson's face (Mathbloger 2018; Serra and Carman 2008).

10.

Let's pick up on this last point. If capital in general and differential accumulation in particular are about power and only power, where does this leave the process of production (labour) and the pursuit of individual wellbeing (utility)? Are production and wellbeing irrelevant for differential accumulation?

**Bichler & Nitzan.** Production and wellbeing are *very* relevant for capital and differential accumulation — but only under the control and direction of power and in ways that are not necessarily the ones you'd expect. According to CasP, what matters for accumulation is not the processes of production and wellbeing as such, but *control* over those processes. It is not the flows of output and consumption that count, but the manner in which these flows are *shaped*, *restricted* and *sabotaged* to affect differential earnings, hype and risk.

Before unzipping this power dimension, we should reiterate that, despite their claims to the contrary, liberals and Marxists in fact fail to explain accumulation with *either* wellbeing or production. We have already seen that neither liberals nor Marxists have a universal unit with which to quantify wellbeing, production and capital, and that power wreaks havoc with the automaticity of both their models. And then there is a third point that we haven't yet mentioned, and that is that neither group has a scientific theory of profit. This latter failure is particularly biting, since the 'flow' of profit, when ploughed back into production, is what causes the 'stock' of capital to accumulate — or at least that's what we are told.

On paper, the explanations look elegant: liberals say that profit is proportional to the (marginal) productivity of capital, whereas Marxists claim it's equal to the difference between the total value of output and the total value of labour power required to produce that output.<sup>62</sup> In practice, though, neither is able to measure these determinants independently of prices, and therefore neither can claim to explain accumulation with either wellbeing or production.

<sup>&</sup>lt;sup>62</sup>Historically, liberal profits were justified on three different grounds — as a pay-out for abstinence/waiting, as compensation for the investor's risk and as a return for the productivity of the capital stock itself. Eventually, the third justification proved the most effective, pushing the other two to the ideological background, from where they are occasionally retrieved as backup ammunition.

The root problem here is that both theories continue to mistake capital for a productive/economic entity. The error originated with the first political economists — although at least they had a good excuse. The nascent rule of capital revolutionized the 'forces' and 'relations' of production, as Marx called them, so it seemed self-evident that value was rooted in the 'economy' and that the accumulation of capital was synonymous with the ongoing growth of its material inputs and outputs.

However, this framework was built on quicksand. Capital, even at its very beginning, was never a material entity, but finance and only finance. It was not machines, structures, raw materials and technical knowhow, but a symbolic institution, denominated in money, to control society at large. It is true that, in the eighteenth and nineteenth centuries, before it started spreading into every other aspects of society, capitalist control concentrated mostly on the flows of production and consumption. But what got capitalized, even back then, was *control* over these flows, not the flows themselves.

In and of itself, capital was a monetary magnitude from its very inception in the late Middle Ages, a capitalized legal claim denominated in prices. The money value of this claim was always forward-looking. It depended and continues to depend on the asset's expected future profit and the discount rate that capitalists deem fitting for that future, and this forward-looking monetary quantum — and here is the key point for our purpose here — has no *direct* connection to the 'ploughing back' of past profit. Past profits — and past production more generally — can certainly boost capitalization, but only if they increase expected future earnings and/or reduce the discount rate. And this increase/reduction is always controlled and directed by power.

<sup>&</sup>lt;sup>63</sup>For more on this issue, see Bichler, Nitzan and Di Muzio (2012: 7-15).

## 11.

Can you flesh out these claims with concrete examples? Why must the effect of production and wellbeing on accumulation be controlled and directed by power?

**Bichler & Nitzan.** According to the materialist view, the key to accumulation is making more and better goods and services — where better products (i.e. wellbeing) help fuel demand and greater output (production) enables supply. Although these two moments are conceptually distinct, for our purpose here they can be considered jointly by looking at the 'volume' — i.e., the number of units — produced and sold.

The impact of volume on differential capitalization works through its effect on the three elementary particles in Equation 5: differential future earnings  $\pi_D$ , differential hype  $H_D$ , and differential risk  $\delta_D$ . So, let's examine each in turn, beginning with differential future earnings.

Equation 6 shows the determinants of these earnings. It uses the subscript D for the differential operator, Q for the volume to be produced and sold, P for the unit price it will be sold at, and k for the share of capitalists in the overall money value it will fetch (the markup):

$$\pi_D = Q_D \times P_D \times k_D \tag{6}$$

To illustrate this determination, we go back to Apple Inc. with the S&P 500 as its benchmark. According to Equation 6, the company can increase its differential future profit  $\pi_D$  by increasing one or more of the following: (1)  $Q_D$  to raise its volume faster than the S&P 500; (2)  $P_D$  to raise its unit price faster than the S&P 500; and (3)  $k_D$  to raise its markup faster than the S&P 500.<sup>64</sup>

Now, assume that Apple follows the first path, increasing its volume faster than the S&P 500. Based on Equation 6, and supposing everything else remains the same, its differential future profit will rise. In other words, the materialist view seems correct: even in a differential context, *production and wellbeing do have a positive effect on profit and therefore accumulation*.

## Or do they?

<sup>&</sup>lt;sup>64</sup>The same effects can be achieved by reducing these three magnitudes more slowly than the S&P 500. For simplicity, we ignore here the possibility of Apple affecting these magnitudes for the S&P 500.

The thing is that output as such does not generate profit. For output to generate profit, it must be sold at a positive price and a positive markup.<sup>65</sup> And for prices and markups to be positive they must be backed by power.<sup>66</sup> Of course, the magnitudes of price and the markup are intimately related to production — but this connection is usually not positive but negative, and this negativity, again, has everything to do with power.

When Apple raises it differential volume, the other elements on the right-hand side of Equation 6 are unlikely to remain the same. At some point, the company's differential price  $P_D$  and/or differential markup  $k_D$  will begin to fall, and if the increase in  $Q_D$  is large enough, the combined drop in  $P_D$  and  $k_D$  is bound to become even larger. Eventually, a higher differential volume, instead of raising Apples' differential profit and accumulation, will cause them to decline.

Note that these dynamics have nothing do with 'excess supply' or 'deficient demand'. These latter concepts are meaningful only in the imaginary neoclassical world, competitive or otherwise, where the autonomous desires of rational sellers and buyers rule the day. In the real world of capitalized power, the negative reactions of  $P_D$  and  $k_D$  to a runaway increase in  $Q_D$  represent not a mismatch of desires, but the accumulator's *loss of control*. In this case, they reflect Apple's inability to maintain its differential power in the face of runaway output — which is precisely why 'such a free run of production has not been had nor aimed at; nor is it at all expedient, as a business proposition, that anything of the kind should be allowed'. Profits are inconceivable without production, but they are also impossible under a 'free run' of production.  $^{68}$ 

<sup>&</sup>lt;sup>65</sup>A stark illustration: the global differential profits of the oil companies are tightly correlated with the relative price of oil (compared to the CPI); they show virtually no correlation to the volume of oil produced and sold (Bichler and Nitzan 2017a: Figure 2, p. 3).

<sup>&</sup>lt;sup>66</sup>To see that this is indeed the case, just imagine what would happen to prices and markups in a world without property rights and the force to back them up.

<sup>&</sup>lt;sup>67</sup>Veblen (1923: 373).

<sup>&</sup>lt;sup>68</sup>This narrative also serves to highlight why Marx's value-based notion of 'exploitation', even if problem-free, cannot capture the full spectrum of capitalized power. As a pecuniary magnitude, exploitation is always mediated through nominal prices and the markup and is therefore affected by forms of power that exist outside the labour process as such.

And these power interactions are by no means limited to Apple. They apply not only to high-tech products, but to the entire gamut of goods and services — from raw materials and food, to automobiles and houses, to weapon systems, financial services and electronic advertising. Beyond a certain point, the free run of production and wellbeing causes power to disintegrate and the relationship between differential volume on the one hand and differential profit and accumulation on the other to become negative. <sup>69</sup>

The only way to avoid this negative impact — and perhaps even make it positive — is to *leverage power*. For instance, while raising its differential volume  $Q_D$ , Apple can also increase its differential markup by incorporating in Ireland to reduce its differential taxes, bribing Chinese government officials to lower its labour costs, preventing its U.S. workers from unionizing and putting pressure on its global suppliers to get their components for even less. It can also increase its differential price  $P_D$  by persuading consumers that its new iPhone is much 'better' and convincing governments and other organizational clients that its big-data tranches are 'worth' more. In both cases, the final effect of production and wellbeing on profit and accumulation will look positive — but only because this effect has been regulated and directed by the power underpinnings of a higher differential price and a bigger differential markup.

And that's hardly the end of the story. As noted, production affects not only differential profit  $\pi_D$ , but also differential hype  $H_D$  and differential risk  $\delta_D$ . Thus, when announcing its plan to increase production, Apple must also persuade investors that this increase won't undermine — and might even raise — differential profit (so as to keep  $H_D$  intact or boost it further) and that it won't increase — and might even lower — differential risk (so as to keep or reduce  $\delta_D$ ). If the company fails in either or both tasks, the increase in differential profit might be more than offset by the combined drop in differential hype/risk, causing differential capitalization to decline. And since both hype and risk are determined by power and only by power, we again see that production and wellbeing can increase accumulation only when backed by power.

<sup>&</sup>lt;sup>69</sup>Nitzan and Bichler (2000a: Figures 5.1 and 5.2, pp. 79-80) generalize these claims to the overall distribution of income, showing for the United States that, from a certain point onward, the income share of capital correlates *negatively* with the utilization of society's resources: the higher the utilization, the *lower* the capitalist share of income. See also the animation by Thouvenot (2019).

## 12.

We know that market capitalization deviates from the dollar value of capital goods, which, at least on paper, is consistent with your claim that capital is not a material-productive entity but a financial representation of power. But couldn't this deviation be the result of other, more mundane factors, such as the mismeasurement of intangible assets or the irrationality of investors?

## Bichler & Nitzan. It could be, but it isn't.

Start with intangible assets. Many experts nowadays argue that because capitalization reflects tangible as well as intangible assets (essentially claims on proprietary knowledge and 'goodwill'), and since the 'capital stock' usually includes only the former type of assets, the dollar ratio between capitalization and the replacement cost of the capital stock — the so-called Tobin's Q — is likely to differ from 1. And the experts further argue that, with the high-tech and information revolutions in full swing, we should expect intangible assets to grow faster than tangible ones, causing Tobin's Q to trend upward — which is exactly what we have witnessed in recent decades.

The problem with this argument is twofold. First, intangible assets are like dark matter. They are invisible. The only way to see them is indirectly, by assuming they are equal to the 'residual' left from subtracting the cost of tangible assets from total market value. To And then there is the second issue: this residual fluctuates heavily, and this fluctuation makes no sense. Since intangible assets are said to represent productive knowledge, and since productive knowledge is usually cumulative, we should expect the magnitude of these assets to grow gradually and more or less continuously. But that's not what Tobin's Q tells us. Instead, it shows that the size of intangibles rises as well as contracts — often by a lot — and this seesaw movement is highly suspect, for how could cumulative knowledge suddenly dissipate for no apparent reason, only to recover big time a few years later, again for no good reason?

<sup>&</sup>lt;sup>70</sup>This residual should not be confused with that of the production function, where the proportion of output that can't be explained by physical inputs is labelled a 'measure of our ignorance' and ceremonially assigned to an invisible input called 'technology'.

Although political economists rarely if ever raise the latter question, they do have a ready-made answer: irrationality. The fluctuations of intangible assets, and consequently of Tobin's Q, they posit, are due to investors' incomplete foresight, emotional overreaction and pure delusions, as well as to various market imperfections from government intervention to misinformation.

The consequence of this irrationality, goes the argument, is financial bubbles and crises. During good times, with profits soaring and the 'real' capital stock rising, euphoric investors bid up financial markets to a bubbling frenzy, causing the intangible-asset 'residual' to appear much bigger than it truly is, or so goes the argument. During bad times, the process reverses. As real accumulation slows, financial markets decelerate even faster. And as the bubble bursts and the 'residual' deflates, we get the impression that intangible assets have contracted.

The good news, though, is that investors' irrationality and market imperfections, although annoying and inefficient, are safely bounded. They tend to move together with and thus merely amplify the ups and downs of 'real' accumulation. And although this amplification can be a big headache in practice, it doesn't undermine the theoretical primacy of the 'real' capital stock.

Or doesn't it? Because, in reality, the relationship between market capitalization and the so-called real capital stock is exactly the opposite of what this common description would have us believe.

The two series in Figure 1 show the situation in the United States. Both series represent annual rates of change smoothed as 10-year trailing averages — one for the dollar replacement cost of fixed assets (thick black line), the other for the dollar market value of corporate stocks and bonds (thin red line). And as the data show, the market-value series does not amplify fixed assets, or even go in the same direction. Instead, it moves in the *opposite* direction (with a negative Pearson correlation coefficient of –0.32). And this opposite movement cannot be dismissed as short-term noise. Its cycle has a peak-to-peak duration of 15-40 years, and it is highly patterned.

And this pattern should be deeply unsettling.

The promise of classical political economy, and later of economics, was to explain and justify the rule of capital: to show how capitalists, obsessed with increasing their own capitalization, propel the rest of society forward. In order to accumulate capital values in dollars and cents, goes the argument, capitalists must invest in 'real' means of production; and when they do so, they boost production, employment, knowledge, rationality, efficiency and the *laissez faire* regime as a whole. According to Figure 1, though, the reality, at least in the

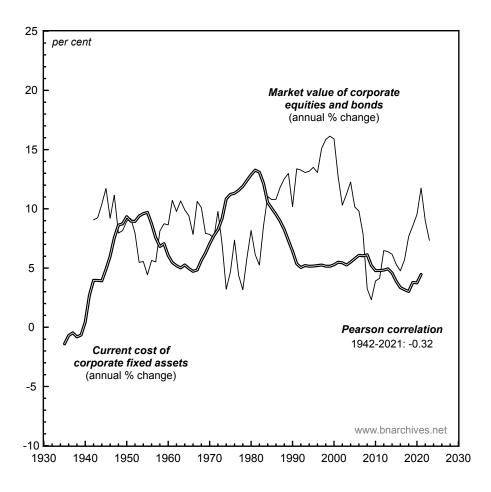


Figure 1: U.S. capital accumulation — fiction versus reality, 1935-2023.

NOTES: The market value of equities and bonds is net of foreign holdings by U.S. residents. Series are shown as 10-year trailing averages. The last data points are 2021 for the current cost of corporate fixed assets and 2023 for the market value of corporate equities and bonds.

SOURCES: U.S. Bureau of Economic Analysis through IHS Markit (mnemonics: FAPNREZ for current cost of corporate fixed assets). The market value of corporate equities & bonds splices series from the following two sources. 1932-1951: Global Financial Data (market value of corporate stocks and market value of bonds on the NYSE). 1952-2023: Federal Reserve Board through IHS Markit (mnemonics: FL893064105 for market value of corporate equities; FL263164100 for market value of foreign equities held by U.S. residents, including ADRs; FL893163005 for market value of corporate and foreign bonds; and FL263163005 for market value of foreign bonds held by U.S. residents).

United States, is the very opposite: the growth rates of capitalization and 'real capital' move not together but inversely, which means that the interests of the capitalist rulers do not line up with society's but are pitted *against* them. So even at this most basic level we are talking about power: the power of capitalists over — and *contra* — everyone else. And if that is indeed the case, who needs the capitalists, let alone the economists who legitimate them?

In short, political economists must make a choice. They can either focus on what drives capitalists, which means treating capital as finance and only finance and theorizing the power processes that drive capitalization — or they can stick with their 'real' capital and give up on being able to say anything meaningful on the capitalist role of capitalists. But they cannot choose both.<sup>71</sup>

13.

Your emphasis on capitalization is influenced by Veblen, as is your analysis of business and industry and the notion that accumulation hinges not on productivity but on strategic sabotage, among other ideas. However, you distance yourselves from Veblenian institutionalism. Why?

**Bichler & Nitzan.** Veblen broke new ground in multiple areas. He decimated neoclassical economics, offered a totally contrarian understanding of why business was antithetical to industry, and used this understanding to theorize the joint emergence and operation of big business and the large state, capitalization and the 'larger use of credit'. As young students in the early 1980s, we were impressed by his insights and originality — as well as by the ability of most political economists to totally ignore him.

But although influenced by Veblen, we don't see CasP as a Veblenian theory, let alone an institutionalist one.<sup>72</sup> Unlike the old institutionalism of Veblen and others, CasP is dialectical rather than evolutionary, and in contrast to the new institutionalism, it seeks to critique and move away from capitalism rather than support and bolster it.

<sup>&</sup>lt;sup>71</sup>The argument in this section, including Figure 1 and the challenge it presents to political economists, was first made in Bichler and Nitzan (2009) and Nitzan and Bichler (2009) and has been updated since in several of our publications, including a *Real-World Economics Review* article (Bichler and Nitzan 2015a). Based on access statistics from our own website as well as RWER's, these three publications were downloaded at least 70,000 times (and possibly more, if we count reposting sites), so this argument was read by many. We find it telling that not a single reader, heterodox or orthodox, has bothered to engage with it.

 $<sup>^{72}</sup>$ For more on the differences between CasP and Veblen's work, see Bichler and Nitzan (2019).

Also, and more concretely, the central CasP concept of differential accumulation has no lineage — and in some sense is alien — to Veblen's framework. Veblen, who wrote at the turn of the twentieth century, before the appearance of business indices and financial benchmarks, emphasized the absolute quest for 'maximum profit' and saw strategic sabotage merely as a power means to an economic end. By contrast, CasP, which developed at the end of the twentieth century, sees power not only as a means of accumulation, but also — and perhaps more importantly — as its ultimate purpose. Accumulators, it argues, are conditioned and driven to augment not their profits and assets as such, but their relative power, and this means that, as symbolic bearers of power, these profits and assets should be measured not absolutely, but *differentially*, relatively to those of others.

Let's look at this latter difference more closely. Veblen uses 'strategic sabotage' interchangeably with the concept of 'differential advantage'. Despite their linguistic similarity, the latter concept has no connection to our own notion of differential accumulation. Veblen's purpose — and this is the paramount point here — is to explain not differential profit, but *profit as such*. For him, differential advantage is simply the ability of capitalists to raise prices — absolutely or relative to cost — so as to generate a profit in the first place. And what he seeks to show throughout his work is that, contrary to received convention, higher-prices-read-profits come not from the owners' economic *contribution* to the community, but from their power to *sabotage* the community.<sup>73</sup>

The question of whether the profit afforded by differential advantage *beats*, *trails or equals the average profit* is entirely irrelevant to and never raised in Veblen's argument. Indeed, to the best of our knowledge, he makes no reference to the 'normal rate of return', 'benchmarking' or 'beating the average', and thus no mention, let alone analysis, of differential accumulation.

And the reason is simple. For Veblen, power is a *means* of accumulation, and that's it. By contrast, in CasP power is *both* the means and end of accumulation. In developing this double-sided view of power and accumulation, we were inspired not by Veblen, but by Lewis Mumford's theory and history of the megamachine. In his two-volume *The Myth of the Machine*, which we mentioned earlier, Mumford examines the ancient and modern state incarnations of the megamachine, a mechanized social construct erected and maintained by state

<sup>&</sup>lt;sup>73</sup>For instance, Veblen (1908: 108).

rulers as a way to exert power for the sake of power.<sup>74</sup> Building on his insights, we have extended and developed this concept to the study of capitalism, arguing that capital is a modern megamachine and that accumulation is the capitalist form of augmenting power for its own sake.<sup>75</sup>

This double-sided understanding of capital as power — the notion that power is both the principal tool and ultimate goal of accumulation — alters the meaning of capitalism. Whereas for Veblen (as well as for liberals and Marxists) the final purpose of accumulation is to increase one's *absolute* claim, in CasP it is to raise one's *differential* claim. And while for Veblen (and other political economists) the absolute claim is over *output*, in CasP the differential claim is over the *societal process* of reproducing the output as well as capitalism at large.

The reason why Veblen never discussed differential accumulation is that, in his opinion, the end goal of all business undertakings is *profit maximization* — or in his words, the 'largest net gain in terms of money'. And since maximization is antithetical to the very logic of differential accumulation, by insisting on the former Veblen effectively (albeit unknowingly) rejected the later. Although his texts are replete with references to 'differentials', his economic thinking was clearly absolute. In this respect, he remained fully aligned with the very neoclassicists he so effectively debunked.

Finally, there is the issue of history. Veblen wrote in the early twentieth century and died in 1929. At the time, he was in no position to invent the concept of differential accumulation, let alone develop it into a full-fledged theory. The necessary historical conditions for such an articulation emerged only after his death.

Consider the following facts: although the ritual of capitalization dates back to the late Middle Ages, economists started to examine it in earnest only at the turn of the twentieth century; the scientific study of finance commenced only with the Cowles Commission after the Crash of 1929 and the Great Depression; portfolio theory emerged only in the 1950s; and it was only in the 1960s and 1970s that discounting became a central preoccupation of corporate finance. In other words, the key theoretical tools for examining differential accumulation were simply not there during Veblen's lifetime.

<sup>&</sup>lt;sup>74</sup>Mumford (1967, 1970).

<sup>&</sup>lt;sup>75</sup>Nitzan and Bichler (2002: Ch. 2; 2009: Ch. 13).

<sup>&</sup>lt;sup>76</sup>This maximization claim is repeated at least 16 time in Veblen (1904, 1923). For the actual references, see Bichler and Nitzan (2019).

And the same goes for the data. Estimates of the national income and product accounts (NIPA) — including profit — were sanctioned only in 1932 and were first published only in the late 1940s. Similarly, the time series on corporate balance sheets and income statements published by the US Internal Revenue Service (IRS) only go back to 1926. Until these statistics became available, there was no clear notion of average incomes, average profits or average assets. And the same is true of financial market indices. The Dow Jones Index began in the late nineteenth century, but until the emergence of industry-, sector- and size-based indices in the second half of the twentieth century, there were no relevant benchmarks to beat.

In other words, during Veblen's time there was no clear 'average' or 'normal' for individual investors and corporate organizations to refer to, and no obvious mechanism to assess, let alone achieve, differential accumulation. This vacuum is evident in Graham and Dodd's Security Analysis — arguably the most famous finance textbook of the time (and some say of all time).<sup>77</sup> The book, published five years after Veblen's death, contains no mention of the terms 'benchmark', 'benchmarking', 'normal rate of return', 'average rate of return' or 'average returns'. The phrase 'beating the stock market' appears twice, on the same page but the discussion relates not to differential accumulation, but to the difficulty of 'buying low and selling high'. The term 'index' appears 12 times — but merely as a generic synonym for 'proxy' and 'measure'. The word 'differential' appears once — but only to denote a yield difference on a bond issue of a particular company. 'Dow Jones' appears seven times — but merely in a descriptive context and never in relation to differential performance. 'Poor's' (the predecessor to Standard and Poor's) is mentioned 14 times — twice to explain the nature of Poor's Manuals and 12 times as references to specific company data. In this context, it is clear that Veblen simply did not have the necessary raw materials — conceptual or empirical — to think of accumulation in differential terms, let alone come up with the concept of differential accumulation as such.

<sup>&</sup>lt;sup>77</sup>Graham and Dodd (1934).

## 14.

In your work, you often refer to Michal Kalecki as a significant influence. Can you explain this influence, as well as how your approach might differ from his?

**Bichler & Nitzan.** As students, we were impressed and inspired by Kalecki's theoretical originality, empirical science and concise, no-frills writing style. We found it particularly appealing that he not only anticipated much of Keynes' *General Theory*, but also fused it with a totally different 'micro' structure — a structure based not on competition, but on oligopolistic power.

Kalecki's most famous concept — the 'degree of monopoly' — was a revelation. And the novelty, at least in our view, was that he not only connected the power underpinnings of the microeconomy with its overall macro performance, but also offered what we thought was a very different way of *measuring* power to start with. Most political economists, even today, associate power with its visible 'levers', such as industry and aggregate concentration ratios, or direct political intervention. Kalecki did the opposite. He looked at power — in his case, the power of capitalists — not through its instruments, but through its *consequences*. The degree of monopoly, he argued, should be gauged not by the number of actors, their policies and actions, but by its distributional result — namely, by the capitalist share of income, or the markup. As an economist, Kalecki focused on economic power, but the principle was general. Our own notion that differential capitalization represents the power of its owners is partly inspired by his innovative index.

Another related influence is the way in which Kalecki integrated the ruling class — particularly its inner struggles and conflicts — into his macroeconomic and geopolitical analyses. 'Many far-reaching upheavals in human history', he pointed out, 'started from a cleavage at the top of the ruling class'.<sup>78</sup> This reminder that the intra-ruling class struggle could often be as important if not more important than the inter-class one, underpins our notion of differential accumulation and is written all over our work.

But there is one important area where we differ sharply. For Kalecki, as for Veblen, accumulation is an absolute process of amassing more and more claims on real assets. In this context, power, however important, is a means to an end, not the end itself. And this assumption leads to conclusions that are opposite to ours. For instance, in his paper 'Political Aspects of Full Employment', Kalecki argues

<sup>&</sup>lt;sup>78</sup>Kalecki (1967: 114).

that under certain circumstances — such as a long boom that empowers workers — capitalists would willingly sacrifice profits to defend their hegemony. A similar view is marshalled by Stephen Marglin, who claims that capitalists often forego efficient innovations to safeguard their overall power. And the same perception underpins the broader Monopoly Capital notion of an underconsumption crisis, where the increased power of capitalists, revealed by their higher degree of monopoly, undermines their ultimate interest in growth-led accumulation. On these matters, CasP argues instead that capitalists scarcely sacrifice their accumulation interests to regain their power. They don't have to. Their very differential capitalization is *driven by and represents* their power to start with.

15.

So power in your approach is both the means and the end of accumulation, and capitalists leverage power to increase it further for its own sake. But what exactly do you mean by power? Also, in your work you refer to different 'modes of power'. How do these modes of power relate to your concept of power?

**Bichler & Nitzan.** To reiterate, we have argued that in capitalism power is a quantitative relationship between entities, and that the key gauge of this power is differential capitalization. In our view, this differential capitalization represents *confidence in obedience* — the confidence of the ruling class in the obedience of the ruled. And the reason is as follows.

Human societies invented the general concept of 'power' — or 'force' in its broader sense — to denote a *mover*: something that causes things to change (or, alternatively, to stay the same despite the apparent impact of another mover). Something itself can be observed directly or detected indirectly: a flood, a war, the plague, a fortune being won, the ups and downs of the business cycle, the trajectories of heavenly bodies, the vibrations of atoms in a gas — these movements are all accessible to our senses and instruments, or so it seems. We

<sup>&</sup>lt;sup>79</sup>Kalecki (1943).

<sup>&</sup>lt;sup>80</sup>Marglin (1974).

<sup>&</sup>lt;sup>81</sup>Bichler and Nitzan (2014a: Box 1, p. 69).

<sup>&</sup>lt;sup>82</sup>Jammer (1957). For the purpose of discussion here, we use the terms 'power' and 'force' interchangeably.

can also observe or detect resistance to change — a tree that doesn't succumb to a storm, a wall that rejects bullets, an economy unresponsive to supply-side policies. But what we cannot observe or detect — at least not objectively and unambiguously — are the movers of these changes.

'Force is nothing but its effect', say its modern theorists from Kepler and Spinoza to Hegel and Marcuse. This elegant tautology, though, is too general. In and of itself, an effect never reveals, let alone unambiguously, a *specific* mover. The motions of the heavenly bodies, for example, taken as an 'effect', have been traced to the will of God, the inherent properties of the bodies, Newton's gravitation and Einstein's curved space, among other explanations. It seems clear, then, that when we choose a mover — whether we call it 'spirit', 'cause', 'force', 'law' or 'power' more generally — our selection is inherently speculative and open to interpretation.<sup>83</sup> From this viewpoint, there isn't — and *cannot* be — a single, 'correct' concept of power. The way we conceptualize power is always embedded in and conditioned by our broader cosmology and the structure of our society.

In our day and age, most students of society, heterodox as well as orthodox, tend to follow Max Weber's notion of social power as a 'resource', something like a 'stock of energy' that can mobilize things. When this resource is distributed more or less evenly between the relevant social entities, it is often manifested as 'power to'. When it is distributed unevenly, it tends to appear as 'power over'. For example, the economic stock of 'real capital' endows its owners with the power to do things (produce, innovate, mobilize resources for the good of society) as well as control others (by monopolizing industry, cornering the market, exploiting workers, bribing politicians, etc.). And we can say the same about other, extra-economic 'sources of power' — such as political power, military power and ideological power, to name a few.<sup>84</sup> Each of these sources of power, goes the argument, can mobilize society as a whole, or pit some of its elements or subsystems against others.

The CasP conception of social power is totally different. As noted, power in our view is not a stand-alone entity or resource, but a quantitative relationship between entities; a relationship that, in its most elemental form, represents the ruling class' confidence in the obedience of the ruled. The rulers try to impose

<sup>&</sup>lt;sup>83</sup>For a brave attempt to impose some semblance of order on these slippery concepts, see Bunge (1961, 1979).

<sup>&</sup>lt;sup>84</sup>For example, Russell (1938), Parsons (1969), Bourdieu (1984, 1986) and Mann (1986, 1993).

their rule against their subjects' resistance — resistance to them as concrete rulers, and occasionally resistance to their very system of rule. And the degree to which the ruling class is confident in being able to withstand and overcome this resistance is what we call power.<sup>85</sup>

Now, on the face of it, this definition may seem awfully subjective. It isn't. Confidence-in-obedience-read-power represents the *collective* mindset of the ruling class. It is not a mere assortment of individual opinions, oddities, illusions and delusions, but the rulers' common assessment and understanding of their shared reality. Of course, the rulers, even as a group, often are misinformed or misjudge their situation, sometimes by a lot. But these misperceptions — which usually arise in the context of significant change — rarely last for long. Sooner rather than later, they are incorporated into the ruling class' collective understanding and alter their confidence in obedience — either up or down. To persuade yourself that this is indeed the case, just think of how long it took Belshazzar, King of Babylon, to realize that his rule had ended, the French monarchy to succumb to the French Revolution and the Soviet ruling class to realize their communist regime had collapsed.

Moving from the general to the specific, the *concrete appearance* of confidence in obedience varies significantly over time and across societies. To understand this variance, we tentatively suggest that society's 'concepts of power' (COP) are intimately bound up with its 'mode of power' (MOP), and that the specific ways in which the rulers conceive, assess and measure their power are deeply intertwined with the concrete ways in which they creorder their societies. In this sense, we might say that concepts of power (COP) and modes of power (MOP) are fused as singular COP-MOP bundles.

Our work on this subject examines and compares, if only briefly and provisionally, three general COP-MOPs: the empires and city states of the ancient river deltas, feudalism and capitalism.<sup>86</sup> The examination is dialectical in that it explores the specific relations of, conceptions of and resistance to power in each COP-MOP; the features that make these conceptions-relations persist; and the reasons why they eventually disintegrate or capitualate to a new COP-MOP.

<sup>&</sup>lt;sup>85</sup>The opposing sides of this dialectic are narrated in two sixteenth-century texts: Machiavelli's *The Prince* (1532), a universal how-to guide for the power-hungry ruler; and de La Boétie's *The Politics of Obedience* (1975), a forgotten brilliant essay about subversion and resistance in the name of human autonomy.

<sup>&</sup>lt;sup>86</sup>Cf. Nitzan and Bichler (2009: Ch. 13) and Bichler and Nitzan (2018: Part III).

Our starting point, mentioned earlier in the interview, is Lewis Mumford's imaginative notion of the megamachine. According to Mumford, the first machines were not material, but social. They comprised large-scale, complex hierarchical structures — hence the prefix 'mega' — and they fulfilled Franz Reuleaux's classic definition of a machine as 'a combination of resistant parts, each specialized in function, operating under human control, to utilize energy and to perform work'. These megamachines differed from subsequent, material machines in that they were made not of physical cogs, but of human beings.

The first megamachines, Mumford argues, emerged in the ancient river deltas of Mesopotamia and Egypt some time in the fifth millennium BCE, and then appeared, often independently, in other parts of the world. Their material output — from irrigation systems and public works, to large bureaucracies and standing armies, to palaces and megalomaniacal graves — was phenomenal. But this output was a means to an end. The ultimate goal of the megamachine, says Mumford, was power for its own sake. It was power that demonstrated — to others, but mostly to the rulers themselves — that they, the rulers, were omnipotent. That their mastery over nature and humans annulled their Gilgameshian fear of death. That they, just like the gods, were immortal.

In our view, this quest for immortality and the megamachine that demonstrates it characterize all COP-MOPs. All COP-MOPs, we argue, are driven by power for the sake of power. And they all create mechanized hierarchies to achieve, sustain and, most importantly, augment that power. These are the similarities. The differences concern, first, the depth, breadth and flexibility of their hierarchies; and second, the symbols — particularly the concepts of power — that give those hierarchies their particular shape and hold them together.<sup>88</sup>

If we are to offer a very rough outline of these differences, we could say, again tentatively, that the ancient MOPs had deep hierarchies; that these hierarchies were relatively rigid; and that their COPs, tied mostly to threatening religious hierarchies, were largely 'magical' (or, as Ulf Martin points out, that the concepts of power and the divinities they represented were the same).<sup>89</sup> By contrast,

<sup>87</sup> Mumford (1967: 191).

<sup>&</sup>lt;sup>88</sup>Blair Fix (2017) shows that the spread and depth of hierarchies are positively correlated with energy capture across time and space. This correlation, he suggests, arises because hierarchical organization is the most effective way of capturing energy. The opposite interpretation is explored in Bichler and Nitzan (2017b), who argue that hierarchies are vehicles of power, and that their correlation with energy capture arises because the taller and more numerous the hierarchies, the greater the energy needed to build and sustain them.

<sup>&</sup>lt;sup>89</sup>In Sumer, for example, the threat to unleash the wrath of one's gods on one's enemies was taken with utmost seriousness by all sides. God-Kings and sacred rulers were prevalent in most of the ancient river deltas.

the feudal MOPs had shallower but more flexible hierarchies, and their COPs, although still sanctified by menacing religion (more in Europe, less so in Japan), were largely 'ontological', representing land, knights, serfs and plenty of physical destruction. <sup>90</sup> The capitalist MOP surpasses both in that its hierarchies have far greater breath and depth and are infinitely more flexible, and in that its key COP — the differential capitalization of power — is a secular, 'operational' symbol (a symbol that constitutes and creorders reality).

The greater breadth, depth and flexibility of the capitalist MOP has much to do with its radically different COP. All rulers need quantitative yardsticks to help them formulate, assess, express and impose their confidence-in-obedience-read-power. There are many such yardsticks — from the size of their land and its yield, to the number of people under their control, to their military might, their precious stones and metals and the gifts they receive — and the key point here is that, in general, the units of these yardsticks tend to *differ* from each other. They are incommensurate. In and of themselves, they cannot be compared and aggregated, which means that their totality — and by extension, the rulers' assessment of their *overall* power — is difficult to formulate.

Capitalism is the only MOP to remove this barrier. Its main COP — the forward-looking differential capitalization of power — is a pure universal number, comparable throughout the space-time of capitalism. It quantifies power in the very same way for all entities, in all capitalist societies and at all points in time. Furthermore, and crucially, it helps capitalists project and assess their *future* power — and in so doing allows them to strategize and act in a seemingly universal, rational fashion, something that the rulers of the ancient and feudal COP-MOPs could not even fathom. In our view, it is this *universal* conception of power, perhaps more than anything else, that enables capitalists to build taller, broader and more flexible hierarchies than those of any other historical COP-MOP.

<sup>&</sup>lt;sup>90</sup> [W] ar in the Middle Ages' writes Le Goff (1965: 29), 'was marked by systemic devastation. Its purpose was not so much to defeat the enemy militarily, as to undermine its economic and social power by burning and destroying crops, houses and villages'.

16.

Can you illustrate your understanding of the capitalist COP-MOP with a concrete example? Specifically, how does the capitalist conception of confidence in obedience illuminate the operation of the capitalist mode of power?

**Bichler & Nitzan.** Take the stock market — the most sensitive barometer of contemporary capitalism and its main guide for capitalist action. The conventional view of its booms and busts is based, directly or indirectly, on some notion of 'valuation'; or, as we suggested earlier in the interview, on comparing equity prices to the economy's underlying 'fundamentals' and then blaming the oscillating difference — whether bubbles or crashes — on Galtonian mean-reverting distortions and irrationalities. The COP-MOP fusion offers a radically different take. In our paper, 'A CasP Model of the Stock Market', we examine the equity market not from the mechanical perspective of a distorted economy, but from the dialectical triangle of capitalized power, systemic fear and strategic sabotage. <sup>91</sup>

A key aspect of this examination is the connection between the stock market's performance on the one hand and the capitalists' power-read-confidence-in-obedience on the other. This confidence, we argue, has two opposite dimensions. The first, *extroverted* dimension is the way in which capitalists price their equities. When capitalists think that, as a group, their power over the underlying population is rising, they express this collective confidence by buying stocks and bidding up their prices. Now, since we are dealing here with capitalized power, the increased price must be expressed relative to those whom the capitalists rule. And given that the majority of the ruled are wage earners and their dependents, a good rough benchmark is the wage rate. Figure 2 shows this differential in the United States, depicting the ratio between the S&P 500 price index and the average wage rate. We call this ratio the *Power Index*.

The *introverted* dimension of the capitalists' confidence in obedience is systemic fear. Capitalists, we argue, are driven to increase their capitalized power without end. That's the basic purpose of their capitalist megamachine. And indeed, the only reason for them to buy stocks in the first place is that they expect stock prices — and by extension the Power Index — to rise even *further*. But this future increase is redistributional, by definition, and redistribution requires more threats, further sabotage and greater violence. And here we get to the

<sup>&</sup>lt;sup>91</sup>Bichler and Nitzan (2016). For critical extensions, see Baines and Hager (2019) and McMahon (2021).

crucial point. The greater the power of capitalists, the greater the resistance to it, and therefore the more difficult it is to increase it even further. Power has limits, or asymptotes, and the closer capitalists get to those asymptotes, the greater their resort to threats, sabotage and violence. And as the bellicosity increases, so does the likelihood of a backlash — a recoil that might reduce the capitalists' power, depose them or even undermine their very regime. This risk generates capitalist fear that, at the limit, becomes *systemic* — that is, fear for the very nature and even existence of their system.

Now, in previous COP-MOPs, the systemic fear of their ruling classes was difficult if not impossible to observe — certainly by the underlying population — and it was usually revealed only in retrospect, after the rulers' demise. But not so in the capitalist COP-MOP. Here we have a quantitative, real-time measure of this fear, generated by the capitalists' own actions. This measure is depicted by the dotted blue line in Figure 2. We call it the *Systemic Fear Index*.

To explain this index and why it represents systemic fear, begin with forward-looking capitalization, the omnipotent ritual that conditions capitalists to discount their expected future earnings all the way to eternity. In this ritual, past profits are irrelevant, by definition. They simply don't get into the computations. Current profits do — but then, being a mere first drop in an infinitely long river of future earnings, their relative significance is practically nil. So, in principle, capitalization — and therefore stock prices — should move pretty much independently of current profits. The correlation between them should hover around zero. Except it doesn't.

The dotted line in Figure 2 depicts the 12-month trailing correlation between monthly stock prices and earnings per share (EPS), smoothed as a 10-year trailing average.  $^{93}$  And as the data show, most of the time the correlation isn't zero. First, its long-term movement is V-shaped. It declined from around +0.4 in the late nineteenth and early twentieth centuries to -0.2 in the early 1980s, only to soar to a record high of +0.6 recently. And, second, its short-term fluctuations are pretty pronounced.

<sup>&</sup>lt;sup>92</sup>Bichler and Nitzan (2012a, 2014b).

<sup>&</sup>lt;sup>93</sup>The computation is simple: for every month, we measure the Pearson correlation between stock prices and EPS over the previous 12 months (current month included); then we smooth the series as a 10-year trailing average; finally we convert the results from monthly to annual observations.

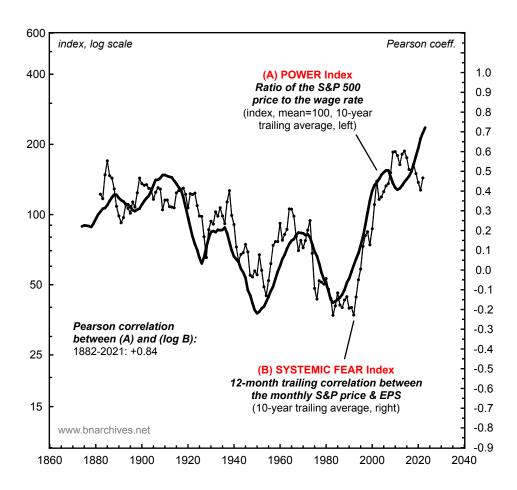


Figure 2: The U.S. dialectic of power and fear, 1874-2023.

NOTES: The systemic fear index represents annual averages of the monthly series. It is constructed in two steps: (1) by measuring the 12-month trailing correlation between the S&P 500 stock price and EPS; and (2) by smoothing the result as a 120-month (10-year) trailing average. The S&P 500 price splices the following four sub-series: a combination of bank, insurance and railroad stock series weighed by Global Financial Data (1820-1870); the Cowles/Standard and Poor's Composite (1871-1925); the 90-stock Composite (1926-1956); and the S&P 500 (1957-present). The wage rate splices hourly data for manufacturing production workers till 1946 with hourly data for nonfarm business-sector workers from 1947 onward. The last data points are for 2022 for the systemic fear index and 2023 for the power index.

SOURCES: Annual S&P 500 price is from Global Financial Data (GFD) till 1900 (mnemonic: \_SPXD) and from IHS Markit from 1901 onward (mnemonic: JS&PNS). The hourly wage rate splices the following series: Historical Statistics of the United States, Millennial Edition Online: hourly wages in manufacturing, all trades, 1865-1889 (mnemonic: Ba4290), hourly earnings in manufacturing, all industries, 1890-1913 (mnemonic: Ba4299), weekly earnings of production workers in manufacturing, 1914-1918 (mnemonic: Ba4362), hourly earnings of production workers in manufacturing, 1919-1938 (mnemonic: Ba4361); IHS Markit: average hourly earnings of production workers in manufacturing, 1939-1946 (mnemonic: AHPMFNS); Conference Board through IHS Markit: average hourly compensation of all employees in the nonfarm business sector, 1947-present (mnemonic: JRWSSNFE). Monthly S&P 500 price and EPS are from Robert J. Shiller's online data archive till March 2022 (http://www.econ.yale.edu/~shiller/data/ie\_data.xls) and from Standard & Poor's via IHS Markit afterword (mnemonics: EARN500NS for the S&P 500 composite diluted earnings per share and USASP5500X for the S&P 500 composite value index.

What explains these deviations from zero correlation? Why do capitalists adhere to their forward-looking ritual at certain times (for instance, during much of the period between the 1920s and the 1990s) and abandon it in others (for example, prior to the 1920s and from the 2000s onward)? The reason, we submit, has to do with capitalist fear, and this fear is intertwined with capitalized power. According to Thomas Hobbes, the bourgeois individual, locked in a war of all against all, feels compelled to increase his differential power without end — but then, the more power he possesses, the more he dreads losing it all. The result, Hobbes points out, is an ongoing cycle, with fear stoking a hunger for power and the amassment of power heightening the very fear that begot that hunger in the first place. <sup>94</sup> This dialectic, we argue, is what Figure 2 demonstrates.

The data show that our Systemic Fear Index, measured by the price-EPS correlation, and our Power Index are in lockstep (with a Pearson correlation of +0.84 out of a maximum of +1), and this lockstep is hardly a statistical fluke. When the Power Index is low — as it was, for instance, during the early 1980s, before the onset of neoliberalism — capitalists realize that this power has a lot of room to grow before provoking any meaningful resistance, let alone a threat to their system as a whole. And in this situation, with little or no systemic fear to speak of, they feel free to concentrate on the long-term future trend of profit and ignore its current ups and downs. When that happens, the price-EPS correlation is low and can even be negative.

But when the Power Index is very high — as it is currently (2023) — capitalists can no longer enjoy this forward-looking luxury. Their high-power situation makes them realize, individually and as a group, that augmenting their capitalized power even further is not only difficult, but also risky; that such an increase might trigger a backlash; and that if this backlash persists, it could endanger their regime. In short, they are struck with systemic fear — an apprehension for the very future of their system. Now, although they would rarely admit it, this systemic fear blurs their forward-looking vision. And as their future becomes increasingly opaque, their long-term profit projections, once solid, 'melt into air'. Frustrated, they are forced to shorten their time horizon. Instead of peering into an abysmal future, they take their solace from the glorious present. Rather than tying their stock prices to fuzzy profit projections, they let them trace the month-to-month gyrations of current EPS. And as their systemic fear rises, the price-EPS correlation goes up in tandem.

<sup>&</sup>lt;sup>94</sup>Hobbes (1691, first published in 1651: for example, pp. 75 and 94).

To recap, the very way in which capitalists price their stocks attests the two opposing aspects of their power: their confidence in obedience shown by the stock-price-to-wage ratio (Power Index) and their systemic fear registered by the their price-EPS correlation (the Systemic Fear Index). In capitalism, power and the fragility of power are depicted by the market's ticker.

# 17.

Your idea of historicizing modes of power resembles Marx's attempt to do so with modes of production, while your emphasis on power resonates, or so it seems, with the work of Foucault. How do you see the relationship between your approach and theirs?

**Bichler & Nitzan.** Our connection with Foucault is only superficial. Yes, Foucault dissects multiple aspects of power, their concepts, myths and manifestations in madness, punishment, education, medicine and sexuality, among other domains. But the gist of his inquiry is diametrically opposed to ours. Whereas CasP tries to identify and theorize the *universal* aspects of power and the different ways in which these universal aspects manifest themselves in historically specific COP-MOPs, particularly capitalism, Foucault does the reverse. His work *denies* universality. Since the only things that 'exist' are power-driven discourses, there can be no universal reality of power, no autonomous subjects to contest this reality and, by extension, no way to study it systematically, let alone scientifically, as a singular regime. The only way to engage power is through stand-alone deconstructions, insights, reflections, comments and claims about its ever-changing kaleidoscope.

In this sense, we are far closer to the Marxist framework. Marx and his followers were the first to theorize the 'capitalist system' as whole. When they speak about the capitalist mode of production (and modes of production more generally), they have in mind a *totalizing* regime. True, this regime revolves around and is largely determined by the forces and relations of production, which is different than what we argue. But it is also dialectically intertwined with the processes of alienation, fetishization, false consciousness and oppressive tolerance, among others. Understood as a broad system, the capitalist mode of production, like its predecessors, is associated with a particular class structure anchored in production and gives rise to specific political institutions of power, violence and state, complete with their internal lineages and contradictions. So, similarly to CasP, the Marxist approach tries to articulate a universal order rather than deny it.

The key difference with CasP is that Marx's framework, much like the liberal one, remains hostage to the Victorian world of material production. Moreover, and crucially, in his zeal for a totalizing approach, Marx, just like the liberals, insisted on developing a *singular* language — in his case, based on labour.

According to Marx, the process of accumulation subjects everyone — including capitalists and workers — to its universal dictates. This process, he argued, is experienced in two different ways: for workers, it materializes as 'simple circulation',  $C \to M \to C$ , whose starting and end points are counted in use values of different qualities; for capitalists, it appears as 'expanded circulation',  $M \to C \to M'$ , with the beginning and end points counted in monetary, or exchange values of different quantities. But both circuits, although totally different in purpose, are denominated in the *same* units of socially necessary abstract labour time.

In our view, this singular denomination contradicted Marx's own logic. Workers are forced to participate in accumulation in order to reproduce themselves. So to describe their activities in terms of the labour they put in and the use value they take out makes sense both for them and for those who analyse them. Capitalists, though, are compelled to accumulate for totally different reasons. According to Marx, their role is to regulate, control and impose the rule of capital. This regulation, control and imposition is not about production and consumption, but about the power of capital. And the power of capital, with its complex instrumentalities, triumphs and crises, cannot be expressed in and reduced to units of labour and use value.

Given that, according to Marx, the accumulation of capital occurs through the exploitation and oppression of workers, the two circuits are inherently conflictual. The first embodies the creative essence of humanity and its universal potential for autonomy, the second the attempt to alienate and disable that very potential for capitalist ends. Marx tried to describe the two circuits with a single language — but since the two circuits are inherently contradictory, the fact that this language fitted the first circuit made it inadequate for the second, by definition. In this way, Marx's singular language ended up undermining his theory, making it difficult to adjust to the twentieth century and impossible to fit to the twenty-first.

If CasP has succeeded in shedding some light on the regime of capital, it is because it never has — nor can it — theorize humanity as a whole. Unlike Marx, CasP focuses solely on the *rulers*. It uses only one language, the language of capitalized power. This language translates and reduces the huge variety of phenomena that baffles the masses at the bottom to a simple, mechanical script

that is perfectly legible to their ruling class at the top. It is the language with which capitalists understand and shape their world, with which they express their convictions, hopes and aspirations, and with which they mechanize their human subjects as cogs in their megamachine.

And this language is revealing because, for the most part, it manages to creorder society, including its ruling class, in the image of its own 'operational symbols'. Rulers tend to see the world from a singular viewpoint. Locked into their unitary class logic, they become subservient to their own architecture of power. In this sense, dominant capital can rarely deviate from the boundaries of its own architecture, even if it wants to. Its members must accept the very logic they impose on the rest of humanity. And the more effective they are in imposing their logic, the more predictable they themselves become. And this, we argue, is why the world they preside over can be theorized and to some extent anticipated.

But the language of capitalized power can say very little about the human beings who are subjected to this power. Of course, the ruling class uses this language to observe, analyse, anticipate and shape their subjects' 'behaviour', 'reactions' and 'choices' — whether 'rational' or 'irrational' — but this class knows little or nothing about their subjects' inner consciousness, awareness, thoughts, intentions, imagination and aspirations. To paraphrase Cornelius Castoriadis, humanity for them is like a 'magma', a seemingly smooth surface that conceals unknown currents and autonomous potentials. From the rulers' viewpoint of capitalized power, this magma is a black box. Its regularities can be predicted and moulded, but only from the outside and never completely. And when the counterforces of the magma erupt, however infrequently — as they had, for example, in the Paris Revolution of 1968 and the 1989-1991 collapse of the Soviet Union — the fixated rulers and their Solaris-like pundits often find themselves totally unprepared and utterly surprised. 96

<sup>&</sup>lt;sup>95</sup>Castoriadis (1987: Ch. 7).

<sup>&</sup>lt;sup>96</sup>In Stanislaw Lem's *Solaris* (1970), the pundits develop a huge literature with highly complex models to predict physical eruptions on an alien planet whose nature they don't even begin to understand.

18.

Many of your general ideas took time and research to evolve and develop. Could you walk us through some of your early steps in this journey? How did your concrete findings differ from those of liberals and Marxists? How have those differences helped shape your general approach?

**Bichler & Nitzan.** We started our joint research in the early 1980s, when we were still university students. Our main focus was Israel — partly because we were Israelis, but also because we found the Israeli case fascinating. Back then, we considered ourselves neo-Marxists and were influenced by the Monopoly Capital approach, pioneered by Kalecki, Steindl, Tsuru, Baran, Sweezy, Huberman, Braverman and Magdoff. The reason for this influence had a lot to do with the Israeli reality.

As we understood it, the theory of Monopoly Capital argued that the rise of large firms creates oligopolistic tendencies; that these tendencies impose downward technological pressures on costs and upward inflationary pressures on prices; that those opposing pressures create a tendency of the surplus to rise and therefore a risk of underconsumption; that in order for growth to continue, the expanding surplus must be 'absorbed'; that this absorption requires institutionalized waste; that this institutionalized waste tends to take the form of rising military spending and the bloating of the financial sector; and that when these wasteful outlets are insufficient, the result is a combination of stagnation and inflation, or stagflation.

At the time, this description seemed to fit Israel like a glove. The country's business sector was highly concentrated (much more than the United States'), domestic military spending absorbed nearly one-fifth of the GDP, finance was the largest sector and the stock market was booming, and the macroeconomy was highly stagflationary. In parallel, we also witnessed a series of related processes, from the emergence of deregulation and privatization, to growing militarization, the ongoing occupation of Palestinian territories, the rise of the far-right and the strengthening of religious and messianic forces.

Our initial aim, then, was to test the Monopoly Capital thesis on Israel. But we quickly realized that this was easier said than done. The first problem was theoretical. The Monopoly Capital thesis, despite its multiple 'microeconomic' departures from classical Marxism, was still 'macroeconomic' in nature. It dif-

ferentiated small from large firms but, for the most part, examined them not directly, but indirectly — by analyzing their alleged impact on broad sectors such as finance and advertising, on macroeconomic indicators like growth and inflation and on geopolitical processes such as neo-imperialism.

This type of 'macro-Marxism' (our term) was highly suspect in our view, though initially we couldn't point out exactly why. And this is where the second problem kicked in. At the time, Israel had no systematic time series — financial or otherwise — on its leading firms, so it was practically impossible to say anything concrete about their role as 'monopoly capital'. It was only after months of physically excavating the country's government, public and private libraries and archives (none of these sources were computerized) that we managed to put together the first-ever systematic dataset for the country's dominant capital. And it was only then, armed with this newly constructed database, an IBM clone and a few 5¼ floppy disks, that we finally realized what the problem was.

As it turns out, the performance of the large Israeli firms was not simply different from that of their smaller counterparts. In many cases it was *opposite*. <sup>98</sup> To give a few examples, inflation and stagnation benefitted dominant capital while harming smaller ones, military spending and arms exports boosted the fortunes of large firms while undermining those of their lesser counterparts and civilian government spending served the small economy while hurting the big one.

These opposite movements meant that we couldn't simply aggregate these two groups into an overall macroeconomic picture. Moreover, since the performance of these groups was intimately intertwined with the country's domestic politics, wars and international relations more generally, and given that dominant capital was actively shaping these latter processes, it was no longer possible to think of capital accumulation as an economic process that is merely 'affected' by politics.

And there was more. Having read Veblen while researching the Israeli reality, it dawned on us that 'economic growth' might be a deeply misleading indicator. It was misleading not only because it was difficult if not impossible to measure (whether in utils or SNALT), but also, and perhaps more so, because it concealed the most important driver of accumulation — strategic sabotage.

<sup>&</sup>lt;sup>97</sup>Rowley, Bichler and Nitzan (1988).

<sup>&</sup>lt;sup>98</sup>Rowley, Bichler and Nitzan (1988), Bichler and Nitzan (1996a) and Nitzan and Bichler (2000b).

Orthodox political economists glorify growth. When the economy grows, they argue, all incomes rise, and the opposite occurs when the economy contracts. Marxists take a somewhat different view, arguing that, under certain circumstances, unemployment and stagnation can be leveraged, deliberately or automatically through the business cycle, to discipline workers and sometimes even redistribute their income in favour of capitalists. But the use of these levers is inherently temporary. In the long-run, the Marxist view on growth isn't much different from the neoclassical. According to Marx, the two intertwined circuits of capital — the workers' simple reproduction  $C \to M \to C$  and the capitalists' expanded reproduction  $M \to C \to M'$  — move in the same direction. In other words, when it comes to growth, the interests of the two class enemies are one and the same. And this convergence is attested by the 'real' data: in the United States, for example, the constant-dollar growth rates of GDP, the capital stock, capitalist income and the compensation of employees all move in tandem. <sup>99</sup>

But if we think of accumulation in terms of power, economic growth is no longer a common interest. And that is what our Israeli research showed us already at this early stage: growth might serve workers and the underlying population more generally, but it often undermines the redistributional power interests of capitalists. Moreover, the overall emphasis is inverted. For conventional political economy, profit and capital are hard 'economic' entities associated with production and consumption, while distribution is a 'social' entity, the purview of sociology, politics and other 'soft' disciplines. If we focus on power, though, this separation disappears. From this viewpoint, accumulation is *driven* by redistribution — and this drive reshapes the entire hierarchical complex of production, finance, government, the military, culture and international relations.

Eventually, these early realizations led us to think of two types of 'social spaces'. <sup>100</sup> According to Einstein, there are two cosmological notions of space: the Newtonian view, in which space is an independent *container* of all material objects; and the Leibnitzian conception, where space is the *positional quality* of the world of material objects. <sup>101</sup> Orthodox political economists, we argue, take the Newtonian view. As they see it, society's entities — consumers, workers, firms, governments, NGOs, etc. — exist in an independent space. The logic of this space — its economic laws, its political drives, etc. — governs the entities it contains, but the entities themselves have *no impact* on the space they occupy

<sup>&</sup>lt;sup>99</sup>Bichler and Nitzan (2014: Figures 12 and 13, pp. 139-140).

<sup>&</sup>lt;sup>100</sup>Nitzan and Bichler (2009: 278-282).

<sup>&</sup>lt;sup>101</sup>Einstein (1954: xi-xv) and Agassi (1969).

and whose logic they obey. By contrast, Marx's political economy is Leibnitzian, in that its social entities are dialectically intertwined with and therefore gradually *transform* the very space they constitute and the laws of motion that they end up conforming to.

In our view, though, there is something amiss in the Marxist setup. By forcing on capitalism the universal language of labour, Marx ended up making both workers and capitalists growth seekers. And by insisting on this common goal, he eliminated, in one fell swoop, what CasP argues is the main positional property of capitalists: their perpetual quest to *re*-distribute — or, in the terminology of the Leibnitzian space, *re*-position — incomes and assets. Contrary to Marx, we argue that capitalists seek redistribution — and specifically, differential accumulation — and that they seek this differential not as a mere means of growing their 'real' assets, but as an *end in itself*. In this sense — and in contradistinction to the Marxist view — their *very purpose* is to continuously reposition-read-creorder the Leibnitzian space they inhabit/constitute. And if our emphasis here is correct, it calls for a sea-change in the way in which we study society and seek to change it.

Although this sharper conceptualization came only years later, it was obvious to us, already in the early 1980s, that both macro-liberalism and macro-Marxism were inadequate, *in principle*, and that we needed to abandon the aggregate view altogether. The world of capitalist power was redistributional by definition, and that made it *inherently disaggregate*. Disaggregation, we realized, was not merely a more accurate or more detailed method of describing and analyzing the political economy, but an essential built-in feature of accumulation as such.

19.

How has your disaggregate approach developed into an overall theory of accumulation? In your work, you've articulated and researched different 'regimes of differential accumulation'. Do these regimes yield results that are fundamentally different than those offered by conventional macroeconomics or Marxist accounts of growth and crisis?

**Bichler & Nitzan.** The idea of differential accumulation first emerged in our analysis of Israeli holding groups and of the leading armament and petroleum companies that benefited from Middle East Energy Conflicts. <sup>102</sup> Initially, our research was fairly instrumental, trying to 'connect' assorted aspects of the political economy (inflation, stagnation, military spending, Middle East wars, etc.) with the differential accumulation of dominant capital (the Israeli holding groups relative to the average and the leading petroleum firms compared to the Fortune 500). It was only during our work on inflation that we began considering this subject more generally and topologically, and it was only then that 'regimes of differential accumulation' emerged as a unifying concept. <sup>103</sup>

Focusing specifically on a firm's differential earnings, we proposed that, analytically, these earnings can be increased in two ways: (1) by raising the firm's differential 'breadth' (the size of its organization measured in employees relative to the average); and (2) by raising the firm's differential 'depth' (its profit per employee relative to the average). Each of these two paths can be further divided, again analytically, into external and internal trajectories. Breadth (the relative number of employees) can be increased externally through 'greenfield' investment (building new capacity faster than the average), or internally through amalgamation (merging or acquiring firms faster than the average). Similarly, depth (profit per employee) can be augmented internally by cutting costs or externally by raising prices faster than others.

This simple analytical framework has proven enormously fruitful for three related reasons. First, unlike the neoclassical and Marxist theories of accumulation, its categories are easy to measure. They rely not on utils or SNALT, but on readily observable monetary magnitudes, and straightforward measurements help make the theories they give rise to empirically researchable and scientifically refutable. Second, the framework encompasses not only the so-called

<sup>&</sup>lt;sup>102</sup>Bichler, Nitzan and Rowley (1989), Bichler, Rowley and Nitzan (1989), Nitzan, Rowley and Bichler (1989), Rowley, Bichler and Nitzan (1989), Nitzan and Bichler (1995) and Bichler and Nitzan (1996b).

<sup>&</sup>lt;sup>103</sup>Nitzan (1992), Nitzan and Bichler (2000b) and (2001).

economic/material/productive dimensions of accumulation, but the full gamut of its power underpinnings. This encompassing view expropriates accumulation from the death-grip of economics, putting it back where its belongs, at the centre of capitalism. Third, and most broadly, it allows us to theorize and research the changing nature of capital accumulation and the transformation of the overall social reality as two sides of the same creordering — or repositioning — of the Leibnitzian social space.

Begin with the conventional view. As noted, most political economists take it for granted that accumulation thrives on overall growth and relative price stability. In terms of our own scheme, they argue that, in order to accumulate, capitalists must boost greenfield investment (external breadth) and cut costs (internal depth). The other two paths are considered irrelevant (if they are considered at all). Amalgamation (internal breadth) is seen as a mere change of ownership and therefore irrelevant to the accumulation of 'real' capital; and price inflation (external depth) is considered self-defeating for individual firms and neutral for them in the aggregate.

CasP research, though, shows that reality is exactly the opposite. When we shift our focus from accumulation in general to dominant capital in particular, and from absolute profit to differential earnings, growth and price stability recede in importance and amalgamation and inflation take the lead.

On the breadth side, the continued ascent of dominant capital has been underwritten not by greenfield investment, but by a long-term uptrend of mergers & acquisitions — both absolutely and relatively to the money spent on new plant and equipment. Moreover, the historical expansion of mergers & acquisitions — from individual industries (horizontal mergers), to overall sectors (vertical), to the national envelope (conglomerate), to the world as a whole (global) — suggests that dominant capital pushes globalization not for the greater efficiency and lower costs of the 'free market', but for the direct augmentation-through-amalgamation of its capitalized power.

Similarly with the depth side of inflation. As noted, political economists tend to concentrate on so-called real magnitudes and see inflation as neutral at best and a friction at worse. In our opinion, one reason for this common disregard is historical timing: the analytical structure of political economy was fixed in the deflationary nineteenth century rather than in the inflationary twentieth. During the nineteenth century, prices trended downwards, and for the political economists of the period this downtrend made perfect sense. Capitalist

<sup>&</sup>lt;sup>104</sup>Nitzan (2001) and Francis, Bichler and Nitzan (2013).

organizations, both private firms and liberal governments, were small in size, currencies were pegged to precious metals and the larger use of credit as ownership was still in its infancy. In this seemingly competitive context, it appeared only natural that the technical progress of capitalism translated into deflation rather than inflation. The twentieth century, though, reversed these tendencies. Firms and governments grew in size, markets became oligopolistic, credit markets ballooned and currencies were floated. Prices, which zigzagged downwards during the nineteenth century, were now rising without end. Even in relatively stable countries, such as the United States and Great Britain, they soared by thousands of per cents over the century, while in other countries they often rose even faster. Academically, though, these reversals came too late. The structure of political economy, having been set a century earlier, was already fossilized, and political economists, realizing that their 'real-terms' theories left no room for the reality of inflation, had no choice but to blame the annoying phenomenon on 'distortions'.

CasP is free of this baggage. Whereas according to Milton Friedman inflation is always and everywhere a *monetary* phenomenon, for CasP it is always and everywhere a matter of *redistribution*. While Friedman's inflation is kickstarted at the aggregate level, CasP's originates at the disaggregate level, from where it expands to appear as an aggregate process. And where Friedman sees the amount of money expanding faster than the quantity of commodities, CasP sees different prices rising at different rates. Now these are all analytical statements, and they can be made consistent with each other if individual price changes are purely stochastic. If different prices move at different rates but these differentials are *random*, the associated redistribution of income and assets will also be random, making inflation seem neutral and vindicating Friedman. But as CasP research demonstrates, the price-change differentials — and therefore the associated redistribution of income and assets — are usually not stochastic in the least. If anything, they tend to be *systematic*.

In our early studies on Israel, for example, we found inflation to systematically redistribute income to capitalists from workers, to firms that dealt with armament and finance from those that didn't and to the larger holding groups from smaller companies. Subsequent CasP studies of the United States and of the global arena more generally added further evidence. They showed that inflation tends to redistribute income, again systematically, to capitalists from workers and to large firms from small ones; to those selling raw materials—

<sup>&</sup>lt;sup>105</sup>Nitzan and Bichler (2000b).

<sup>&</sup>lt;sup>106</sup>Nitzan and Bichler (2009: Ch. 16).

including oil and grain — from those that don't; <sup>107</sup> and to firms that produce armament and gold from others that do not. <sup>108</sup> Moreover, and crucially, all of these studies indicated that the differential impact of inflation, whatever it may be, tends to be driven by strategic sabotage, and that this sabotage is almost always associated with some degree of stagnation. In other words, they indicated that inflation usually appears not as *growth*-flation, but as *stag*-flation. <sup>109</sup>

The accumulation of these various studies led us to formulate two broader hypothesis. The first is that, from the early twentieth century onward, the differential accumulation of dominant capital relied less and less on greenfield investment and cost-cutting and more and more on mergers and acquisitions and stagflation. We also hypothesized that this historical shift has grown increasingly binding. Modern firms, we proposed, could no longer rely on greenfield growth and cost-cutting, even if they wanted to. These older forms of accumulation might help them meet the average, but not beat it. In the new power reality of the twentieth century, they had to amalgamate, raise their relative prices or face differential *decumulation*.

Second, while individual corporations could often engage simultaneously in both amalgamation and inflation, dominant capital as a whole finds this simultaneity difficult if not impossible to implement. The rise of corporate amalgamation and modern inflation have creordered the entire state-capital complex, or, in our language, the 'state of capital'. And in this new constellation, the societal conditions that are conducive to mergers & acquisition are hostile for stagflation, and vice versa. For this reason, we suggested that dominant capital is likely to follow one of these paths at any one time, but not both. The default trajectory, we proposed, is internal breadth through amalgamation. This is the path of least resistance, and it has the greatest impact on differential accumulation. But when mergers & acquisitions run into barriers, dominant capital, faced with the spectre of differential decumulation, is compelled to engage in the much more risky and destabilizing path of inflationary sabotage, or stagflation. Finally, we suggested that, if both strategies fail, differential accumulation will turn negative.

<sup>&</sup>lt;sup>107</sup>Bichler and Nitzan (2004) and Baines (2014).

<sup>&</sup>lt;sup>108</sup>Nitzan and Bichler (2001).

<sup>&</sup>lt;sup>109</sup>Nitzan (1992).

And so far, CasP work on the subject seems consistent with these hypotheses. Over the past century, in both the United States and the United Kingdom, the two regimes of differential accumulation — via amalgamation and through stagflation — have oscillated *inversely* to each other. And these oscillating regimes of differential accumulation have far-reaching consequences, including at the global levels.

For example, we noted earlier in the interview how Middle-East Energy Conflicts were triggered when the profitability of the leading oil companies trailed the average, and that these conflicts, once ignited, allowed these very companies to again beat the average and resume their differential accumulation. But, as our research showed, this cyclical recurrence of Energy Conflicts was itself nested in the even broader cycle of global breadth and depth.<sup>111</sup> Each of these two regimes, we pointed out, was led by a different coalition of dominant capital. Breadth periods of amalgamation were led by what we called the 'Mergerdollar-Technodollar' coalition of high-tech, amalgamation-prone firms, whereas depth periods of stagflation were guided by the Weapondollar-Petrodollar Coalition of large armament and oil companies. In this way, when global differential accumulation relied on breadth, Energy Conflicts were less responsive to the plight of the Weapondollar-Petrodollar Coalition. It was only when differential accumulation shifted into depth that the Weapondollar-Petrodollar Coalition took the lead, that Energy Conflicts revived and that the differential fortunes of the armament and oil companies soared on the back of renewed regional wars.

Another example of this broader nesting is offered by the great 1990s U-turns of South Africa and Israel, in which the former abandoned its Apartheid regime and the latter moved toward reconciliation with the Palestinians. There are many comparative accounts of the two countries and many attempts to reason their respective U-turns. Explanations of the later range from domestic resistance and revolts, to external pressures, to the exhaustion of their social structure of accumulation (especially in South Africa). But few if any have embedded these U-turns in the changing nature of global accumulation in general and differential accumulation in particular.

In 'Going Global: The Great U-Turn in South Africa and Israel', <sup>112</sup> we argued that, by the 1980s, the dominant capital groups in the two countries had grown too large for their respective home markets, and that in order to continue their differential accumulation, they had to break through their 'national envelopes'

<sup>&</sup>lt;sup>110</sup>Nitzan (2001) and Francis, Bichler and Nitzan (2013).

<sup>&</sup>lt;sup>111</sup>Bichler and Nitzan (2015b).

<sup>&</sup>lt;sup>112</sup>Nitzan and Bichler (2001).

and go global. However, conflict-related sanctions and boycotts on the two countries made significant outward capital movement difficult if not impossible. Moreover, and perhaps more importantly, the global stagflation of the 1970s and 1980s provided their dominant capital groups with a massive differential windfall: global inflation multiplied the price of gold many times over and in so doing boosted the differential profit of the South African conglomerates, while the depth-driven conflicts of the Middle East caused military production and exports by the Israeli holding groups to thrive. And as long as these differential boosts continued, a large chunk of the capitalist ruling classes in the two countries remained seated on the fence. They wanted the conflicts to end so that they could go global, but with their depth-driven differential accumulation being so lucrative, they were willing to wait. It was only with the collapse of the Soviet Union, the opening for business of the former Communist Bloc, the rise of emerging markets and the consequent global shift from depth to breadth that they finally got off the fence to openly support the end of Apartheid and reconciliation with the Palestinians. And it were these inner realignments of the elites, we argued, that tipped the balance in favour of the U-turns and serve to explain why the two U-turns were, at least initially, relatively peaceful. It seems that, when it comes to the accumulation of power and the associated creordering of the world, the ups and downs of inflation, just like the amalgamation of ownership, are anything but neutral.

20.

What are you working on now, and what is the programme of research you have set yourselves for say the next five years?

**Bichler and Nitzan**. We are currently working on concepts and modes of power. That should keep us busy for a while.

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