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Evidence review to support the development of a Wellbeing Economy strategy in Scotland

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Contents

Summary4

Background6

What is the purpose of the economy and the role of an economic strategy? 14

How should an economic strategy be devised? 14

What are the assumptions underpinning the current economic approach and what is the evidence for these assumptions? 15

To achieve a Wellbeing Economy vision, what does the evidence suggest should be the strategic approach and what are the uncertainties? 23

Recommendations for future work 30

Conclusions 30

References 31

Summary

The Scottish Government published its 10-year National Strategy for Economic Transformation (NSET) in 2022. The NSET set out an ambition to create a Wellbeing Economy, but Non-Governmental Organisations (NGOs) who advocate for a Wellbeing Economy and environmental sustainability were critical both of the contents of the NSET, and the process used to create it. This paper seeks to provide a review of evidence to better inform the future development of economic strategy in Scotland, and rebalance the advice the original NSET was based upon, such that it might have a better chance of realising a Wellbeing Economy in the future.

The global leaders of Wellbeing Economy thinking and practice, the Wellbeing Economy Alliance (WEAll), define a Wellbeing Economy as one that is, “designed with the purpose of serving the wellbeing of people and the planet first and foremost; in doing so, it delivers social justice on a healthy planet”. A Wellbeing Economy should democratise the economy so that people are not subjected to economic decisions that do not serve their interests and which cause harm. It is therefore important that the development of economic strategy and policy is the product of a democratic process, and uses evidence from those with expertise in, and experience of, a Wellbeing Economy.

The world faces a series of interconnected crises (“polycrisis”), including climate change, biodiversity loss, stalled life expectancy trends, eroded public services, rising poverty, threats to democracy, and global conflict. The current economic design is an important cause of these crises, not least because of the assumptions which underpin economic decision-making, economic models and dominant public and political discourses around the economy. Recent empirical reviews of the underlying evidence for key economic assumptions show that these are flawed and do not achieve the objectives claimed.

The NSET should be an articulation of how we can achieve a Wellbeing Economy. However, the current NSET contains fundamental misunderstandings of the core principles and goals of a Wellbeing Economy. Using the available evidence and working back from outcomes that characterise a Wellbeing Economy (around planet, material resource equity, solidarity, culture and knowledge, health, peace and safety), intermediate outcomes and the actions, policies and changes required to realise the outcomes can be identified.

We identify that the following are urgently needed at scale:

- changed growth narrative;
- increased plural ownership of economic assets, including social enterprises and co-operatives;
- increased public ownership of assets and industries;
- voices of workers and service users integral to the planning and delivery of publicly owned industries;
- strengthened trade unions;

- address wealth accumulation mechanisms (rent, interest, profits, capital gains, speculation);
- redistributive taxes;
- selective industrial taxes focused to create a transition away from industries that are ecological unsustainable and which create ‘failure demand’;
- closure of international tax havens and tax evasion/avoidance mechanisms;
- business regulation and accountability;
- investment in foundational economy and what supports ‘good lives’;
- investment in nature restoration;
- and investment in de-carbonised energy and technology.

These powerful leverage point¹ interventions are needed if a Wellbeing Economy is to be realised. It is our position that the GDP-focussed vision of the Scottish Government undermines, and will continue to do so, the scale, scope and effectiveness of their work in these areas.

However, this list should not be considered as exhaustive or comprehensive. We have identified that further work is needed in four areas to deepen our understanding of how to realise a Wellbeing Economy beyond the approach taken to date:

1. A deep deliberative and participatory process to gather the collective views and intelligence of the population on the design of our economic strategy, with commitment to action and routes for ongoing public scrutiny.
2. Mapping and interrogation of economic power in Scotland and how it is used to serve particular interests at the expense of the population at large.
3. Developing a theory of social change and empowerment that could create the conditions and context in which the design and implementation of a genuine Wellbeing Economy strategy is feasible, including understanding of the key forms of power that are needed for implementation.
4. Creation of better models of the economy which integrate ecology, health and social phenomena, use assumptions that have real-world validity, which take a systems approach, and are transparent in facilitating public debate and scrutiny.

The current economic design in Scotland, and which is dominant across the world, is an important cause of the multiple crises we face. Reorientating towards a Wellbeing Economy is urgently needed, and the economic strategy to achieve this should be based upon a democratic process and robust evidence. This paper seeks to make a contribution to this evidence base.

Background

The National Strategy for Economic Transformation (NSET)

The NSET was published in 2022 by the Scottish Government as Scotland's economic strategy for the following 10 years.² The strategy articulated the need to move to a Wellbeing Economy, whereby the economy would be redesigned to serve ecological, social, equity and health outcomes. This was in line with the commitments made by the then First Minister Nicola Sturgeon to this agenda, and the leadership demonstrated by Scotland as part of the Wellbeing Economy Governments (WEGo) group.

However, despite this ambition, the content of the NSET fell far short of what would be required to achieve a Wellbeing Economy.^{3,4} There was no definitive move away from economic growth being the primary goal of the strategy, despite the widespread critiques made of this objective in recent years.⁵⁻⁹ Furthermore, the Scottish Government made economic growth one of its four priorities in May 2024 (alongside eradication of child poverty; tackling the climate emergency by investment in green energy and infrastructure; and improving Scotland's public services as an investment in Scotland's future health, equality and prosperity), something that is likely to undermine the other priorities.¹⁰ There was also frustration about the lack of consultation and public engagement in the creation of the strategy, and at the lack of clear and urgent actions that would have potential to achieve the Wellbeing Economy ambitions and address the urgency of current challenges.^{3,4}

Supporting the creation of the NSET was a series of 'evidence papers'. One was produced by civil servants and another was from 'Industry Leadership Groups and Sector Groups'. Finally, there was a paper collating evidence from Regional Economic Partnerships. It is our view that these evidence papers were, and remain, a wholly inadequate basis to write an economic strategy.

Notwithstanding the problems of a lack of public engagement and a participatory process, the range of interests represented in these evidence papers is very narrow. Furthermore, there was little or no evidence produced in these papers that justified the decisions ultimately included within the NSET. Much of the evidence presented was simply a rehearsal of existing data on economic activity and trends, and descriptions of current activity and challenges across different sectors.

It seems likely that by 2023 some ministers and officials were frustrated by what they perceived was a lack of focus on accelerating economic growth. The recent change in First Minister and Cabinet Secretary for the Economy was accompanied by a change in titles for various Cabinet and Ministerial positions, with the terms Wellbeing Economy and Community Wealth Building (amongst others) being dropped.

Given that there is a change in First Minister and priorities, this paper aims to provide a contribution to the evidence base that ministers and officials will use in developing and implementing economic strategy and policy for the coming years and which citizens can use for assessing them. We cannot undertake a participatory process with the resources and authority we have, but we do represent broader interests than those whose evidence was published alongside NSET, and we hope that this

might represent a step towards this. We do not currently have the time nor resource to undertake detailed economic modelling or systematic literature reviews, but we have used our knowledge of the literature to bring an evidence-informed perspective to the debate.

Global Polycrisis

We currently live in an era of polycrisis.¹¹ The World Economic Forum, for example, has identified a series of interconnected challenges including war, ecosystem damage, supply chain collapse, inflation, population health challenges, state collapse, adverse outcomes from technological advances, and erosion of social cohesion.¹²

Arguably, even this somewhat gloomy analysis of risk is too optimistic and misses the point. We are currently on track for catastrophic climate change, even though we have robust scientific analyses of the scale of the problem and the required responses, and despite pledges from global leaders dating back to 1990 that urgent action would be taken.¹³ The declaration by several governments, including the Scottish Government, of a ‘climate emergency’, has not been accompanied by sufficient urgent action. Even on its own metrics (which exclude substantial important sources of Greenhouse Gas (GHG) emissions, including those embedded in imports), the Scottish Government is failing to meet its GHG reduction targets and the lack of a credible plan to achieve these has resulted in ministers having to repeal the legislation that mandates their achievement.^{14,15}

The challenge of climate change is compounded by ecosystem damage and biodiversity loss, and the potential catastrophic impacts that this may have, not least on food supplies.¹⁶ Future projections of how biodiversity loss and climate change will transpire are uncertain, not least because of the presence of a series of ‘tipping points’ after which large-scale catastrophic change will rapidly occur due to non-linear system interactions. But despite the uncertainty, damaging changes will occur.¹⁷

Other elements of this polycrisis are less talked about. Life expectancy across the UK and several other high-income countries stopped improving around 2012, bucking the trend that stretches back to the end of World War II.¹⁸ For people living in the 30% most deprived areas in the UK, life expectancy has consistently fallen since then.¹⁹ This predates the COVID-19 pandemic and has continued since restrictions ended.¹⁹ It is now clear that the widespread implementation of austerity policies for almost 14 years, particularly those which have cut public service provision and the real value and dependability of social security benefits, have been instrumental in causing these harmful impacts on life expectancy.²⁰⁻²² Inflation has eroded real household incomes, particularly for those already living in poverty,^{23,24} and has had a particular impact in the UK because of our dependency on fossil fuels (the most important driver of rising prices).²⁵

Democracy across the world is also under threat. A functioning democracy needs media that is free to report the truth and which disseminates unbiased and accurate information. This is increasingly undermined by the concentration of media in the hands of wealthy owners and elite interests.²⁶⁻²⁸ Regulations are needed to prevent undue influence arising from wealth (and the

associated funding of political parties, campaigns and media).²⁶ We have seen the consequences of this in relation to misinformation around vaccines and conspiracy theories.^{26,29} We are not immune to these pressures in Scotland. We are exposed to global media, including the individually differentiated and almost unregulated (mis)information disseminated by social media and the internet.³⁰ Even within traditional news outlets such as the printed press and television, ownership has become increasingly concentrated amongst a wealthy elite, reducing balance and objectivity in the information society is exposed to. More fundamentally, there is a sense that real power has become more distanced from politics and its associated democratic structures.³¹ This is particularly true of economic power, and the lack of economic democracy.³² Where democracy is weakest, we have seen political polarisation and increased popularity of ‘strong leaders’, contributing to structural racism and international conflicts and genocides such as in Burma, Ethiopia, South Sudan and Palestine.³³ Even when these conflicts seem distant, they can have direct impacts at home. For example, the war in Ukraine and associated sanctions on Russia has been a substantial contributor to the higher inflation seen during 2022 and 2023, something which has further exacerbated economic, social and health inequalities.^{23,24}

These issues are global in nature, the resolution of which will require highly skilled international leadership and co-operation over a prolonged period of time, twinned with social and economic democratisation.³⁴ However, despite the limitations of devolution, the economic strategy in Scotland can make a contribution towards these global challenges.

Scottish Challenges

Despite a long period of economic growth, economic inequalities in Scotland and across the UK are wide, having rapidly increased during the 1980s and 1990s.³⁵ There have been several contributors to this increase. Technological change has had impacts on labour markets, reducing some of the jobs that the working class relied upon. Trade union rights were weakened and there has been increased casualisation of work. There were dramatic changes in taxation which reduced its progressivity. A suite of policies that implemented privatisation and deregulation were introduced which led to increased concentration of ownership of economic assets, contributing to a rise in ‘rentierism’ rather than rewarding productive activities.³⁶⁻⁴² Globalisation and private ownership meant that a substantial part of the wealth and profit arising from economic activity in Scotland accrues elsewhere, often avoiding taxation.^{43,44} As the price of housing and land has increased, this has become an important source of wealth inequalities between owners and renters, and another mechanism through which income flows from poorer to richer groups.^{45,46}

Not only have life expectancy trends changed, but health and illness of the population has deteriorated. Mental health problems are increasing in young people,⁴⁷ healthy life expectancy is rapidly declining,⁴⁸ and chronic conditions (e.g. in relation to obesity) have increased.^{49,50}

Despite the stalling of life expectancy trends, Scotland’s population is also ageing and birth rates have fallen. With the withdrawal of the UK from the European Union, the number of economic migrants from continental Europe living and working in Scotland has decreased, contributing to

Scotland's rising 'dependency ratio' (the ratio of children and older adults to the working-age population).⁵¹

The challenges to the financial sustainability of Scottish public services were laid out back in 2011.⁵² It was argued by the Christie Commission that widespread adoption of preventative approaches, as a means to reducing 'failure demand' (the avoidable demands on public spending due to the harms caused by the current economic model) was essential otherwise demand would outstrip what was financially possible.⁵² Although some preventative approaches have since been adopted, most notably in relation to public health legislation on tobacco and alcohol use, they have not been sufficiently adopted to have successfully achieved this aim.⁵³ Tax revenue growth has been low since 2010, likely to have been caused (at least in part) by austerity which reduced demand in the economy.⁵⁴

As noted above, 14 years of austerity have had devastating consequences across the UK, not least on population health and life expectancy trends.^{20,22} The consequences of austerity are broad, encompassing a deterioration in the availability and quality of public services, a reduction in the many aspects of culture (including the number of cultural institutions, opening hours, accessibility, and affordability), and widespread reduction in living standards.⁵⁵⁻⁵⁷ The impacts have been disproportionately felt by women, people on low incomes, migrants, and people with disabilities.^{22,58-61} The Scottish Government has limited borrowing and tax raising powers, and thus the UK-wide austerity policies have largely been imposed in Scotland, albeit with some mitigations and different choices about the areas of public spending that have been cut.^{22,58-61}

The Scottish Government's fiscal position, that is the amount of money available to fund public services, is currently very tight. There are three substantive causes of this: reductions in spending by the UK Government that have worked through Barnett consequentials to effectively reduce the block grant; reluctance to use the full range of existing taxation powers, and high inflation which has increased costs. The Scottish Government funded larger public sector wage increases than elsewhere in the UK and additional social security benefits, in part funded by higher and more progressive income taxes. Decisions to freeze the regressive council tax for many years has acted to reduce real revenues (although the Scottish draft budget published in 2024 has proposed to increase council tax rates). The net result of this has been a further round of cuts to Scottish public services and very restricted options for spending.⁶²

Finally, the proportion of economic assets owned by non-UK citizens is higher in Scotland than most other nations, contributing to a substantial outflow of profits (amounting to £36.5 billion in 2021 alone).⁶³ Foreign ownership of economic assets is the intended and predictable consequence of economic strategies which seek to attract Foreign Direct Investment (FDI), something that the Scottish Government remains firmly committed to. The consequences of this model of economic ownership are profound. It leaves the workers (and government tax revenues) vulnerable to changes in economic decisions made by people abroad whose only concern is profit maximisation. This in turn damages economic democracy and puts pressure on the government to compete for FDI by lower business taxes, fewer regulations and subsidies.⁶³

Economic policy at the root of the polycrisis

Importantly, the global polycrisis is not unrelated to economic policy. We argue, leaning on the work of a wide range of scholars, that it is the current dominant economic design that is driving most of these issues (Table 1). As such, Scotland's economic strategy is a crucial element of responding to the causes of the polycrisis, and small tweaks are unlikely to be sufficient. Although Scotland is only part of the global system, it can contribute to change and demonstrate leadership. For some aspects of the polycrisis, Scotland has some agency to effect change (e.g. wealth and income inequality, population health), albeit with the context of a globalised economy and UK Government policies on reserved matters. Scotland could also become a leading case study for how a small, but relatively rich, country could embrace transformational change to a more inclusive, fairer and environmentally-friendly economy that puts people before profit and challenges harmful vested interests.

Table 1 – How the current dominant economic system is driving the polycrisis

Polycrisis aspect	Contributing economic mechanisms	Implications
Climate change	Economic activity has not been nor can reasonably expected to be sufficiently ‘decoupled’ from GHG emissions within the time left to avoid two degrees of warming, ^{64–66} the cause of climate change. ¹³ Current economic activity is thus driving increasing GHGs in the atmosphere, and further economic growth will exacerbate this.	Further economic growth in the current model will breach climate tipping points leading to widespread social, health and economic harms. ¹⁷ Rapid and radical change to reduce the size of particular economic sectors is needed.
Ecosystem damage and biodiversity loss	Ecosystems and nature are seen as resource inputs over which private property rights can be traded, and a location to ‘externalise’ unwanted by-products of production and consumption. Supply chains do not take account of the finite nature of many of their inputs. ^{67,68}	Outside of the narrow range of regulated areas, the only limits to ecosystem withdrawals are ownership and price, not the sustainability of ecosystems or broader non-monetised value put on it by society, thereby encouraging the disposal of by-products in the environment, externalising these costs to the producers but generating costs to others through ‘failure demand’. ⁵³
Population health	Population health depends upon access to a range of ‘determinants of health’, including public utilities, housing, work, income and public services. Inequalities in health are determined by inequalities in income, wealth and power. ^{69–71}	Erosion of welfare states, public services and social security systems as part of austerity policies implemented across many high-income countries since 2010 have caused overall mortality rates to stop improving, and a rapid widening in mortality inequalities. ^{21,22,48}

<p>Democratic erosion and racism</p>	<p>Anti-democratic forces generally identify a social group and argue that they are undeserving in some way. This is frequently an ethnic minority, but can also be welfare recipients, religious groups, sexual minorities and others.^{72,73} The neoliberal application of economic power takes many forms, but includes processes of voter suppression, reducing limits and regulations on campaign and political funding, and promotion by elite-owned media of narratives which are divisive, discriminatory and racist.^{27,33,74,75} This has been facilitated by the rise and dominance of under-regulated and elite-owned social media which has facilitated political polarisation and conspiracy theories.^{26,29,30}</p>	<p>Economic power now dominates the spaces and limits to democratic discussion and has eroded the ability of political processes to wield sufficient power over the design of the economy.³¹ This limits the ability of governments to legislate and introduce policies that could address the polycrisis and which might otherwise gain the support of NGOs and the public.</p>
<p>International conflict</p>	<p>Capitalism has been argued to both increase, as well as decrease, the likelihood of conflict.⁷⁶ Conflicts, as well as the human displacement they create, hurt economic productivity and growth, typically redistributing public funds towards defence production needs (the ‘war economy’) and the broader military-industrial complex.⁷⁷ In addition to the human and environmental costs, the recent rise in international conflict risks greater spending on the military with the attendant opportunity costs.</p>	<p>Military expenditure is unaffordable socially, environmentally, and financially. Concerted efforts at peace-making and addressing the causes of war is essential.</p>
<p>Wealth and income inequality</p>	<p>Six economic mechanisms have been described which exacerbate wealth and income inequalities: rent, interest, capital gains, profit, monopoly and speculation.^{45,46}</p>	<p>In the absence of countering policies,⁴⁶ these will tend to widen wealth and income inequalities, and the economic power that the elite have to prevent these mechanisms being regulated.²⁷</p>

<p>Poverty and cost of living</p>	<p>Levels of poverty and destitution in Scotland are high and have been increasing over the past decade.^{78,79} This is driven by a lack of income combined with a high and increasing cost of living and reduced access to essential public services. Social security for those out of work has been eroded and does no longer cover a decent cost of living. In addition, income from work is too low and/or too insecure for many people to escape poverty, with the majority of children living in poverty in Scotland part of in-work households.⁷⁸ Given the high levels of overall wealth and income in Scotland and the UK, the mechanisms for exacerbating income and wealth inequality outlined above play a key role in maintaining and exacerbating poverty.</p>	<p>Without efforts to counter the drivers of wealth and income inequality and to invest in a sufficient social safety net, poverty levels in Scotland and the UK will remain high.⁸⁰</p>
<p>Demographic trends</p>	<p>Rising costs (e.g. housing and childcare), increasing educational barriers to decent and well-paid work, and erosion of social security benefits for children create economic incentives to delay or forgo childbearing.⁸¹⁻⁸³ Increased hostility to immigration (see above) creating downward pressure on the rate of migration from countries with lower median age to countries with a higher median age.</p>	<p>Increased dependency ratio (number of young and old in the population compared to the number of working age), creating increased fiscal pressure on governments because of a growing difference between tax revenues and the needs for public spending.⁸⁴</p>

What is the purpose of the economy and the role of an economic strategy?

The economy has been defined by McCartney et al. as, “consumption and production practices and how they are organised to provision individuals and populations”.⁸⁵ It is “a complex evolving system in which individuals, populations and organisations attempt to address their needs, wants and aims”, and is, “shaped by historical and geographical contingencies, power relations, culture, values, legal systems and ecology. The economy is, therefore, seen as embedded in society and partially reflective of prevailing social values”.⁸⁶ Furthermore, the society (and the economy as part of that) is wholly dependent on the health of the planet which we inhabit, and any economic strategy must recognise this.

A Wellbeing Economy is defined by the Wellbeing Economy Alliance as, “an economy that is designed with the purpose of serving the wellbeing of people and the planet first and foremost; in doing so, it delivers social justice on a healthy planet”.⁸⁷ In this way the economy is a ‘means to an end’, not the end itself.

With this description of what an economy is, and the purpose of the economy, the role of an economic strategy is to detail how this can be realised. A traditional approach to economic management is directed to achieving primarily economic outcomes like growth or full employment. However, since the objectives which have been set out have to be measured in non-monetary terms, a radically different approach will be needed, with a much greater degree of public control of the outcomes of economic activity. Necessarily there are substantial uncertainties given the scale of the challenge and rapid rates of change in society more generally. Nevertheless, it is possible to use the evidence we have available to provide some guidance on the most appropriate courses of action, and where further work is needed.

How should an economic strategy be devised?

The evidence paper published by the Scottish Government in March 2022 to support the development of NSET sought to present evidence on how to deliver, “transformational improvements to Scotland’s economic performance”⁸⁸. Although there is brief recognition that a wide range of indicators of performance are required to, “...capture broader wellbeing, environmental factors or the level of equality...”⁸⁸, the focus of the evidence review is almost exclusively focused on how to increase economic growth.

We argue that any economic strategy should be devised as an evidence-informed theory of change, which starts by articulating clearly the desired long-term outcomes, and then working backwards to determine the pathways and mechanisms that will achieve those outcomes, taking cognisance of assumptions, contextual dependencies, constraints, and unintended consequences (sometimes termed ‘backcasting’⁸⁹ or ‘outcomes-focused planning’). Using evidence of the

impacts of different interventions and policies, the strategy should then articulate what changes should be introduced to achieve what outcome, and through what mechanisms.

In our view, a central problem with NSET is that it does not clearly articulate what a Wellbeing Economy is, contains important misunderstandings, and does not demonstrate how the proposed policies and interventions link to this overall vision. Instead, it argues that increased economic growth will somehow achieve the range of desired social and environmental outcomes: “The ambition of this strategy is not just to grow our economy but, in doing so, to transform our country’s economic model so that we build an economy that celebrates success in terms of economic growth, environmental sustainability, quality of life and equality of opportunity and reward”.² This generates irreconcilable conflicts within the strategy.

Finally, a key characteristic of a Wellbeing Economy is economic democracy.⁸⁷ Economic democracy has been defined by Cumbers et al. as having four key elements:^{85,90}

1. Workplace and employment rights, (including the) levels of employment protection and insecurity, employee participation and managerial attitudes;
2. The degree of associational economic democracy, involving levels of trade union organisation, employers’ organisation and collective ownership (such as co-ops and credit unions);
3. The distribution of economic decision-making powers (including the concentration of economic power in financial sector, and the geographical concentration of government fiscal powers);
4. The transparency and democratic engagement in macroeconomic decision making (for example, the extent of different social partners in decision making, accountability and levels of corruption and central bank transparency).

The *creation process* of the NSET is central to achieving the fourth of these elements, and the *content* of the strategy is critical to influencing the other three, notwithstanding the limits of devolved powers. Therefore, creating a participatory process to ensure democratic involvement in the development and implementation of the strategy is essential.

What are the assumptions underpinning the current economic approach and what is the evidence for these assumptions?

Many of the dominant assumptions made in economic modelling and decision-making over recent decades, largely based on theoretical elaborations, have been firmly challenged in recent years by syntheses of empirical evidence of the actual impacts of economic policies (largely on economic

growth as an outcome^a, Table 2),⁹¹ as well as scholars with heterodox perspectives including feminist, ecological, Marxist, institutional and post-Keynesian economics.^{8,87,92-95} Many of these assumptions are empirical and testable, with many being found wanting (Table 2). Others are more ideological (and as such, less easily tested in empirical studies), and as a result are in many ways more pernicious (Table 3).

The current NSET is similarly based upon these flawed economic assumptions. It argues that a Wellbeing Economy can be achieved through creation of an entrepreneurial culture, taking advantage of new market opportunities (including increased inward investment and increased trade), and increased productivity (including the creation of ‘Greenports’). Economic growth (albeit caveated with the idea of growth for a purpose), the widespread use of market mechanisms across the economy, and the creation of an environment for business to thrive are all key drivers of the NSET. The evidence paper for NSET outlined and celebrated some of the businesses that were seen to have been successful in scaling-up in Scotland, but each of these were clearly and obviously businesses that are detracting from a Wellbeing Economy. Discussing the issues with each briefly is instructive in how celebrating business growth without any critical eye on the extent to which they are contributing to Wellbeing Economy outcomes is highly problematic.

1. Skyscanner is a website which seeks to identify the cheapest flights, car hire and hotel deals for consumers. Its success is predicated upon the promotion of international travel by unsustainable and fossil-fuel intensive modes.
2. Rockstar North is a video games company famous for creating the game ‘Grand Theft Auto’. Notwithstanding the critique that particular game has had for its celebration of misogyny, violence, crime, and its racist overtones,^{96,97} TaxWatch UK reported that despite very substantial profits and the company receiving £42million in tax credits, it had paid zero corporation tax between 2009 and 2018.⁹⁸
3. FreeAgent is an accounting software platform which was acquired by NatWest Group in 2018.⁹⁹ NatWest Group, formerly Royal Bank of Scotland, received £45billion bailout from the government in the midst of the 2008 financial crisis. Whilst the bank has been in public ownership it has continued to pay huge salaries and bonuses to individuals rather than using the profits to benefit wider society and public services.¹⁰⁰
4. Current Health is a ‘care at home’ remote healthcare platform. There are concerns about the problems with these types of technology and the risk of exacerbating existing inequalities.¹⁰¹ In addition the company was acquired by US multinational Best Buy which has been the subject of controversies related to anti-union activity¹⁰² and, as a multinational corporation they are able to take advantage of any number of tax arrangements that mean they pay minimal tax.^{103,104}

^a This evidence base demonstrates that much economic modelling and decision-making fails on its own pro-growth terms, notwithstanding the numerous problems with prioritising growth in this way (detailed in Table 3).

If the global financial crisis taught us anything, it was that business growth is not necessarily in the public interest, and can in fact be to the detriment of society generally. Take Barclays Bank as an example (the host venue for a recent speech by the Scottish First Minister¹⁰⁵). It is a “prolific user of tax havens”,¹⁰⁶ invests heavily in fossil fuels,¹⁰⁷ and was found guilty of illegal market manipulation as part of the LIBOR scandal.¹⁰⁸ Uncritical celebration and promotion of businesses and business interests is dangerous, and based on out-dated economic assumptions that do not stand up to the available evidence (Tables 2 and 3).

However, there are many aspects of the current NSET which are different, and which hold greater potential to contribute to a Wellbeing Economy. For example, Community Wealth Building (CWB) is prominent and includes the commitment to introduce CWB legislation. CWB is described as a “practical approach to local economic development that supports a wellbeing economy” (page 12²) which builds on existing work in local authorities including North Ayrshire. It includes the development of anchor institutions that ‘will work with communities and businesses to build a stronger, more resilient local economy, promote fair work, local spend, democratic ownership models and to use land and assets for the wider common good’ (page 21²). The CWB approach, offers practical steps to delivery of a Wellbeing Economy¹⁰⁹ and also represents an approach that recognises current structural inequalities embedded in our economic system and institutions.¹¹⁰ The NSET talks about it in very broad terms, without necessarily spelling out the steps that have been articulated elsewhere. There was always a risk that it was something that might shift and morph away from the original intentions, but the fact that it holds a prominent space in the NSET and legislation is planned, means that there is space for individuals and organisations to shape the eventual outcome. However, the recent cabinet reshuffle indicates that the potential benefits are at risk. The role of Minister for Community Wealth and Public Finance has been renamed and community wealth has been dropped, this alongside the disappearance of ‘Wellbeing Economy’ from the Cabinet positions suggests that there is a de-prioritization of this area of work. The Scottish Council for Voluntary Organisations (SCVO) and The Alliance, both prominent supporters of CWB and Wellbeing Economy more broadly, have highlighted similar concerns.^{111,112}

Given that the assumptions underpinning the current NSET are not well supported by the evidence, the need for an alternative approach is clear.

Table 2 – Key economic assumptions which are intrinsic to economic decision-making currently, and which have been subject to robust systematic reviews and meta-analyses of the underlying empirical evidence base

Common economic assumption	Empirical evidence	Revised evidence-informed assumption
Increasing minimum wages decreases employment levels.	There is little or no evidence of a negative association between minimum wages and employment. ¹¹³	Increasing minimum wage levels does not decrease employment levels.
International economic exchange (economic globalisation) increases economic growth.	Any effect of increased economic globalisation is small, and may in fact be zero. ¹¹⁴	Reducing trade barriers has little or no impact on economic growth.
High levels of public (government) debt reduces economic growth.	Any effect of higher public debt levels on economic growth is small, and may in fact be zero. ¹¹⁵	Higher public (government) debt has little or no impact on economic growth.
Lower business taxes increase economic growth.	There is no evidence that lower business taxes have any impact on economic growth. ¹¹⁶	Reducing business taxes has no impact on economic growth.
Stronger employment legislation reduces economic growth and increases unemployment.	Stronger employment legislation has little or no relationship with unemployment. ¹¹⁷	Legislation to protect employment has little or no impact on unemployment rates.
Tax cuts are more effective than spending increases in increasing economic growth.	Government spending increases, especially public investment and during recessions, are substantially more effective than tax cuts at stimulating economic growth. ¹¹⁸⁻¹²⁰	Government spending increases, particularly during recessions and when spending is on public investment, is more effective than tax cuts at stimulating economic growth.
High levels of public spending on infrastructure reduces private sector economic growth.	The effect of increased public spending on infrastructure is to increase private sector economic growth. ¹²¹	High public spending levels increase private sector growth rates.
Economic growth can be ‘decoupled’ from GHG emissions (i.e. where economic growth can increase whilst GHG emissions decline).	“Large rapid absolute reductions of resource use and GHG emissions cannot be achieved through observed decoupling rates, hence decoupling needs to be complemented by sufficiency-oriented strategies and strict enforcement of absolute reduction targets”. ^{65,66}	There is no evidence that economic growth has been decoupled from GHG emissions at the required scale. Emission reduction strategies must take a different approach, including changes in economic design, a move towards private sufficiency, and enforced absolute reductions in GHG emissions.

Table 3 – More generalised and ideological economic assumptions and the empirical evidence which relate to them

Assumption	Empirical evidence	Revised evidence-informed assumption
<p>Growth will solve our problems (or is required to solve our problems).</p>	<p>Economic growth has increased the material goods and services available in society and this has had many positive impacts. However, economic growth is also causing a wide range of negative impacts (see Table 1) leading to avoidable public expenditure, much of which can be described as ‘Failure Demand’.^{52,53} Measures of economic activity such as GDP do indicate the current taxable levels of wages, profits, sales, etc., which currently provide the dominant means of funding public spending.</p>	<p>Further economic growth cannot be assumed to be a positive force in achieving desirable outcomes in the future. On the one hand, measures of economic activity (e.g. GDP) indicate the level of many taxable resources and thus economic growth might provide a means for greater government revenues and vice versa. On the other hand, the negative impacts of growth lead to harm and higher need for government spending. The forms, modes and distribution of economic growth would need to be radically different in the future were they to make a positive contribution.</p>
<p>Businesses are the wealth (and job) creators in society.</p>	<p>The creation of wealth is best framed as the creation of value, but many definitions of value (including GDP) conflate value creation and value extraction (i.e. rents).^{122,123}</p>	<p>Real value in the economy is largely created by public sector actors creating and co-shaping markets in line with public purpose.^{122,123}</p>

<p>We need economic growth to fund public services and social security payments.</p>	<p>The limited borrowing powers of the Scottish Government accompanied by rising demands for services (and the increase in demand-led social security benefits) mean that the Scottish Government either needs to reduce spending in some areas, reduce demands, increase taxes, or increase the size of the economy. Within a UK context there is greater scope for government borrowing or the use of monetary policy to fund spending, and to reduce spending in undesirable areas (e.g. military). As noted above, there are substantial opportunities to reduce demands on services through prevention and reduction in failure demand.^{52,53}</p>	<p>Current devolved constitutional and currency arrangements mean that public services and social security payments need to be funded through a combination of the UK block grant and devolved taxes, the latter of which will vary depending on economic growth and the tax policies in place. However, changes to economic design have the potential to reduce ‘failure demand’ on public services.^{52,53} Furthermore, increasing the tax take in order to provide high quality services can reduce the need for private spending (i.e. move from the current ‘private luxury and public sufficiency’ model, to a ‘public luxury and private sufficiency’ model which provides public and shared goods and services in a more efficient and widely accessible manner, through public and shared community resources, reducing the purchasing and hoarding of goods and services by private households) and thus achieve multiple positive outcomes.¹²⁴⁻¹²⁶</p>
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<p>When income taxes become too high the total government revenues raised starts to decrease (otherwise known as the ‘Laffer Curve’). This can happen because individuals decide to work less, outward migration of richer people, discouragement of richer people from moving here, or ‘income shifting’ whereby people move taxable incomes to other jurisdictions with lower tax rates.</p>	<p>Recent evidence on the impact of higher income taxes in Scotland on higher earners has shown that net migration of taxpayers into Scotland after the tax rise increased.¹²⁷ There is evidence however, that ‘behavioural responses’ (i.e. people either choosing to work less or, more likely, people using accounting measures to avoid or evade tax) do impact on the amount of tax revenue raised.^{128,129} There are no systematic reviews available to understand the impact of marginal changes in taxes in the current context, and it is highly likely that the revenue consequences would also be dependent on the tax rules and enforcement in place, as well as the prevalent forms of economic ownership.</p>	<p>Recent increases in income taxes in Scotland have not caused a flight of higher taxpayers from Scotland, with an increase in in-migration instead observed.¹²⁷ However, it is likely that in the current context of economic ownership and tax rules enforcement, many people with high incomes would be likely to try to avoid or evade higher taxes and this would impact on the effectiveness of changes. Changing economic ownership, tax rules and the enforcement of tax rules are all likely to be required as well as changes to tax rates if the opportunities for revenue raising are to be maximised.</p>
<p>Increased labour productivity is desirable and necessary.</p>	<p>Labour productivity describes the amount of outputs – usually GDP - produced from a given level of labour input. Increasing productivity can be good because it produces more useful goods and services for less input, making things cheaper and more widely available. It can also reduce waste and forms of labour that are unfulfilling. However, given that GDP does not distinguish between useful value creation and value extraction, increasing productivity can also be the result of an increase in damaging extractive activities.^{122,123} Productivity also carries risks of creating unemployment and of work intensification whereby workers are stressed and overworked. There are also some areas of the economy which are fundamental for wellbeing but are not amenable to increased productivity, such as care work.^{130,131}</p>	<p>Care is needed to understand the routes to increased productivity, and the consequences in any particular setting, as it is an abstract concept which has the potential to mix positive and negative consequences. Resource productivity is likely to be a better objective for increasing efficiency of provisioning systems in the economy.¹³²</p>

<p>Government spending requires raising taxes or issuing debt.</p>	<p>“The UK Government creates new money and purchasing power when it undertakes expenditure, rather than spending being financed by taxation from, or debt issuance to, the private sector”.¹³³ Taxation and debt issuance are used to manage the economy and pursue other economic goals, such as maintaining economic stability or reducing inequality. This does not apply to the Scottish Government, which has limited money creation and borrowing powers within the devolved settlement.¹³⁴</p>	<p>The UK government should use the full powers it has to create money, borrow and tax for the purpose of building a Wellbeing Economy, including the much-needed investment in social welfare, public services and the tackling of climate change and environmental breakdown. Such investments should not be limited by arbitrary fiscal rules, as long as it avoids excessive financial instability.</p>
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To achieve a Wellbeing Economy vision, what does the evidence suggest should be the strategic approach and what are the uncertainties?

Given our view of what entails a Wellbeing Economy, and the outcomes it seeks to achieve (i.e. social justice on a healthy planet), our approach to developing a Wellbeing Economy strategy is to start from these long-term outcomes and then work backwards to identify the shorter-term outcomes that would lead to these in time, and then the range of policies and interventions that would be most likely to achieve these shorter-term outcomes.

The constraints and dependencies for implementing these changes need to be integrated into how the strategy is devised, phased and funded. Most fundamentally, it is our contention that any genuine Wellbeing Economy strategy will require a rebalancing of economic power away from the dominance of those with capital wealth,^{27,34} and as such will be resisted by those interests who currently benefit most – primarily elites and capital/business.^{27,74} Simply writing an alternative strategy without a parallel strategy of social empowerment which would build popular support through deep democratic processes would fail in the face of resistance and mobilisation by countervailing forces.³⁴ There is therefore a need to better understand economic power in Scotland and how this is used to avoid radical economic change.

One of the core principles to the approach we take is that reducing ‘failure demand’ on public services through prevention is essential. This includes reducing poverty and inequality, fostering decent work rather than low quality, precarious, or unnecessary jobs.¹³⁵ Policy coherence is essential to avoid shifting of problems between government departments, and to avoid different departments or levels of government causing unnecessary problems for each another. It also requires a focus on what some refer to as a ‘caring economy’: that is one which recognises the value of the myriad of unpaid roles and responsibilities (most of which are carried by women) and supports investment in social as well as physical infrastructure rather than viewing the former as ‘spending’ rather than ‘investment’.¹³⁶ It is also worth noting that other government strategies (not least the environment strategy) should not be subservient to the economic strategy: given that all human and economic life is completely dependent on the environment, it should be the other way around.

The perspective we take for this alternative strategy is Scotland, with recognition that Scotland currently sits within the UK and the Scottish Government has limited devolved powers. Changes in policy at UK and international level, as well as the changing global economic context will all be important in determining Scotland’s future economic trajectory. Nevertheless, the Scottish Government is not without agency, and there is much that can be done to progress towards a Wellbeing Economy with existing powers and in the existing and immediately foreseeable context. This is the space that we hope to articulate for a Wellbeing Economy strategy.

Figure 1 details our initial theory of change. As noted above, we start from the long-term outcomes we articulate as a reasonable vision for a Wellbeing Economy strategy. It is envisioned that these would be achievable after 10 or more years. These are:

1. Planet: society operates within planetary boundaries and ecosystems are restored.
2. Material resource equity: everyone has sufficient resources to live in comfort and to participate, and they are equitably distributed.
3. Solidarity: collectively we have an equal say in decision-making, an equal stake in society, and experience benefits equitably.
4. Culture and knowledge: collectively we experience a flourishing of culture and knowledge.
5. Health: collectively we experience good population health (defined by McCartney et al. as incorporating the average, distribution and inequalities in health across a population¹³⁷)
6. Peace: society is safe and peaceful at all levels.

Across the relevant outcomes (i.e. planet, material resource equity, solidarity, culture and knowledge, health, and peace and safety), the experiences would be equitable across the population. This includes eradication of inequalities across all social dimensions described by the Scottish Government's list of protected characteristics. If we were to achieve these long-term outcomes, in our view that would be the measure of a successful Wellbeing Economy.

To achieve these long-term outcomes, a series of intermediate outcomes that would be achievable within a 2-to-10 year time horizon are described. These do not neatly link to the long-term outcomes because each contributes to multiple outcomes simultaneously as part of a complex system. We have not attempted here to build a systems diagram for this, but we recognise the potential for feedback loops, tipping points and contextual interactions – indeed, in our view a Wellbeing Economy strategy should make use of these interactions because of the integrated nature of economic, social, ecological and other systems.

The intermediate outcomes we have identified are:

1. Levers of the state used in service of majority population defined by their economic position
2. Ownership of finance and business equitably distributed
3. Just transition (i.e. communities and individuals affected by degrowing sectors and industries are supported, including by retraining and redeployment into growing areas)
4. Degrowth of some sectors and industries (e.g. fossil fuels, military)
5. Reduced aggregate material resource consumption, carbon footprints, pollution
6. Growth of de-carbonised energy production and technologies
7. Growth of nature restoration activity
8. Contraction and convergence of material consumption
9. Equitable wages
10. Shorter working week
11. Fulfilling and useful work
12. Sufficient social security provision
13. Public spaces reclaimed and accessible
14. Participatory democracy
15. Universal service provision
16. Sustainable tax base

These intermediate outcomes are the mechanisms or pathways that if in operation for a prolonged period of time could be expected to result in the long-term outcomes. However, they are contextually dependent, as Scotland is part of a global system, and can neither achieve these outcomes in isolation, nor can it be insulated from global changes.

To achieve these intermediate outcomes, we have identified a series of actions, policies and changes that would generate them. This should be approached as an emergency response, reflecting the urgency of the polycrisis. These are:

1. Changed growth narrative
2. Increased plural ownership of economic assets, including land, social enterprises and co-operatives, encouraged by changes to property and land taxation, and enhancing community ownership rights
3. Increased public ownership of assets and industries (including land, energy, housing and food)
4. Voices of workers and service users integral to the planning and delivery of publicly owned industries
5. Strengthened trade unions
6. Address wealth accumulation mechanisms (rent, interest, profits, capital gains, speculation)
7. Redistributive taxes
8. Selective industrial taxes focused to create a transition away from industries that are ecological unsustainable and which create 'failure demand'
9. Closure of international tax havens and tax evasion/avoidance mechanisms
10. Business regulation and accountability
11. Investment in foundational economy and what supports 'good lives' (e.g. education, public services, utilities, etc. – described by others as the 'foundational economy'⁹⁵)
12. Investment in nature restoration
13. Investment in de-carbonised energy and technology

It is important to note here that successive Scottish Governments have attempted to progress policies, for example, to make taxation more progressive, or to invest in nature restoration. However, we appear caught in a loop where civil society continues, as we do here, to advocate for more significant action only to be met with refrains of 'we are already doing this' or 'we plan to do this'. In turn this is met with the refrain, 'no you're not' or 'your plans are inadequate'. Examples include the Wellbeing and Sustainable Development Bill^{138,139} and the Scottish Government's response to the recommendations of the 2019-20 Citizens' Assembly of Scotland¹⁴⁰).

What is behind this? We argue here that it is because policymakers do not, or cannot, recognise that the mindset from which they currently design, fund and implement their version of these policies ensures they reproduce the harms they seek to mitigate. Furthermore, their paradigm permits actions in other policy areas that directly undermine the stated environmental and social objectives of other initiatives.

So when inconsistencies, such as those outlined in Tables 2 and 3, are acknowledged and understood, seemingly logical policies like the Natural Capital Market Framework become difficult to reconcile with the aim of increasing investment in nature. This recognition necessitates the exploration of alternative approaches, from which it becomes possible to design and implement in ways appropriate to scale, scope, depth and speed required by the polycrisis.

It is at this level of mindset and paradigm shift that systems change can become most rapid¹ and it is why we order the above list to highlight the actions required first to allow later policies and actions to have their desired impact.

There are four important limitations to the theory of change detailed in Figure 1 that need to be acknowledged.

First, as noted but which is important to emphasise, it is our contention that an economic strategy and theory of change should result from a participatory process. Whilst we have not had the resources to run a fully participatory process, we are aware of the recommendations of the Citizens' Assembly of Scotland which has many overlaps with the proposals we make here (Box 1).¹⁴⁰

Box 1 – Summary of the recommendations of the Citizens’ Assembly of Scotland

- Expand the number of citizens’ assemblies and their role in decision-making
- Make the real living wage a requirement of all employers; make zero-hours contracts illegal
- Introduce taskforces to overcome poverty
- Give powers to a new body to find tax evaders and avoiders and recover those taxes
- Create tax incentives for businesses to follow good employment practices
- Publish taxes paid by organisations
- Greater transparency on government spending
- Invest in scientific and technological innovation
- Favour small and medium enterprises in investment decisions
- Provide more mental health support services
- Implement housing rent caps
- Create more apprenticeships
- Increase access to sports and arts for young people
- Reduce waste and ban the use of non-biodegradable products
- Invest in renewable energy sources
- Subsidise housing retrofitting; greater transparency in outsourcing of government contracts
- Investigate a four day working week
- Expand the powers of the Scottish Parliament
- Increase the coverage of mobile phone networks
- Make the internet free to access
- Lower the age for retirement
- Reintroduce community policing
- Guarantee free education for life.

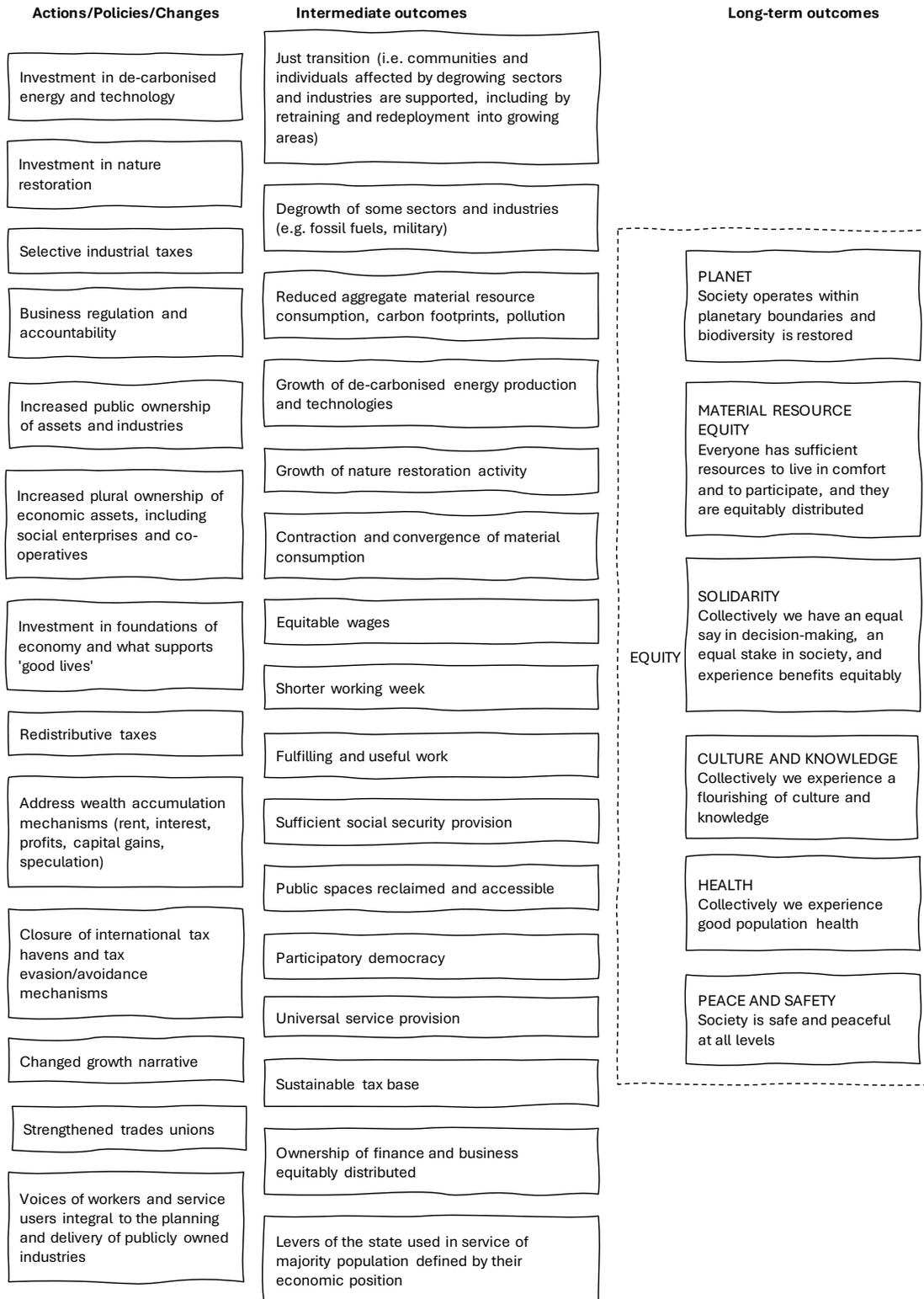
However, for any participatory process to be meaningful there should be full commitment to a process that can make specific recommendations that are taken seriously by those with the power to make changes. The current ways in which the Scottish Government have supported participatory and deliberative processes leaves much room for improvement. Rather than outputs of large numbers of recommendations (60 in the case of the Citizens Assembly for Scotland 2020, and 81 in the case of Scotland's Climate Assembly, which have in turn been received by the Scottish Government with responses that 'sets out the plans we already have in the areas the Assembly has identified for action'¹⁴⁰), there should be ongoing scrutiny and debate about the ways that government responds to the recommendations of citizens who have committed time and energy into such processes. As such, we are likely to have missed important aspects and important viewpoints.

Second, we are not aware of a comprehensive economic model which would allow for the fiscal constraints the Scottish Government faces to be assessed against the wide range of outcomes and system interactions that are important. Thus, the affordability and staging of different actions would need further detailed consideration.

Third, Scotland is part of a global system and is interdependent with changes occurring across the globe, and policies introduced internationally. More pointedly, many economic levers remain at the level of the UK Government, and this creates contextual boundaries for what decisions made in Scotland can achieve.

Finally, implementing a Wellbeing Economy strategy as detailed here would require a rebalancing of social and economic power. This rebalancing would be part of the economic strategy (e.g. by diversifying the ownership of economic assets and a more equal distribution of income and wealth), but it would also require a broader strategy of social change and action.³⁴ We identify this as an area for further work in the future.

Figure 1 – An initial theory of change for a Wellbeing Economy strategy



Recommendations for future work

It is clear that Scotland needs an economic strategy to ensure that the necessary actions to redesign our economy to meet Wellbeing Economy goals and achieve a 'just transition' are implemented and co-ordinated. However, we remain some way from having such a strategy. This paper has only scratched the surface of the work required to detail such a plan. There are several areas in which we feel there is specific work required:

1. A deep deliberative and participatory process to gather the collective views and intelligence of the population on the design of our economic strategy, with commitment to action and routes for ongoing public scrutiny.
2. Mapping and interrogation of economic power in Scotland and how is it used to serve particular interests at the expense of the population at large.
3. Developing a theory of social change and empowerment that could create the conditions and context in which the design and implementation of a genuine Wellbeing Economy strategy is feasible, including understanding of the key forms of power that are needed for implementation.
4. Creation of better models of the economy which integrates ecology, health and social phenomena, uses assumptions that have real-world validity, which take a systems approach and are transparent in facilitating public debate and scrutiny.

Conclusions

The current economic design in Scotland, and which is dominant across the world, is an important cause of the multiple crises we face. Reorientating towards a Wellbeing Economy is urgently needed, and the economic strategy to achieve this should be based upon a democratic process and evidence. Much of the current economic policymaking and understanding is based upon assumptions which are not borne out by the empirical evidence. Informed by what the evidence shows, and starting from the outcomes that would embody a Wellbeing Economy and working backwards, leads to a very different set of actions, policies and changes than those currently described in the NSET. We hope that this contribution can better inform the refresh of the NSET such that a Wellbeing Economy is more likely to be realised.

References

- 1 Meadows D. *Leverage Points: Places to Intervene in a System*. Hartland VT: The Sustainability Institute, 1999 https://1a0c26.p3cdn2.secureserver.net/wp-content/userfiles/Leverage_Points.pdf.
- 2 Scottish Government. *Scotland's National Strategy for Economic Transformation*. Edinburgh, 2022.
- 3 'Friends of the Earth Scotland', Scottish Environment LINK Economics Group, Wellbeing Economy Alliance Scotland, *et al.* *Ten Points for a Transformative Economic Strategy in Scotland*. <https://www.weallscotland.org/post/copy-of-how-transformative-is-scotland-s-strategy-for-economic-transformation>.
- 4 McCartney G, Hensher M, Trebeck K. How to measure progress towards a wellbeing economy: distinguishing genuine advances from 'window dressing'. *Public Health Research & Practice* 2023; **33**: e3322309.
- 5 Fioramonti L. Post-growth theories in a global world: A comparative analysis. *Review of International Studies* 2024; : 1–11.
- 6 Fioramonti L, Coscieme L, Costanza R, *et al.* Wellbeing economy: An effective paradigm to mainstream post-growth policies? *Ecological Economics* 2022; **192**: 107261.
- 7 Trebeck K, Williams J. *The Economics of Arrival: ideas for a grown up economy*. Bristol: Policy Press, 2019.
- 8 Jackson T. *Post Growth - Life after Capitalism*. Cambridge, UK: Polity Press, 2021.
- 9 Stiglitz JE, Sen A, Fitoussi J-P. *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Paris, 2009 <https://ec.europa.eu/eurostat/documents/8131721/8131772/Stiglitz-Sen-Fitoussi-Commission-report.pdf>.
- 10 The First Minister's Statement: "Priorities for Scotland". Edinburgh: Scottish Parliament Information Centre, 2024 <https://spice-spotlight.scot/2024/05/23/the-first-ministers-statement-priorities-for-scotland/#:~:text=These%204%20priorities%20are%3A%201%20To%20eradicate%20child,investment%20in%20Scotland%E2%80%99s%20future%20health%2C%20equality%20and%20prosperity>.
- 11 Whiting K, Park H. This is why 'polycrisis' is a useful way of looking at the world right now. 2023; published online March 7. <https://www.weforum.org/agenda/2023/03/polycrisis-adam-tooze-historian-explains/>.
- 12 *The Global Risks Report 2023: 18th Edition*. Geneva: World Economic Forum, 2023.
- 13 Pörtner HO, Roberts DC, Tignor M, *et al.* *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Working group II contribution to the IPCC Sixth Assessment Report.

Cambridge, UK: Cambridge University Press, 2022
<https://www.ipcc.ch/report/ar6/wg2/about/how-to-cite-this-report/> (accessed Oct 17, 2022).

- 14 Scottish Greenhouse Gas Statistics 2021. Edinburgh: Scottish Government, 2023
<https://www.gov.scot/publications/scottish-greenhouse-gas-statistics-2021/pages/4/>.
- 15 Scottish government scraps climate change targets. BBC News. 2024; published online April 18. <https://www.bbc.co.uk/news/uk-scotland-68847434>.
- 16 Biodiversity – evidence for action. London: Royal Society, 2021 <https://royalsociety.org/-/media/policy/projects/biodiversity/Biodiversity---evidence-for-action.pdf>.
- 17 IPCC. Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Intergovernmental Panel on Climate Change (IPCC), 2022.
- 18 Fenton L, Minton J, Ramsay J, *et al.* Recent adverse mortality trends in Scotland: comparison with other high-income countries. *BMJ Open* 2019; **9**: e029936.
- 19 Walsh D, McCartney G. Changing mortality rates in Scotland and the UK: an updated summary. Glasgow: Glasgow Centre for Population Health, 2023
https://www.gcph.co.uk/assets/0000/9348/Changing_mortality_rates_in_Scotland_and_the_UK_-_an_updated_summary_FINAL.pdf.
- 20 McCartney G, Walsh D, Fenton L, Devine R. Resetting the course for population health. Glasgow: Glasgow Centre for Population Health and the University of Glasgow, 2022.
- 21 McCartney G, McMaster R, Popham F, Dundas R, Walsh D. Is austerity a cause of slower improvements in mortality in high-income countries? A panel analysis. *Social Science & Medicine* 2022; **313**: 115397.
- 22 Walsh D, McCartney G. Social murder? Austerity and life expectancy in the UK. Bristol: Policy Press, 2025.
- 23 Richardson E, McCartney G, Taulbut M, Douglas M, Craig N. Population mortality impacts of the rising cost of living in Scotland: scenario modelling study. *BMJ Public Health* 2023; **1**: e000097.
- 24 Broadbent P, Thomson R, Kopasker D, *et al.* The public health implications of the cost-of-living crisis: outlining mechanisms and modelling consequences. *The Lancet Regional Health – Europe* 2023; **27**. DOI:10.1016/j.lanepe.2023.100585.
- 25 Guan Y, Yan J, Shan Y, *et al.* Burden of the global energy price crisis on households. *Nature Energy* 2023; **8**: 304–16.
- 26 Kickbusch I, Piselli D, Agrawal A, *et al.* The Lancet and Financial Times Commission on governing health futures 2030: growing up in a digital world. *The Lancet* 2021; **398**: 1727–76.

- 27 McCartney G, Dickie E, Escobar O, Collins C. Health inequalities, fundamental causes and power: towards the practice of good theory. *Sociology of Health & Illness* 2021; **43**: 20–39.
- 28 Happer C, Philo G. The Role of the Media in the Construction of Public Belief and Social Change. *JSPP* 2013; **1**: 321–36.
- 29 Ball J. *The other pandemic: how QAnon contaminated the world*. London: Bloomsbury, 2023.
- 30 Arora SD, Singh GP, Chakraborty A, Maity M. Polarization and social media: A systematic review and research agenda. *Technological Forecasting and Social Change* 2022; **183**: 121942.
- 31 Bauman Z. *Liquid Modernity*. London: Polity Press, 2000.
- 32 Cumbers A, McMaster R, Cabaço S, White MJ. Reconfiguring Economic Democracy: Generating New Forms of Collective Agency, Individual Economic Freedom and Public Participation. *Work, Employment and Society* 2020; **34**: 678–95.
- 33 Krieger N. ENOUGH: COVID-19, Structural Racism, Police Brutality, Plutocracy, Climate Change—and Time for Health Justice, Democratic Governance, and an Equitable, Sustainable Future. *Am J Public Health* 2020; **110**: 1620–3.
- 34 Wright EO. *Envisioning Real Utopias*. London: Verso, 2010.
- 35 OECD. Income inequality. <https://data.oecd.org/inequality/income-inequality.htm> (accessed Aug 4, 2023).
- 36 Scott-Samuel A, Bambra C, Collins C, Hunter DJ, McCartney G, Smith K. The Impact of Thatcherism on Health and Well-Being in Britain. *Int J Health Serv* 2014; **44**: 53–71.
- 37 Mirowski P, Plehwe D. *The Road from Mont Pelerin: The Making of the Neoliberal Thought Collective*. Cambridge, MA: Harvard University Press, 2015.
- 38 Collins C, McCartney G, Garnham L. Neoliberalism and Health Inequalities. In: *Health Inequalities: critical perspectives*. Oxford: Oxford University Press, 2016: 124–37.
- 39 Piketty T. *Capital in the Twenty-First Century*. Cambridge, MA: The Bellknap Press of Harvard University Press, 2014.
- 40 Stiglitz J. *The Price of Inequality*. London: Penguin, 2013.
- 41 Galbraith JK. *Inequality and Instability: A Study of the World Economy Just Before the Great Crisis*. Oxford University Press, 2012 DOI:10.1093/acprof:osobl/9780199855650.001.0001.
- 42 Christophers B. *Rentier Capitalism: Who Owns the Economy, and Who Pays for It?* London: Verso, 2020.
- 43 Bilicka K, Qi Y, Xing J. Real responses to anti-tax avoidance: Evidence from the UK Worldwide Debt Cap. *Journal of Public Economics* 2022; **214**: 104742.

- 44 Oats L, Tuck P. Corporate tax avoidance: is tax transparency the solution? *Accounting and Business Research* 2019; **49**: 565–83.
- 45 Sayer A. *Why we can't afford the rich*. Bristol: Policy Press, 2014.
- 46 Sayer A, McCartney G. Economic relationships and health inequalities: improving public health recommendations. *Public Health* 2021; **199**: 103–6.
- 47 Zhang A, Gagné T, Walsh D, Ciancio A, Proto E, McCartney G. Trends in psychological distress in Great Britain, 1991–2019: evidence from three representative surveys. *J Epidemiol Community Health* 2023; **77**: 468.
- 48 Walsh D, Wyper GMA, McCartney G. Trends in healthy life expectancy in the age of austerity. *J Epidemiol Community Health* 2022; **76**: 743.
- 49 Scottish Burden of Disease study. Forecasting the future burden of disease: Incorporating the impact of demographic transition over the next 20 years. Glasgow: Public Health Scotland, 2022 <https://publichealthscotland.scot/publications/scottish-burden-of-disease-study/scottish-burden-of-disease-study-21-september-2021/>.
- 50 Walsh D, Tod E, McCartney G, Levin KA. How much of the stalled mortality trends in Scotland and England can be attributed to obesity? *BMJ Open* 2022; **12**: e067310.
- 51 Trends in Scotland's population and effects on the economy and income tax. Edinburgh: Scottish Fiscal Commission, 2022 <https://www.fiscalcommission.scot/wp-content/uploads/2022/08/Trends-in-Scotlands-population-and-effects-on-the-economy-and-income-tax-August-2022.pdf>.
- 52 Commission on the Future Delivery of Public Services. Edinburgh: Commission on the Future Delivery of Public Services, 2011 https://webarchive.nrscotland.gov.uk/20200115025611mp_/http://www2.gov.scot/Publications/2011/06/27154527/0.
- 53 Chrysopoulou A, Anielski M, Weatherhead M. *Failure Demand: counting the true costs of an unjust and unsustainable economic system*. Glasgow: Wellbeing Economy Alliance (WEAll), 2022.
- 54 Blyth M. *Austerity: the history of a dangerous idea*. Cary, NC: OUP USA, 2013.
- 55 *Ending stagnation: a new economic strategy for Britain*. London: Resolution Foundation, 2023.
- 56 O'Connor J. *Reset: Art, Culture and the foundational economy*. Adelaide: University of South Australia, 2022 <https://resetartsandculture.com/wp-content/uploads/2022/02/CP3-Working-Paper-Art-Culture-and-the-Foundational-Economy-2022.pdf>.
- 57 O'Connor J. *Culture is Not an Industry: Reclaiming Art and Culture for the Common Good*. Manchester: Manchester University Press, 2024.

- 58 Abed D, Kelleher F. *The Assault of Austerity*. Oxford: Oxfam International, 2022
<https://www.oxfam.org/en/research/assault-austerity>.
- 59 Macdonald K, Morgan HM. The impact of austerity on disabled, elderly and immigrants in the United Kingdom: a literature review. *Disability & Society* 2021; **36**: 1125–47.
- 60 Ryan F. *Crippled: austerity and the demonization of disabled people*. London: Verso, 2019.
- 61 Walsh D, Dundas R, McCartney G, Gibson M, Seaman R. Bearing the burden of austerity: how do changing mortality rates in the UK compare between men and women? *J Epidemiol Community Health* 2022; **76**: 1027.
- 62 Local government budgets 2024/25. Edinburgh: Accounts Commission, 2024
<https://audit.scot/publications/local-government-budgets-202425>.
- 63 Dalzell C. Profit extraction: how foreign ownership drains Scotland’s wealth. Edinburgh: Common Weal, 2024 <https://commonweal.scot/wp-content/uploads/2024/02/Profit-Extraction-FINAL.pdf>.
- 64 Vogel J, Hickel J. Is green growth happening? An empirical analysis of achieved versus Paris-compliant CO₂–GDP decoupling in high-income countries. *The Lancet Planetary Health* 2023; **7**: e759–69.
- 65 Wiedenhofer D, Virág D, Kalt G, *et al*. A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part I: bibliometric and conceptual mapping. *Environmental Research Letters* 2020; **15**: 063002.
- 66 Haberl H, Wiedenhofer D, Virág D, *et al*. A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part II: synthesizing the insights. *Environmental Research Letters* 2020; **15**: 065003.
- 67 Hanlon P, McCartney G. Peak oil: Will it be public health’s greatest challenge? *Public Health* 2008; **122**: 647–52.
- 68 Heinberg R. *Peak Everything: Waking Up to the Century of Decline in Earth’s Resources*. East Grinstead: Clairview Books, 2007.
- 69 McCartney G, Collins C, Mackenzie M. What (or who) causes health inequalities: Theories, evidence and implications? *Health Policy* 2013; **113**: 221–7.
- 70 Marmot M, Allen J, Boyce T, Goldblatt P, Morrison J. *Health Equity in England: The Marmot Review 10 Years On*. London: Institute of Health Equity, 2020.
- 71 Krieger N. *Ecosocial theory, embodied truths, and the people’s health*, 1st edn. New York: Oxford University Press, 2021.
- 72 Maddow R. *Prequel: an American fight against fascism*. London: Torva, 2024.
- 73 Mason P. *How to stop fascism: history, ideology, resistance*. London: Allen Lane, 2021.

- 74 Friel S, Townsend B, Fisher M, Harris P, Freeman T, Baum F. Power and the people's health. *Social Science & Medicine* 2021; **282**: 114173.
- 75 The Geneva Charter for Well-being. Geneva: World Health Organisation, 2021 <https://www.who.int/publications/m/item/the-geneva-charter-for-well-being>.
- 76 Väyrynen R. Capitalism, War, and Peace: Virtuous or Vicious Cycles. In: Väyrynen R, ed. Raimo Väyrynen: A Pioneer in International Relations, Scholarship and Policy-Making: With a Foreword by Olli Rehn and a Preface by Allan Rosas. Cham: Springer International Publishing, 2022: 145–85.
- 77 Byrne EF. Military Industrial Complex (MIC). In: Poff DC, Michalos AC, eds. *Encyclopedia of Business and Professional Ethics*. Cham: Springer International Publishing, 2017: 1–5.
- 78 Poverty and Income Inequality in Scotland 2020-23. Edinburgh: Scottish Government, 2024 <https://data.gov.scot/poverty/#children>.
- 79 Fitzpatrick S, Bramley G, Treanor M, *et al.* Destitution in the UK 2023. York: Joseph Rowntree Foundation, 2023.
- 80 Poverty and Inequality Commission child poverty scrutiny report 2023-24. Edinburgh: Poverty and Inequality Commission, 2024 <https://povertyinequality.scot/publication/poverty-and-inequality-commission-child-poverty-scrutiny-report-2023-24/>.
- 81 Neels K, Murphy M, Ní Bhrolcháin M, Beaujouan É. Rising Educational Participation and the Trend to Later Childbearing. *Population and Development Review* 2017; **43**: 667–93.
- 82 Dioikitopoulos E, Varvarigos D. Delay in childbearing and the evolution of fertility rates. *Journal of Population Economics* 2023; **36**: 1545–71.
- 83 Zabak S, Varma A, Bansod S, Pohane MR. Exploring the Complex Landscape of Delayed Childbearing: Factors, History, and Long-Term Implications. *Cureus* 2023; **15**: e46291.
- 84 Wang H, Abbas KM, Abbasifard M, *et al.* Global age-sex-specific fertility, mortality, healthy life expectancy (HALE), and population estimates in 204 countries and territories, 1950–2019: a comprehensive demographic analysis for the Global Burden of Disease Study 2019. *The Lancet* 2020; **396**: 1160–203.
- 85 McCartney G, McMaster R, Shipton D, Harding O, Hearty W. Glossary: economics and health. *J Epidemiol Community Health* 2022; **76**: 518.
- 86 McCartney G, Hearty W, Arnot J, Popham F, Cumbers A, McMaster R. Impact of Political Economy on Population Health: A Systematic Review of Reviews. *Am J Public Health* 2019; **109**: e1–12.
- 87 Janoo A, Bone Dodds G, Frank A, *et al.* Wellbeing Economy Policy Design Guide. Wellbeing Economy Alliance (WEAll), 2021.

- 88 Scotland's National Strategy for Economic Transformation. Evidence Paper. Edinburgh: Scottish Government, 2022
<https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2022/03/scotlands-national-strategy-economic-transformation/documents/evidence-paper/evidence-paper/govscot%3Adocument/evidence-paper.pdf>.
- 89 Vergragt PJ, Quist J. Backcasting for sustainability: Introduction to the special issue. *Technological Forecasting and Social Change* 2011; **78**: 747–55.
- 90 Cumbers A. A new definition of economic democracy – and what it means for inequality. London School of Economics. 2018. <https://blogs.lse.ac.uk/businessreview/2018/03/03/a-new-definition-of-economic-democracy-and-what-it-means-for-inequality/>.
- 91 Gechert S. Reconsidering macroeconomic policy prescriptions with meta-analysis. *Industrial and Corporate Change* 2022; **31**: 576–90.
- 92 de Muijnck S, Tieleman J. *Economy Studies: a guide to rethinking economics education*. Amsterdam: Amsterdam University Press, 2021.
- 93 Jacobs M, Mazzucato M. *Rethinking Capitalism. Economics and policy for sustainable and inclusive growth*. Chichester: Wiley, 2016.
- 94 Marçal K, Vogel S. *Who cooked Adam Smith's dinner? A story about women and economics*. London: Granta books, 2016.
- 95 Foundational Economy Collective. *Foundational Economy: the infrastructure of everyday life*. Manchester: Manchester University Press, 2018.
- 96 Beerthuisen MG, Weijters G, van der Laan AM. The release of Grand Theft Auto V and registered juvenile crime in the Netherlands. *European Journal of Criminology* 2017; **14**: 751–65.
- 97 Polasek PM. A Critical Race Review of Grand Theft Auto V. *Humanity & Society* 2014; **38**: 216–8.
- 98 Gaming the tax system: How the makers of Grand Theft Auto managed to pay £0 UK corporation tax and claim millions in government subsidies whilst making \$\$\$ billions in profit. Taxwatch, 2019 <https://www.taxwatchuk.org/reports/gaming-the-tax-system/>.
- 99 FreeAgent taken over by RBS in £53m deal. *The Scotsman*. 2018; published online March 27. <https://www.scotsman.com/business/freeagent-taken-over-by-rbs-in-aps53m-deal-311219>.
- 100 Makortoff K. NatWest accused of 'unjust' profiteering after CEO paid £5.2m. *The Guardian*. 2023; published online Feb 17. <https://www.theguardian.com/business/2023/feb/17/natwest-makes-largest-profit-since-financial-crisis-on-higher-rates>.

- 101 Serrano Luiza Palmieri, Maita Karla C, Avila Francisco R, *et al.* Benefits and Challenges of Remote Patient Monitoring as Perceived by Health Care Practitioners: A Systematic Review. *The Permanente Journal*; **27**: 100–11.
- 102 Cox J. Here Is Best Buy’s Leaked Anti-Union Presentation. *Vice*. 2020; published online May 28. <https://www.vice.com/en/article/xg8xa3/best-buy-anti-union-presentation>.
- 103 Semuels. How Giant Corporations Can Still Get Out of Paying Taxes. *Time*. 2023; published online Oct 23. <https://time.com/6326583/tax-shelters-multinational-corporations/>.
- 104 Aston C. How much tax did multinational companies underpay in the UK last year? *Taxwatch*. 2023; published online Dec 14. <https://www.taxwatchuk.org/multinationals-tax-hmrc/>.
- 105 We are writing too many strategy documents - Swinney. *BBC News*. 2024; published online May 17. <https://www.bbc.co.uk/news/articles/c80zxvvp7zgo>.
- 106 Data from Barclays’ report shows why public country-by-country reporting is vital. Transparency International EU, 2017 <https://transparency.eu/open-data-for-tax-justice-project/>.
- 107 Barclays risks investor revolt with new fossil fuel policy. *Banktrack*, 2020 https://www.banktrack.org/article/barclays_risks_investor_revolt_with_new_fossil_fuel_policy.
- 108 What Was the LIBOR Scandal? What Happened and Impacted Companies. *Investopedia*, 2022 <https://www.investopedia.com/terms/l/libor-scandal.asp>.
- 109 Scotland’s National Strategy for Economic Transformation Evidence from Regional Economic Partnerships. Edinburgh: Scottish Government, 2022 <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2022/03/scotlands-national-strategy-economic-transformation/documents/evidence-regional-economic-partnerships/evidence-regional-economic-partnerships/govscot%3Adocument/evidence-regional-economic-partnerships.pdf>.
- 110 What is Community Wealth Building? Manchester: CLES <https://cles.org.uk/community-wealth-building/what-is-community-wealth-building/>.
- 111 O’Brien C. What happened to the Wellbeing Economy? Glasgow: Alliance, 2024 <https://www.alliance-scotland.org.uk/blog/opinion/what-happened-to-the-wellbeing-economy/>.
- 112 Brown K. Community Wealth Building, the road to where? Edinburgh: SCVO, 2024 <https://scvo.scot/p/91412/2024/05/15/community-wealth-building-the-road-to-where>.
- 113 Doucouliagos H, Stanley TD. Publication Selection Bias in Minimum-Wage Research? A Meta-Regression Analysis. *British Journal of Industrial Relations* 2009; **47**: 406–28.
- 114 Heimberger P. Does economic globalisation promote economic growth? A meta-analysis. *The World Economy* 2022; **45**: 1690–712.

- 115 Heimberger P. Do higher public debt levels reduce economic growth? *Journal of Economic Surveys* 2023; **37**: 1061–89.
- 116 Gechert S, Heimberger P. Do corporate tax cuts boost economic growth? *European Economic Review* 2022; **147**: 104157.
- 117 Heimberger P. Does employment protection affect unemployment? A meta-analysis. *Oxford Economic Papers* 2020; **73**: 982–1007.
- 118 Gechert S, Rannenberg A. Which fiscal multipliers are regime-dependent? A meta-regression analysis. *Journal of Economic Surveys* 2018; **32**: 1160–82.
- 119 Gechert S. What fiscal policy is most effective? A meta-regression analysis. *Oxford Economic Papers* 2015; **67**: 553–80.
- 120 Nijkamp P, Poot J. Meta-analysis of the effect of fiscal policies on long-run growth. *European Journal of Political Economy* 2004; **20**: 91–124.
- 121 Bom PRD, Ligthart JE. What have we learned from three decades of research on the productivity of public capital? *Journal of Economic Surveys* 2014; **28**: 889–916.
- 122 Mazzucato M. *The value of everything: making and taking in the global economy*. London: Penguin, 2019.
- 123 Mazzucato M, Ryan-Collins J. Putting value creation back into “public value”: from market-fixing to market-shaping. *Journal of Economic Policy Reform* 2022; **25**: 345–60.
- 124 Ross K. *Communal Luxury: the Political Imaginary of the Paris Commune*. London: Verso, 2016.
- 125 Monbiot G. Public luxury for all or private luxury for some: this is the choice we face. *The Guardian*. 2017; published online May 31.
<https://www.theguardian.com/commentisfree/2017/may/31/private-wealth-labour-common-space>.
- 126 Olma S, O’Connor J. Communal luxury: an introduction. *Making & Breaking* 2023; : 1–11.
- 127 Intra-UK migration of individuals: movements in numbers and income. London: HMRC, 2024
<https://www.gov.uk/government/publications/labour-market-participation-and-intra-uk-migration-of-taxpayers/intra-uk-migration-of-individuals-movements-in-numbers-and-income>.
- 128 Hope D, Limberg J. *The Economic Consequences of Major Tax Cuts for the Rich*. London: London School of Economics and Political Science, 2020.
- 129 The Exchequer effect of the 50 per cent additional rate of income tax. London: HMRC, 2012
<https://webarchive.nationalarchives.gov.uk/ukgwa/20140109143644/http://www.hmrc.gov.uk/budget2012/excheq-income-tax-2042.pdf>.

- 130 Himmelweit S, Mohun S. Domestic labour and capital. *Cambridge Journal of Economics* 1977; **1**: 15–31.
- 131 Hardt L, Barrett J, Taylor PG, Foxon TJ. What structural change is needed for a post-growth economy: A framework of analysis and empirical evidence. *Ecological Economics* 2021; **179**: 106845.
- 132 United Nations. Participants at Paris Forum call for shift from labour to resource productivity. 2013; published online April 5. <https://unis.unvienna.org/unis/en/pressrels/2013/unisous184.html>.
- 133 Berkeley A, Ryan-Collins J, Tye R, Voldsgaard A, Wilson N. The self-financing state: An institutional analysis of government expenditure, revenue collection and debt issuance operations in the United Kingdom. London: UCL Institute for Innovation and Public Purpose, 2022 <https://www.ucl.ac.uk/bartlett/public-purpose/publications/2022/may/self-financing-state-institutional-analysis>.
- 134 Olk C, Schneider C, Hickel J. How to pay for saving the world: Modern Monetary Theory for a degrowth transition. *Ecological Economics* 2023; **214**: 107968.
- 135 Graeber D. *Bullshit jobs: the rise of pointless work and what we can do about it*. London: Allen Lane, 2018.
- 136 *Towards a green and caring economy: briefing for a future government*. London: Women’s Budget Group, 2024.
- 137 McCartney G, Popham F, McMaster R, Cumbers A. Defining health and health inequalities. *Public Health* 2019; **172**: 22–30.
- 138 McLeod A, Mordin A, Piggot A, Girling A, Clark A. Joint letter led by WEAll Scotland. 2024; published online June 4. <https://www.weallscotland.org/post/over-150-campaigners-call-on-scottish-government-to-pass-world-leading-legislation?postId=665eed8d5c21f30f41701c78>.
- 139 McLeod A, Piggot A, Girling A, Tolmie A, Clark A. Joint letter led by WEAll Scotland. 2024; published online Sept 30. <https://www.weallscotland.org/post/over-130-campaigners-call-on-scottish-government-to-back-world-leading-legislation>.
- 140 Citizens’ Assembly of Scotland - Doing Politics Differently report: Scottish Government response. Edinburgh: Scottish Government, 2021 <https://www.gov.scot/publications/citizens-assembly-scotland-scottish-government-response-doing-politics-differently/>.

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The **Post-Growth Economics Network** links together researchers and practitioners accepting the existence of ecological limits to economic growth. Members work on issues such as, amongst others, ecological macroeconomics, environmental policy, economics of degrowth, energy economics and policy, climate change, fiscal policy for the socio-ecological transition, green monetary policy and green finance.

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