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Collective value creation: a new approach to stakeholder value

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ABSTRACT

The corporate community has rediscovered an old idea: stakeholder value. The concept's history is rooted in the literature on varieties of capitalism. Within that scholarship it has served to delineate institutional and relational differences between capitalist systems and forms of corporate governance. Today, stakeholder value is being used to argue for the redirection of capitalism to deliver on key goals related to inclusion and sustainability. This paper argues that the concept – and thus the endeavour to change capitalism – will remain weak unless it goes to the centre of how we create value. Moralistic exhortations to business leaders are not enough to bring about a true stakeholder form of capitalism. For this we must have stronger theory and practice on how to restructure finance, production, and public-private partnerships in new ways that recognise the state's market-shaping role and support equitable distribution of value across stakeholders.

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1. Introduction: redirecting capitalism

Because the world is facing multiple crises – from climate, health, and biodiversity emergencies to rising inequality and political instability – it is more urgent than ever to collectively revisit the structures and decisions that shape the capitalist systems we live in. Capitalism is not singular and deterministic, with consequences that are either good or bad. The exact form it takes is a result of concrete choices made to structure businesses, government organisations, and transnational institutions – and how they relate to each other. In this sense, the market itself is an outcome, not a set process that imposes inevitable decisions on others. Because capitalism is currently not working for so many, the only way for true transformation is to move beyond a single-minded focus on shareholder value and build a new social contract between businesses, labour, and the state.

Ever since Friedman (1970) famously argued that 'the social responsibility of business is to increase its profits', shareholder value maximization has had a tight grip on global market economies. For decades, Friedman's article promoted the idea that America's economic performance was declining because the principle of profit maximization was being violated. The only way to ensure that managers would not misallocate resources and that companies would run well, was considered to be the maximization of

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shareholder value through a strong market. Importantly, this need to boost shareholder value (Jensen and Meckling 1976) varies across national contexts, depending on institutional rules that shape and govern a particular region (Hall and Soskice 2001). While the literature on the varieties of capitalism highlighted the role of different forms of corporate governance in shaping businesses' response to shareholder pressures, it also created space for the consideration of stakeholders' interests. Put simply, the level of attention given to stakeholder value is associated with the economic and social consequences of different varieties of capitalism.

In recent years the concept of stakeholder capitalism has taken off, no longer an academic concept to describe varieties of capitalism, but a proclamation of change from the business and finance communities. Nevertheless, when companies talk about providing stakeholder value today, they usually frame it as a means to an end – stakeholder engagement as a productive way of increasing shareholder value in the long run. Although there has been much talk about the social goals and responsibilities of businesses, the value they create has not been distributed to all.

For instance, in Larry Fink's 2022 annual address to the CEOs of the companies whose assets his firm manages on behalf of investors, the founding director of BlackRock – the world's largest asset manager – took the opportunity to advocate for a more sustainable, socially-conscious, and forward-looking form of capitalism rooted in stakeholder rather than shareholder value. Yet Fink's vision for stakeholder capitalism – epitomising the conventional view – focuses far too narrowly on intra-organisational corporate governance and fails to see the wider landscape of extra-organisational, institutional relations between different domains and sectors of society. It leaves untouched the traditionally separate identities of stakeholder and shareholder. Stakeholders are to be considered and valued only insofar as their inclusion benefits the ultimate bottom line – the long-term profits of a different set of people, the shareholders, who remain at the top of the pecking order.

However, when value is created collectively, it should be shared collectively. If one does not buy into the first part, with the faulty assumption that wealth creation happens only inside business and the state can, at best, fix market failures along the way, then the second part will continue to prove futile. Accordingly, stakeholder capitalism needs to not only be placed at the centre of corporate governance reform, but at the centre of where value is created in the first place: at the interface between different actors in the economy. Thinking about the redirection of capitalism towards a new social contract and collective value creation requires a stakeholder understanding of capitalism itself. Because businesses can't be successful without the involvement of many groups, civil society, workers, communal organizations, and governments should have the power to influence and benefit from business decisions (Mazzucato 2018a).

The article begins by presenting an alternative view of the state as market shaper, which emphasises the role of public investments in value creation and innovation. Moving towards inclusive and sustainable growth requires a different theory of what government is for. It then develops the notion of mission-oriented policies which can help shift the status quo of market-fixing towards new public-private partnerships (Mazzucato 2021). To do so it's critical to develop institutional capabilities in establishing a new social contract. Indeed, the work of Edith Penrose (1959) on the dynamic capabilities inside our private organizations, can be extended to the kinds of capabilities

that need to be developed inside all organizations, including the public ones. The article concludes by developing a notion of stakeholder capitalism which asks how the collective ways in which value is created, can be reflected in how it is distributed. Overall, this article identifies the shortcomings of the current system and outlines a forward-looking vision for stakeholder capitalism guided by dynamic organizational capabilities and collaboration through a mission-oriented approach.

2. The state's role as a market shaper

Over the past half century, many have bought into the ideology that the state's role should be limited to reactively 'fixing' or 'correcting' market failures rather than proactively shaping or creating markets. Orthodox economic discourse disparaged industrial strategies aimed at 'picking winners' and restricted state interventions to levelling the playing field, ensuring only the most competitive would win. The assumption of market failure theory is that markets work well and only when they fail must policymakers and regulators make sure that externalities are properly accounted for. Negative externalities, such as those created by pollution, require public measures that cause the private sector to internalise external costs. Carbon taxes are one example. The aim is to fix failures in carbon-intensive industries – so that negative externalities are fully internalized and priced to truly reflect their social and ecological impacts. Positive externalities arising from public goods will be characterised by underinvestment by the private sector and will therefore require public investment. This is the case for basic research, which has high spillovers that create difficulties in appropriating private returns.

While this market-fixing approach to internalizing externalities is an important departure from the orthodox free market ideology, providing some ground for coordination, it stops short of the radical reinvention required to respond effectively to the massive challenges of climate change, global pandemics, and technological disruption. This is because instead of creating markets, the state is understood to fill gaps, tinker on the edges, and level the playing field. However, to solve the most pressing problems of our time, a mission-oriented approach to economic policy with a clear vision of public value is necessary.

Markets themselves should be viewed as outcomes of the interactions between both public and private actors (as well as actors from the third sector, and from civil society). In his seminal work, *The Great Transformation*, Karl Polanyi describes the role of the state in forcing the so-called free market into existence: 'the road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism' (Polanyi [1944]2001, 144). Polanyi's perspective debunks the notion of state actions as interventions, rather highlighting the ways in which markets are deeply embedded in social and political institutions (Evans 1995). Indeed, even Adam Smith's notion of the free market is amenable to this interpretation. His free market was not a naturally occurring state of nature, free from government interference. For Smith, the free market meant a market *free from rent*, which indeed requires much policymaking (1776).

Yet what we lack in economic theory are words to refer to how the actions of public institutions (visions, investments, and regulations) *contribute* to value creation. Polanyi's analysis is not only about the way that markets form over the course of economic

development. It can also be applied to understanding the most modern form of markets, and in particular those driven by innovation. Some of the most important general-purpose technologies, from mass production, to aerospace, and information and communications technology, trace their early investments to public-sector investments (Ruttan 2006).

Although upstream basic research is the classic public good, market-creating investments are not limited to this sort of activity. Indeed, some of the public investments that led to technological revolutions (information technology, biotech, nanotech) and new general-purpose technologies (such as the Internet) were distributed along the entire innovation chain: basic research through the National Science Foundation (NSF), applied research through the Defense Advanced Research Projects Agency (DARPA) and the National Institutes of Health (NIH), and early-stage financing of companies through agencies such as Small Business Innovation Research (SBIR) (Block and Keller 2011). These kinds of innovation instruments were thus spread through a decentralized network of different agencies across the entire innovation chain. Such agencies might not act together in a planned way, but they are often driven by a vision to create new landscapes, such as in life sciences, rather than only fixing problems in existing landscapes. DARPA, the NIH, and other such agencies have been successful precisely because they led the way, rather than following behind, de-risking the leaders.

It is not just innovation agencies that play a key role here. Globally, public banks have often provided high-risk, early-stage, capital-intensive investment in different sectors. In Israel, the public venture capital fund Yozma was critical for what became Start-Up Nation, and in Germany, the KfW public banks have provided the most patient high-risk finance to green companies. In developing countries, it is often banks like BNDES in Brazil, or the African Development Bank that take on the most risk (Mazzucato and Penna 2015).

Considering the state as a market-maker and shaper provides a different justification for its remit: it is not about correcting but creating objectives that all of society can contribute to. Furthermore, given the collective contributions to economic growth, there must be a collective division of rewards between public and private actors. Both of these areas require rethinking the types of capabilities required in our state structures.

3. Dynamic capabilities of the state: public purpose and mission orientation

Penrose's (1959) work on capabilities contributed to a better understanding of the internal resources and managerial capabilities necessary for a firm's growth. According to her seminal work, the firm should not just position itself competitively, as Michael Porter would later argue, but continuously develop capabilities to promote value creation and innovation. Put simply, the competitiveness of a business depends on its ability to learn; managerial capability serves as the bottleneck on a firm's growth. Penrose's (1959, 48) writes,

> The experience of a firm's managerial group plays a crucial role in the whole process of expansion, for the process by which experience is gained is properly treated as a process creating new productive services available to the firm.

Organisational theorist Teece, Pisano, and Shuen (1997) developed this further into the 'dynamic capabilities' of the firm as the ability to 'integrate, build, and reconfigure internal and external competences to address rapidly changing environments'. The emphasis on internal capabilities meant paying less attention to the external environment of a firm. Instead, a firm's ability to be agile and flexible in navigating its success is considered a key component of building long-term competitive advantage.

Once we accept the role of the state as market shaper, the same question of dynamic capabilities arises for the public sector. To improve the implementation of strategic missions and carry out transformative projects, innovation policy needs to adopt a 'lead-and-learn' approach. In particular, there are three levels of dynamic capabilities to be developed: state capabilities to set ambitious goals and obtain consent, policy capabilities to coordinate and create impact, and administrative capabilities to ensure long-term vision and secure organisational support (Kattel and Mazzucato 2018). Moreover, because outsourcing the delivery of core services and functions undermines the state's capacity of acquiring these capabilities, the state must be embedded in the production of public value (Collington and Mazzucato 2022; Mazzucato and Collington 2023). Only by moving beyond outsourcing can the state respond to ever evolving demands.

The state, when driven by public purpose, should empower all stakeholders and actors in the economy to work together – government agencies, corporations, small businesses, social enterprises, civic institutions, charities, citizen groups and trade unions, in a 'multi-actor perspective' (Avelino and Wittmayer 2016). Collective intelligence can be fostered through the realization of common goals, or missions, with positive spillovers and multipliers fairly distributed between all stakeholders. A mission-oriented approach begins by asking the question 'what is the problem we want to solve?' – framed as a goal to be achieved through investments in sectors and collaborations within individual projects.

Missions are not new. They have been used to inspire and direct action throughout history (Mazzucato 2021). A generation of missions in the 1960s were technological, such as NASA's Apollo mission of putting a man on the Moon by the end of the decade. The moonshot required innovation in many sectors – as diverse as nutrition, textiles, software and aeronautics – and hundreds of projects. NASA would have failed had they not also transformed their own organisation to be more agile and flexible, with horizontal communication between project teams. They also changed their way of doing procurement towards a more challenge led one rather than the old cost-plus one. And given NASA's confidence they made sure to include 'no excess profits' clauses in the contract (Ibid.).

The missions we need today – tackling health crises, climate change, and digital disruptions – are different from NASA's missions in the 1960s. But the lessons of a clear direction from the top, cross-sectoral coordination, bottom-up experimentation and outcomes-oriented budgeting and procurement are vital. Such an approach has already begun to be incorporated within EU innovation policy, for instance, the Horizon program, which has selected five mission areas on the basis of two mission reports I produced (Mazzucato 2018b, 2018c). Those broad mission areas map neatly onto several of the UN Sustainable Development Goals (SDGs), mobilizing those Goals as the navigational stars guiding and illuminating mission maps. But they also break down into specific, concrete missions that can be measured.

Fundamental to delivering a successful modern mission is setting a clear direction, with targeted, measurable, and time-bound goals amenable to reflexive evaluation and continual improvement through experimental trial and error. The mission-led policy model can be summed up as ROAR: setting a Route and direction of change; building a decentralized network of willing Organizations to form mutualistic collaborations; evaluating their impacts through Assessment that can capture dynamic spillovers and feedback loops; and sharing out Risks and rewards fairly between public, private and labour partners through a renewed social contract (Mazzucato, Kattel, and Ryan-Collins 2020).

We need to re-engineer the institutional machinery of the state to gear legal, fiscal and regulatory tools towards stimulating social innovation across the public, private, and third sectors. Only by doing so, can the state's role become the cultivation of supportive financial environments and initiation of dynamic incentive structures for creative experimentation to flourish. It can then marshal resources – human, material, financial, informational – to effectively coordinate multiple dispersed actions to deliver objectives (Mazzucato 2021). This is how we tilt the playing field so market incentives encourage boundary-spanning innovation, and 'winning' entails solving wicked problems (Rittel and Webber 1973). These complex, multi-dimensional, intractable problems are resistant to straightforward scientific resolution, and they require transdisciplinary, multi-sectoral, and trans-scalar solutions directed by missions. So, for example, the creation and growth of new, alternative markets, such as for green energy and circular production, is simultaneously enabled by public investment in research and development, as well as patient capital pipelines for enterprise incubation. If done strategically, this can 'crowd in' private investments into new and nascent markets that create public value, while 'crowding out' old industries that produce little of public value or that contribute to problems such as inequality.

Key here is to use the full range of levers available to governments, from supply-side interventions, with the state acting as an investor of first resort (rather than lender of last resort) and as a funder and regulator with clear direction, to demand-side interventions, with the use of dynamic procurement policy to incentivize innovative solutions in domains ranging from public transport to housing. Governments play a critical role in catalysing and coordinating both public and private investment around common goals, not least transitioning to a green economy. Industrial strategies must not be about subsidizing specific sectors but about catalysing transformation across all sectors in order to meet social goals: climate action requires sectors as diverse as digital, nutrition, transport and construction to innovate and collaborate.

Such a mission-oriented, 'entrepreneurial' state is not engaged in a strategy of 'picking winners' per se but rather one of backing the willing – that is, supporting all those actors and agencies that are capable and committed to finding solutions to wicked problems (Mazzucato 2013). This means moving from seeing government as lender of last resort to investor of first resort. The state is thus engaged in the public support, subsidy, and incubation of innovation ecosystems whose development is essential to meeting a mission – rather than of individual enterprises that appear competitive – for an economy geared towards mission-oriented innovation rather than profit maximization.

Key in all this is the state's relationship to risk. Rather than putting all its eggs in one basket by picking a particular company or technology or sector to support, while

foregoing any public stake in their future success, an entrepreneurial state acts more like a venture capitalist to structure its investments as a portfolio, cross subsidizing any losses with gains and reinvesting surpluses in further rounds of innovation (Mazzucato 2013). With greater risk and with higher stakes, comes failure. Failure is an intrinsic part of a more experimental and mission-oriented industrial strategy; the challenge is not to minimize failure per se but rather to minimize its costs and speed up the process of learning from failure, to 'fail faster' (Rodrik 2004).

4. Stakeholder capitalism: sharing both risks and rewards

A mission-oriented approach can be conducive to creating and reinforcing symbiotic public – private partnerships towards addressing societal challenges. Given the state's role as risk-taker and investor of first resort, new thinking is required for the ability of public institutions to share not only risks, but also rewards. This can encourage new thinking on how to achieve growth that is not only 'smart' (innovation-led) but also more inclusive. Mechanisms that find ways to socialize both risks and rewards can have an important effect on inequality as they create a 'pre-distribution' approach.

By allowing the state to retain a share of the rewards created through a process it contributes to, those rewards can be reinvested back into areas that directly create a more inclusive and sustainable economy. This can help states be more strategic and proactive in investments. Without this, government needs to focus most of its energy on *redistribution*, due to the negative consequences on inequality that arise when incomes are skewed, rewarding the few for the activities of the many.

Labour's share of global income is almost at an all-time low. In the US, for instance, the share of gross value added in the nonfarm business sector paid out to workers as wage (or self-employment) income remained stable, between 63% and 65%, for more than a century – but then, around 2000, began to drop to hit a low of 56% in 2013, before recovering slightly to about 58% by 2020 (Grossman and Oberfield 2022). At the same time, and as a consequence, the capital share of global income has risen. Is this because capital has become smarter and more efficient while labour has become less so? No. Even in periods when productivity rose, labour did not reap the rewards. Indeed, the growth of real wages has lagged productivity growth (Jacobs and Mazzucato 2016). This is because the increasing financialization of the economy has meant profits are not reinvested back into the economy, but largely go to shareholders, increasing the divide between those that own capital and those that do not. This, in turn, is a direct consequence of a focus on maximising shareholder value, which simply siphons off rewards for a very small percentage of economic actors. This is a problem across industries, from pharmaceutical research and manufacture (Tulum and Lazonick 2018) through to Big Tech (Strauss et al. 2021).

Corporate taxation has been falling and corporate tax avoidance has been rising globally. Some of the technology companies that have benefitted most from public support, such as Apple and Google, have also been among those accused of using their international operations to avoid paying tax. Perhaps most importantly, while the spillovers that occur from upstream 'basic' investments, such as education and research, should not be thought of as needing to earn a direct return for the state, downstream investments targeted at specific companies and technologies are qualitatively different.

Precisely because some investments in firms and technologies will fail, the state should treat these investments as a portfolio and enable some of the upside success to cover the downside risk.

Considering the ways in which rewards are privatised while risks are socialised, it is key to move from focusing on shareholder value to thinking about a more capacious and collaborative form of stakeholder value (Schwab 2021). An essential part of this transformation is to link the understanding of how value is created collectively to its distribution. Stakeholder capitalism is about recognising and rewarding the contributions that different stakeholders, whether shareholders or not, make to the value creation process (Mazzucato 2018a). Growth is an inherently collective process: value is co-created between producers and consumers, workers and managers, inventors and administrators, regulators, and investors – not just heroic entrepreneurs, venture capitalists and corporate leaders – through the organisational and institutional configurations which enable all to work together. Achieving inclusive growth means that the conditions must be correct in the first place, without over-relying on the taxation system to redistribute problematic forms of wealth creation that create structured inequities. Creation and distribution must be seen as two sides of the same coin. This can happen through both financial and non-financial means. Financial might include equity stakes, while non-financial can include conditionality on how prices are set, as well as the direction of investment making production more sustainable, and workers paid well and treated with dignity.

Historically, the big innovations that have produced value for shareholders of successful companies like Apple and Amazon are more often than not the result of public investment. Most of the innovations driving the IT revolution and the key technologies underpinning the functionality of the smart phone – including GPS and the internet itself – flowed from strategic state investment as opposed to the private entrepreneurialism that free marketeers lead us to believe. Indeed, the smartphone is the classic case of a composition of technologies first invented and developed by the state – the US defence research agency DARPA – and gifted to the world for free (Mazzucato 2013).

The large digital companies, Facebook, Amazon, Apple, Netflix and Google, have received a large share of income produced by a collective value creation process. In 2021, for example, Google's revenue was $185,527 billion while it employed only 139,995 staff. Similarly, while Apple had 147,000 staff members, the company's revenue was $274,515 billion. Both corporations rely largely on the collective value created by their platform's and product's users.[1] Furthermore, given that the underlying algorithms that power Google and Amazon were to a large extent publicly funded (e.g. the NSF funded the Google algorithm, DARPA funded the internet which both companies need, and much of the underlying artificial intelligence is the fruit of collective investment), it is critical to ask how such public investment can incorporate conditions to ensure that the value created is good and not bad (Mazzucato, Gouzoulis and Ryan-Collins 2023). Because, as Zuboff (2019) has so clearly shown, the opposite has happened: algorithms have been constructed to commodify and exploit human feelings and insecurities.

Another example is illustrative: in 2009, the Obama Administration gave two companies – Tesla and Solyndra – a guaranteed loan (Tesla received $465 million and Solyndra received $500 million). Tesla of course went on to become a successful company, while Solyndra failed. The success was seen as a private sector success while

bankruptcy a public sector failure, with the usual critique of 'picking winners': the futility of government trying to direct an economy. The irony is that the agreement was that if Tesla did not pay back the loan, the government would get three million shares in Tesla – a bad deal. Instead, had the deal been that the government would get three million shares if the loan was paid back, it would have been a good deal. The money made could have gone back to a public fund, covering both the Solyndra loss and a next investment round. The problem is that by not admitting that the state here acted like a public venture capitalist, it ends up socialising risks but privatising rewards.

There is thus a strong case for arguing that, where technological breakthroughs have occurred as a result of targeted state interventions benefitting specific companies, the state should reap some of the financial rewards over time by retaining ownership of a small proportion of the intellectual property it had a hand in creating. This is not to say that the state should ever have exclusive licence or hold a large enough proportion of the value of an innovation to deter its diffusion (although this is almost never the case). The role of government is not to run commercial enterprises; it is to spark innovation elsewhere. But by owning some of the value it has created, which over time has the potential for significant growth, funds can be generated for reinvestment into new potential innovations.

One tool to engage in more coordinated state investment are conditionalities: funds given or loaned on the condition that the recipient complies with pre-set conditions meant to influence their behaviour, improve outcomes, and increase the chance that the aid will achieve its ultimate intended goal. Ambitious policies with conditionalities attached can help ensure the result is truly inclusive and sustainable. In this context, conditionalities – a typical industrial policy measure – tied to the allocation of public funds – such as on the pricing of final goods and services, knowledge governance, and reinvestment in innovation and local production – can be understood as active attempts to steer benefits directly to society (Mazzucato and Macfarlane 2019).

First, we need to reform intellectual property rights so that the value that's created by public investment in pharmaceutical and other technological inventions is recognized and rewarded. A business model defined by high research costs alongside low production costs, combined with an R&D investment model highly dependent on public funding, creates big incentives for big pharma to extract value by charging astronomically high prices for medicines justified through 'value pricing' (Mazzucato and Roy 2018).

While governments have funded some of the highest risk capital intensive research, private pharmaceutical firms have benefitted from a patent and pricing system that does not take that into account. Patents are often too strong, too wide, and too upstream (Mazzoleni and Nelson 1998). Prices are set by value-based pricing that allows prices to go to whatever the market will bear. However, the system should not be designed in a way that private profit is prioritized over public value. Governments could adopt price-capping regulations instead of relying on market forces to produce equitable prices. Another instrument for ensuring competitive prices is the implementation of competition and antitrust policies, which may be far less tolerant of monopoly prices than has been the case over the past 40 years in the US (Stiglitz 2017).

An unprecedented amount of public funding has been poured into vaccine research, development, and manufacturing. The leading six vaccine candidates have received an estimated $12bn of taxpayer and public money, including $1.7bn for the Oxford/

AstraZeneca jab, $2.48bn for Moderna/Lonza and $2.5bn for the Pfizer/BioNTech candidate (MSF 2020). Governments have used 'advanced market commitments' to guarantee that private companies that successfully produce a COVID-19 vaccine are amply rewarded with huge orders. And yet a large percentage of the world remains unvaccinated. Many lower income countries are unable to afford the necessary doses. Indeed, because of the competition for doses, lack of bargaining power, and opaque licensing agreements, poorer nations are paying significantly more for the same vaccines than rich countries. Even though AstraZeneca agreed to sell its vaccine at cost, different prices are charged in different regions. If we cannot temper the profit motives of big pharma during a global pandemic, in the interests of keeping economies running as well as keeping people alive, what hope is there for a future of intensifying shocks and crises?

To socialize rewards in a non-monetary way we can make sure that the companies receiving public subsidies, guarantees and direct investments operate in a way that serves the public. For example, the extraction of value from the real economy that has been a result of the increasing use of share buybacks (Lazonick 2014) can be reversed through conditionalities that assure that profits being earned from a process of collective wealth creation are reinvested back into the economy. The direction of that investment can also be a condition: for example, making sure that energy companies that receive subsidies transition more to renewables. For example, a recent loan to the German steel industry was conditional on the sector lowering its material composition, which it does through innovations around recycling, repurposing, and reusing material throughout the value chain. The direction of that investment can also be a condition; for example, making sure that energy companies that receive subsidies transition more to renewables, or as occurred in Germany when a recent loan to the steel sector was conditional on steel lowering its material content (Vogl, Åhman, and Nilsson 2021). Most recently, the US CHIPS Act included conditions to protect national security interests and limit stock buybacks. The Act is an opportunity to align private-public partnerships with bold policy goals to ensure that the rewards of investment are shared equitably.

There are also good examples emerging from the ongoing COVID-19 crisis. When negotiating bailouts for industries suffering, such as airlines not flying, some states are seeking concrete societal benefits. To accelerate greening of industrial sectors, Austria has made its airline-industry bailouts conditional on the adoption of climate targets, while France has also introduced five-year targets to lower domestic carbon dioxide emissions. And both Denmark and France are denying state aid to any company domiciled in an EU-designated tax haven and barring large recipients from paying dividends or buying back their own shares until 2021.

Similarly, governing innovation for the public good has been highlighted during the COVID-19 pandemic. To maximize the impact on public health, the innovation ecosystem must be steered to use collective intelligence to accelerate advances. Science and medical innovation thrive and progresses when researchers exchange and share knowledge openly, enabling them to build upon one another's successes and failures in real time. The COVID-19 technology access pool (C-TAP), which is a voluntary pool for health technology-related knowledge, intellectual property and data proposed by Costa Rica and adopted and launched by the World Health Organization on 29 May 2020, has offered a pragmatic solution with game-changing significance (WHO 2020). However, it remains unused to this day.

5. New financial institutions

A political economy based on stakeholder value will require institutional innovations that can ensure the more equitable distribution of value, as well as the sustainability of its creation. State investment banks can provide the much-needed patient capital – whether grants or low-interest loans – to incubate innovation ecosystems, while taking a non-controlling equity stake and distributing dividends for public value. Such institutions invest public finance and crowd-in private investment in new enterprise and innovation that aims to resolve global challenges like the climate crisis – and, importantly, take an equity stake or share in future revenues on behalf of workers and citizens.

Following the Second World War, National Investment Banks' (NIBs) traditional functions were in infrastructure investment and counter-cyclical lending. More recently however, NIBs have become key actors in driving economic growth and innovation. In focusing on tackling modern societal challenges, they play important risk-taking and mission-oriented roles. By placing state investment banks at the centre of industrial strategies and innovation investment processes, countries like Germany and China, as well as the European Union, are steering the path of innovation and value creation towards public goals.

National investment banks can also work alongside public wealth funds to provide public ownership and governance of key assets in land, enterprise, and intellectual property. Public wealth funds can use the revenues generated by state investment banks and other state-capital hybrid institutions to provide a citizen' dividend, public services, and infrastructure to effectively end poverty and dramatically reduce inequalities. Such innovations reimagine value distribution from *re*distribution *ex post* to *pre*-distribution *ex ante* – moving from an 'income sharing' state to a 'capital sharing' state (Susskind 2020).

Public wealth funds can also be leveraged to enable the state to take a direct stake in the assets of the economy and the revenues generated by capital (Detter, Fölster, and Ryan-Collins 2020). At the national level, a public wealth fund in charge of mature assets would make equity capital injections to larger corporations, when necessary, but could also act as a holding company for assets that governments already own, such as state-owned companies and real estate assets. The long-term argument for public wealth funds is that, by taking equity in risky start-up firms with good long-run potential, the state can help create businesses and an economy that would otherwise never come into being. Importantly, the state shares not only the risks, but also the rewards. The public surpluses generated by this stakeholder approach can be reinvested into further rounds of innovation. This long-term capital sharing approach is particularly important in meeting three objectives where the private sector is unwilling or unable to take the risks: to create new businesses in regions in decline or in a permanently depressed condition; to promote new businesses at the forefront of technology; and to accelerate the response to climate change (Ibid.). Public wealth funds could also be established for regional and urban scales. Regional wealth funds could focus and invest resources in economically disadvantaged communities, where a few small, hard-to-restart businesses are vital to community life and where support may be warranted for both economic and social reasons. Urban wealth funds have been effective funding vehicles in various cities globally to pay for infrastructure investments, including transport, education, and health care, as well as

housing, without the use of taxes. Urban wealth funds are also a means by which the public sector can ensure the rise in land values that comes from public investment in infrastructure, in particular transport, is efficiently captured for the public purse (Ryan-Collins, Lloyd, and Macfarlane 2017).

Ultimately, public institutions form the real material basis of a new social contract between the state, capital, and labour. They can reclaim their rightful role as servants of the common good. They must think big and play a full part in the great transformations to come. They must get over their self-fulfilling fear of failure and realize that experimentation and errors are part of the learning process.

6. Conclusion

Despite stakeholder value having gained traction outside the realm of academic conceptualisations, the concept does not go far enough. It undersells the true meaning of stakeholder capitalism. The latter seeks to close the gap between stakeholders and shareholders rather than maintain the distinction. The aim is to empower stakeholders as shareholders – to give workers and citizens, trade unions and community groups, state institutions and NGOs an actual financial as well as political stake in the operation of capitalism.

First, to implement this vision, we need a new social contract. The combined efforts of the public and private sectors are needed to transform technological, economic, and social paradigms and bring better and broader growth. Symbiotic collaborations between government and business that truly serve the public interest are essential for public value creation. This depiction is very different from assuming that the private sector simply needs to be incentivised to invest. Indeed, it is when governments are bold and strategic that the most crowding in has happened.

Second, a mission orientation is necessary to coordinate public and private initiatives and build new networks. Importantly, a mission-oriented framework, which actively co-creates new markets, requires continuous and dynamic monitoring and evaluation throughout the innovation and investment processes. Missions themselves should be co-designed, with different voices at the table – they can help bring public purpose to the heart of policy making. Missions have the ability to be transformative across entire value chains and not be limited to narrow areas where positive and negative externalities exist.

Third, to make a new social contract and a mission-orientation work, we need to build state capabilities to successfully shape and create markets by establishing strong regulations and conditionalities that guide market players towards the achievement of purposeful missions. Without in-house capabilities, governments will resort to outsourcing work and knowledge to third parties such as consulting companies, think tanks, and the private sector. To avoid the hollowing out of government, public institutions need to invest in scientific and technological expertise to nurture their capacity for risk-taking and experimentation.

Fourth, because in many cases public investments have become business giveaways, making individuals and their companies rich but providing little return to the economy or the state, stakeholder capitalism needs to incorporate a fundamentally transformed risk-reward relationship. Acknowledging the collective nature of innovation must result in an increased sharing of the rewards that accrue from the process of innovation.

Lastly, financial institutions themselves can become more capable and mission-oriented by directing public finance towards societal goals. It is crucial to demonstrate ambition and provide patient, long-term finance to organisations willing and able to help steer an economy towards meeting its challenges. The conventional choice between tax rises or public debt to pay for large-scale state investment is a false dichotomy. In countries with monetary sovereignty, money can be generated by the state for public investments.

Note

1. See https://growthrocks.com/blog/big-five-tech-companies-acquisitions/.

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