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Common Weal Policy

RESILIENCE ECONOMICS: AN ECONOMIC MODEL FOR SCOTLAND'S RECOVERY

COMMON WEAL

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www.commonweal.scot
www.sourcenews.scot

Or contact us at:
hello@common.scot

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INTRODUCTION

Imagine an economy which did not result in regular financial crises and which did not tend to fall over when external shocks hit it. Imagine an economy with diversity of business type, where employees are deeply involved in making businesses better, where they can negotiate fair wages and where economic activity is not concentrated in a few geographical areas. Imagine an economy which provided everyone with sufficiency and security, enough to live a good life now and confidence that they can live a good life in the future. Imagine if that economy enhanced their family life rather that detracting from it, made them healthier and not less healthy. Imagine an economy which created a strong society driven not by consumption but by community cohesion, high levels of trust and participation and by preventing the poverty that does so much damage. Imagine an economy which stops the alienation that comes from watching inequality rise and rise and the psychological harm of being driven to spend more and more (and being told you are failing if you fall behind in the spending race).

Imagine an economy which supports great public services and infrastructure rather than undermining them and allowing them to decline. Imagine an economy where powerful players can see democracy in action without always seeking to distort it for private benefit. Imagine an economy which allows our environment to recover, our wildlife to thrive and our climate to stabilise. Imagine an economy without plastic and chemical pollution, which ends waste and which does not need to keep taking more from dwindling global mineral resources. Imagine an economy the purpose of which is to create good lives, not to make small proportions of people richer. Imagine an economy which was, at its heart, useful; its workers having a clear sense of purpose and value in what they do, growing, building, making, serving, caring.

This would be a resilient economy – and the vast majority of citizens would choose this economy. So why can't they have it? This report argues that the barrier in Scotland is not lack of natural resources, talented employees, insufficient availability of energy or insufficient levels of national development. It argues that the barrier is the economic model that we use and the economic theory which underpins that model. It further argues that we've been stuck with this model partly because it suits a few people very well, partly from habit and partly because decision-makers have been persuaded there isn't an alternative.

So at the heart of this report is that alternative, an economic model designed to create the kind of economy envisaged above – itself designed to deliver the kind of society people deserve. The old economic model has been failing for a long time now and you can take your pick between growing inequality, increasing insecurity, declining wellbeing, environmental collapse or the sheer number of financial crises we've seen as evidence to demonstrate it. Its time was up anyway and its demise has been greatly hastened by the Covid pandemic. Going back to 'normal' is not only going to prove impossible, it would be utterly irresponsible. So let's recover forward to something better, a new economics for a new era, an economics designed for people and the planet.

This report is not a protest and its not a complaint. Its the solution.

WHAT IS 'RESILIENCE'?

It is urgent that we grasp fully the enormity of the crises faced by the world's current economic model. These are:

— Current serious problems with financial instability and the growing impacts of inequality

— The approaching impact of the disruption which will be caused by climate change and the other environmental crises

— The enormous loss in demand resulting from the Covid crisis and the spiralling damage this is going to do right across the economy.

All three have consistent patterns of impact though each has a different (though closely interrelated) cause. What links the causes is financial speculation, the rise and rise of 'rentier capitalism', very long 'just-in-time' supply chains, lack of manufacturing capacity in western economies and low solvency among households which have been driven into debt by housing costs and the hard-selling of cheap credit. What links the patterns of impact is instability and vulnerability. Profit has been maximised by running the over all economy and individual banks, businesses and corporations in a precarious way and to create increasingly precarious employment. This was predicated on 'global stability' – but we are finally realising that global stability in the midst of climate crisis is not possible. Where previously precarious working practices enabled maximum profit extraction on the assumption that there was no risk of business interruption, now they are showing us just how vulnerable our lifestyles are.

We must grasp the enormity of this not to paralyse ourselves in fear but to stimulate us to action. Where once profit was the only real goal of economic policy, now we must instead prioritise resilience. It is more important that we work to make sure we can sustain our quality of life rather than allowing it to involve more and more resource consumption. This makes us more and more vulnerable (and we must stop measuring quality of life as though it was synonymous with consumption and waste). The driver of our economy must now be resilience. There are three elements to that resilience that are indivisible:

— **Social resilience.** We need economic security for everyone, not only those with wealth. We also need stronger social institutions, cohesive and integrated communities and first rate public services.

— **Economic resilience.** We need an economy which gives us absolute confidence that it will deliver the goods and services we need to maintain our quality of life and it must create good jobs and the economic equality needed to create economic security for all. Everything else is secondary.

— **Environmental resilience.** We need to restore and protect our environment or we simply will not be able to live decent lives.

Without these we cannot create a resilient Scotland. Without a resilient Scotland many will live in fear of the future and all of us will pay a price. This is the priority of our generation.

We cannot build this new economy using only the tools which built the last one. We cannot build it without a firm, conceptual economic model that is underpinned by solid economic theory. And we cannot wait until some new theory emerges. Rather we must build a new economics from what we have. Thankfully that is not a problem. The current economic model is built around a single 'magic bullet' concept of the infallibility of free markets and this forced out alternative economic thinking which was built from different assumptions. But that broad range of alternative economic theories exists and can quickly be brought together to create an economic framework for national resilience.

That economic framework is Resilience Economics. This paper presents its theoretical underpinning. It is this which will drive Scotland towards a new, better economy for the future.

WHAT IS RESILIENCE NOT?

It's worth touching very briefly on what resilience does not mean. There are two recent uses of the concept of resilience in economics which Common Weal rejects entirely. The first is the idea of 'individual resilience'. This report will examine in detail what has made our economy vulnerable and why it produces so many social failures – and in both cases it quickly becomes clear that this is a structural problem and not the result of personal choices and behaviours. People who live precarious lives with insecure work are very seldom in that position because there is another choice they can make and it is not because they lack some kind of character attribute. These jobs exist in great numbers in the economy – someone has to fill them, so someone will always be in that vulnerable job.

But some do talk as if resilience as a function of the individual – that it is up to you to be the kind of person who can shrug of adversity and cope with change. This is little more than scapegoating victims of and economic system for the vulnerability they suffer and pits all against all in a battle to not be the ones in the bad jobs. That does nothing to reduce the number of bad jobs. Resilience is a function of the system and saying that it is up to an individual is like saying 'why can't this brick be as solid as a wall, but all by itself'. Achieving resilience is a collective act.

Similarly, one of the uses of the term resilience has implied that the meaning of resilience is that communities affected by rapid change or persistent economic failure must learn to cope with it better. In effect this is to say 'poverty and insecurity is inevitable so resilience is how well you can cope with it'. Again, Common Weal rejects this argument entirely. Poverty and insecurity are not inevitable and the ability to suffer quietly is not resilience. This report will explain that the goal is to remove the drivers of community suffering from the economic system in the first place. Resilience is not only collective it is national, and it is achieved or not achieved based on national decision-making. This does not mean centralisation, this means that you can't achieve justice if the macroeconomic framework is unjust, and it requires action at the legislative level to prevent that injustice.

WHY IS THE CURRENT ECONOMIC MODEL FAILING?

Since the 1980s the UK's economic development model has been a free-market, profit-driven model generally known as neoliberalism (or simply free market economics). This philosophy believes that collective benefit derives primarily from profit because profit creates prosperity through paying wages and paying for public infrastructure and services by being taxed. In this theory the more profit, the more public benefit. The ultimate goal was therefore defined as 'increasing growth value added' (the total sale value of what is produced minus the cost of production). This is best known as GDP growth and became the primary goal of governmental economic policy (with other measures such as unemployment, productivity, rates of innovation and investment and average incomes dropping in significance). An important part of this philosophy is the belief that profit is created by 'winners' and that the way to select winners is through maximum competition in a 'free market' where there is no external interference. Those who win and those who lose both 'deserve it' because profit has already been defined as merit and therefore the more profit, the more merit. A system of perpetual competition will therefore eventually achieve the maximum possible profit and therefore the best achievable society. In this theory the public good is achieved through 'trickle down' – that some of the concentrations of wealth in individual regions or held by individuals, corporations or wealth funds will somehow be reallocated by the free market down to those who don't have it.

However, this theory has substantial problems and these have been mounting in recent decades. Fundamentally, wealth has not 'trickled down' but has been increasingly concentrated. While public benefit may accrue from profit there are many ways to increase profits through means which act against public benefit. Increasing 'rent' on things in limited supply (like housing) creates profit, but only by extracting it from existing customers or others already in or trying to join the housing market. Allowing banks to take greater and greater risks can also increase profit (at the expense of stability and security), but again this is 'predatory profit'. The attraction is that these are forms of profit which can be achieved quickly (precisely because they are not generated through productive activity) and so in a profit-driven system the incentive to expand these industry sectors crowds out the incentive to invest in productive industry sectors like manufacturing.

Another crucial way that profit has been driven is through globalised long supply chains – the production process has been broken up and distributed to wherever costs are lower, even if those places are at the opposite sides of the world. In many economies this has broken much of the link between production and consumption and left consumption-dominated economies to create non-productive economic activity and this has been increasingly deskilled and casualised, leading to things like the phenomena of in-work poverty and zero-hours contracts. But by far the biggest impact has been on global inequality and environmental collapse. As we shall see it is these globalised supply chains which are one of the key factors in why the Covid crisis points to very worrying economic problems around the world. But it is also those long supply chains which have done much of the environmental damage through carbon emissions – from freight transport to the waste and production that it leaves across the length of those supply chains (by definition costs are lower where environmental and other regulations are lowest).

The end result of all of this is that the UK now has an economy dominated by the needs of the so-called FIRE industries (finance, insurance and real estate) which are primarily involved in a form of wealth redistribution which means that those who already have wealth are increasingly able to use it to lever more wealth from those who have less via the ownership of non-productive assets. This is where the competition model falls down; the winner has very often not been the better, more innovative, more customer-focused enterprise but the one that started with the most money. This meant they were in a stronger position to extract even more money.

The rapid expansion of retail has a similar effect. Retail is a crucial public service and clearly without a retail market it would be very difficult to organise the distribution of essential goods and services. But that does not mean all retail is a public good. Corporate retail redistributes wealth from customers to big business and has promoted damaging and unhealthy patterns of consumption. It has also led to reduced diversity on high streets, increasingly monopolistic behaviours and has one of the highest proportion of low pay jobs of any of the major economy sectors. And because it is a wealth-extracting model it faces the problem of what happens when all the available wealth has been extracted. The response was to enable very cheap borrowing so wealth could continue to be extracted from customers who have simply built up higher and higher levels of debt.

There are other ways to increase profits without increasing productivity through investment and innovation – most obviously by reducing costs. The two primary costs which can most easily be suppressed are wages (so long as the jobs concerned are not skilled jobs) and supply chain costs (so long as the purchaser has greater economic power than the producer). A good example of this is the tight margins (and extreme duress) imposed on domestic producers which form the business model of the UK supermarkets. This has made the UK a hostile environment for small and medium-sized producers (and other businesses) and has resulted in an insecure, low-pay labour market.

Another key problem with this ideology is the issue of externalities, largely embodied in those long supply chains. Externalities are negative impacts which the economic model creates and which have costs for society but which the businesses causing the impacts do not pay, leaving others to pay for them (usually the taxpayer). Three major examples are risk, poverty and environmental harm. When the banking sector crashes the economy, it is the taxpayer who pays. When low-pay retail creates poverty, the taxpayer pays for welfare payments. When industrial agriculture causes flooding, the taxpayer pays for flood mitigation. The costs to the taxpayer are not included in the calculation of business profits. This in a nutshell is why free markets have created the climate emergency – the theory is based on rational decisions over price but the prices are artificial because they don't reflect true costs.

Finally, if profit-seeking is the ultimate goal of public policy then a move from public benefit to greater exploitation of the public realm for private profit is inevitable. This infrastructure previously managed in the public interest is privatised to increase profits derived from customers who previously owned the infrastructure to which they are now charged for access (mostly notable are the public utilities). Other services previously delivered on a not-for-profit basis through the public sector are now outsourced and run on a profit-making basis by private companies. And of course the national scandal of the Private Finance Initiative (PFI) has led to taxpayers paying many multiples of the value of public infrastructure construction because of a fundamentally corrupt financial process through which they are financed.

The stewardship of the UK economy has not only enabled but encouraged all of these behaviours. It has made it much easier to take a short-term approach to profit through asset value accumulation than to take a long term approach of investment and innovation. For example, where we should have been rapidly improving building standards while constraining house price rises we have actually constrained improvements in building standards while rapidly inflating house prices. Instead of high-quality, low-cost housing we have low-quality, high-cost housing. The saving in build quality costs and the constantly-inflated price of the house are what has created the profit and so the national rise in GDP. But the outcome is economically negative in almost every sense.

We can see this replicated across the entire economy. We have very low levels of investment and even worse rates of innovation. We manufacture less and less which means we run a constant balance of trade deficit. We create low-wage employment which creates a vicious circle of increased need for public services but lower tax revenue (low wages have substantially harmed the income tax base). This has created high levels of inequality (which in itself is economically inefficient), continuing environmental and social harm, declining public wellbeing (for example poorer quality sleep and increasing levels of stress), declining public infrastructure and rising corruption (particularly in the finance industries but also through ever-greater influence of commercial interests on government policy).

This fallacious ideology of the 'wealth creators in perfect competition' has been utterly dominant in UK politics for decades. In reality, wealth-creation is a function of collectivism – collective provision of education, transport networks, communication systems and laws and their enforcement interact with the collective management of resources such as water, land and money and the provision of labour from a large, well-educated and healthy labour force.

But the ideology of profit as a function of the private sector has spread well beyond economic policy, leading to the fundamental belief among its advocates that shrinking the public realm as a proportion of the overall economy is inherently 'good'. This has led to an utterly unnecessary obsession with public accounting deficits which in turn has led to one of the most damaging and counterproductive economic theories of the modern age; austerity. This has all been exacerbated by the impact of wealth inequality; when wealth is concentrated in a small proportion of the population it makes the taxation system inefficient. Those with very large resources in wealth are greatly undertaxed – but so are those who have incomes so low that they pay little or no tax. The inequality-deficit-austerity triangle has dominated public finances.

The theories behind the neoliberal economic model are now widely understood as seriously flawed and the economic performance they have created is damning evidence of this. And that was before they faced a second major economic shock in quick succession.

HOW THE VIRUS CRISIS EXPOSED THE FAILURE OF NEOLIBERALISM

Most economic commentators have been expressing ever-mounting concerns about the underlying health of the economy (both global and national). Very few have not been predicting a second economic shock sooner or later and most took the view that this one had a high chance of being an existential threat to the current economic order (the Annex to this report looks at the history of economic crises and suggests there is very good reason for this). It is therefore worrying that none predicted a shock as major as we are currently experiencing.

All of the fears look like they may now be realised – and potentially some that were not foreseen. There are many aspects to this but there are three weaknesses in economies which the virus crisis feed on in particular. The first is the effect on globalised supply chains and the likely future behaviours of nation states. The second is the deskilled and insecure labour market which was encouraged to take on debt to consume. The third is the impact on a global financial services sector which is still built on household debt and buying and selling assets that everyone knows are overvalued. Let's briefly look at these one at a time.

First, supply chains. The neoliberal order was predicated on the belief in stability; in fact, one now notorious but at the time influential theory was that we had reached the 'end of history'. The idea was that an economic and political system so perfect had been created that the traditional drivers of global change ('history') were gone. No need for war over resources because the market was allocating them in a 'perfect' way and no need for major political ideologies because all that was left was to gently manage the perfect system in a technocratic way. We would always have one unchallenged economic order and there would be no more global conflict. So it no longer made sense for economies in the developed north to grow or manufacture many of the goods that made life possible (including food) because they would always be guaranteed by the free market. They could instead focus on services, finance and a small amount of high-tech manufacture.

But history didn't end after all. Post-virus it is very likely that the world's leading economies will declare that they remain as committed to the globalised free market as ever – but it is almost certain that this is not how they will act. The virus is in effect a 'dry run' for the kinds of economic shock that will come from climate change. No big democracy will want to run the risk of their food security (in particular) being mostly in the hands of other nations – and the same is likely to be true of other essential goods. Protectionism is a pejorative used by neoliberal economists to disparage economies which prioritise domestic need over free market pressures. There is no doubt that there are forms of economic protectionism now and in history which have been deeply damaging, but it is a perfectly reasonable to approach the management of an economy in terms of the security and wellbeing of citizens. Or to put it the other way round, politicians throwing up their hands and saying 'no food – don't blame us, it's the global free market' is hardly a responsible approach. (It is to be noted, wryly, that the nations which most oppose protectionism are economically dominant because throughout much of their history they were aggressively protectionist – but they are now very keen on an open economic system where they are a lot more than equal).

Despite the rhetoric of free market advocates, long supply chains are only resilient until they aren't. It will not take much reprioritising of domestic consumption to create 'contagion' and so even small amounts of redirecting of things like food away from global markets and into domestic ones will cause more and more to follow. With something like food, losing even a comparatively small proportion of what is available on globalised free markets will have spiraling effects on availability and price. Similar impacts are likely to be felt on all long supply chains for essential goods. Plus, we have seen just how fragile are the assumptions that enormous global movements of people and goods will always be possible in all conditions. But what if they aren't? The whole system breaks down if there is an interruption to the 'just in time' supply chains, and we now know this is more than possible.

The second specific impact is on casualistion of the workforce and the rise of household debt. The neoliberal philosophy was so certain about the end of history that 'saving for a rainy day' became seen as an economic liability. The cynical view was that if people saved for the future that was money a corporation couldn't take away from them through sales. Instead people have been encouraged to get into more and more debt; rather than saving now in case you need it later you shopped now and would pay for it later. The problem is that the virus means 'later' has arrived – and how many people will be able to meet their debt responsibilities if there is widespread unemployment isn't clear. Even more immediately, people are losing income (for many of them overnight and for the first time in their lives) and they have no savings to tide them over. Neoliberal economics is almost explicit in viewing the workforce as just one more disposable asset to buy and dispose of on the free market as and when needed. In fact, this is just another way of saying 'globalised supply chain'. It means that the economy is littered with the self-employed, causalised contractors, people without any job security and of course the Thatcherite drive to undermine trade unions mean few have any collective bargaining protection. Many people are experiencing impacts which they previously presumed would only ever be faced by 'other people' (the idea that middle class people could be in the same position as the title character in

I, Daniel Blake would not have occurred to many people even a few weeks ago).

The third clear problem experienced during the virus crisis is the impact of the financial services sector. In many ways banks have become 'debt traders'. They trade in household and business debt, on the debt contained in assets (for example in commercial retail premises which extract rent from business) and as we all know post-2008 they trade in complicated packages of debts which they buy and sell to each other. Since they are debt traders, they fall over if they cannot extract debt payments (this does not apply to the traditional banking sector which traded in customer services).

During this crisis we have seen the implications; the 'free market' is not providing income to businesses but it is still extracting debt (especially through rent and mortgages). In addition to this the over-hanging problem that caused the last financial crisis – the exposure of the finance sector to assets which they have over-valued – remains in place and will get worse. In exactly the same way that sub-prime loans led to the unravelling of the financial system, now that same system is heavily exposed to assets which public policy has deliberately inflated in price for ten years – for the sole purpose of saving the financial sector from the impacts of a correction in the real value of these assets. It is almost exactly like dealing with a problem gambler by printing money to keep their habit going. The impact of all of this is everywhere throughout this crisis. First, the government is providing income to households and businesses for the primary purpose of them being able to hand it over to the banks again. It is really just another big bank bail-out (in a free market these banks would fail). Second, central banks are (yet again) printing money like there is no tomorrow to (yet again) prop up a financial system which those same bankers were recently warning was dangerously unstable.

This all means that the rapid drop in production and demand in the economy and the temporary loss of parts of the labour force linked with vulnerability of global supply chains, and the insecurity of much of the workforce are set to have a very concerning economic impact which has already begun. But that is not the end of the problem; remember those many economists who thought that the economic shock would hit the banking sector and it would be this which brought down economies? That is happening right now, and they are being artificially propped up yet again by giving unlimited financial support from the state (through central banks). If there is anything like the demand drop that looks likely over the next year, it may not be possible to prop them up forever. And without any doubt whatsoever they cannot be allowed to create the risk of a third enormous crisis by being allowed to behave like they are now.

The neoliberal economic order was already on notice of its vulnerability and negative impacts on inequality and the environment – but for the reasons outlined this fragility is being experienced to a degree much more extreme than most predicted. It is sobering to note that the dominant economic theory of the last 40 years has to all intents and purposes already been abandoned in favour of desperate action to save economies from collapse. It is not easy to see any route back for neoliberalism as we know it, at least in the medium term.

THE APPLICATION OF RESILIENCE TO ECONOMICS

The word 'resilience' has had a chequered past in recent economic development theory and practice. This phase began with austerity. At first 'resilience' was a way of describing the need to ensure that communities are not hit with wave after wave of economic impacts which weaken them but rather they are equipped to remain strong and cohesive even in the face of economic shocks. But the imperatives of austerity (the shocks were coming well before the communities in question could be made 'resilient') caused this meaning to be distorted. Resilience began to be used as a way of saying 'these communities are simply going to be hit hard so they need to find ways to get on with it nevertheless'. Resilience went from being a description of the need to strengthen communities into being really just another way of saying 'laissez faire' or 'tough luck'.

This is absolutely not the meaning of resilience here. We use resilience to mean a number of closely-connected things. First, it means that we must have an economy and a society which is much better able to cope with the inevitable recurring crises that will be thrown at them from all sorts of directions (the inherent failures of globalised neoliberalism, the impact of dwindling natural resources and climate change). If our economy and our society are going to be stress-tested on a regular basis in exactly they way they have been in recent decades, they need to be much better able to weather them than the current economy – we cannot get into a boom-bust-austerity cycle.

We also mean resilience in terms of securing the basis of a good society. As we shall see below Foundational Economics makes clear that there are certain goods and services without which modern society cannot operate on anything like the terms it does just now – food, education, communications, housing and so on. It is for a democracy to ensure that these are resilient, that they cannot simply be 'taken away' or their supply removed during crises. We need our quality of life to be resilient and vulnerable, long, 'just in time' supply chains and a free market are clearly not enough – as we are currently seeing.

Then we mean resilience in terms of the social and civic resilience which helps us to create a better place to live. Neoliberalism has created ever-growing inequality in society and the impacts of inequality are very well documented – they reduce the resilience of society in many ways. The tax base reduces as many have incomes too low to pay tax and some become so wealthy they can avoid tax, and this undermines public services. Second, all the social indicators of a better society move in the wrong way – health, mental health, happiness, addiction, crime and so on. Third, the infrastructure of communities on the wrong end of inequality decline and those communities face more and more social and economic problems. Fourth, trust in the public realm declines. As people see that government is working for some but not others, they become suspicious of the motives of public officials. This weakens the power of government to do important things, things that need done. Had there been better trust in government pre-virus then trust in taxation would have been higher and the chances are that more investment in the NHS would have been made.

Finally, we need a resilient environment. This means we must manage all of our natural resources so that they are always able to regenerate themselves after human activity. The world is again critically aware of a fact we should never have forgotten – it is these natural resources from our environment which make human life possible and if we wish to have a resilient economy and society we need a resilient environment, not one in constant decline.

This is what we mean by resilience – the ability of a nation to keep providing a good life for its citizens whatever the economy, the world and the environment throws at them.

WHAT ARE THE PRINCIPLES OF A RESILIENT ECONOMY AND SOCIETY?

If these are the aims of a Resilient Economy, what principles help to guide us there? Here we must begin with one over-riding principle; that economies serve societies and very much not the other way round. If an economy isn't delivering what a society needs then it is failing. So to consider the principles for a resilient economy we need to look at both the principles for that economy, but also the society it supports.

The principles of a Resilient Economy

— **Sufficient and secure.** If public policy for a resilient economy is to deliver what citizens want then it will be built around 'sufficiency and security'. This is the real hope people have for the economy – that it will provide them with the things they need to live a good life now and with the confidence to believe they will be able to live a good life in the future. At the moment public policy believes that citizens are driven by 'aspiration' and then define aspiration as little more than greed – how much more can I acquire? There is nothing wrong with aspiration and many of people's aspirations are virtuous (more time with family, learn a language, have a garden) – but public policy can't be driven by greed and is failing if sufficiency and security for all is not the goal. This is true at the national level as well – ensuring sufficiency and security for the nation as a whole is currently left entirely to free markets, and as we can see, they are failing under pressure. Since these pressures will continually increase in the future, a Foundational Economy approach must be taken to ensure that true sufficiency and security is guaranteed for Scotland as a nation and that we can be confident the nation as a whole will always be able to provide the basis of a good life for its citizens.

— **Useful.** The impact of the virus has shown how much of Scotland's economy is non-productive and how little is really useful. We need to restructure the economy so that much more of it is providing useful and meaningful outputs and less is simply various forms of wealth extraction. If this results in less aggregate economic activity then that is no bad thing if we have created sufficiency and security – it simply means people will be able to work less.

— **Non-extractive.** Scotland may well have the most foreign-owned economy in Europe. The dominance of multinational corporations mean that all economies face extensive wealth extraction (wealth taken out by shareholders and exported abroad rather than reinvested into the local and national economy) but this is therefore particularly bad in Scotland. Wealth-building approaches must mean that much less of the economy's profits are being extracted and much more are being reinvested.

— **Definancialised.** The single biggest problem for the UK economy isn't the virus but debt. It is not the lack of demand which is closing businesses down but the ongoing demand for debt payments to be met and rent paid. The financial services sector has engineered the economy to make it very largely dependent on the finance and property sectors and has then used these sectors to extract enormous amounts of wealth (it is this which has led to much of the economic inequality). This must be reversed; rent and debt must serve the economy rather than undermine it.

— **Economically democratic.** Globalisation should not be thought of as 'internationalisation' but process of de-democratisation. It forces nations (by threat of serious legal consequence) to prioritise global free markets (which is a way of saying 'corporations') over domestic wellbeing and takes the decision-making over this out of any forum which can be held to account by citizens. This does not support any of the other principles here but rather undermines them. This is a process of deglobalisation, or perhaps more accurately the restoration of economic democracy – but it should be stressed that deglobalisation must go along with internationalisation – genuine expansion in the relations between Scotland and other nations based on mutually-beneficial trade, managed tourism and shared cultural links. This is discussed further below.

— **Regenerative.** There is a risk that the impact of the virus makes us forget about the impact of the environmental crises. 'Getting back to before' is not only impossible but utterly irresponsible. The economy must be regenerative – it must put back into nature what it takes out and it must not put into nature things nature cannot process naturally.

— **Circular and Shared.** In the end, sufficiency and security is about always having adequate access to necessary resources. This becomes much easier if you look after your resources better. Rather than buying them on international markets, using them and then landfilling them only to repeat the process, we need to make sure that all resources are reused and recycled. This will greatly strengthen domestic resilience. Equally important is the concept of 'sharing'. This is a very effective way of maximising the use of resources (whether it be the lending library model, the shared facilities model or any other variation) but has been discouraged by free market capitalism because it is also very bad for wealth extraction (where the inefficient use of resources creates the space where wealth is repeatedly extracted).

— **Designed.** The term 'planned' is used as a pejorative in free market thinking and a semi-religious belief in infallible markets is held to be the only legitimate influence on the economy. This is no longer a credible belief given the scale of what is ahead. Rather we must think of economic 'design' being key; it is not about control or certainty but is about explicitly seeking to create the conditions for success. As an example; if we wish to build up the productive domestic economy then the uncertainty of free markets must be addressed by designing-in predictability so that public procurement can give businesses long-term confidence in demand where they are taking a risk on expansion or diversification. This concept of designing conditions in an economy is crucial; the era where economic structures are driven only by profiteering must end.

— **Equalised.** This is crucial – there is no version of a resilient economy in which resources are so unevenly distributed that a large proportion of people can never achieve economic security and where crucial public services are undermined by the sheer tax inefficiency of wealth inequality.

— **Diverse and Decentralised.** Diversity and decentralisation makes an economy much less vulnerable to the impact of difficulties in one region or one industry sector and should be a hallmark of a resilient economy. Diversity should also mean a diverse range of types of ownership because different types of company (private, mutual, cooperative, worker-controlled, social enterprise and publicly owned) all have a different role to play in the economy.

— **Better.** There is one really important factor in Resilience Economics which must not be forgotten; it must be better than what it replaces. There is a strong tendency to view economic transformation as a step backwards in living standards and quality of life – it is a narrative that has transferred itself very quickly from the economic adaptation required by climate change to economic adaptation required because of the impact of the viral crisis. The assumption that any move away from globalised free market economics must inherently mean a step backwards in living standards is simply a function of free market ideology and is not based in reality. Only if 'rate of consumption and production of waste' is taken as 'quality of life' do we need to be concerned – it is easily possible to have access to more and better products and services which do not get thrown away after limited use, create more disposable income through definancialisation and much better individual welfare from better work-life balance and less pressure to spend.

The principles of a Resilient Society

— **Sufficiency and security.** You can't create a resilient society unless people have enough to live a decent quality of life. It is that simple. The reason sufficiency and security are the first principle in a resilient economy is the reason they are the first principle for a resilient society – nothing else is possible when people are insecure and forced to live with a low quality of life. It rightly damages trust and social cohesion. The good society is built from good lives.

— **Wellbeing.** There is a real risk that wellbeing becomes a bland and meaningless concept – which would be very unfortunate. Wellbeing is crucial. Ensurng that people have a good level of physical and mental health is very important for a resilient society (unless we want to dedicate enormous amounts of NHS resources to easily avoidable illnesses). The food system is creating widespread obesity, the financial system is creating insecurity which creates anxiety, the transport system is filling our cities with pollution and so on. A resilient society prioritises wellbeing and this avoids the enormous social costs of suffering.

— **Cooperation.** It is telling that whenever it matters (like in real crisis), we rediscover the enormous benefits of cooperation – but when there is no crisis it goes back to ‘everyone for themselves’, the free market philosophy of development that enables wealth extraction. There are of course some benefits that come from competition and we don’t want to lose them completely, but there are many more benefits that come from cooperation. This must always be the underpinning of the resilient society because a society which pits citizens against each other is vulnerable.

— **Diversity and decentralisation.** Just as an economy which contains diversity is more capable of withstanding shocks, so is a diverse and decentralised society. It is a small group lacking diversity making public policy which is most prone to bad policy and it is an over-reliance on central institutions and capital cities which makes fast responses difficult and leads to parts of nations being ‘left behind’.

— **Participation.** The most important part of diversity is the diversity of the citizens of a nation. Everyone has something different to bring to their community and their society and the ease with which they can participate in their community and society is measure of how much their skills, knowledge and perspectives can be used to improve those communities and that society. The practice of replacing those skills with skills bought on a free market by a centralised government is why people feel alienated from their democratic process and feel powerless in their communities.

— **Transparency.** The greatest threat to resilient societies are unaccountable cliques running public institutions in their own interests. Whenever this happens societies get distorted into shapes that benefit some at the expense of others. The balances to that are democracy and transparency so the public can assess properly the extent to which government and its institutions is working in the interests of everyone.

— **Infrastructure.** Communities need social and physical infrastructure to succeed and modern societies are built around crucial infrastructure. The most important of these are democratic infrastructure (the ability to choose how we are governed and then ensure we can hold those we elect to account) but from public utilities (many now privatised but still public in nature) to local services, resilient societies have strong infrastructure.

— **Opportunity.** None of this is to forget that society must facilitate the reasonable aspirations of the individual. This is first achieved through cooperation – that which each of us aspires to individually needs first the strong society and economy to enable it and that is better achieved through collaboration. But people must have opportunity to pursue the lives that they want to live and a society which does not offer reasonable opportunity to achieve reasonable aspiration is not a stable society.

THE FUNDAMENTAL THEORIES OF RESILIENCE ECONOMICS

As we have seen above, free market economics has utterly dominated public policy and has created a vicious circle in which dependency has required failures to be patched up but this patch-up process has simply prolonged the dependency. This should have been addressed after the 2008 financial crisis but wasn’t and the UK economy is paying that price now.

One of the reasons that neoliberalism is so vulnerable is that it is built on a ‘magic bullet’ theory, the theory that markets if left alone will always deliver the maximum public good. For neoliberals this creates a greatly-simplified version of the world in which everything is ‘obvious’ and everything is ‘simple’ – all government has to do is as little as possible, regulate as little as possible and embed this magic bullet theory into public policy and success is inevitable. Naturally there has been much additional theory built on top of this basic assumption but it all takes that assumption as the only valid starting point. You can describe this belief as a principle or a tenet but it looks a lot more like a dogma or an article of faith, because it is very clear indeed that deregulated free markets are not in themselves capable of creating a good society (given that every ten years or so neoliberal economics demands a major public intervention or bail out).

For this reason it is important that the concept of Resilience Economics is underpinned by something more balanced and stable than a single 'magic bullet' analysis of how an economy works. Instead, Resilience Economics recognises that economies are dynamic and changing systems, that economic actors do not always behave rationally or according to the rule of law and that economics is a subset of society which is and will always be affected by a large range of internal and external impacts. Tackling the effects of each of them requires a more nuanced and adaptable set of analyses than a single magic bullet offers. Resilience Economics is therefore a place where a number of different and adaptable theoretical approaches meet. These are drawn from under-exposed fields of economics like environmental and social economics and from new and emerging schools of thought like some of the modern money theories.

If this group of economic theories are put together they give a collective picture of how Resilience Economics works.

Foundational Economics

Foundational Economics is a comparatively recent development. It is a body of theory which derives from the fact that there is a core set of economic activities which are fundamental to all other economic activity and so form a 'foundation' for the wider economy. Foundational Economics describes these as 'non-optional consumption', things which we have no option other than to consume if we want to maintain a basic quality of life in our society. The kinds of goods and services modern societies cannot function without include: health, education, law and order, transport and communications infrastructure, energy, land, food and housing. These are then considered the foundation of the economy, a category different from consumer goods. And because these are so fundamental to the wider economy they cannot be managed according to the same market-based strategies applied to general, optional consumer goods. There are three ways Foundational Economics suggests we can manage these foundational aspects of the economy. First, public or collective ownership and provision, which is how we deliver public services such as law and order, health, transport infrastructure and education and how Foundational Economics would argue we should deliver energy and telecommunications. But it is not desirable that the entire Foundational Economy is publicly owned so the second approach is to use public intervention and subsidy to influence markets. That can mean the provision of public rental housing and rent support or land reform. The third approach is regulation and monitoring to shape markets for the public good. This is generally the approach taken to goods such as food. The aim of Foundational Economics is to use this range of public action to make sure that the provision of these goods and services is secure, equitable and sufficient for the quality of life we expect.

Modern Money Theories

Austerity economics was framed as a response to the public sector 'running out of money' through the analogy of a household budget. This was factually incorrect and intentionally misleading - the national budget is in no way like a household budget. This is because a nation state with its own currency can increase or decrease money supply through practices like printing money or quantitative easing via its central bank – there is no 'fixed' amount of money for governments. But this does not mean that money supply is infinite because there are other important factors which happen when money supply increases such as inflation and devaluation of the currency. Modern money theories (there are more than one with different emphases) have created a new way of looking at money supply based on this reality. It demonstrates that we can think of tax not as a way to fund public services but as a means to manage the supply of money and so control inflation and currency value. When money creation puts money into the economy (it effectively does this when borrowing to pay for public services) then tax must be used to take money out of the economy to a level which achieves inflation targets. Crucially, this does not have to mean 'one in, one out' – if more money can be created than removed without impacting on inflation and exchange rates, that's fine. This is effectively all just a detailed way of explaining that the need for balanced budgets is a fallacy and that nations with their own currency have a much more sophisticated and powerful way of managing their national finances. It also makes clear that, other things being equal, a government which runs a surplus will therefore induce a deficit in the other parts of the economy since it reduces spend and demand. The corollary is also true; a government running a deficit tends to induce surpluses in the wider economy.

Local Wealth Building

Monopoly capitalism strips local economies of wealth; the mechanisms which do this are seldom described in these terms, but that's what they are. Long supply chains (without embedded externalities, see below) mean that local productivity can very often be undercut by moving different parts of a production process to different parts of the world. This is only possible for multinational corporations which are not owned in the local economy (and generally not even owned in the national economy). That means all the profits derived from sales in a local community are extracted and exported to the owners of the corporation. Where before localised economies would generate profits which were recycled into the local economy and so had a multiplier effect (local businesses would use local supply chains and local services) now these economies are undermined by businesses which remove the profit out of the local economy and do not reinvest it in local supply chains or services. This simply weakens and weakens local economies which is why there is such a high level of regional economic inequality in Britain. Local Wealth Building is a recent body of theory which reverses this process. It emphasises local economies and seeks to tilt economic policy in favour of businesses that do not extract wealth. The empirical evidence on the impact of this is compelling – the more of a local economy is owned locally the healthier that local economy becomes. Keeping wealth in the economy is achieved by managing spending, infrastructure and policy in ways that maximises the chance of local business being able retain wealth (for example by breaking down procurement policies to enable smaller businesses to compete fairly with corporations or by not planning city centres round large shopping malls).

Green Import Substitution Reindustrialisation

It is undoubtedly an ungainly phrase but Green Import Substitution Reindustrialisation is a crucial concept. It is effectively the application of Local Wealth Building to national economies to achieve the build-up of domestic production and to achieve environmental outcomes. To reduce the major environmental harm of goods and the harm done by unregulated production in other countries (plus to make the provision of key goods more resilient) we need to shorten supply chains. Green Import Substitution Reindustrialisation seeks to shorten supply chains and make sure they are delivering positive environmental outcomes by sourcing a larger proportion of goods from the domestic economy (rather than importing harmful ones). If a nation is capable of producing something, then the responsible thing is for that nation to produce it to high environmental standards for its domestic market. This should then be used to restore manufacturing and industry to the nation state and thus replace bad jobs in retail with good jobs in production – while greatly reducing the negative impact on the world economy caused by importing environmentally harmful goods.

Circular Economics

Circular Economics was developed primarily as an environmental economic strategy but also delivers resilience. In circular economics the aim is to reduce waste to zero. The principles which can achieve this are longevity, repairability, simplification of materials and biomimicry (only using materials which return to nature naturally at the end of their lifecycle), standardisation of packaging, Sharing Economics, deconsumerisation, better product design and remanufacture. These become 'resource loops' which must be followed – if products can be shared or reused they should, if they can't they should be repaired, if that isn't possible they should be remanufactured (dismantled and component parts reused) and so on. If at the end of this process if there is any unused resource it must be recycled and used as the input for the next round of manufacture. It is important that quality becomes the priority so that goods are manufactured to a quality that means they last as long as possible and do not have 'built in obsolescence' (the practice of making goods lower quality so they fail faster and you have to buy more of them). It is also important that we simply move away from single-use products. Circular economics is utterly essential if any nation is to meet its responsibilities to tackle the environmental crises we face. However, they also come into their own in terms of resilience since the threats to resilience include the threat of dwindling resources and the vulnerability of long supply chains. If you are reusing goods for longer and recovering their component materials at the end you are no longer reliant on continually importing these from markets which may break down.

Sharing Economics

The Sharing Economy is key. Neoliberalism drives people to buy poorly-made products which are designed with short lives with the knowledge that they will be used very inefficiently – we buy things we don't even nearly have sufficient lifetime need for because it is the only way to get access to them. The case study is often taken to be a screw gun, a devise capable of many, many hours of operation but which on average is only used for about 15 minutes by each owner. In a circular economy we are building products of a higher quality which last and be repaired when needed. The second part of this is to use them more efficiently by leasing and sharing a lot more. If people need a screw gun they should be able quickly and easily to borrow one from a local 'tool library'. Many consumer goods are made to a lower quality to reduce the price and encourage you to buy them – but you buy many more of them over their lifetime. If they are leased for their lifetime it means that they can be made to a much higher standard and yet cost the user much less over their lifetime (there is no real need to own two washing machines in your life). The same principle can be applied to business – rather than assuming it's 'everyone for themselves', public policy should identify who has need for processing or other facilities or services but not sufficient to invest in them alone – and link them up with others to share facilities. Alternatively the public sector can create infrastructure such as advanced manufacturing centres where businesses can then rent time.

Theories of Economic Ownership and Democracy

In the field of economics there has been much study of business ownership models. Where neoliberalism favours the corporation above all else, in fact there are other kinds of ownership model which deliver many outcomes better than the corporation. For example, cooperatives and mutuals are more stable than risk-taking private businesses, social enterprises deliver much more positive social impact and worker-controlled businesses are often more innovative as a result of their governance structures. And of course publicly-owned enterprises have had a crucial role in economic and social development. A diverse pattern of enterprise ownership not only produces an economy with a wider range of public-good outcomes, it is also more resilient as different kinds of economic shock impact differently (Ireland's credit unions were the only part of the country's finance sector with liquidity in the early stages of the financial crisis of 2008).

Wellbeing Economics

This is a diverse field which calls for economic performance to be assessed based on the impact of the economy on the individual and society rather than measuring progress using abstract concepts such as GDP. In some ways Wellbeing Economics is a catch-all term for many of the other theories covered here, but it does have some specific elements. For example it is Wellbeing Economics which most questions whether the work-life balance is right and will argue that we work too many hours given our current level of productivity. Wellbeing Economics also calls for success to be measured in a much more balanced way than blunt GDP figures which give an inaccurate picture of economic health. A much more balanced set of economic and social indicators should be used instead and national economic policy should be designed to improve all those indicators, not the single indicator of business profit which is represented by GDP.

Inequality Economics

While not really a distinct economic theory, Inequality Economics refers to a wide body of research on the negative impact of economic inequality. This has been mostly concerned with social impacts (poverty, crime, health) but these also have specific resilience implications. For example, most people lack savings which would offer some kind of smoothing effect during any periods of crisis and the recovery process will be greatly hampered by the tax inefficiency (those who have gained from inequality are better able to avoid tax, those who have lost are less able to pay tax so tax efficiency has dropped). The concept of redistribution is well known (equalising wealth through the use of tax and money transfers) but the concept of 'predistribution' is even more important. Rather than accept inequality and then try to mitigate it through cash transfers it instead seeks to reduce the inequality in the first place. If an economy is restructured in such a way that low-pay employment sectors are allowed to decline and be replaced with high-pay ones, all aspects of wellbeing improve. There are other tools to achieve the same end; industrial democracy drives greater equality because workers are more able to negotiation fair terms and conditions (it is much more innovative and productive too) and a Universal Basic Income (a monthly income paid to all citizens) can create economic security which supports both employees and employers. Generally, predistribution analysis will lead to a national industrial strategy, a non-neutral view on how public policy wishes to support and manage the economy to achieve the aims of greater equality.

Entrepreneurial State

The concept of the Entrepreneurial State is important. Free market economics views the role of the state as being to deliver minimal levels of facilitation and regulation of the economy (and to provide a limited series of services which the free market can't). This is wrong; the state is not only a facilitator but an important economic actor in its own right. When the state takes an entrepreneurial role it can engage in a wide range of forms of intervention, from active commissioning to the creation of enterprises in public ownership as well as regulatory interventions. Again, one of the clearest ways to create the entrepreneurial state is to develop an industrial strategy, a clear statement that the state is going to take value judgements about the national economy.

Creative Adaptation

Another feature of free market economics is 'creative destruction', the belief that if enterprises or industry sectors are failing then they must be allowed to fail to enable 'what comes next' – and that the state should take no part in what comes next. Creative Adaptation is different. Rather than allowed rapid swings between viability and non-viability, Creative Adaptation sees government and its agencies as being economic partners which can help to shape the nature of decline and enable diversification into new and more viable activity. In this model government does take a view of the nature of change and what comes next. A diversification agency can also help the transitions such as the decline of oil and gas or the desire to move away from weapons manufacturing.

Decentralisation

Centralisation is inherently non-resilient as it places too much reliance on one economic region. This also has the effect of stripping economic activity (and therefore wealth) from other regions. Along with Local Wealth Building, Scotland should use an active policy of economic decentralisation to equalise the volume and nature of economic activity across the country.

Economic re-democratisation

Resilience Economics is a deglobalisation agenda. This does not mean isolationism and so it must be matched with internationalisation – an unwavering commitment to strong trade, transport and cultural relations. Globalisation is quite different from internationalisation. The latter is about nations working together, the former is about democratic control of laws (mostly relating to how the economy works) being taken out of the hands of nations and being policed at a global level by non-democratic institutions working closely with corporations. The uniform imposition of free market economics around the world is what has caused lack of resilience and economic inequality at a local and global level – but has also accelerated the environmental collapse we currently see. Deglobalisation confidently asserts that repatriating economic democracy is absolutely not isolationism nor does it imply hostility to others. Internationalisation should increase at the same time as globalisation decreases.

Post-Growth

Economic growth can be a good thing – and it can be a very bad thing. Likewise, greater success and wellbeing can be achieved without growth, or the move to a better economy can create virtuous growth all by itself. Post-Growth economics is a key part of Wellbeing Economics but is so important it merits separate consideration here. The point is simple; manage the economy based on its impacts and outcomes, not its size – and devise economic development policy accordingly.

A RESILIENT SCOTLAND

Scotland is in a particularly strong position to achieve a Resilient Economy. It is should not be read as isolationist or selfish, and nor is it an unrealistic demand for self-sufficiency. It is about using your national resources first (and responsibly) before you start relying on (and thus draining) the resources of other nations. It is about stewarding those resources really well so you don't need to rely on importing resources all the time and you don't need to mitigate the negative impacts of disposing of resources that you shouldn't be disposing off. It is about preventing the constant extraction of wealth by corporations who take out more than they put back in and prioritising reinvesting a nation's wealth back into its own economy – for the sake of itself and everyone else's nations.

The concept of Resilience Economics is emerging from Scotland for a reason – Scotland is almost embarrassingly well equipped to achieve this quickly. Few countries have the capacity to achieve net energy, food and construction self-sufficiency based on their existing resources and to do it in a regenerative and sustainable manner. Of those who do very few also have rich abundance of the human resources to make it happen and the institutions and infrastructure in place to make it happen quickly. Scotland has no excuse for not leading on this and no reason at all not to make an enormous success of it. Here are some of the factors which should give us the confidence to set out on this path with confidence:

— **Land.** This perhaps above all is Scotland's 'secret weapon'. Scotland has one of the world's worst track records for population growth over the last 100 years (high mortality rates but especially inordinate volumes of out-migration). This is regrettable but leaves the ratios of population to land very high for an advanced nation state. In the current economic system that land isn't valued because land-based industries have been globalised to regions of the world where labour costs are very low and sustainable materials have been greatly undercut on price by free markets. That is why so much of Scotland's land is simply not used productively. It is the source of three key supply chain elements – energy, food and timber products. This latter is an especially promising area for expansion as discussed below.

— **Food.** Scotland is currently calorie self-sufficient – we produce more calories than we consume. This is not to say we're food self-sufficient given that we export a lot of luxury food and drink products, import lots of food that isn't growable here (using traditional technologies at least) and dedicate about a third of our arable land to barley for the whisky industry. That Scotland has greatly undervalued its domestic food system (public policy has been about those luxury export industries) simply means that the leaps forward that can be taken if we value it properly are very large indeed.

— **Energy.** Again, Scotland is not only easily able to become self-sufficient in clean, inexhaustible energy but has so much potential clean energy that we won't even nearly be able to use it all. This gives us an enormous global lead in the emerging hydrogen industry since hydrogen is effectively a way of saying 'spare electricity'.

— **Timber.** This more than anything is an enormous squandered opportunity for Scotland. We have the lowest level of forestry in Europe but the highest potential for forestry. Wood will become a crucial source of materials in the future. It can be used for energy (though this is an inefficient use in Scotland), for construction materials (it would be easy for Scotland to become almost self-sufficient in construction) and for wider manufacturing. This is where the biggest opportunity is. As well as the enormous range of applications for advanced cross lamination (from a steel beam to a plastic coffee maker, cross laminated timber can easily replace the materials we use just now) cellulose from timber is the raw ingredient in bioplastics. From thin film (plastic bags and food packaging) to standard plastics (coffee cups or ballpoint pens) to high specification plastics (applications where strength is crucial), Scotland can produce all of these from timber products.

— **Infrastructure.** Many of the countries with the potential for the expansion of primary material manufacture and food and energy security that Scotland has are in the developing world. It is very rare for a nation with Scotland's advanced infrastructure (from roads and telecommunication to health and education services) to also have such woefully under used natural resources. This advanced infrastructure means the sustainable exploitation of these resources can be achieved much more quickly and without external reliance.

— **Human resources.** This is also true for Scotland's 'human infrastructure'. Scotland has a very highly educated workforce, strong institutions of 'human capital development' (especially a really strong college and university sector) and an enviable track record on crucial disciplines like science and engineering. There is little Scotland lacks in terms of its people if it wishes to pursue Resilience Economics.

— **Innovation.** Much of what will make Resilience Economics work will involve innovation. There will be social innovation as new public policy is tried. There will be technical innovation in adapting to the impacts of climate change. And there will be all sorts of scientific innovation (rapidly improving the efficiency of hydrogen-from-electrolysis, developing the science of bioplastics and advanced wood industries, adopting and perfecting new food growing technologies). This will be underpinned by the strength of Scotland's university sector which must pivot away from a business model selling expensive education to overseas students and towards supporting the development of Scotland's society and economy.

— **Seas.** Scotland's seas bring many benefits, from both domestic and international transport links to energy generation and fishing. Again, few nations have anything like the extent or scope of Scotland's oceans nor Scotland's enviable geostrategic location.

— **Political stability.** This is often overlooked when Scotland is discussed – we have a high level of political stability with a much higher level of political consensus than many countries. While there remain divisions over the future of Scotland's relationship with the rest of the UK, there is a strong consensus on issues like public services or economic regulation. So while there may be disagreement over how to access the powers needed to deliver this Plan, it should be perfectly possible to build a political consensus around it. Nor does it need to be implemented with the assumption that a hostile political administration may take over at any point and begin to undermine it. Scotland can bank on sustained political support for a transformational plan of this sort.

WHAT HIGH-LEVEL GOALS MIGHT THIS MEAN FOR SCOTLAND'S RECOVERY?

Our forthcoming major report will detail how this can all be translated into a policy programme that transitions Scotland from post-virus vulnerability to a resilient economy via a Green New Deal. But to help visualise what Resilience Economics might mean in practice, the following is a short list of some of the high-level goals these economics suggest for Scotland:

— Scotland must create an economy which is more productive and useful and which reduces low-pay and insecure jobs with high-pay, secure ones

— Scotland should do much more to prioritise domestic productive business over corporations and help and encourage those businesses to develop themselves as part of a new green economy

— Scotland should get property price inflation under control so excessive rents and mortgages don't undermine the economy again

— Scotland should make banking safe and boring so that a reliable and resilient banking sector can be trusted to provide crucial services – with risk-takers being allowed to fail

— Scotland should reduce the volume of commercial retail and to transition away from a reliance on the low-pay service sector

— Scotland must begin a major programme of green reindustrialisation and increase domestic manufacturing capacity

— Scotland's recovery must be driven in part by land-based industries and so land reform will be crucial

— Scotland must adopt an 'entrepreneurial state' model working to a national industrial strategy

— Scotland must very substantially increase the proportion of our economy which is domestically owned

— Scotland must use the economic rebuilding post-virus to move rapidly to start a radical Green New Deal

— Nothing in Scotland's recovery and its subsequent reindustialisation process must be considered if it does not decrease economic inequality and poverty

CONCLUSION

There is every reason for hope; while the impact of Covid and climate change are both very worrying, the problems they pose are far from impossible to address. But these problems cannot be tackled effectively with the same toolbox that created the very vulnerabilities and failures which are the reason we need change in the first place. We live in a new era and we must recognise that; it will result in a new economy which we must embrace. But it will need a new theory of economics.

The world is moving into a period in which we can expect big global-level crises to recur – and very possibly at an accelerating rate. We need an economy which is resilient in the face of these crises. But we also need an economics which recognises that it exists to serve not the economy or an 'economic class' but to serve society. Resilience isn't found in corporate profits but in social wellbeing. There is a strong, established range of economic theories which provide an analytical framework for thinking about what we do next. When these are brought together we can see a coherent package which together represents a new economics for this new era.

That is Resilience Economics. Common Weal believes that these lie at the heart of Scotland's future and must lead us out of the current crisis and well away from the next.

ANNEX: A BRIEF HISTORY OF ECONOMIC CRISES AND WHY CHANGE IS INEVITABLE

In many ways a shift in the economic model we have been using is inevitable. There are historic precedents for economies suffering major trauma and none of them have ever coped (without major reform) with two fundamental global crises in quick succession as is now happening. The last parallel example is the start of the 20th century. A major financial crisis was mounting as a result of over-valued assets which was exacerbated by the outbreak of the First World War (though the war also created some economic stimulus). Once the war was over western economies did everything they could to return to business as usual (balanced budgets and protecting the Gold Standard). But this artificially inflated asset prices again and led straight to the Wall Street Crash of 1929 and the ensuing great depression.

That led to the collapse of the old economic order and the adoption of a new one – generally known as Keynesian economics. Rather than an economic elite protecting their own wealth, a public approach of fiscal stimulus became the standard practice for dealing with crises. Rather than allowing only powerful market forces to drive the economy, this new economic order noted that free market economics always creates booms and busts and that the only way to deal with this is 'counter-cyclical spending'. That is to say that at periods where the market is withdrawing investment, the only way to stop a downwards spiral is for another entity to start spending money – the state.

This was at the heart of Roosevelt's New Deal; the Great Depression had sucked demand out of the economy and it spiraled downwards, so massive public works were started to pump demand back into the economy. This led to everything from new road networks to the US's national parks. It turned the tide of the Great Depression.

The Second World War is not a good comparator for what the world is facing now because the economic shock it created was to workforces, supply chains and infrastructure. Actually economic demand was high because so much manufacturing was required for the war effort – far from an unemployment problem nations faced a labour shortage problem (this is effectively military Keynesianism). But the post-war rebuilding phase was pure Keynesianism and this model created the conditions for the longest economic and social boom in modern history (even giving its name to the generation born in that period - 'boomers').

But it started to come to an end in the 1970s when the theories of neoliberal economics emerged. In many countries complacency on growth led to underinvestment in capital, which combined with factors such as the sudden rise in oil prices and the economic drag on the US economy resulting from the Vietnam War. This created a situation known as 'stagflation', a damaging combination where inflation keeps rising but the economy stagnates. A new school of thought believed not only that Keynesianism failed to address stagflation but that it actually caused it (though this has since been widely debunked).

This new economic model came to be known as neoliberalism. Neoliberals believed that government was the problem, not the solution and were convinced that markets left alone without intervention would become 'perfect markets' and so achieve the maximum possible economic benefit. The prescription was low taxes, low public spending, privatisation of public assets, low market regulation and globalised supply chains. This economic model was imposed on the US and Britain during the 1980s in particular and has been the overwhelmingly dominant economic theory since (until recently this form of 'neoclassical economics' based on a partial reading of the work of Adam Smith has been virtually the only economic discipline taught in universities in the western world).

Globalisation became a crucial aspect of this. In a democracy there is only so much inequality possible before political pressure for change grows unstoppable, so neoliberalism pushes much of the worst of the impacts of inequality onto other nations (particularly the global south and the sweatshops of countries like China and Indonesia). With policy set in one democracy but the worst of the negative impacts being experienced elsewhere (both in inequality and major environmental harm) the model looked secure for many years.

But that plastered over enormous fundamental flaws which made this economic model unstable – and increasingly so. After the unemployment crisis of the 1980s there were two housing mini-crises in the 1990s, a substantial 'dot com' crisis in 2000s and then mounting environmental crises throughout the following decades. By 2008 the model was in serious trouble – low regulation had led to enormous speculation on assets whose value was much lower than the speculation had priced them at and this was exposed when people became aware that in housing in particular the banks effectively had large and unsupported debts. This led to the 'sub prime' crisis which then caused the 2008 financial crisis.

This was so substantial that an unprecedented bailout was necessary. Effectively the economy was now underpinned by giant financial institutions that had gambled on asset values and lost the gamble. With the whole system at risk central banks took action to reinflate the value of assets. In effect they printed money and gave it to financiers who used it to buy their own assets and in so doing inflate the value of those assets again (this was mostly stock 'buy-back' where share values were made artificially high by corporations buying back their own shares). It was very widely acknowledged that since there had been extensive financial sector lobbying to prevent any substantial new regulation and since the underlying value of assets had not risen, only their speculative value, all the conditions that caused the 2008 crisis were still in place but this time with many of the orthodox methods for dealing with crisis exhausted. Over the last ten years there has been a growing body of economic concern that any future economic shock could cause a crisis that this time had no orthodox solution and which might conceivably not be recoverable.

That subsequent economic shock is now with us – and it is much worse than those who were concerned about the future viability of the current economic model anticipated. No-one is seriously arguing that neoliberal economics can get the world out of this crisis. Other than a few extreme voices everyone accepts that something more like Keynesianism is needed now. Some neoliberals hope this can return us quickly to the neoliberal system as was. But this is not realistic given that even if this is the last viral crisis it's only the start of the environmental crises.