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Meeting Social Needs on a Damaged Planet:

Foundational Economy 2.0 and the
care-ful practice of radical policy

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Meeting social needs on a damaged planet: Foundational Economy 2.0 and the care-ful practice of radical policy

Luca Calafati, Julie Froud, Colin Haslam, Sukhdev Johal and Karel Williams¹

This working paper is a systematisation and a statement of current British foundational thinking. It is necessary because the foundational approach works not by formulaic and repetitive restatement but by development. We have moved on substantially since the 2018 book² just as that book was an advance on the original 2013 manifesto³. This working paper in 2021 consolidates our recent work and delivers radical new messages. Most fundamentally, without neglecting renewal of our old twentieth century needs based reliance systems, we must now innovate by building new resource-based reliance systems because in the twenty first century we need new ways to link nature and social well-being and to find ways to deliver the latter without harming the former. And we need to signal these messages strongly so that readers do not suppose earlier formulations represent current positions.

This working paper draws on research which we have published serially in working papers and reports, starting in late 2018 with a working paper on income measures and liveability⁴ and then continued with a report on the Morriston community study⁵. The *Serious about Green*⁶ report on afforestation and wood economy in 2020 obliged us to think seriously about how (and with what implications) the nature and climate emergency can be integrated and foregrounded in foundational thinking. *When Systems Fail*⁷ on the NHS response to the first wave of Covid-19 took us from the observed paralysis of Welsh afforestation policy to the hyper innovation of UK health policy and how the pursuit of health service efficiency and public health reform left health without surge capacity. The forthcoming *Enabling Renewal*⁸

¹ <https://foundationaleconomy.com/>

² The Foundational Economy Collective. (2018). *Foundational Economy: The infrastructure of everyday life*, Manchester, MUP.

³ Bentham, J., Bowman, A., de la Cuesta, M., Engelen, E., Ertürk, I., Folkman, P., Froud, J., Johal, S., Law, J., Leaver, A., Moran, M. and Williams, K. (2013). *Manifesto for the Foundational Economy*, CRESC Working Paper 131.

⁴ Froud, J., Haslam, C., Johal, S., Tsitsianis, N. and Williams, K. (2018). *Foundational liveability: rethinking territorial inequalities*, Foundational Economy Working Paper No.5, October.

⁵ Calafati, L., Ebrey, J., Froud, J., Haslam, C., Johal, S. and Williams, K. (2019). *How an ordinary place works: understanding Morriston*, Foundational Economy Research Report, May.

⁶ Calafati, L., Froud, J., Haslam, C., Johal, S. and Williams, K. (2020). *Serious About Green? Building a Welsh wood economy through co-ordination*, (Report commissioned by WoodKnowledge Wales), October.

⁷ Froud, J., Haslam, C., Johal, S., Law, J. and Williams, K. (2020). *When Systems Fail: UK acute hospitals and public health after Covid-19*, Foundational Economy Research Report, June.

⁸ Buchanan, J., Froud, J., Lang, M., Lloyd, C., Smith, B. and Williams, K. (2021). *Enabling Renewal: Further Education and Building Better Citizenship, Occupations and Business Communities*, Wales, Colegau Cymru, (forthcoming 2021).

report on Welsh vocational education will show how meeting social needs must involve changing the activities of potential engine institutions like Further Education Colleges.

This paper is organised into three sections which together give an overview of the foundational project in 2021. The first section, introduces, elaborates and explains the distinction between Foundational Economy 1.0 (FE 1.0) which focuses on meeting social needs without explicit concern for the environment and Foundational Economy 2.0 (FE 2.0) which relocates the foundational project within the environmental limits we have to respect on our now damaged planet. The second section explains that foundational thinking is part of a social turn but comes with distinctive, foundational concepts measures and objectives. The third and final section recommends the care-ful practice of radical policy through new forms of governance and experimental learning which draw on our involvement in Welsh foundational programmes.

What to do? Foundational Economy 1.0 and Foundational Economy 2.0

As we have long argued, foundational thinking challenges the assumption that there is one unitary economy which works according to the same principles and rules and hence we distinguish multiple economic zones (foundational, overlooked and tradeable) each with its own history and organizational principles. In changing environments, the aim is balanced development of the different zones without disruptive intrusion of one into the other. One of the recurrent problems of our time is that, with privatisation and outsourcing, financialised corporate providers have imposed extractive high risk/ high return/ short term business models of tradable, competitive activities on low risk/ low return/ long horizon foundational activities.

But the foundational zone also has its own changing rhythms and periodicities. These can be understood in terms of how the history of urban, industrialised society throws up different challenges in various periods and how (in relation to these challenges) we can have periods of foundational innovation, roll out and construction and, equally, periods of system stability or run down in foundational provision. On this basis, we would distinguish between the 1880-1970 period of construction gave us what we call Foundational Economy 1.0 (FE 1.0). This was followed by an intervening period since the 1970s of neglect and exploitation in Western Europe. Going forward, we now face the new challenge of constructing and rebuilding which we call Foundational Economy (FE 2.0).

Foundational Economy 1.0 (FE 1.0) is our term for a historical assemblage of socio-technic systems put together in Western Europe after 1880. This primarily and slowly addressed the material public health and providential income maintenance problems and social needs created by nineteenth century urban, industrial societies of wage labour. For the first time in recorded history these innovations made life civilised and safe for all; starting in urban areas and then progressively spreading into rural ones. FE 1.0 sustained well-being and represented

a huge advance in substantive freedom which democratised and extended choices in a society where the individual was safe because everybody was safe.

From the mid-nineteenth century, piped water and sanitation, plus utilities like gas (and then electricity) transformed the quality of life and added twenty years to life expectancy. After 1945 across Europe, we had the provision of universal providential health and education services and the extension of income maintenance for the unemployed, sick and old which brought what T H Marshall described as a new kind of social citizenship⁹. As Edgerton¹⁰ argues, the last great period of national foundational construction in the UK was in the period 1950s to 1970s. Inter alia this brought slum clearance, new towns and social housing so that by the late 1970s 30% of the housing stock was social¹¹: coal and nuclear powered an upgraded electricity grid connecting to multiple appliances in all households whose gas boilers drew on a natural gas grid; a motorway system connected towns increasingly adapted for mass automobility.

After 1945, European citizens could begin to enjoy a better every day in what Fourastie termed “les trentes glorieuses” in France¹². Across Europe, this was sentimentally celebrated as a huge achievement, but it is important to recognise that in many European countries there never was a stable post war settlement. Instead, we had toing and froing on basic principles of foundational provision which made it all the easier to shift towards degradation of provision after 1980.

Social insurance provides a classic example. The Beveridge Report¹³ in 1942 had recommended a funded scheme offering flat rate subsistence benefits after a long lead in; but the post war Labour government set up a “pay as you go” scheme which paid out more to the current generation of pensioners; on the recommendations of the Philips Committee, a Conservative government in 1954 dropped the long term ambition of subsistence benefits; in 1959 the electorate rejected the Labour Party’s proposals for a European style shift to an earnings related scheme under which the low paid would retire on 2/3rds of earnings and subsequent earnings relate schemes changed little in what was still basically a flat rate scheme¹⁴.

⁹ Marshall, T. H. (1950). *Citizenship and Social Class and Other Essays*, Cambridge, England, Cambridge University Press.

¹⁰ Edgerton, D. (2018). *The Rise and Fall of the British Nation: A Twentieth-Century History*, London, Allen Lane.

¹¹ [Table 104 Dwelling stock: by tenure, England \(historical series\)](#), Live tables on dwelling stock (including vacants), Ministry of Housing, Communities & Local Government.

¹² Fourastié, J. (1979). *Les Trente Glorieuses, ou la révolution invisible de 1946 à 1975*, Paris, Librairie Arthème Fayard.

¹³ Beveridge, W. (1942). *Social Insurance and Allied Services (Cmd. 6404), (The Beveridge Report)*, (1942), Inter-departmental Committee on Social Insurance and Allied Services, Great Britain.

¹⁴ <https://publications.parliament.uk/pa/cm199900/cmselect/cmsocsec/56/5605.htm>

In the 40 years after 1979, a combination of privatisation, outsourcing and deregulation then degraded our material and providential economies¹⁵ which are now generally underinvested and operationally over extended. The reforms were justified on the grounds that new operators could bring in private capital and introduce competition and markets which would drive efficiency improvements. But, as we have documented in a sectoral study of British railways¹⁶ and in our overview of outsourcing¹⁷, the reforms brought in financialised, rent seeking corporates (or private equity with debt-based business models). The financial engineering of these operators was never controlled by utility regulators primarily concerned with making the world more like economic theory; these regulators focused on competition and consumer prices while ignoring the business model issues whose importance is highlighted by foundational analysis of specific sectors.

Matters are now further complicated by the technical shift from electrification and automobility to digital technologies and the internet whose benefits have been captured by under regulated platform monopolists offering new services which are compellingly attractive to households. Platform practices like selling our personal data and corporate tax avoidance make their business models opaque and objectionable. But, when they do not directly involve traditional Standard Oil types of price gouging, national governments compete to attract these corporates and accommodate or encourage tax avoidance. The digital also brings a degree of de localisation and dematerialisation of the foundational infrastructure as the Amazon warehouse replaces the local shop and mobile telephony replaces land lines. This is especially a problem because cash generative new technologies like fibre broad band which could support municipalities are by default ceded to the private sector.

Whatever the changes, we cannot and should not neglect the defence and renewal of FE 1.0. Covid-19 has reminded us of the continuing importance of acute health care and public health which we had taken for granted. The *When Systems Fail* Report¹⁸ on the UK NHS response to Covid-19 shows how a one-dimensional fixation with financial efficiency plus churning reorganisation led to a health system which was irresponsibly running with no hospital bed and staff buffers and no surge testing capacity in public health laboratories. So any foundational politics has to start by tackling the harm and neglect of recent decades by rebuilding and redirecting old provision so as to ensure citizen access to foundational goods and services.

One of the underlying problems then is that foundational policy does not involve choice within one dimension of rationality but between competing and incommensurable

¹⁵ The Foundational Economy website provides a detailed explanation of these terms and what is in each category <https://foundationaleconomy.com/activity-classification/>

¹⁶ Bowman, A., Folkman, P., Froud, J., Johal, S., Law, J., Leaver, A., Moran, M. and Williams, K. (2013). *The Great Train Robbery: the economic and political consequences of rail privatisation*, CRESC Public Interest Report.

¹⁷ Bowman, A., Ertürk, I., Folkman, P., Froud, J., Haslam, C., Johal, S., Leaver, A., Moran, M., Tsitsianis, N. and Williams, K. (2015). *What a waste: outsourcing and how it goes wrong*, Manchester, MUP.

¹⁸ Froud, J., Haslam, C., Johal, S., Law, J. and Williams, K. (2020). *When Systems Fail: UK acute hospitals and public health after Covid-19*, (2020). *Foundational Economy Research Report*, June.

rationalities, In the terminology of the French sociologists Boltanski and Thevenot¹⁹ the foundational is the domain of competing orders of worth because there is always a business model for charging and recovering financial costs and equally a larger social purpose and account for the activity. Financialized and marketized provision in Boltanskian terms privileges one order of worth so that provision (with or without profit) runs on financial values whereas much of the foundational economy must also be about social value and civic worth.

The central and local state must play a major role here as a kind of Boltanskian manager of the incommensurable. But we must recognise the double limits on state activity going forward into the 2020s. First, West European states in the 2020s will be dealing with the legacy costs of Covid-19; while governments of different hues have found it politically very difficult to reform complex tax systems. Consequently, governments will not have large amounts of funding to sustain large scale re-municipalisation and re-nationalisation, especially in activities like public transport or waste disposal which are not cash generative and will require ongoing capital investment and revenue support. Second, and equally important, successful public ownership requires administrative capability which in many areas has been weakened by serial reorganisations and atrophy of government functions in the dark decades since 1980.

Hence the importance of social licensing²⁰ whereby national and regional government impose explicit and relevant social obligations on private and not for profit providers of foundational goods and services. Because without such intervention, providers will default onto working the financial logic of their business models and publicising their undemanding commitments to green washing and social responsibility. At present social licensing is no more than a proposal and we urgently need to work out how social licensing could be done at different levels of government in ways which include citizen consultation.

But, more broadly, what we now also need, and have not yet realised or delivered, is Foundational Economy 2.0 (FE 2.0) which must address not just the well-being of current generations and their social needs but also the well-being of future generations which is problematic in the context of nature and climate emergency on an over-burdened planet. Current and future desiderata are interconnected. The resources and conversion technologies necessary to deliver FE 1.0 material and providential services both sustain the well-being of the current generation and at the same time represent a burden on the planet and a threat to the well-being of future generations. This new consideration has been embodied in an enlightened and farsighted Welsh legislation²¹ which has highlighted the difficulty of delivering for future generations.

Measuring environmental impact is complex, especially in globalised economies where materials and energy-intensive products are imported from overseas as in the UK and most

¹⁹ Boltanski, L. and Thevenot, L. (2006). *On Justification: Orders of Worth*, Princeton, Princeton University Press.

²⁰ Froud, J. and Williams, K. (2019) *Social Licensing for the Common Good*, *Renewal*, 20th September.

²¹ *Wellbeing of Future Generations (Wales) Act*. (2015). Future Generations Commissioner for Wales.

European countries. The UK has seen a reduction in energy demand and CO₂ emission over the past decade, which has remarkably been around 30%²². But this reduction is not a sign of success and a sign of hope that environmental targets can be met. Rather than a move towards sustainability, the reduction is mostly the result of the outsourcing of manufacturing and heavy industry – energy-demanding and polluting activities - to other countries²³.

Attributing environmental impact is then further complicated by measurement issues and the difficulty of getting comprehensive measures which cover the impact of fabrication and use. So, for example, in the case of housing and buildings, measures must consider the environmental impact embodied in their materials and construction process as well as the impact of heating and maintaining buildings during their operational life. According to Wood Knowledge Wales,²⁴ embodied carbon emissions over the whole life cycle of a UK building represent on average around 65% of overall emission in the case of homes and offices and up to 76% in the case of warehouses.

CO₂ emissions are a common headline indicator of environmental burden because of the direct connection between these emissions and climate crisis. But this indicator does not take into account the nature crisis about environmental impacts such as loss of ecosystems or depletion of non-renewable resources. Measures of environmental impact, such as the Ecological Footprint, try to take these burdens into account.^{25,26} This measure has its limits²⁷ but nonetheless gives an insight into the burden which a country places on the planet. Certainly, high-income countries such as the UK consume a quantum of resources which is well above what global sustainability requires. If every country in the world consumed resources as the UK did in 2017 we would require the equivalent of roughly 3 planets earth of resources²⁸.

Here FE 1.0 clearly contributes to the problem because some (but not all) foundational activities are environmentally burdensome. A detailed Welsh Government study published in 2015²⁹ provides a sector-by-sector analysis of environmental impact. Three sectors of the material foundational alone – that is transport, housing and food – are responsible for almost 60% of the environmental impact of the region. Personal services- like health, education and care- add to the environmental impact but in much smaller proportion. They account for another 8% in terms of contribution to the whole ecological footprint of Wales despite

²² Evans, S. (2020). Analysis: UK's CO₂ emissions have fallen 29% over the past decade, *Carbon Brief*, 3rd March.

²³ Allwood, J., Azevedo, J., Clare, A., Cleaver, C., Cullen, J., Dunant, C., Fellin, T., *et al.* (2019). *Absolute Zero. Delivering the UK's climate change commitment with incremental changes to today's technologies*, UK Fires, University of Cambridge.

²⁴ WoodKnowledge Wales. (n.d.). *Zero Carbon Homes*, (Report commissioned by the Welsh Government).

²⁵ Wackernagel, M. and Rees, W. (1996). *Our ecological footprint: Reducing human impact on the earth*. Oxford, UK: John Carpenter.

²⁶ Lin, D., Hanscom, L., Murthy, A., Galli, A., Evans, M., Neill, E., Mancini, M., Martindill J., Medouar F-Z., Huang, S., Wackernagel, M. (2018). Ecological Footprint Accounting for Countries: Updates and Results of the National Footprint Accounts, 2012–2018. *Resources*, 7(3): 58. Chicago.

²⁷ Giampietro, M. and Saltelli, A. (2014). Footprints to Nowhere, *Ecological Indicators*, Volume 46, Issue 11.

²⁸ Global Footprint Network, <https://data.world/footprint>

²⁹ Stockholm Environment Institute and GHD. (2015). *Ecological and Carbon Footprints of Wales*.

employing roughly 30% of the workforce.

To solve the challenge of sustainability we must think now in a second dimension about resource inputs and conversion processes as well as about the corollary unwanted outputs of FE 1.0. Thus, in FE 1.0 terms the social needs issue is about whether all our houses can be adequately warmed in winter without creating fuel poverty for low-income households. While in FE 2.0 terms we have to add the issue that in more than 20 million British houses the central heating is powered by a natural gas boiler which emits CO₂. Most of these boilers are of the condensing type and are already fitted with flue gas heat exchangers so no increases of efficiency are easily available. The current dilemma is that alternative technologies (for heat pumps or hydrogen gas boilers) are underdeveloped and expensive.

The debate about what to do is at present stuck in a place where the discussion is about whether new break-through technologies could at scale and low cost, for example, produce large amounts of cheap hydrogen or synthetic aviation fuel. Techno optimists,³⁰ like Adair Turner and the Energy Transitions Commission, put their trust in a portfolio of new technologies where many are unlikely to deliver economically at cost and scale. In contrast Techno realists, like the UK FIRES group³¹ recommend working with existing technologies which can be already employed at scale in combination with societal changes which would decrease the demand for matter and energy-intensive products, services and infrastructures.

We agree with the techno realist argument that we should not trust in technology as *deus ex machina* to deliver us from social choices. But this opens the question of how to achieve transition through social change and here we disagree with the social engineers in the techno realist camp like Julian Allwood³² who recommend wrenching changes in life-style like stopping flying and closing airports. Intrusive measures which would involve top-down prohibitions for ordinary households are very unlikely to be politically acceptable. If we want to make the socio-ecological transition sellable to the electorate what we should offer to people are not prohibitions but choices of different mix of outputs, where ecologically compatible and socially attractive goods, services and activities substitute for matter and energy intensive one.

A key policy question is then where to start and here we would argue that the foundational economy offers a strategic entry-point. Foundational systems – such as healthcare, energy provision, the food system and transport – are the basis of welfare and civilised life. In case of socio-ecological shocks, if these systems malfunction basic needs are threatened in ways which could lead to partial or total social breakdown. If we start the socio-ecological transition in the foundational economy, we get the highest overall return in terms of social resilience and security. Creating a sustainable fashion industry is clearly an important objective, which

³⁰ Energy Transitions Commission. (2020). *Making Mission Possible: Delivering a Net Zero Economy*.

³¹ Allwood, J., Azevedo, J., Clare, A., Cleaver, C., Cullen, J., Dunant, C., Fellin, T., *et al.* (2019). *Absolute Zero. Delivering the UK's climate change commitment with incremental changes to today's technologies*, UK Fires, University of Cambridge.

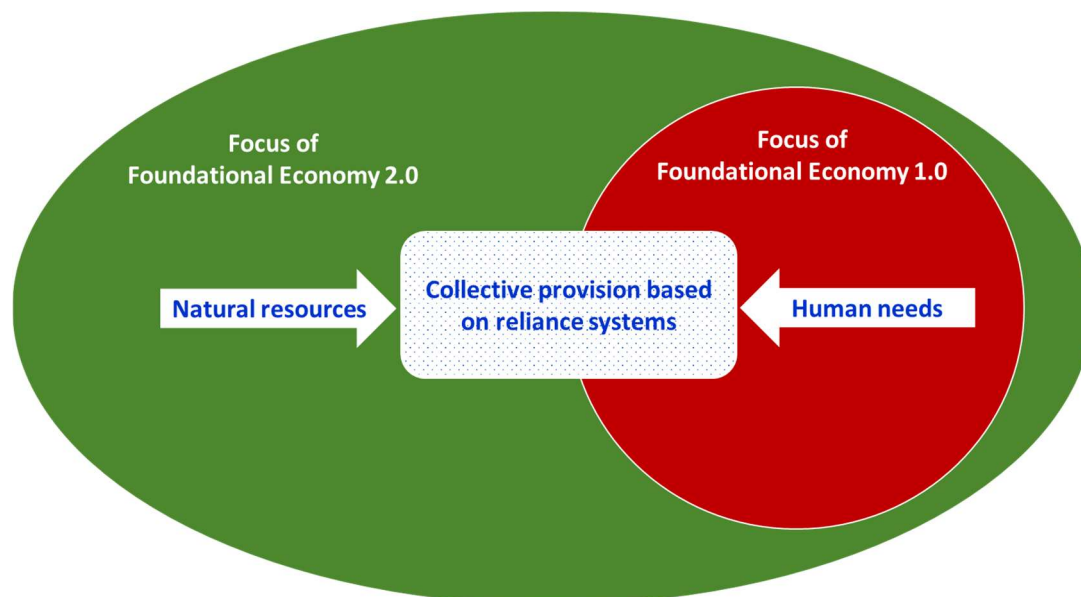
³² Allwood, J. (2020). *The only way to hit net zero by 2050 is to stop flying*, Financial Times, 7th February.

rightly today has much public and private support; but the social gain from sustainable fast fashion is dwarfed by the gain from transition to a more ecological food or energy system.

We accept that new technologies will help us to produce foundational outputs with smaller impacts on the planet. But as argued above, given current consumption levels and the technologies we have, we clearly have to think of a change in the overall mix of economic output and a radical reformatting of material and providential foundational activities which have a high carbon footprint. Also, as we will explain more in detail later in the last section of this paper, the challenge here is not technical about the diffusion of technologies but organisational about the coordinated management of reliance systems.

The good news is that citizens can have more of the low carbon labour intensive services like health, care, and education; while we must, in politically acceptable ways, decarbonise housing, energy, food and transport of goods and people which currently place an high environmental burden to the planet. In FE 2.0 the logic of resource consumption, conversion inefficiency and unwanted outputs requires a clean-up of high carbon food, mobility and housing. Inter alia, this means diet reform, housing decarb, zero emission cars and fewer cars (without compromising urban and suburban workability and liveability in ways that would provoke “gilets jaunes” type electoral reaction).

Exhibit 1: The development of foundational economy thinking



If we are serious about mitigating the impact of climate change, managing down natural resource use and securing biodiversity, we must also think more divergently about direct action outside this frame of ‘cleaning up’ old foundational systems and think about new kinds of foundational systems designed intentionally to promote low carbon material substitution, tackle carbon sequestration and support biodiversity. Hence in the *Serious about Green*

report³³ our proposal for a Welsh wood economy which would address the climate emergency through afforestation for carbon sequestration creating productive woodlands whose timber output would substitute for environmentally damaging high carbon materials like steel and cement in construction.

FE 2.0 is thus not only a new historical period, it also adds a second dimension of foundational thinking about the planetary burden of meeting social needs and wants; all of which raises new supra national issues outside the municipal and national frame in which FE 1.0 was constructed.

In FE 1.0 we focused on the link between current social needs and the necessary collective provision for citizens which satisfies them. Here the key issue is how access to, and quality of, provision can be improved for the current generation of citizens. In FE 2.0 thinking we must focus also on the link between collective provision of material and providential services and the resource inputs, conversion inefficiencies and unwanted outputs of those services whose planetary burden threatens future generations. The challenge is then how resource consumption and ill-being outputs can be reduced to lower the planetary burden in a way that benefits future generations, while at the same time maintaining acceptable quality and quantity in the collective provision for the current generation.

The priority of FE 2.0 issues should not overshadow concerns around FE 1.0 provision. FE 1.0 goods and services still remain crucial in FE 2.0 and this is represented in our diagram above where FE 2.0 is a larger sphere containing FE 1.0. We need an adequately financed providential health care system which must now broaden its span beyond acute medicine to include prevention and care for the elderly; and in clean up mode we need decarb of the existing housing stock and many material systems. But we also need to go further and directly tackle resource systems and build wood, renewables and hydrogen economies instead of steel, cement and fossil fuel economies.

Without neglecting renewal of old needs-based systems, we should innovate by building new resource-based systems because in the twenty first century we need new ways of making the link between nature and social well-being and delivering the latter without harming the former. Old and new activities must now be about embedding foundational provision in environmentally sound materials and processes so to place the well-being of future generations onto sustainable foundations. From this standpoint the wood economy has the same salience to our twenty first century collective future on the planet as piped water or sanitation had for the collective future of the nineteenth century city.

³³ Calafati, L., Froud, J., Haslam, C., Johal, S. and Williams, K. (2020). Serious About Green? Building a Welsh wood economy through co-ordination, (Report commissioned by WoodKnowledge Wales), October.

In context: foundational concepts and measures as part of a British social turn

Foundational thinking has a historic and social context. It is methodologically distinctive in that it focuses on the specifics of financialized capitalism and the hollowed-out state by combining accounting literacy and facility with official statistics with a liberal collectivist reforming social mission³⁴. And this has since 2018 been elaborated in distinctive concepts, measures and objectives, including residual household income and reliance system which are introduced in this section of our working paper. But, in context, these post-2018 developments in foundational thinking can be situated as part of what might be called the recent British social turn in thinking about extending citizen entitlements beyond the boundaries of the existing welfare state through universal basic services.

This British social turn takes several different forms but has a common patrimony going back to the 1950s and the 1980s. In relation to the 1950s, social turn arguments restate Galbraith's criticism of private affluence and public squalor in societies³⁵ which have privileged private consumption wants over collective provision of social needs; and build on Marshall's arguments about entitlements as the basis for citizenship³⁶. In relation to the 1980s and 1990s, the social turn draws on ideas about substantive freedom developed by Sen³⁷ and Nussbaum in many different texts and by Doyal and Gough³⁸ in their book about human needs.

The Universal Basic Services slogan is one of the higher profile manifestations of this social turn. The UCL Institute for Global Prosperity in 2017 made an argument for extending the range of free basic services to include such things as local transport³⁹. A more developed and convincing argument for Universal Basic Services has since been made by Coote and Percy⁴⁰ who explicitly refer back to Sen and on capability and Doyal and Gough on human need. They argue that UBS provision of childcare, adult social care, housing transport and internet access is possible for about 5% of GDP and is therefore entirely practical.

Building on these arguments, the foundational approach proposes a distinctive synthesis, which finds a path between the UCL advocates of universal basic services and another equally enthusiastic group of social policy reformers like Standing⁴¹ who advocate universal basic income. The specifics of this foundational synthesis are threefold. First, the foundational approach takes account of income pooling by explicitly focusing on the household (not the

³⁴ On liberal collectivism and its limits, see Cutler, T., Williams, J. and Williams, K. (1985). *Keynes, Beveridge and Beyond*, London, Routledge.

³⁵ Galbraith, J.K. (1958). *The Affluent Society*, New York, Houghton Mifflin.

³⁶ Marshall, T. H. (1950). *Citizenship and Social Class and Other Essays*, Cambridge, England, Cambridge University Press.

³⁷ Sen, A. (2001). *Development as Freedom*, Oxford, OUP.

³⁸ Doyal, L. and Gough, I. (1991). *A Theory of Human Need*, London, Palgrave Macmillan.

³⁹ Social Prosperity Network. (2017). *Social prosperity for the future: A proposal for Universal Basic Services*, UCL Institute for Global Prosperity, London.

⁴⁰ Coote, A. and Percy, A. (2020). *The Case for Universal Basic Services*, Wiley.

⁴¹ See e.g. Standing, G. (2017). *Basic Income: And How We Can Make It Happen*, London, Penguin.

individual) as the unit of consumption. Second, the foundational approach accepts that it is not enough to list and focus on basic service provision because we must also consider the income available for overlooked services like hairdressing which are important to cultural participation, Third, the foundational approach absolutely rejects the idea that we must choose in a binary way between providing services or income because the task is to find points of intervention at household level after analysing the interaction between income and services of different kinds which are on and off the market.

Giving individual citizens private income to spend on consumption is not enough because basic service provision in complex, urban societies depend on technical systems which have to be collectively provided by the state or corporate providers. Mobile telephony or public health nicely illustrate this point. An individual citizen can buy a smart phone but not a 4G network coverage across a city region; just as an individual citizen can buy private medical treatment but not protection from epidemic disease which depends on mass vaccination. But puritanism about restraining private consumption (e.g., by high rates of tax) is generally not electorally saleable in liberal democracies. And there are good reasons for this quite apart from often justified scepticism about the state's ability to organise services which deliver social value for money. Puritan measures often bear onerously on the agency of those at the bottom of the social structure whose choices are already limited so that prohibitions are fiercely rejected.

Household income⁴² is relevant in many ways to well-being and will remain so as long as many necessary goods and services like food and housing are wholly or partly on the market so that all or many households buy them from income; while overlooked services generally have to be bought out of disposable post tax income after the inescapable semi fixed costs of housing, utilities and transport have been met. As soon as we take account of the interactive relation between household income and service provision and spend, we start to question the standard measures of regional and local economic achievement in terms of per capita Gross Domestic Product (GDP) and Gross Value Added (GVA).

GDP and GVA add up the financial value of all the marketable output in a national or regional economy. In this way arms and food production, or advertising and home building become commensurable before the statisticians add on the value of all public sector output at cost. The resulting national income accounting measure is uninformative about the issue of the changing balance in composition of output (between foundational, overlooked and tradeable components). This omission is important because the foundational approach is not to seek an increase in the quantum of total output but what might be called Galbraithian balance between the different kinds of output. While the fixation on a per capita output figure is grossly uninformative about the range of variation in household incomes within and between regions and the drivers of that variation.

⁴² We use household income rather than individual income as households are typically multi-person unit with dual earners who consolidate their incomes and collectively purchase and share many goods and services.

On the income side of the equation, households are typically multi-person income pooling units who share many goods and services. In the UK or other European countries, households headed by younger adults will typically have two wage earners so that both partners now work in 3/4 of UK 2 parent households with dependent children⁴³. On the expenditure side, the cost of housing very much depends on type of tenure (owner occupier, private or social tenant) and more expensive property in “successful” city regions typically takes a larger share of higher incomes. London in the UK is at the centre of a crisis about housing unaffordability: 25% of London households are private renters and, in the case of the mean private renting household in London, rent takes 34% of disposable post tax income⁴⁴.

Consider the complexities for two parents in an UK household with young children whose household income comes from two jobs and/or public welfare payments. In the UK they will benefit from free health services and school education, but they will typically have to pay for pre-school childcare which in the UK will then take a substantial share of one wage earner’s earnings⁴⁵. Housing is an inescapable cost which is on and off the market so that according to region or tenure it can take a very variable share of similar incomes. Housing is on the market positively for owner occupiers with the incomes to take out a mortgage on an appreciating asset and negatively for private renters who are effectively paying off a landlord’s mortgage. Housing is partly off the market for all social housing tenants who typically pay 50% of market rents but this option comes with restriction on housing choice; and for private renters, state aid goes only to those whose low incomes make them eligible for state housing benefit. After housing, other basic goods and services like utility supply and food will be on the market and bought from private corporate providers.

Most households will be concerned with foundational liveability which depends on access to, and affordability of, foundational goods and services. The way foundational liveability is achieved changes from country to country depending from welfare regime. In general, in most European countries health and education are off the market while food is on the market and housing and transport are variably mixed in different countries. By way of contrast, in the US foundational provision is mostly on the market and much off market provision is for stigmatised households at the bottom of the social structure. While the US system is clearly a social and political failure, we do not believe that this justifies any general verdict whereby on market provision is bad while off market provision is good (or vice-versa). Clearly the outcome depends on what market and off market provision deliver for particular groups as part of an overall social settlement.

Instead we would point out that in contemporary societies foundational liveability constitutes the basis of household welfare in two ways. First foundational liveability is important because good access to foundational goods and services is what makes a civilised existence possible.

⁴³ Families and the labour market, UK: 2019, ONS.

⁴⁴ Calafati, L., Froud, J., Haslam, C., Johal, S. and Williams, K. (2021 forthcoming). Diversity in leading and laggard regions: living standards, residual income and regional policy, *Cambridge Journal of Regions Economy and Society*.

⁴⁵ OECD Policy Briefing. (2020). *Is Child Care Affordable?*

We have to collectively recognise that we are depriving households of dignified existence and social rights when households cannot buy or rent housing fit for need, cannot freely move within their cities and regions, cannot afford a choice of healthy meals, cannot raise children with access to education or rely on health and care when they are ill or old.

But life in the 21st century is not only about making a life with security and choices about these basics. It also about a life which is satisfying and this often depends on cultural and leisure activities like eating out, cinema and streaming, sport and holidays which are individual familial and social. And here foundational liveability is crucial in a second way because when foundational provision is relatively affordable (through cheap prices or off market provision) then the overall household budget easily allows the discretionary spend that sustain such activities. It is this margin of discretionary income, left over after taxes and daily necessities are paid, which enables access to take away food, restaurants, haircuts, pubs and bars, gyms and sport equipment, media subscriptions and holidays which are all largely on the market.

These goods and services beyond the foundational basics are culturally mediated necessities because they are the entrance ticket to family life and broader social participation. The list can change through time and space, but the preconditions for access to and enjoyment of these goods do not change. The two key preconditions for participation are a margin of discretionary income and some free time. Hence the importance of labour markets which pay living wages for predictable hours of work in a job where the daily commute to work is short and cheap. An income with discretionary margin is meaningless if it is only obtained in some weeks by working long hours at low wages in an irregular job with an awkward commute.

To take account of these complexities, we have proposed residual household income as an alternative measure to GDP or GVA per capita. Residual household income is post tax disposable income after further deductions for the semi fixed expenditure items of housing, transport and utilities⁴⁶. This measure doubly recognises the burden of necessary semi fixed foundational expenditures and the importance of a residual margin which allows discretionary consumption.

The residual income measure is practically important because it displaces the notion that high GVA is the mark of a city or region whose success should be emulated; and low GVA per capita is the mark of a “left behind” city or region whose objective must be to raise GVA per capita. Regions cannot be meaningfully ranked in terms of GVA per capita because within and between regions we have a mosaic of differently placed households; and the GVA measure misdirects policy because in many circumstances public policy to manage down housing costs gives more leverage over liveability than policies to raise household incomes from creating high wage employment. Low GVA regions can be very liveable for two income households

⁴⁶ Froud, J., Haslam, C., Johal, S. and Williams, K. (2020). Cohesion through housing? residual income, housing tenure and UK regional policy, (2020), *Foundational Economy Working Paper No.6*, February.

with secure low cost housing, while in many successful world cities the benefits of high gross and disposable incomes are eroded by high rents.

If we shift now from liveability measures to fundamental objectives; the ultimate foundational goal is not economic welfare narrowly defined but some broader concept of social well-being. This wellbeing is something like substantive freedom in the Senian sense⁴⁷. Citizens living in households should have “the freedom to live a life they have reason to value” which requires opportunity and the ability to choose between alternatives after the basics of material welfare/security are assured. The 2018 book made the connection between foundational economy and citizenship which was developed in a subsequent collection of essays⁴⁸. From our point of view, the important point is that foundational citizenship has to be about active choice and voice not a list of entitlements.

Here again there are complications, if freedom is about what citizens (not we as experts) value. In this case, political elites and technical experts must do policy with and for citizens who should have voice; and must not do policy to citizens whose role is to gratefully receive in a transactional system where the political classes promise that if you pay your taxes they will deliver the services. Representative democracy may be better than all the alternative systems of government, but it is not enough to offer electors occasional choice of candidates with policy slates when lobbyists and politicians informed by focus groups work through manipulative slogans. A basic need like adult care or a problem like climate change will remain a wicked problem in democracies because parliamentary representation is a poor mechanism for building a stable political consensus on problem definitions and solutions

Hence the relevance of new devices like citizens juries and assemblies which are not panaceas but do allow meaningful citizen participation in decisions about complex issues. The quality of citizen deliberation is also related to their everyday participation and involvement in community projects hence a key part of this renewal project is the empowering and support of that diverse mix of citizen groups, social movements, associations and social projects we commonly call civil society. The UK has experimented with a citizens assembly on social care⁴⁹ and climate change⁵⁰ and Wales has hosted two citizens juries on social care⁵¹. The results are hugely encouraging because they show how informed citizens can make serious judgements about complex issues and take citizens beyond the reach of the cheap rhetorical slogans and scare mongering which have become the currency of electoral politics.

⁴⁷ Sen, A. (2001). *Development as Freedom*, Oxford, OUP.

⁴⁸ Barbera, F. and Jones, I.R. (eds.). (2020). *The Foundational Economy and Citizenship Comparative Perspectives on Civil Repair*, Bristol, Bristol University Press.

⁴⁹ Involve and House of Commons. (2018). *Citizens' Assembly on Social Care: recommendations for funding social care*.

⁵⁰ <https://old.parliament.uk/business/committees/committees-a-z/commons-select/business-energy-industrial-strategy/news-parliament-2017/climate-change-and-net-zero-chairs-comments-17-19/>

⁵¹ <https://www.climateassembly.uk/> and <https://gov.wales/understanding-social-care-experiences-citizens-citizens-jury-report-2020>

At the same time, we need a new kind of social research which both enquires into (and respects) what people collectively value in their communities or spaces of interaction whether local, regional or national. Hence, through the Morriston community study⁵² we discovered a disconnect between well-meaning Welsh government policy makers and their citizens. Welsh policy makers are preoccupied with transport infrastructure which they hope will extend labour markets and attract inward investment; ordinary Welsh citizens attach great importance to the condition and availability of local social infrastructure like public parks, high streets and neighbourhood youth club. In urban societies which are increasingly segregated by income and compartmentalised by car use, this social infrastructure is a crucial bridging facility which underpins functioning democracy.

This kind of research reminds us of how complicated any listing of needs and wants quickly becomes when 21st century humans are social animals living in a society where new technologies continuously expand the field of what is cheaply possible and available to most citizens; as we see with Zoom and Skype for work and family in lockdown. Certainly, high income societies tend to produce ever longer lists of more sophisticated intermediate goods which meet basic needs and allow participation at some cost to the planet. Thus, housing needs heating or cooling according to climate but most citizens would now include thermostatically controlled central heating as a North European necessity and maybe add air conditioning for hot climates like South Australia; while experts would then add that large investments are necessary to de-carbonize housing and reduce wasteful energy consumption on heating and cooling.

For all these reasons we prefer the term social needs to human needs. Of course, there are some basic human needs and the classification of foundational activities as those which supply daily essentials recognises basic needs for food, shelter and warmth. But human need can seldom (maybe never) be encountered in unmediated form because in every period it is met by and fuses with specific collective socio technic systems which, as we explain below, are themselves important objects of analysis for policy makers. In early modern European urban settlements, human faeces were carted away as night soil and then often used as agricultural fertiliser; after the late nineteenth century European cities built large reservoirs to feed flush toilets with ball cock tank filling and the flush toilets were connected to glazed clay pipe sewers whose discharge increasingly went to treatment plants while artificial fertiliser was made from oil and natural gas feed stock.

More broadly, the configuration of systems like housing or transport is immediately not so much a matter of choice but of sunk cost and physical formatting which leaves not just individuals but whole communities with few options. This is classically the case in our car dependent towns where, outside London, the car is now the essential tool for accessing work, shopping, family and leisure. In the Welsh towns we are currently studying, more than 90% of households on recently built middle class estates have one or more cars and 70% of

⁵² Calafati, L., Ebrey, J., Froud, J., Haslam, C., Johal, S. and Williams, K. (2019). How an ordinary place works: understanding Morriston, *Foundational Economy Research Report*, May.

households on social housing estates are car owners. The post 1980 provision of out of town and edge of town residential, retail and public service provision has resulted in a society of live/work/spend disconnects where car use is obligatory for many journeys; while many town centres, which citizens value, also decay.

This is a useful reminder that if the foundational economy is driven by household needs and wants, this economy also has a supply side which formats goods and service delivery and thereby shapes collective necessity and possibility for citizens. The argument is well made by Schafran *et al.* in their important recent book on the urban social contract: if our social aim is Senian freedom built on a foundation of realised capabilities, then agency in urban, industrial societies depends not just on individual human bodies but on collectively provided socio technical systems. From this insight, Schafran *et al.* develop their concept of a reliance system which we would use more loosely to denote any socio technical system which enables citizens to access foundational goods and services which are important for the well-being of citizens and the planet⁵³

Reliance systems mobilise material resources and technical expertise, classically through systems of networks and branches grounded in place and operating in a specific institutional context of regulation and governance. Their output is an intermediate good or service which addresses a social need. Thus, in nineteenth century cities, clean piped water is the intermediate good which along with sewers addresses urban public health via the control of infectious disease. The foundational economy is then an assemblage of reliance systems specific to time and place which (from an FE 2.0 perspective) collectively secure the well-being of current and future generations.

A reliance system will often include high tech and precision elements, as with electricity generation and grid distribution since the 1930s or food distribution which relies on bar codes and temperature-controlled supply chains since the 1980s. But the whole system will usually be an untidy assemblage of heterogeneous financial, physical and political elements. Viability of goods or service provision depends on the alignment of several conditions: a business model (with or without a profit surplus) which is financially stable and stakeholder credible, access to physical resources, supply chains and suitable conversion technologies, and the political capacity to regulate provision or directly deliver goods and services.

If revenue streams are stable, reliance systems are often in technical or political transition which diverts revenue to new corporate players; as with the initial creation of national telecoms utilities in Europe from the 1920s onwards, the privatisation of these landline firms in the 1980s and the subsequent rise of mobile telephony partly outside the domain of dominant land line operators. All reliance systems have capital and operating costs and unintended consequences (physical and financial) which may offset any benefits; as we now discover with reliance systems which have a heavy carbon footprint. There is often conflict or

⁵³ Schafran, A., Smith, M.N. and Hall, S. (2020). *The Spatial Contract: A New Politics of Provision for an Urbanized Planet*, Manchester, MUP.

contest, as in housing, health or social care, about where to draw the boundary line between social provision and private consumption.

The foundational challenge is designing new reliance systems and reformatting old reliance systems under conditions of great difficulty because addressing citizen needs is not the same as adequately satisfying citizen needs at acceptable social cost with a viable financial business model. Producer practices will often shape provision which may or may not be culturally sensitive and relevant to users. Issues of coverage, access and quality are inherent in many network and branch systems when cherry picking customers is financially attractive if provision in low density areas incurs high capital costs but brings in modest revenues. The classic examples here are about rural provision of electrification before the 1950s or high-speed broadband in the 2010s. If political agency requires that users be the judges, non-users will also want a voice if as taxpayers they are subsidising the service or as investment fund managers looking for a return on their investment.

From our previous work on UK pig meat supply⁵⁴ through our book on outsourcing⁵⁵ to our most recent work on the NHS⁵⁶ we have researched specific cases and that has helped to inoculate us against binary thinking about the superiority of state versus market provision (or vice versa). In the private sector, we have criticised the blundering and unstable outsourcing conglomerates which seek high returns from a changing portfolio of activities they do not understand; or the transactional approach of supermarkets who use power against suppliers. But we also recognise that the state can be a bad steward of foundational services, as classically in the case of British Rail before privatisation. Here successive governments stunted on revenue support and capital investment for a socially valuable and capital-intensive activity where users will never through passenger fares or freight charges cover the operating and capital costs of the system ⁵⁷.

State and private ownership both have dogmatic political supporters on left and right but both are inherently prone to failure insofar as they operate through thin simplifications. We would accept that large bureaucracies are technically well suited for operating technically complex, integrated systems like railway systems or electricity grids. But as James C Scott⁵⁸ argues, “seeing like a state” is a problem insofar as large organisations (public and private) work through knowledge at a distance and codified rules while not valuing metis or the practical skills and hence do not acquire intelligence which responds to local requirements.

⁵⁴ Bowman, A., Froud, J., Johal, S., Law, J., Leaver, A. and Williams, K. (2012). Bringing Home the Bacon: from trader mentalities to industrial policy, CRESC Research Report, June.

⁵⁵ Bowman, A., Ertürk, I., Folkman, P., Froud, J., Haslam, C., Johal, S., Leaver, A., Moran, M., Tsitsianis, N. and Williams, K. (2015). What a waste: outsourcing and how it goes wrong, Manchester, MUP.

⁵⁶ Froud, J., Haslam, C., Johal, S., Law, J. and Williams, K. (2020). When Systems Fail: UK acute hospitals and public health after Covid-19, Foundational Economy Research Report, June.

Bowman, A., Folkman, P., Froud, J., Johal, S., Law, J., Leaver, A., Moran, M. and Williams, K. (2013). The Great Train Robbery: the economic and political consequences of rail privatisation, CRESC Public Interest Report.

⁵⁸ Scott, J.C. (1999). Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed, New Haven, Yale University Press.

The problems are compounded insofar as private or public organizations commit to forms of planning which involve the imposition of grand designs.

Equally, from our original report on the “missing middle” (for the FSB Wales)⁵⁹ we have been concerned to distinguish between financialised corporate business and the many micro and small and medium-sized enterprises (SME) businesses whose calculations and values are different. In sectors where SMEs of limited ambition and varying capability are completely dominant, there are limited returns from spending large amounts of time and effort denouncing extractive, mobile (corporate) business or spending much effort in promoting not for profit social enterprise. Our analysis of residential care shows how extractive, debt based private equity business models are fundamentally ill suited to the activity because they add costs and bring risks; but the private equity chains control less than one quarter of the beds with half or more of the beds operated by smaller for-profit SME firms⁶⁰.

As we argue in our recent study of Welsh vocational education, the better (for profit and not for profit) SMEs in Welsh care and construction are “shining lights” which combine commercial acumen with social values of service to the local community which often limit their ambitions to grow⁶¹. Increasing the stock of these grounded firms should be a major policy objective. This is urgent in regions like Wales, where the SME share of employment is more or less flat over the last twenty years as large firm employment has declined; the increasing share of employment is in micro firms which account for 37% of Welsh employment and on average employ less than two workers so that they are not so much firms as artisan with helpers.

⁵⁹ Bowen, R., Brill, L., Froud, J., Folkman, P., Johal, S. and Williams, K. (2015). The missing Welsh Mittelstand: an argument for re-connecting finance with ownership, *CRESC working paper 139*.

⁶⁰ Burns, D., Cowie, L., Earle, J., Folkman, P., Froud, J., Hyde, P., Johal, S., Jones, I.R., Killett, A. and Williams, K. (2016). Where does all the money go? Financialised chains and the crisis in residential care, *CRESC Public Interest Report*.

⁶¹ Buchanan, J., Froud, J., Lang, M., Lloyd, C., Smith, B. and Williams, K. (2021). *Enabling Renewal: Further Education and Building Better Citizenship, Occupations and Business Communities*, Wales, Colegau Cymru, (forthcoming 2021).

The care-ful practice of radical policy

In the years since 2013, foundational thinking has slowly penetrated the UK mainstream mainly in the form of reports and papers which recommend a refocusing of industrial policy from high tech and tradeable sectors to foundational and overlooked sectors⁶². In itself, this is sensible because UK industrial policy was, and is, too narrowly focused. As we pointed out in our original 2013 manifesto⁶³, the UK has a large volume of employment in foundational activities which account for more than 40% of all employment; whereas, for example, the industrial strategy challenge funds announced in 2017 covered less than 2% of all UK employment.

But the resulting discussion of a broader kind has been confused and confusing because the mainstream has through the foundational lens discovered another mundane or “everyday economy”; but the main stream reads that newly discovered economy through the lens of its earlier preoccupation with the aim of increasing productivity and marketable output. The Greater Manchester Combined Authority and others then add to the confusion by identifying this everyday economy with a subset of low wage/ low productivity activities like care, retail and hospitality where, for various structural reasons it is difficult to raise productivity.

Readers of this working paper (or our 2018 book)⁶⁴ will realise that foundational thinking is in any case about more than industrial policy which is a sub domain of mainstream economic policy. The idea of substantive freedom for active citizens challenges the whole mainstream idea of separate economic and social policy domains where the first priority is to fix the economy as productive machine before secondary redistribution of income and output for social ends. The foundational approach is different because the aim is not to grow economic output and increase firm level productivity but to meet social needs by varying the composition of output and reorganising reliance systems.

From a foundational point of view, it is necessary to change not only the object of state policy by focusing on foundational sectors but also to change the form of intervention by policies which reform chain governance in reliance systems. Indirectly, this connects with much beyond the foundational economy Through reliance systems the foundational economy is connected into the tradable and competitive sectors. So that, for example, the largest manufacturing sector in the UK is food processing which directly feeds into the foundational economy of supermarkets delivering food to households on a daily basis. The food processing sector is in turn connected to other manufacturing sectors being probably the largest

⁶² see, for example, IPPR Economic Justice Commission Report (2019) and Jacobs, M. (2017). IPPR working paper on Industrial Strategy or GMCA (2019) Greater Manchester Local Industrial Strategy.

⁶³ Bentham, J., Bowman, A., de la Cuesta, M., Engelen, E., Ertürk, I., Folkman, P., Froud, J., Johal, S., Law, J., Leaver, A., Moran, M. and Williams, K. (2013). Manifesto for the Foundational Economy, CRESC Working Paper 131.

⁶⁴ The Foundational Economy Collective. (2018). Foundational Economy: The infrastructure of everyday life, Manchester, MUP.

purchaser of capital equipment in the UK and an intensive user of digitally controlled technologies for temperature controlled storage and distribution on a just in time basis.

The point with the foundational approach is not that tradable and high-tech is irrelevant but that these sectors are seen as adjuncts to a reliance system (or in more traditional terms, a supply chain or provision system) that delivers what matters to people.

In this section of our working paper, it is therefore necessary to consider the broader obstacles to foundational delivery and the problems of the post administrative state and its three characteristic policy defaults of avoidance, announcement and hyper innovation. Here our analysis focuses on the conditions of purposive action and our argument is about how the obstacles to change can be overcome through processes of experiment and learning. Because in the foundational approach we do not start by always knowing what to do and how to do it.

A particular kind of industrial policy was re-discovered by New Labour after the 2008 financial crisis and continued under Coalition and Conservative governments, up to and including the May administration. This type of industrial policy was about public/private partnership for supporting early-stage innovation in glamorous high tech (wheels, wings, bio-tech etc.) and materialised in the under-performing Catapult Centres⁶⁵. In parallel, Mariana Mazzucato was advocating a more visionary, entrepreneurial state, mission oriented focused version of high tech industrial policy.⁶⁶ Her arguments are likely to influence the next iteration of UK industrial policy under Boris Johnson and have already influenced the Scottish government whose new National Investment Bank⁶⁷ has £2 billion of funding to support a mission oriented industrial strategy.

The problem with Mazzucato's style of industrial policy is that it generalises from the special case of industrial policy for great power national winners (which is irrelevant to the UK or Scottish governments). The promise is that all can imitate the success of the United States in the Cold War era, which invested public funds in applied basic research whose outputs were then incorporated in market making, disruptive new products like smart phones and search engines. But the USA in the 1970s or China in the 2020s are both special cases of great power success where commercialized innovations and a large domestic market provide a product and process base for fast growing, cash generating corporates who combine a large domestic employment base with global reach.

The UK case in the 2010s and 2020s is very different and the best-case result is something like Arm Holdings, the Cambridge based firm whose processor chips are dominant in smart phones, tablets and smart TVs. Arm is a research and design only operation based on intellectual property. After nearly 30 years of growth, the firm employs less than 7,000 worldwide and Arm is no longer independent because (like many other British firms with

⁶⁵ Ernst and Young, (2017). *Catapult Centre Review*, Department for Business, Energy and Industrial Strategy.

⁶⁶ Mazzucato, M. (2013). *The Entrepreneurial State*, Anthem: London.

⁶⁷ Mazzucato, M. and Macfarlane, L. (2019). *A mission oriented framework for the Scottish National Investment Bank*, UCL Institute for Innovation and Public Purpose Working Paper, UCL, London.

attractive technology) it has been bought out and sold on as part of global portfolio shuffling. As for Scotland or Wales, they do not have the high-tech clusters of the South of England and need to think about industrial strategy outside the frame of mission.

The foundational economy provides the basis for an alternative approach. The concept of reliance system (as outlined in the previous section of this report) provides the basis for distinctive foundational interventions where the aim is to build FE 2.0 reliance systems like wood economy and rebuild FE 1.0 reliance systems like health care considering environmental constraints. The focus of the mission-oriented approach is on the economy as it should be, so that it becomes more competitive through a stock of high performing firms. The focus of foundational strategy is on the polity we have and how government and governance in systems of splintered agency can create reliance systems with benefits for the current and future generation of households.

Most of what the mission-oriented approach considers to be primary is secondary from a foundational point of view. The stock of capable firms is more a consequence than cause of success in foundational strategy; the measure of foundational success are not thin abstractions like GDP per capita but household well-being, which requires a supply of basic services plus residual household income without over burdening the planet. Above all, government grants and patient finance are necessary but not sufficient because complex systems like wood economy or healthcare can never be fixed by simply putting in more money at one point.

In the mission approach, the catalyst of change is funding which is the prerequisite for acquiring and deploying the kinds of leading-edge knowledges that are, in this way of thinking, classed as ‘innovation’. In the foundational approach, the catalyst of change is coordination of various kinds because systems are primarily fixed by managing and redistributing power. Very often, UK investment in acquiring new knowledges would only be sensible after we had drawn on global practice in thinking and doing; as, for example, international practice about, for example, turning wood pulp into fabrics, or integrating health and care systems. World understanding trumps world beating every time.

The problem with old and new reliance systems is not a shortage of early-stage innovation and its diffusion but a deficiency of coordination. Effective co-ordination means various things in different systems. In wood economy, intervention is required to end stasis and align different government, private and third sector actor through governance. Here we argue that the success of Eire’s afforestation and the failure of Welsh afforestation shows the need for a lead actor to taking responsibility for chain coordination from tree planting in small plots to higher value-added processing of wood products going into timber frame construction. In another reliance system like health care⁶⁸, margin of safety is a crucial issue because intervention must recognise the impossibility of robust service delivery if acute hospitals have

⁶⁸ Froud, J., Haslam, C., Johal, S., Law, J. and Williams, K. (2020). When Systems Fail: UK acute hospitals and public health after Covid-19, *Foundational Economy Research Report*, June.

no buffers and pathology labs no surge capacity. Here we argue that the first step is for the central government to resile from top-down pressure for continuous “efficiency gains” which are in effect resource cuts.

Exhibit 2: Mission oriented industrial strategy vs foundational system intervention

	Mission oriented industrial strategy	Foundational system intervention
Focus	Innovation as applied knowledge with benefits from firms operating on the supply side	Reliance systems essential to the well-being of current and future generations of households on the demand side
Aim	Addressing broad challenges & missions; moving to the economy as it should be	Fixing and developing sustainable reliance systems in the polity we have
Leading vs understanding and following	Be a regional & national knowledge leader; encourage active disruption	Draw on global thinking and doing (e.g., by licensing technologies) before focusing local efforts
Catalyst	Patient long-term investment with finance as the catalyst; because market economies have private funding gaps	Coordination is the catalyst through alignment of governance; with finance as necessary but not sufficient input
Institutions and actors	Acquiring and deploying knowledge is crucial to innovation; markets provide good signals after early-stage innovation	Systems are fixed by managing and directing power; hence the importance of government (for the return on what we already know)
Intended outcome/result	Generic supply side returns like productivity and growth from stock of new or higher performing firms	System specific household benefits for FE 1.0 current & FE 2.0 future generations; capable firms as system output

If various reliance systems require different forms of intervention, that also signals the important point that building new reliance systems and rebuilding old systems in FE 2.0 is now more difficult than it was in earlier time. This is because the development of reliance systems and their subsequent direction depends on the alignment of three preconditions: the mobilisation of stakeholder alliances, a viable financial business model and relevant governmental initiatives and permissions. This alignment was never straightforward under FE 1.0, and it becomes hugely more complicated with FE 2.0 which adds the environmental dimension, and poses new challenges and new constraints arising from the need to coordinate new sets of actors.

In FE 1.0, the construction of a material or providential reliance system was within the competence of a single political actor, whether a municipality or central government or private company. Thus, nineteenth century municipalities across the UK created town gas companies and city water utilities; and local mutual societies, as in Tredegar and Llanelli in the 1930s, could move ahead of the central state in pioneering social insurance which covered all health care costs for whole populations. FE 1.0 systems often involved new technology like electricity with prime movers operating in a space where there was no established competition. Much of the knowledge base required for reliance system development and operation was then technical engineering of one kind or another. After initial choice of technology, the extension of networks and the addition of branches -whether in electricity or food distribution- was often a matter of replication.

In FE 2.0 the construction of new reliance systems or the reformatting of old reliance systems requires co-ordination and the overcoming of resistances built into the dominant modes of private governance by financial markets and public governance by political institutions. Financial market governance dominates private sector calculations by larger players, and this means investment project approval *ex ante* depends on predicted high hurdle rates of return as a prelude to steady extraction for rapid pay back. Political agency is splintered and siloed when many public services are delivered by not-for-profit autonomous institutions -health boards, housing associations, academy schools, further education colleges and universities- all operating in silos and working their own business models.

In terms of formal government, there is multi-level complexity. In the UK after Brexit, the supra national EU remains relevant as the arbiter of market access for services and there is limited scope for UK regulatory divergence without EU retaliation. Within the UK we have Westminster government and three Celtic national governments with assemblies and limited home rule; then we have added elected mayors with very limited powers in English city regions superimposed on borough level local authorities; plus, we have local authorities differently organised within the four nations so that Wales, for example, has no fewer than 22 unitary local authorities for a population of just over 3 million.

Against this background, the administrative capacity of central and local state has been undermined to the point where in many policy domains we have a *post-administrative state* which lacks the organisational, local and task-specific forms of expertise necessary for effective administration. The formal apparatus of modern public sector top-down management control is everywhere so that we have strategies, mission statements, initiatives, business plans, key performance indicators, risk registers, regulators and many forms of audit. But administrative capacity has been hollowed out. Thirty years of churning public service reorganisation, followed by a decade of austerity cuts, have undermined administrative capacity by removing public servants with specialist technical and administrative expertise and destroying the organisational relations that go with these.

These problems are not confined to the UK. For instance, in Germany, local authorities have been unable to spend the modest sums allocated for infrastructure renewal partly because they lack technical and planning staff (Chazan⁶⁹ 2019). But post-administrative incapability is a particular problem in the UK. Our polity is by international standards highly centralised and incapable of the delegation necessary to manage heterogeneity so that the Welsh and Scottish governments, for example, have very limited tax varying and borrowing powers. While privatisation, outsourcing and deregulation (to deliver grandly conceived top-down policy designs and objectives regardless of specifics) were centrally important to both Conservative and New Labour governments for many years between 1979 and 2010.

Outsourcing and deregulation in the UK led not just to policy fiascos but also to social tragedies. The Grenfell Tower fire was caused by the undermining of building regulation and inspection, which resulted in sub-contracted, poorly fitted and highly combustible cladding panels on many high-rise blocks. But the problem now is that there is no short-term alternative when in-house capability is limited. In crisis, UK government departments have no choice but to default to distress outsourcing without any of the controls necessary for sensible results. Thus, whenever something has to be done quickly and at scale in the Covid-19 crisis, the British government has turned to outsourcing companies. It turned to Deloitte to assist with procuring PPE, to Serco and others to run regional testing sites and contact tracing, and to KPMG to build field hospitals.

Against this background, government must be the catalyst and facilitator of change but government-initiated change processes often or usually miscarry in one of three ways:

- First, we have avoidance when governments cannot get started with complex problems which involve resistance from threatened “loser” groups and/or require major tax changes; the classic here is how successive governments have deferred reforms which would address the sustained underfunding of adult social care.
- Second, we have paralysis, where governments make bold announcements and set policy targets but there is no administrative follow through: the classic example here is Welsh afforestation where twenty years of well-intentioned strategy have not turned into planted trees.
- Third, we have hyper innovation where under achievement and disappointment becomes the rationale for further innovation; the classic example here is the English NHS between 1991 and 2012 when the life expectancy of individual organizational units was below ten years as the purchaser provider split was imposed.

If the political processes of liberal democracy are to get beyond these kinds of ineffectuality, it is necessary to get beyond technocratic managerialism and the ideal of control in pursuit of some one dimensional ideal like efficiency and the associated denial of local complexity and

⁶⁹ Chazan, G. (2019). Investment pot overflows as Germany’s infrastructure crumbles: Failure to tackle repairs blamed on construction capacity rather than lack of funds, *The Financial Times* (online edition).

incommensurability. This requires also going beyond the illusion that one principle (like privatisation or social enterprise) will produce reliably beneficial results. The English NHS was disorganised by principled reorganisation which created autonomous units working their business models on either side of a split between hospital service providers and primary care purchasers. And we have here suggested that the remedy is not applying more of the same management but some learning from the clinical “logic of care” i.e., the modest, nuanced, consultative and iterative approach of clinical teams to the managing of chronic conditions like diabetes⁷⁰.

It could be argued that present day financialised capitalism is a chronically ill patient whose ailments are partly the consequence of inept earlier acute treatments. But, like all analogies the logic of care analogy is incomplete. So it is worth spelling out what the careful practice of policy would entail in rebuilding old and building new reliance systems:

- First, the care-ful practice of policy entails sober analysis of magnitudes, linkages and business models in specific activities so that radicals have an understanding of what available policy levers can realistically achieve given local circumstance and develop a sensible apprehension about unwanted consequences. The available policy levers will vary according to time and place, so that rent control is currently strategic in Berlin but unthinkable in Birmingham. The engagement of specifics will then displace generic recipes like Community Wealth Building which everywhere recommends redirecting public purchasing towards firms whose invoices have local post codes (but often long supply chains elsewhere). This kind of autarchic Keynesianism in one small area opens the way for competitive localism without any discrimination about where the value is added. A more discriminating approach would recognise that public purchasing dominates in a reliance system like adult care where purchasing is a strategic lever for reform of supply side providers and working conditions; but that public purchasing is completely marginal in relation to household demand in the food system so that any case for reform of the public plate has to be socio-cultural.
- Second, the care-ful practice of policy has to start by recognising that we often do not know what to do but, from analysis of specifics, we do know where to start with securing radical change and are prepared to learn from experience. We can all quite rightly criticise the dogmatism of post-1980 reform in countries like the UK which recommended privatisation in activities like air traffic control or railways where there was not enough revenue in the system to cover the inevitable requirement for extraction. But, it also needs to be recognised that dogmatic renationalisation inverts the mistake by making the state responsible for covering capital investment and operating costs in hollowed out activities where no form of pricing will conceivably cover all of the system’s costs. Language about ending extraction, reacquiring assets and taking back control should not be allowed to obscure the point that renationalisation or ending outsourcing means new responsibilities for management, pricing, capital expenditure and operating subsidy. This is a live issue in the UK where activities like waste disposal can be re-municipalised (for a

⁷⁰ Mol, A-M. (2008). *The logic of care: Health and the Problem of Patient Choice*, Abingdon, Routledge.

variety of non- financial reasons should be re-municipalized) but will at best be marginally profitable and occasionally loss making. Again, clarity about objectives and consequences is required, and then some realism about priorities and about the relative merits of costly nationalisation against low cost social licensing.

Radical politics has been, and always will be, a politics of enthusiasm concerned to defeat vested interests, expand administrative capability and deliver the reliance systems that make life safe and civilised for current and future generations of citizens. The challenge is whether this fine ambition to democratically reform governance and government can in the twenty first century be fused with a hefty dose of informed pragmatism and a willingness to learn from experience in rebuilding reliance systems. On these conditions, radical politics can become an effective means to transition towards transformation.