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GETTING SERIOUS ABOUT VALUE

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Public value is value that is created collectively for a public purpose. This requires understanding of how public institutions can engage citizens in defining purpose (participatory structures), nurture organisational capabilities and capacity to shape new opportunities (organisational competencies); dynamically assess the value created (dynamic evaluation); and ensure that societal value is distributed equitably (inclusive growth).

Purpose-driven capitalism requires more than just words and gestures of goodwill. It requires purpose to be put at the centre of how companies and governments are run and how they interact with civil society.

Keynes claimed that practitioners who thought they were just getting the 'job done' were slaves of defunct economic theory.¹ Purposeful capitalism, if it is to happen on the ground for real, requires a rethinking of value in economic theory and how it has shaped actions.

Today's dominant economics framework restricts its understanding of value to a theory of exchange; only that which has a price is valuable. 'Collective' effort is missed since it is only individual decisions that matter: even wages are seen as outcomes of an individual's choice (maximisation of utility) between leisure versus work.² 'Social value' itself is limited to looking at economic 'welfare' principles; that is, aggregate outcomes from individual behaviours.

¹ Keynes, J. M., *General Theory of Employment, Interest, and Money*, 1936.

² Mazzucato, M., *The Value of Everything: Who makes and who takes from the Real Economy*, Public Affairs, 2018.

In economic theory, value is created inside business (the 'production function'). Governments are seen as, at best, creating some of the inputs (such as education and skills for workers) and redistributing value (for instance, via taxation and subsidies). In this sense, public investment is seen as simply fixing a market failure, whether the failure has occurred due to lack of investment in areas with good spillovers like new knowledge (positive externalities), or over-investment in 'bads' like industrial processes that create pollution (negative externalities). Public goods, investments in basic research or clean air, are seen not as objectives created from a collective imagination of 'what to do', but as corrections – to fill gaps – in areas that the private sector does not enter.

At the macroeconomic level, GDP is not able to account for the value of goods and services that do not have prices, such as the essential care we receive inside our homes from family members, or the negative effects of pollution on the environment. Measuring productivity by output per unit input (both measured with their relative prices) means that the term 'productive' is biased towards services that have high fees. It is no coincidence that the CEO of Goldman Sachs once argued the investment bank's workers were the most productive in the world.³ The value of essential public services like free healthcare and education is hard to measure and thus only their costs enter GDP, not their value (for example, only the salaries of teachers are included, not the quality of public education). This is not unrelated to why civil servants cannot claim to be as 'productive' as those working in financial services. The same applies for the value of public spaces such as parks, or diversity of well-designed city districts. How do we measure the value created by a public space?

Our discussions of value have been 'McKinsey-fied' – a term used by the artist Olafur Eliasson⁴ – which means that valuable is what can be rationalised, made more efficient. A public space is seen as a place that fills a gap rather than one that creates a valuable experience.⁵

However, great city neighbourhoods are great partially because of redundancy, as argued by IIPP Fellow, Dan Hill: each neighbourhood replicates similar sets of services from grocers to pubs to hairdressers. Instead of the efficiency of large malls, the redundancy of small service providers creates public value.⁶

Civil servants have been convinced by the dominant economic narrative that, at best, they can fix market failures (for example, markets do not provide national security or fund fundamental research). If they do anything beyond that, they get accused of 'crowding out' business or creating 'government failure' (for example, through corruption). Bureaucrats are supposed to implement the political will of the day while speaking truth to power. Such narrow lenses risk dehumanising work in public organisations and crush both ethos and creativity.

It is true that academics have discussed the idea of public value over the past two decades, most notably in the public management and administration field⁷, and public policy practitioners have sought to capture the distinctive contribution to society created by government and public institutions outside the market sphere.⁸ In the United Kingdom, the New Labour government, informed by the 'Third Way', began to develop the idea of public value as a yardstick for measuring policies and institutions' effectiveness.⁹ This was based on the idea that public value should be concerned with outcomes (rather than outputs) including equity, ethos and accountability; the means used to deliver these outcomes; and with generation of trust and legitimacy in government. In parallel, a conception of public values was developed in an effort to operationalise the broader concept of the 'public interest' that incorporates both private and public activity. This led to 'public value mapping' and 'public value failure' as a counterpoint to market failure theory, as a means of justifying government intervention and public policy.¹⁰

3 "Goldman Chief Defends Employee Pay", *Financial Times*, Nov. 10, 2009, available at <https://www.ft.com/content/52917628-ce33-11de-a1ea-00144feabdc0>

4 In 2020, Olafur Eliasson will be joining IIPP as artist in residence.

5 'Olafur Eliasson is literally shining a light onto our environmental crisis', *Dazed*, 2018, available at <http://www.dazeddigital.com/art-photography/article/39096/1/artist-olafur-eliasson-little-sun-diamond-environmental-crisis-art>

6 Hill, D., *Dark Matter and Trojan Horses: A Strategic Design Vocabulary*, Strelka, 2015.

7 See Mark Moore's seminal *Creating public value: Strategic management in government*, Harvard, 1995; and, more recently, Jean Hartley, John Alford, Eva Knies & Scott Douglas (2017), 'Towards an empirical research agenda for public value theory', *Public Management Review*, 19(5), 670-685, DOI: 10.1080/14719037.2016.1192166.

8 See forthcoming IIPP working paper by Mariana Mazzucato and IIPP Fellow June Sekera, 'Rethinking public production: producing public value and achieving public purpose', 2019.

9 Kelly, G., Mulgan, G., & Muers, S., *Creating Public Value: An analytical framework for public service reform*, London, 2002.

10 Bozeman, B., 'Public value failure: When efficient markets may not do', *Public Administration Review*, 2002, 62(2), 145-161; and Public values and public interest: Counterbalancing economic individualism, Georgetown, 2007.

While these contributions have been important, they do not disrupt the economic understanding of where value is created, so they have not changed how governments view their role in the economy. We argue that in order to make public value a functional and powerful new policy framework, we need to fundamentally rethink the economics that such a framework is based on.

A positive agenda: from public goods to public value

Any theory of value must first identify the collective nature of how value is conceptualised and created. Public value is not just about measuring how the public or society benefits from the value that is created; it is also about how it is created in the first place. Public value has been diminished by not being centred on the state as co-creator and producer. Public value results from the collective imagination, investments and pressure from social movements. To produce those well, knowledge and capabilities are required in the planning, production, management and interactions among the different interest groups.

The conventional view is that public goods are required to fill the gap created by a lack of investment by the private sector. This is another example of the state playing the market-fixing role. However, public value goes beyond public goods. Rather than asking what gap or failure public goods are filling and fixing, we should ask what are the outcomes that society desires, and how can we make these happen? To do this, it is useful to begin with an understanding of markets as outcomes of the interactions between different actors in the economy.

The concept of public value enables us to overcome the dubious dichotomy between market and state. The market-failure justification also implies that pure private market goods can exist independently of public action. However, as illustrated by the seminal work of Karl Polanyi, there are very few examples of such phenomena. Most markets were forced into existence by collective action and policy.¹¹ Many government actions enable markets to function or create and shape markets through investment, demand generation through procurement, legal codes, antitrust policies, university scientists and physical infrastructure. Markets are co-created by actors from all sectors, but economic theory does not view public actors as creators and shapers. This new role for governments as co-creators of markets would make it possible to shift not only the rate but also the direction of economic growth through collective action. Thus, the concept of public value is fundamental for guiding public

action in shaping markets and co-creating the direction of economic growth.

The search for value should not be limited to soul-searching inside the private sector. Public institutions must also carefully consider their role in creating public value. The most ambitious public organisations – those that invented the welfare state, put a man on the moon, created the Internet, and are today funding renewable energy and creating sustainable carbon-neutral cities – did more than just fix market failures. They had ambition, purpose, and a mission that extended beyond day-to-day politics.

Consider the example of the British Broadcasting Corporation (BBC), which used the concept of public value extensively in its two most recent Charter Renewal documents. In 2004, it presented a conception of public value based on the three principles on which it was founded: universality, fairness and accountability.¹² The BBC's appeal to public value is a bold attempt to clarify its mission in the face of considerable pressure from commercial broadcast media. Public value is used to justify the receipt of public funds and to provide practical guidance to all levels of public management on the delivery of publicly valued broadcasting. Rather than seeing their role as limited to those 'formats' not invested in by private broadcasters (documentaries, for example) – filling the market failure – the notion of public value in the BBC is applied to all formats from soap operas to talk shows and high-quality news. The BBC's own research and large-scale survey, conducted by Ofcom in 2004, suggested that the public continues to define public service broadcasting as a broad and integrated system of programmes and services. Thus, it is both a clarification of public conceptions and a popular appeal to claim that the BBC exists to create public value. Certainly, it aims to serve its audiences not just as customers, but also as citizens in a democratic society.¹³

We argue that public value should be understood as a way of measuring progress towards the achievement of broad and widely accepted societal goals that are agreed on by participatory processes (for example, a rapid transition to a low-carbon economy). Such goals can only be achieved through collaboration between both private and public sectors that together, via the process of innovation, co-create and co-shape markets. This requires moving away from a market-fixing view of public policy towards a market-shaping and -creating view; one that can be operationalised in everyday policies and practices.

11 Polanyi, K., *The great transformation*, Beacon Press, 1957.

12 BBC, *Building Public Value*, 2004.

13 Blaug, R., Horner, L., Lekhi, L. & R., Public value, politics and public management. *A Literature Review*, London, 2006.

To get real about value we need to concentrate on purpose throughout governance and production, recognise that economic value is created collectively, and build more symbiotic partnerships among public institutions, private institutions and civil society. This is not about levelling the playing field but tilting it towards the direction of sustainable and inclusive growth.

In recent years, the notion of alternative metrics for value, such as happiness and wellbeing indicators¹⁴, has received attention but too little has been done in terms of rethinking value inside public organisations. The concept of public value must be nested within a theory and practice of creating value within the public sector. From a policy perspective, it is essential to answer and operationalise the four following challenges:

- 1. WHAT VALUE TO CREATE:** a purpose-driven approach engaged with civil society
- 2. HOW TO CREATE IT:** capabilities within the public sector and dynamic partnerships
- 3. HOW TO ASSESS IT:** dynamic metrics beyond cost-benefit analysis
- 4. HOW TO SHARE ITS BENEFITS:** risks and rewards for inclusive growth

Below, we look at new ways to approach the above challenges from a public value perspective, and show work that the UCL Institute for Innovation and Public Purpose has been doing in each domain. We end with a research and policy agenda for rethinking public value in the 21st century.

1. WHAT VALUE TO CREATE

A purpose-driven approach

“The important thing for Government is not to do things which individuals are doing already, and to do them a little better or a little worse; but to do those things which at present are not being done at all.”

John Maynard Keynes (1926, p. 46)



Fig 1: United Nations Sustainable Development Goals

14 See the Commission on the Measurement of Economic Performance and Social Progress, Joseph E. Stiglitz, Amartya Sen, and Jean-Paul Fitoussi. “Report by the commission on the measurement of economic performance and social progress”, 2009.

In his seminal book *The Moon and the Ghetto*¹⁵, Richard Nelson asked how it could be that society had achieved such difficult feats as landing a man on the Moon, and yet continues to be so terribly disorganised and technologically unsavvy in dealing with the more earthly problems of poverty, illiteracy and the persistence of ghettos and slums. Nelson argued that while politics was partly the culprit, the real issue was that a purely scientific and technological solution could not solve such problems.

Countries around the world are seeking to achieve economic growth that is smart (innovation-led), inclusive and sustainable. This ambition is a direct admission that economic growth has not only a rate but also a direction and can therefore have multiple alternative directions. However, such ambitious goals require re-thinking the role of government and public policy in the economy, and the associated organisational forms that can be as dynamic and explorative as the policies themselves.

The question of the appropriate role of the state in such challenge-led policies is not a purely technical one. It also reflects fundamental questions regarding the proper relationship between the market and the state. Similarly, many political philosophers have restricted the sphere of legitimate action by the state to providing a framework for private action. A more ambitious framework will admit collective goals and actions in the interest of the common good.

The United Nations' 17 Sustainable Development Goals (SDGs) (Fig 1) are concrete targets that have been signed up to by 193 countries, and involved wide stakeholder consultation. Neither the public sector nor the private sector can alone tackle the 169 targets that underlie those goals. Governments can use the goals to set missions that stimulate many different organisations to invest and innovate.¹⁶ Going to the moon required innovation not only in aeronautics but also in nutrition, in textiles and other materials. That same mission-oriented approach could be used for the SDGs – an ambitious direction set by governments to solve a problem that purposeful organisations then tackle together. This is the approach that the Institute for Innovation and Public Purpose is advocating in its practice-based work, founded on a report for the European Commission's Horizon programme.¹⁷

Industrial and innovation policies have historically involved both 'horizontal' policies that try to improve conditions

across the national economy (for example, by improving skills and infrastructure) and 'vertical' policies that target interventions in specific areas, notably sectors (such as aerospace, automotive or manufacturing) that have become the conventional understanding of industrial strategy. A mission-oriented policy framework reinvents the vertical dimension to focus on problems that draw on many different sectors. Instead of using vertical policies to 'pick winners', the vertical aspect of missions picks the problem.

The solution is then reached by stimulating multiple sectors and multiple forms of cross-actor collaborations to address those problems using the entire research and innovation value chain, from fundamental research to applied research and cutting-edge innovation. Importantly, today's missions differ from NASA's original Apollo mission to the Moon because NASA's focus was on technological challenges.

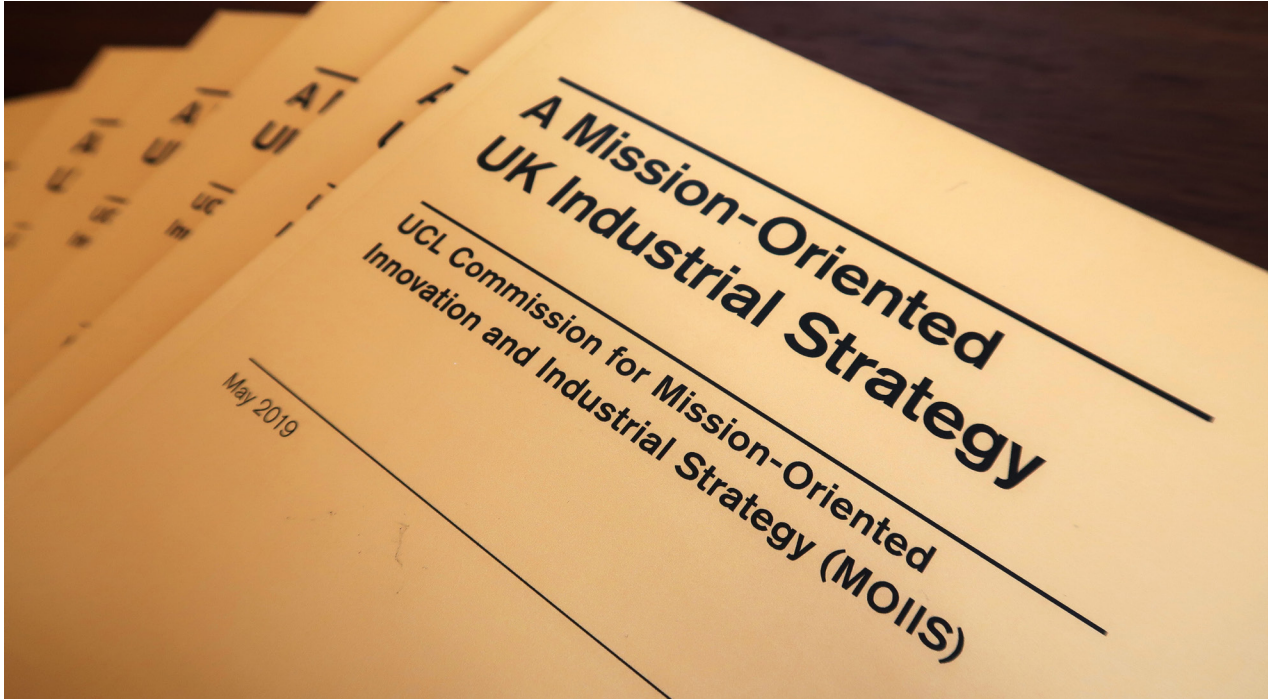
Today, with 'wicked' problems such as global warming that require mass behavioural change alongside science and technology, the focus is on both technological and social challenges. This brings greater complexity to our solutions and means we must recast the policy measures needed to make missions work in the 21st century.



15 Nelson, R., *The Moon and the Ghetto: An Essay on Public Policy Analysis*, New York, 1977.

16 Mazzucato, M., 'Mission-Oriented Innovation Policy: Challenges and Opportunities', *Industrial and Corporate Change*, 2018, 27(5), 803–815, available at <https://doi.org/10.1093/icc/dty034>.

17 Mazzucato, M., 'Mission-Oriented Research & Innovation in the EU: a problem-solving approach to fuel innovation-led growth', 2018, https://ec.europa.eu/info/sites/info/files/mazzucato_report_2018.pdf

Box 1. The UCL Commission for Mission-Oriented Innovation & Industrial Strategy (MOIIS)

The MOIIS Commission brings together academics and world-leading industry experts from cross-disciplinary institutions to provide thought leadership on how mission-oriented policy can be implemented. Co-chaired by Professor Mariana Mazzucato and Lord David Willetts and hosted by IIPP, the Commission has been instrumental in developing mission-oriented policy within the UK Government's Industrial Strategy, which sets out four clear and ambitious Grand Challenges to drive innovation and investment: future of mobility, AI and data, clean growth and ageing society. The purpose of the Commission is to consider how to transform these 'grand challenges' into concrete 'missions' and how the public sector can foster bottom-up innovation across the economy to achieve these missions. In order to target the above Grand Challenges, the MOIIS Commission has published a report entitled "A Mission-Oriented UK Industrial Strategy".¹⁸ The report outlines how to ensure the design of these missions are able to crowd in investment and innovation across different actors and sectors in the economy and what needs to change. The report identifies eight groups of implementation steps for how the Industrial Strategy can:

- Steer the direction of innovation-led economic growth
- Drive the UK's international competitiveness
- Solve grand challenges through cross-sectoral missions
- Systematically support the development of science, technology and the arts
- Nurture sectoral capabilities and absorptive capacity
- Invest in public-sector capabilities and work across government
- Connect with citizens, mobilising social and behavioural change
- Leverage and crowd in other forms of investment

¹⁸ The report is available at: <https://www.ucl.ac.uk/bartlett/public-purpose/partnerships/commission-mission-oriented-innovation-and-industrial-strategy-moiis/mission-oriented>

2. HOW TO CREATE PUBLIC VALUE

“We live and do business in the Information Age, but the last major reorganization of the government happened in the age of black-and-white TV.”

Barack Obama, State of the Union, 2011.

(a) Capabilities inside the public sector

To tackle societal challenges, we must first admit that socio-economic issues do not have a single correct solution. Rather, such issues require continuous discussion, experimentation and learning, each of which requires specific sets of capabilities. Does the public sector have the capabilities for such learning and experimentation?

Managers of private enterprises are taught how to think out of the box, be flexible and adaptable; these are skills at the heart of MBA courses in strategic management, organisational behaviour and decision sciences worldwide. The fact that bureaucracies often do not have those skills is related to the role we assign bureaucracies. At best, it is about marginal efficiency gains, redistribution, or fixing problems along the way. Over the past few decades, many public organisations have focused on increasing the marginal efficiency of their activities.¹⁹

While efficiency is an essential indicator of a successful public organisation, many of the reforms have outsourced key capabilities and thus hollowed out public organisations. In some cases, the changes have been dramatic. As IIPP Fellow and co-founder of Public Practice, Finn Williams showed, in 1970 47 per cent of all architects in the UK worked in the public sector; today this figure is less than 1 per cent.²⁰

This is a great example of how the capabilities to formulate strategic goals (within political and legal constraints) and align organisational resources to achieve these goals have been damaged. Governments are increasingly recognizing that they need more dynamic capabilities at their disposal yet they lack a theory to justify this change. Both policy-makers and academics have realised that we know relatively little about what makes governments and specific public organisations dynamic and able to respond to changing societal demands and needs.²¹

Solving big problems does not necessarily equate to having big organisations. Policy-makers must be more than mere project or programme managers, more than neutral implementers of a political will. The critical question is: how can we ensure that public organisations direct their efforts towards solving societal challenges and creating public value? This question generates useful discussion around how much civil servants should influence policy agendas, and whether civil servants need to be equipped with specialist engineering, design, or science skills along with managerial capabilities. We have to rethink ways in which public organisations create and implement strategic actions (from leadership capabilities to engagement with societal actors), how we build and develop civil service (from training to performance assessment and promotion) and how we organise work in public organisations (from cross-sectoral teams to iterative experimentation).

19 The intellectual origins of such reforms can be traced back to the theory of public choice, as expressed by James Buchanan and Gordon Tullock in *The calculus of consent* (Ann Arbor, 1962). Public choice theory argues that, even where there are clear examples of market failure, it is not always the case that government intervention would result in a more efficient outcome. Rather, there could also be 'government failure'. Such ideas formed the foundation for new public management reforms in 1990s and 2000s that aimed to bring 'market discipline' to government activities. The reforms resulted in a series of privatisations, outsourcings, installation of performance pay systems, etc. For a critical overview, see Wolfgang Drechsler, 'The rise and demise of the new public management', 2005, PAE Review, available at <http://www.paecon.net/PAEReview/issue33/Drechsler33.htm>.

20 Williams, F., 'Finding the beauty in bureaucracy: public service and planning', 2018, available at <https://www.lendlease.com/uk/better-places/20180823-finding-the-beauty-in-bureaucracy/>.

21 Kattel, R., Mariana Mazzucato, M., 'Mission-oriented innovation policy and dynamic capabilities in the public sector', *Industrial and Corporate Change*, 2018, 27(5), 787-801, available at <https://doi.org/10.1093/icc/dty032>.

Box 2. IIPP Mission-Oriented Innovation Network (MOIN)



The network is creating and testing a new policy-making framework that is able to justify, nurture and evaluate policies that actively shape and create markets — not only ‘fix’ them — and which are driven by public value. The network operates as a peer-learning platform where new policy tools can be developed and discussed, focused on the development of capabilities and capacity needed to nurture collaborations across the economy, which can drive innovation across society-wide missions.

The network focuses on creating a new policy-making toolkit that allows public organisations to:

- Set up ambitious mission-oriented policy agendas
- Engage with key stakeholders to design and frame missions
- Map and develop required dynamic capabilities
- Develop and test evaluation frameworks (beyond cost-benefit analysis)

The network is supported by the Rockefeller Foundation.

To find out more, please visit www.ucl.ac.uk/iipp.

(b) Building mutualistic partnerships

There are many publics in ‘the public.’ In the public value framework, contestation of actual value production and evaluation systems is a critical success factor. Involving civil society organisations in framing public policy goals (missions) is a central part of the co-creation process. Producing public value requires collaboration and co-creation; public value cannot be created from the top down. Missions present an opportunity to put citizen participation at the heart of innovation policy and to directly connect R&D spending and broader policy measures to issues that matter to people. In this regard, IIPP Fellow Charlie Leadbeater has written on the role of social movements behind missions.²² Birth control and HIV drugs would not have happened without the feminist movement and the Actup movement, respectively. Today, climate change action is being driven by citizen campaigns on routine activities, from flying to drinking through plastic straws.

Current policies too often rely on the idea that a supply of good ideas and worthwhile projects comes from the private sector and that governments only need to avoid fraudulent behaviour and support the best (and potentially the most profitable) project. Such an approach denies public actors a more meaningful purpose. Governments should worry less about hand-outs and more about using instruments like procurement and prize schemes to nurture the bottom-up solutions within companies needed to address the development goals. That is, it is less about picking winners and more about picking the willing.

Consider the example of UK’s Government Digital Service (GDS). Digital transformation in the public sector is a notoriously complex task that often ends up costing more than anticipated and delivering worse services to the public. For instance, in the UK, the National Health Service’s ambitious scheme for creating electronic patient records was eventually written off at an estimated cost of £9.8 billion. As argued by IIPP Fellow and co-founder of the GDS, Mike Bracken, government IT procurement is often ‘failure by design’: all parties involved realise that large-scale IT solutions are outdated the day they are rolled out, which creates an automatic need for the next large contract. The GDS, launched in 2010, was intended to break up the oligopolistic market of government IT procurement, decreasing the huge costs related to it and radically changing service delivery by creating an agile culture of service design that focused on user experience. This meant attracting top design and software talent to the government and rethinking what was measured

and evaluated, and why. At the outset, Mike Bracken was asked to make savings targets the prime Key Performance Indicator (KPI) for the new agency.

He refused to do so and instead implemented lower-level, user-focused KPIs, aimed at creating a unified user experience through the gov.uk web domain (and its underlying infrastructure) and using agile service design processes (fast prototyping, constant user research).

By doing so, the GDS saved the government £1.7 billion, diversified the IT supply chain (instead of a handful large vendors, the UK Government now procures from roughly 3000 smaller companies) and created an award-winning domain.

Importantly, the GDS focused not only on creating something new, but also taking existing poor-quality online services offline and preventing cumbersome solutions from being deployed. It did so quickly and with low costs: for instance, the prototype for gov.uk was created in 12 weeks and cost £261,000.²³

22 Charlie Leadbeater, ‘Postscript: Movements with missions make markets’, *Industrial and Corporate Change*, 2018, 27(5), 937–942, <https://doi.org/10.1093/icc/dty033>.

23 J. Birkinshaw and S. Duncan, ‘The Government Digital Service (UK)’, 2014, London Business School.

Box 3. Scottish National Investment Bank

In September 2017 the First Minister of Scotland, Nicola Sturgeon announced plans to establish a new Scottish National Investment Bank to support her government’s vision of delivering smart and inclusive growth. The announcement was informed in part by advice from IIPP Director Professor, Mariana Mazzucato, who has been part of the Scottish Government’s Council of Economic Advisors since 2016.

Following the announcement, IIPP was appointed to a small Advisory Group that was convened to lead the work developing an evidence-based implementation plan. The implementation plan was published in February 2018, and draws on IIPP’s research to outline a roadmap for creating a new mission-oriented Scottish National Investment Bank. The proposed vision for the bank outlined in the plan is:

“The Scottish National Investment Bank will provide finance and act to catalyse private investment to achieve a step change in growth for the Scottish economy by powering innovation and accelerating the move to a low carbon, high-tech, connected, globally competitive and inclusive economy.”

In March 2019, IIPP published a new report outlining a mission-oriented framework for the Bank which, if implemented successfully, will maximise its potential for promoting transformational change across Scotland’s economy (Mazzucato and Macfarlane, 2019). Drawing on international evidence, as well as IIPP’s own path-breaking research, we set out clear criteria for designing missions, as well as how a mission-based approach should be implemented in practice.

The bank is expected to become operational in 2020 and will aim to maximise additionality by providing access to the long-term patient finance necessary for ambitious firms to invest in innovation, and for large-scale projects that will help transform Scotland’s economy in line with the bank’s missions.

3. HOW TO ASSESS VALUE

“We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard; because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one we intend to win, and the others, too.”

John F. Kennedy, September 12, 1962.

Beyond cost-benefit analysis

Would humans have landed on the Moon had a cost-benefit analysis been done ex-ante?

For challenge-led policies – like the Moon-shot or, more relevant today, the UN Sustainable Development Goals to be successful, they require robust and appropriate forms of policy appraisal and evaluation. This means appraisal both in justifying an intervention before it happens (should we bother trying?), as well as evaluating it after the fact (was it worth it?). Even if a mission is not accomplished, it is important to measure the dynamic spillovers across the economy.

Currently, the analytical frameworks used by governments to evaluate policy assume that government interventions are mainly concerned with correcting ‘market failures’.

This encourages a view of policy as involving marginal interventions and a focus on improvements to the allocation of limited resources in a particular sector to achieve ‘value for money’. This approach needs rethinking.

Influenced by the market-failure framework, modern appraisal and evaluation approaches are usually based upon a static form of ex-ante cost-benefit analysis (CBA) with costs and benefits measured using existing market prices. CBA-type analyses are concerned with allocative or distributive efficiency, which involves making the best use of (fixed) resources at a fixed point in time.

However, market-shaping policy and mission-oriented innovation focuses on making the best use of resources to achieve changes over time including, perhaps most importantly, the creation of new technologies and/or the shifting of technology frontiers. Such change will likely impact multiple sectors and prices, which makes the assumption of ‘all other things being equal’ inappropriate.

In contrast, a dynamic efficiency approach to evaluation, with a longer-time frame and an understanding of complex systems, will better capture these impacts. Underlying a market-shaping approach is the Keynesian concept of uncertainty about the future and the idea that economic and social systems are complex and prone to disequilibrium states rather than self-correcting equilibrium.

Box 4. Market-fixing vs. market-shaping analytical frameworks²⁴**MARKET-FIXING VS MARKET-SHAPING: ANALYTICAL FRAMEWORKS**

	Market fixing	Market shaping
Justification for the role of government	Market or coordination failures: <ul style="list-style-type: none"> ▪ Public goods ▪ Negative externalities ▪ Imperfect competition/information 	All markets and institutions are co-created by public, private and third sectors. Role of government is to ensure markets support public purpose, also by involving users in co-creation of policy
Business case appraisal	Ex-ante cost benefit analysis (CBA) – allocative efficiency assuming static general relationships, prices etc.	Focused on systemic change to achieve mission-dynamic efficiency (including innovation, spillover effects and systemic change)
Underlying assumptions	Possible to estimate reliable future value using discounting. System is characterised by equilibrium behaviour	Future is uncertain because of potential for novelty and structural change; system is characterised by complex behaviour
Evaluation	Focus on whether specific policy solves market failure and whether government failure avoided (Paretoefficient)	Ongoing and reflexive evaluation of whether system is moving in direction of mission via achievement of intermediate milestones and user engagement. Focus on portfolio of policies and interventions, and their interaction
Approach to risk	Highly risk averse; optimism bias assumed	Failure is accepted and encouraged as a learning device

24 Kattel, R., Mazzucato, M., Ryan-Collins, J., Sharpe, S., 'The economics of change: Policy appraisal for missions, market shaping and public', 2018, IIPP Working Paper, no. 2018-06. <https://www.ucl.ac.uk/bartlett/public-purpose/wp2018-06>.

4. HOW TO SHARE VALUE

“If we are very generous with ourselves, I suppose that we might claim that we ‘earned’ as much as one fifth of [our income]. The rest is the patrimony associated with being a member of an enormously productive social system, which has accumulated a vast store of physical capital, and an even larger store of intellectual capital– including knowledge, skills, and organizational know-how held by all of us.”

Nobel Prize Laureate Herb Simon’s speech to the American Political Science Association, in 2000.

Reshaping risks and rewards for inclusive growth

Sometimes those who have been lucky enough to accumulate wealth admit they have done so on the back of a dynamic and well-funded social system as Simon alludes to.

Warren Buffet stated that “Society is responsible for a very significant percentage of what I’ve earned.” Similarly, Bill Gates argued that “success is a product of having been born in this country, a place where education and research are subsidised, where there is an orderly market, where the private sector reaps enormous benefits from public investment.” This has included not only the basic infrastructure and educated workforce that governments fund, but also the technology that is in an iPhone (from the Internet to GPS).²⁵ What has been less easy to admit in the business community is how this collective effort requires sharing not only risks but also rewards.

When we admit that value is created collectively, by public, private and third-sector organisations and social movements, the question is how that value should be shared. Given that digital companies like Uber and Google have benefitted directly from public investments for the underlying technology, and the data they monetize comes from citizens, we must imagine new forms of ownership and governance of the data to reflect collective intelligence and technological sovereignty. This is what IIPP Fellow Francesca Bria, the chief technology officer of Barcelona, is doing in that city through the Decode project.²⁶

The question of inclusive growth must not only be about the redistribution of value but about how to ensure that production and distribution of value are in dialogue. This is why the narratives and stories about where value is created matter so much. If the narrative is that risk-taking and value creation occur only in business, with the public sector at best de-risking the private sector, then value can, at best, be redistributed from the risk-takers to the others. Instead, if we have a truly collective understanding of value, with the market itself understood as an outcome of the way that public and private intersect, then the question arises as to how to ensure that not only risks are socialised but also rewards.

Indeed, the process of innovation in areas like computing, artificial intelligence and renewable energy shows that direct public funding has increasingly moved downstream, to a point where the risks are high but so are the expected rewards in case of success. This requires an understanding of market co-creating and shaping not only market-fixing, in which the state is a leading actor and entrepreneur – an investor of first resort, not last resort – capable of taking risks and influencing the quality of markets outcomes. Legal rules, procedures and contracts play a constitutive role and are expressions of the state’s power. This approach requires thinking through additional functions of legal institutions beyond the structuring of background incentive conditions for profit maximisation. Policy measures to institutionalise rewards in a way that promotes more equitable public–private partnerships can be understood as attempts to mediate asymmetric power relations, tensions and conflicting views among multiple stakeholders, as well as building a shared notion of the value and legitimacy of the role of the state.

Mechanisms for socialising rewards include both monetary and non-monetary returns.²⁷ The former include retaining equity, while the latter include ‘conditions’ set on prices (of goods like medicines that receive plenty of public investments), on reinvestment of profits, and on knowledge governance (ensuring that the patent system is not abused).²⁸ For instance, the IIPP recommendation is that the Scottish National Investment Bank (see box above) creates conditions for its loans, based on Scotland’s ‘business pledge’, which includes elements such as guaranteeing a living wage and reinvestment of profits rather than hoarding.

25 Mazzucato, M., *The Entrepreneurial State: debunking public vs. private sector myths*, London, 2013.

26 <https://decodeproject.eu/contact-us> (accessed May 1, 2019)

27 For a full discussion, see ch. 9 of Mazzucato, M., 2013; and Laplane, A. and Mazzucato, M., *Socialising the risks and rewards of public investments: Economic, policy, and legal issues*, 2019, forthcoming IIPP working paper

28 UCL Institute for Innovation and Public Purpose, ‘The people’s prescription: Re-imagining health innovation to deliver public value’, IIPP Policy Report, 2018, 10. Available at <https://www.ucl.ac.uk/bartlett/public-purpose/publications/2018/oct/peoples-prescription>

Box 5. The people's prescription: Re-imagining health innovation to deliver public value



Funded by the Open Society Foundations, IIPP's health innovation report highlights the imperative of putting in place conditionalities for public return on public investment.

The public sector is pivotal to health innovation: the 2019 budget for the United States National Institutes of Health is close to US\$39.1 billion, and the 2017 budget for the Medical Research Council in United Kingdom was £814.1 million. Despite this, the existing health innovation system fails to guarantee affordability of and accessibility to publicly funded innovative treatments. In effect, the public – as taxpayers – are paying twice. In 2016, the National Health Service in England spent £1 billion purchasing medicines that had received public investment. Globally, it has been estimated that the public pays for between one- and two-thirds of upfront drug R&D costs.

As value is created collectively through the involvement of public and private actors, the rewards of innovation should also be shared to ensure sustainable capital and resources for continued innovation. The report proposes four areas of conditionalities to ensure public return: attaching conditions on public funding such as reinvesting profits from innovative products to support future R&D; a commitment to share knowledge and fully disclose data related to R&D, including expenditures and data from failed clinical trials; the possibility for the public to retain a golden share from intellectual property rights and, on occasion, equity of profits; and a requirement that manufacturers supply treatments on reasonable terms.

5. CONCLUSION

A call to action

This brief argues that to take public value seriously we it must:

- Develop a new ‘market creating/shaping’ economic framework that justifies public investments not according to the market failure they are fixing but by the outcomes that are being sought;
- Invest in capabilities inside the public sector and dynamic partnerships that deliver public purpose;
- Create new metrics that capture the dynamic benefits that collective action creates;
- Imagine new institutional forms that ensure that collective value creation is shared across society.

A key to our approach is the need to reimagine policy outside of the box of tinkering on the edges. In IIPP we are developing a new framework to guide the 4 questions explored in this policy brief. The framework starts from the point that, if value is to be created collectively to achieve public purpose, then we need a new purpose-driven approach inside the public sector. This is about tilting the playing field towards building an economy that is more sustainable and inclusive.

We have operationalised our approach in a ROAR framework²⁹ that looks at how to justify policies for public value, how to create organisational capabilities to do this, how to evaluate the framework, and how to ensure that the benefits are shared as widely as possible.

Box 6. The ROAR APPROACH TO POLICY and PUBLIC VALUE (IIPP)

ROUTES & DIRECTIONS. How can policy be used to set the direction of change and enable bottom-up experimentation?

ORGANISATIONS. How can explorative public sector organisations be built that learn by doing and welcome trial and error?

ASSESSMENT. How can market-creating public sector investments (that push market frontiers beyond ‘crowding in’) be evaluated?

RISKS AND REWARDS. How can new deals be formed between the public and private sectors, socialising both risks and rewards?

Many governments establish new organisations, such as policy labs, to bring new skills into the civil service. We believe we should go further than that, equipping civil servants with a new mind-set and thinking framework that does not shy away from difficult moral choices around policies and discussions surrounding innovations, and does not hide behind performance targets. For civil

servants to support innovation, for the bureaucracy to be creative, we need both new skills and a new sense of purpose and pride. For this purpose, IIPP has created a new Masters of Public Administration programme, which will embody a new curriculum that puts public value creation at the centre of training, for a dynamic and creative 22nd century bureaucracy.

29 This framework is described in Mazzucato, M., ‘From Market Fixing to Market-Creating: A new framework for innovation policy’, *Special Issue of Industry and Innovation: ‘Innovation Policy – can it make a difference?’* 23 (2), 2016; and Mazzucato, M., ‘Mission-Oriented Innovation Policy: Challenges and Opportunities’, *Industrial and Corporate Change*, 27(5), 803–815., 2018, Available at <https://doi.org/10.1093/icc/dty034>.

IIPP Masters in Public Administration (MPA) in Innovation, Public Policy and Public Value

The globally unique programme focuses on the competencies, capabilities and leadership skills that purpose-driven organisations in the public, private and civil sectors need to confront the grand challenges of the 21st century.

The programme has four core courses:

Public Value and Public Purpose: This course delves into different approaches to understand the creation and measurement of public value and different framings for purpose-led organisations.

Grand Challenges and Systems Change: Considers how public value and purpose can direct innovation by multiple actors to tackle societal grand challenges, from those related to climate and health, as well as to guide fiscal and financial frameworks.

Creative Bureaucracies: Looks at governance frameworks geared to developing dynamic capabilities within organisations that need to be flexible, adaptable and willing to experiment.

Transformation by Design: Develops strategic design skills and techniques for creating policy innovation cultures, processes, environments and organisations, particularly addressing the dynamics of digital transformation.

ENQUIRIES

If you would like further information about this policy brief or IIPP research, please contact: iipp-research@ucl.ac.uk

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Additional IIPP resources

- Mission-Oriented Innovation Network (MOIN) website <https://www.ucl.ac.uk/bartlett/public-purpose/partnerships/mission-oriented-innovation-network-moin>
- IIPP blogs on medium <https://medium.com/iipp-blog>

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