In the transition to the sustainable economy, citizens will have to adjust to a lower level of sustainable consumption from which to build out sustainable economic growth. The level of consumption will go down before it can gradually rise again, to pay for the capital maintenance, the costs of pollution and to save enough to fund the investments. The poor will be particularly hard hit, and the clear implication is that such a transition can be made only in the context of a radical rethink of social justice. If some citizens already find it hard to have the capabilities to fully participate in society and the economy, the transition to the sustainable economy presents a whole new challenge. There can be no sustainable economy without social justice.

That challenge is compounded by the macroeconomics, and the incompatibility of much of the current Keynesian policies with the sustainable economy. If consumption is net of capital maintenance and if debt is only for enhancements to natural and the other capitals, then deficit funding of current spending, negative real interest rates and QE have no place in the sustainable economy. That means getting off the Labour Standard and returning to flexible wages and rethinking minimum and living wages, while at the same time achieving social justice. Social justice must handle flexible wages if we are to get away from the Keynesian policy framework which has done so much harm to the environment.

How to get from here to the sustainable economy, with its hits on consumption, and have flexible wages? The answers are: citizens
should have access to the primary assets, through USOs backed up by social tariffs; and citizens should be entitled to an element of universal basic income, tied to the national balance sheet and an annual dividend. With both pillars in place, the sustainable economy sustains both the environment and its citizens.

**The Universal Service Obligations**

All primary assets carry USOs: access to them has to be provided to each citizen *regardless of that citizen’s ability to pay*. It is their right. This does not mean that citizens should not contribute to the costs. This is their obligation. Recall that the four core physical systems and renewable natural capital all have low to zero marginal costs. Recall that if price equals marginal cost, then for many and probably most poorer users, the marginal cost is very close to zero, so charging them zero would be consistent with the marginal cost pricing principle.

The obvious problem we have already encountered is that since marginal cost is below average cost and often zero, there will not be enough total revenue to remunerate the assets. Hence, there either needs to be some people paying more than their marginal costs or the taxpayer makes up the shortfall. Loss-making nationalised industries are an example of this mixed model. The introduction of a fixed capacity charge for system access allows for this element to be raised across the entire customer base.

There is little chance of getting the pricing precisely right, but from the USO perspective the important point is that the poorest are not excluded. With a new system like broadband, where the marginal cost is zero, the challenge is to put in place sufficient capacity to ensure that the system is never congested. Since the overall cost of over-capacity is typically very small, and the costs of deficient networks are substantial, the cost of the excess is not a great burden and can also be made up of a mix of user charges for those who can afford to pay and taxpayer contributions for those who cannot. Like the roads, bridges and railways, once the system is in place, it can last, subject to capital maintenance, for a very long time.

The provision of health and educational USOs is common to most developed countries. The systems of healthcare vary, and user contributions vary too. Even in the UK National Health Service (NHS),
users often pay for food and other facilities and conveniences, and the health service benefits from some demand going elsewhere to the private sector as it does in education.¹

Although, in the case of the internet, energy, water and transport, it is pretty clear what the service comprises, and hence it is not hard to define the USO, it is not so clear-cut in health and education. Some health treatments are excluded from free provision, and some services are rationed. In education, class sizes can often be quite large, and additional support limited. The level of provision in both cases is an important consideration and will vary over time. For example, pupil access to laptops and tablets was not necessary ten years ago, but now these enable a higher level of provision without necessarily deploying as many resources. Such resources proved crucial during the coronavirus lockdowns.

It is no accident that these basic primary assets feature strongly in the design of the broader welfare states constructed after the Second World War across Europe. Even the US, notably with Lyndon B. Johnson’s reforms of the 1960s, provides a welfare safety net. To the municipal utilities of the first half of the twentieth century, the post-war added the NHS and free education in the UK in the 1940s, and it nationalised the core infrastructure systems. Electricity and rail were fully nationalised, joining the Post Office, with communications incorporated within it. Although the details varied, the nationalised model was pervasive across Europe until the 1990s, whilst in the US, rate of return regulation of private utilities had somewhat similar consequences. In exchange for monopoly, the USO had to be met.

A critical feature of post-war nationalisation is that not only was ownership transferred from the private sector to the public, but competition was banned. These were statutory monopolies. Users could not shop around and go elsewhere, leaving the nationalised industries to decide how and from whom to recover their costs. The recovery of the average costs was in effect made into a taxation problem. The USO could be applied and there could be widespread cross-subsidies. It made social justice much easier.

For example, the electrification programme was more expensive as the rural and peripheral areas were brought into the system.

¹ In the UK, 7 per cent of pupils attend private schools, and yet their parents pay taxes that contribute to the funding of state schools. Students widely contribute to university costs.
coverage. It obviously costs more to provide electricity to the tip of Cornwall than to the major cities. In a statutory monopoly, these peripheral areas could be cross-subsidised from the densely populated areas. It is a consideration now with the roll-out of fibre, and it was a key consideration as natural gas replaced town gas.

The rationale comes back to the concept of citizens rather than consumers. Each citizen has a right to participate in the society and to have the chance to reach their potential. Access to these systems needs to be common, even though the costs vary, and prices cannot reflect the full network costs of peripheral connections without many being unable to pay. The extreme example of this is the postal service, where a postage stamp costs the same for the delivery of letters and parcels to the Outer Hebrides, off the west coast of mainland Scotland, as to central London from any location. It needs a monopoly to prevent cherry-picking competitors.²

Privatisation had the potential to break down cross-subsidies, especially since the ambition was to combine private ownership with competition, allowing customers to switch supplier. Private suppliers have less interest in poorer and peripheral customers. These customers are more likely to have bad debt records, and, for the supplier, servicing a customer with a smaller value of consumption has the same fixed costs as dealing with bigger customers, and hence reduces the profit margin. Not only did privatisation move from pay-as-you-go to pay-when-delivered, hence shifting the cost of investment onto the next generation, but it also potentially threatened the delivery of the USOs to current customers.

Regulators, challenged on the distributional consequences, suggested that the government should use welfare payments to top up the incomes of the poor, rather than requiring incumbent companies to cross-subsidise.³ Prices should equal costs in an efficient market. Distributional issues are a matter for government and the welfare system. Furthermore, citizens’ inclusivity should be achieved by money rather than goods, and all goods and services should be treated alike. There would then be no special assets or goods; none would be primary. In a liberal and rationalist manner, giving the poor money would leave

² Debates about ‘levelling up’ and whether to introduce differentiated pay in the civil service on a regional basis are about common entitlements of citizens within a country.
³ An early example was the E factor, which the then head of Ofgem, Clare Spottiswoode, argued should be transferred to the taxpayers.
them free to choose, with the implicit assumption that they would behave in the same manner as the educated elite who supported such ideas. They would not spend their limited money on ‘booze and fags’, fast food and lottery tickets.4

Competition is not a problem without solutions, and public ownership is not necessary for the delivery of USOs. But some element of monopoly is. Recall that the core networks remain natural monopolies, and hence their charges can reflect the USOs. They do not need to differentiate by geography, for example.5 Once the UK government became a central buyer for electricity in the 2010s, by contracting for almost all new generation, these charges became in effect cost pass-throughs from which there is no escape for customers. The central buyer is a monopoly, as well as the networks.

All these central buyer costs, plus those of the network natural monopolies and the growing series of other levies and obligations, have eroded those already limited elements between which customers can switch suppliers and hence competition can drive these sectors. The direction of travel after privatisation has ironically been away from broadening the domain of customer choices and competition, towards a greater role for monopoly charges and cost pass-throughs. Expansion of the competitive domain has been more about competition to provide these monopoly and government-contracted investments and services, and less about retail competition. Where retail competition has been tried, notably in electricity supply, the results have often been bad, and in some cases disastrous. In electricity, UK retail competition ran into serious problems in 2022, with half the suppliers going bust, and with switching grinding to a halt. Domestic retail competition never got off the ground in water, and failed in railways. For all the rhetoric about competition and customer choice, most of the core system utility networks are still monopolies. In broadband and fibre, competition and switching are already very limited.

Even where there is duplication of networks, it is perfectly possible to impose an overall user charge, just as it is possible to apply a tax like value-added tax (VAT). For example, each business customer has

4 George Orwell’s Down and Out in Paris and London (1933) and The Road to Wigan Pier (1937) were attempts to explain to the elites just what being poor was all about.

5 Economists regularly propose zonal and locational network charging, without taking account of how poverty and access to USOs are geographically distributed. There is a good social reason why network charges often have postage-stamp characteristics.
paid climate levies, and domestic customers share the costs of energy efficiency measures like smart meters. The issue is not the ability to recover these costs, but rather the precise mechanism and in particular the use of system charges. As we shall see later on, by designating system regulators and the system operators, and locating the USO duties with them, cross-subsidies to ensure that the USOs are met can sit in harmony with the otherwise competitive supply of the services that flow through these core system networks.

Other assets that are essential to citizens’ capabilities, such as housing and food, have USO characteristics. Local authorities are required to house the homeless. The costs come from local taxation, and local government budgets are topped up by central government. The extent and quality of this housing is one of those boundary issues around the USOs. There is no right answer, but we know what wrong answers look like. A civilised society which treats its citizens fairly will not allow homeless people to live on the street. But when it comes to food, what constitutes the food itself is open to debate. Here, governments have typically opted to provide money rather than goods, although food banks now offer widespread direct provision and could become a USO, and there is much debate about both the level and the content of school meals. Obesity is more prevalent amongst the poor, for both children and adults. Some types of food are more primary than others.6

**Social Tariffs and Cross-Subsidies**

Recovering the costs of the systems under monopoly is a matter of choosing the balance between taxpayers and customers, and between different sorts of customers. What makes the development of social tariffs possible, differentiating between customers, and ensuring social justice for the USOs, is defining some costs as non-switchable.

Amongst the myriad of possible social tariffs, there are fundamental choices to be made. There are two broad types of social tariffs. The Dimbleby ‘National Food Strategy’ starts to distinguish ‘bad food’ and proposes that the state guides choice by taxing sugar. It is not clear whether the rationale is to protect individuals from the consequences to themselves of too much sugar, salt and meat, or to reflect the externality costs to society of the health consequences, in terms of health and productivity. See H. Dimbleby (2021), ‘The National Food Strategy: The Plan – An Independent Review for Government’, 15 July, [www.nationalfoodstrategy.org/](http://www.nationalfoodstrategy.org/).

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Social Justice

tariff: charging less to the poorer customers; and providing an initial block of supplies at lower cost to all customers. Most current social tariffs are based upon targeted assistance to particular groups of customers designated as ‘poor’. The help to these customers can be provided by lower charges contributing to the network costs, or for specific help in reducing consumption, such as energy and water efficiency. Groups of customers can be exempted altogether (for example, provided with free rail and bus travel), or given discounts (for example to students, elderly and welfare-dependent categories). These costs are recovered from the rest of the customers or taxpayers.

The problems with targeted assistance are multiple. Identifying who is poor requires that poverty is accurately measured, and that those entitled to the extra help actually claim the benefits to which they are entitled. In practice, the identification problem is anything but straightforward. Is it income? What about those with no income but with wealth? Is it age-related? Does the household count or just the individual? Are the number and ages of children relevant as dependants? Is poverty relative or absolute?

All these questions need answers, before we come to the problems that means-related benefits cause to incentives for people to work and accept wages appropriate to their productivity, and who has what access to the data, and how regularly the data is updated. There is also the politicisation of the targeted benefits. Given that in some developed countries (and in China too) the population is ageing, a growing number of voters are either pensioners or soon to become pensioners. Protecting pensions can then trump all the other deserving poor, as older people hog the benefits budgets through both state pensions and aged-related social tariffs.

The universalisation principle that underpins the idea that all citizens are treated equally points to an alternative approach to social tariffs. Instead of trying to identify and target the poor, all citizens could be provided with an initial block of services at a common lower price. This could be managed where the citizens’ bills are calculated on the volume of the service they use – how much water and electricity they use, and how many rail and bus journeys they take. The zero marginal cost pricing principle for access would be violated, but, provided the initial block is very low cost, there is a trade-off advantage. If the tariff is fully volume-related then it can be graduated to rise with volume, but the access problem can then get exacerbated.
After the initial block of the USO on a social tariff, the tariff can rise in blocks, and these subsequent blocks can recover not only the rest of the network and monopoly costs, but also the implicit cross-subsidy in the initial social tariff block.

There are other advantages of taking this second route. It is massively simpler to administer, it does not require detailed information on the circumstances of each customer, and there are fewer data protection issues. It leaves incentives largely in place, since the social tariff block is independent of wages and income. In putting citizens rather than consumers in the driving seat, this route keeps faith with the capabilities approach. There will of course be special cases and special needs which will add more complexity back into the charging, but these can be very targeted cases, and leave the bulk of the problem met through the social tariff initial block.

The initial block could be free if the state paid this contribution to the total system network monopoly costs. This would get closer to zero marginal costs access and hence be even better from a capabilities perspective. In effect, the initial block of costs would come from the taxation regime and the better-off would be contributing more even if the tax system was flat rate, as discussed below. From an overall accounting perspective, whether taxpayers or customers pay for this initial block of system costs makes no difference to the economy as a whole. The costs have to be paid. It is just a question of who pays what.

Universal Basic Income

With energy, water, transport and communications, and with natural capital, citizens should have primary assets to draw upon, both now and in the future. The various social tariffs are one method of achieving this. But there is more to a decent life than access to these primary assets. Food, clothes and the ability to access nature and to engage in social life all require money. Although many of these requirements can be mediated through assets, including a sustainable agriculture, sustainable clothing production and materials, and social capital, in practice all developed economies provide for cash payments over and above access to the basic assets. In the presence of both pervasive uncertainty and government failures, there will be lots of incompleteness in mapping the capabilities onto social justice.
The mainstream approach to insufficient money coming in is to direct payments to those in poverty. Some in the liberal tradition regard this as an insurance problem, handling the risk of bad things that might randomly happen to people. This is the route taken by William Beveridge in his famous wartime report, ‘Social Insurance and Allied Services’,7 and much earlier in the Bismarck scheme in Germany in the late nineteenth century. Pensions and health insurance schemes are the prime examples.

Beveridge’s assumption was that the target was absolute poverty, and back in the 1940s he calculated that this would, with reasonable economic growth and his scheme fully implemented, be effectively abolished in a couple of decades. Thereafter, the costs would wither with the problem: people would have enough to eat and the public services would provide the other reliefs to the causes of poverty as economic growth increased incomes. He also had full employment in mind.

Poverty, however, turned out to be not purely absolute in an abstracted way from society, but to have a relative element to add to these absolute measures.8 What counts as being poor depends on what others have, and how the capabilities shift over time. Not having a fridge or even electricity supply in 1900 would not count as evidence of poverty, but it would now.

Whereas for the capability approach it is poverty that counts, for socialists the aim is to reduce inequality. This is a purely relative concept and it could be achieved at any level of absolute poverty. We could all be equally starving. Eliminating inequality blunts the incentives that drive a market economy, and indeed that is the point for those who wish to replace capitalism and the profit motive with socialism and the focus on public duty and service, with the state deciding who gets what and all dependent upon the state. Why would anyone go to work except if instructed by the state?

This incentive issue lay at the heart of the debates between capitalists and socialists in the 1930s and in the Austrian economics we met earlier. The backdrop was the great experiment in Soviet Russia.

Hayek and the Austrians on one side of the debate, and Oscar Lange\(^9\) and socialist economists on the other, argued out the relative merits of markets versus planning. Hayek was much more concerned with this debate than he was with Keynes and the Keynesians, and his great contribution was his theoretical critique of the Soviet system. This was on two fronts: one about human nature and what motivated people to come up with new ideas and be entrepreneurial; and the other radical uncertainty of the sort discussed in chapter 3. For Hayek, the market had two supreme advantages: it provided incentives for people by opening up the prospect of profits, and it was more informationally efficient than planning. For him, the market enabled freedom, and needed a constitution of liberty to protect it, and it would be more efficient than state planning.

This ruled out socialism (it was bound to fail), but it did not remove the poverty problem and it did not deliver social justice. The Soviet Communist model offered in the post-First World War context an alternative to that of the US, and one with much greater equality. As George Orwell pointed out in his review of Hayek’s *Road to Serfdom*,\(^{10}\) the trouble with competition is that someone wins and someone loses.\(^{11}\) Hayek and the Austrian school were rather less sympathetic about concerns for the losers. One reason for the lack of sympathy was the link to unemployment and the extent to which state support would undermine the flexibility of wages.\(^{12}\)

As with the social tariffs, this problem will never go away as long as poverty relief is targeted and explicitly or implicitly means-tested. Why work for a wage below the value of state benefits? It was the reason why so many economists have traditionally opposed a

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\(^{10}\) Orwell, ‘George Orwell’s Review of Hayek’s The Road to Serfdom’.


minimum wage, because it effectively legislates for sticky wages at the bottom of the income distribution, and hence the Labour Standard.

Is there any way to both eliminate poverty and avoid blunting the incentives to work and thereby entertain flexible wages whilst generating social justice? One answer is universal basic income, the payment of money independent of income to all citizens. Basic income is a USO: everyone is entitled to get it, irrespective of other income or wealth. It provides one route to the completion of the provision of basic capabilities to all citizens, providing money rather than goods for those things not already covered by the system infrastructures, healthcare and education. Basic income plus USO access to natural capital and the other core systems provide social justice.

There is of course a snag: the jam is spread across the entire working population, and hence it is very expensive (older people can be covered by state pensions, and children by child benefit). Furthermore, it is also wasteful, in that the billionaires do not need the basic income payment, whereas the poor do. These high costs would be partially offset by the more efficient functioning of the labour market, and in particular the effective abolition of involuntary unemployment, since everyone could choose a job if the wage was low enough to meet their marginal product of labour if they wanted to. All unemployment would be voluntary. Basic income is net of the abolition of all means-tested unemployment benefits. Tax revenues would be higher as a result of employment gains. Wages would be fully flexible. There would be no need for the manipulation of aggregate demand, à la Keynesians, for employment reasons.

Yet, the results would still be expensive, which raises the question of whether there is a modified version of the basic income that might meet these objectives of eliminating poverty whilst maintaining incentives to work.

It is not hard to think of ways to modify basic income, for example by cutting off the top half of the distribution, and therefore

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14 Biden’s $1,400 helicopter money comes close to this on a one-off basis in 2021.

15 The furlough support schemes during the Covid-19 pandemic lockdowns gave some taste of what broad employment protection schemes look like.
those for whom the minimum wage would not have been an obstacle to employment. Provided that the basic income is paid to a big enough number to very comfortably clear what would otherwise be the minimum (or living) wage, it would address the work incentive difficulties of the minimum wage and hence make sure that no one had insufficient income in society. Like the social tariffs discussed above, it provides for all citizens to have sufficient to be able to participate in the economy and society. Whilst critics argue that limiting the entitlements to basic income is a move in the direction of means-tested benefits, it remains very different for the bit of the distribution that matters – the poor. And it still radically alters their incentives.

**Inequality and the Problem of the Ultra-Rich**

If poverty could be abolished though basic income plus USO access to natural and other capitals, and healthcare and education, would there be any reason to worry about inequality? Consider the consequences of not worrying about the difference between an annual income of, say, £50,000, £100,000 and £500,000. If it is poverty and not equality that is the concern, these different annual incomes should not matter.

Consider one radical option to raise the money for the systems access and the modified basic income: a flat single rate for both income and capital gains, set at whatever level reaches the total current spending requirements including capital maintenance. All exemptions and special tax treatments could be abolished, on the grounds that the state is pretty bad at ranking what is more deserving of special treatment, in part because it is so easily captured by tax lobbying. A crude and simple tax system would radically reduce the costs of tax collection and of minimising taxation deadweight costs incurred to accountants and financial advisers. Similarly, the costs of welfare provision under the present means-tested and complex rules of entitlement would be replaced by the single basic income. The cost of administering welfare payment systems is a significant part of their total budgets, and the cost of tax collection represents a significant percentage of total receipts once the private costs of accountants are also included. The interaction of the two adds yet another layer of costs.\textsuperscript{16}

Under the modified basic income and a flat-rate tax, the very large social security and tax bureaucracies could be radically slimmed down. They would no longer be significant industries in their own right probably in total employing over 1 million people, and hence on a par with the NHS in the UK. Together, this would be an enormous saving which could be diverted to a more generous basic income. The incentives in the economy would be preserved, as the possibility of higher rewards would not be blunted by increasing marginal rates as incomes rise. Modified basic income and radical tax simplification go hand in hand.

Some may argue that the ultra-rich would remain a problem, and that allowing some individuals to own more than the GDP of some small countries is divisive and tends to break social unity. They tend to be ultra-polluters and their detachment from society can undermine social institutions and hence be detrimental to social capital. If these arguments are taken seriously, there are various ways of addressing them while keeping to the broad outline of a flat-rate tax system. There could be a special second rate of higher tax applied to incomes and capital gains over a given threshold. This could, for example, be £500,000. It could be higher, and the higher it is set, the smaller the number of individuals involved. Above £1 million per annum, in the UK there are only a few thousand individuals to consider, out of a population of over 65 million. Similarly, there is a relatively small number of very high-wealth individuals.

There are several options beyond higher marginal tax rates on incomes. One is to address the causes of these high incomes and wealth directly, and in particular executive pay, and set a maximum ratio between the top and bottom paid in an organisation. This might appeal to concepts of fairness and worth, but would inevitably be complex in

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17 The total direct employment comprises 100,000 for the UK Department of Work and Pensions and around 70,000 for HM Revenue and Customs. The total number of accountants in the UK is 380,000. See Financial Reporting Council (2021), ‘Key Facts and Trends in the UK Accounting Profession’, www.frc.org.uk/getattachment/69761f38-3397-4779-b192-1be7da9d175/FRC-Key-Facts-Trends-2021.pdf.

the application and open to widespread evasion. If it is wealth that is the problem above a defined threshold, then a wealth tax is the obvious path to take, supported by a serious inheritance tax. The key point here is that modified basic income, and tax simplification, are not barriers to addressing what might be called gross inequality. If the ultra-rich are a threat to social capital, the answer is to address this group head on. A flat-rate tax plus a wealth tax can be very different in social justice terms from just a flat-rate tax.

From the 1980s onwards, several countries experimented with radical simplification, and steps towards the flat-rate approach. The difficulties came both for the obvious political reasons and also because none was radical enough, failing to fully integrate all the various other dimensions of the tax system, notably capital gains tax, and to address the problems of poverty discussed above. Ever since, layer upon layer of complexity have been added back.

Even in the more radical version described above – a basic income for those below a threshold and a flat-rate tax – some further complexity is inevitable in practice. As with social tariffs, there are people with specific individual needs who will require extra support. There are special tax categories for people who live overseas. But the important point is that basic income starts simple and allows some limited complexities, whereas the existing social security system and the tax regimes start very complicated, and tend to get increasingly complex. All of these extra complexities to the flat-rate approach already exist in current tax regimes, so the modified basic income proposal does not make matters worse. Few argue that the complexity that has been added to tax regimes in the last three decades has resulted in a much more equal distribution and poverty has not gone away. The evidence is unambiguously to the contrary. Complex tax regimes have become ever more complicated, and the overall scale of inequality has risen very sharply.

Even with the above modifications, questions remain about the level of the basic income. How high should it be in order to

19 In the 1980s, Chancellor Nigel Lawson developed a two-rate system for UK income tax, at 20 per cent and 40 per cent with thresholds for each. The Czech Republic introduced a flat-rate 15 per cent on gross income in 2008, but by 2013 a higher rate was added.

abolish poverty (net of the system assets USOs)? How does it relate to the capacity of the economy to pay and hence to a stable sustainable economy?

**Basic Income and National Dividends**

A basic income is a special type of USO entitlement. It is a claim by citizens on the sustainable economy and its transition to a sustainable consumption path.

The capacity of an economy to support some or all of its citizens depends on how well the economy is doing, and on consumption not being allowed to outstrip that underlying performance. Borrowing from the next generation to support current spending is ruled out. The ultimate constraint is the maximum sustainable level of consumption consistent with the requirement to ensure that systems are passed down to the next generation in a properly maintained form. Given we are living beyond our sustainable means, once pollution charges are added, public goods are provided and assets properly maintained, and the transition via decarbonisation is paid for, the impacts on the poor are going to be considerable. There is no escaping the consequences of living within our sustainable means. The events in energy and food markets in 2022 and the associated ‘affordability crisis’ gave a taster of how painful this could be.

In the debates of the 1930s, Lionel Robbins argued that unemployment was high because workers demanded wages that failed to reflect the destruction of capital in the First World War. They had, in effect, not come to terms with the diminished circumstances caused by the war, and the need to pay off the debts incurred. UK industry was, in the 1920s and 1930s, uncompetitive; the UK could not pay its way in the world, and the Gold Standard simply made this explicit, rather than being the cause of the underlying problems.

What if this is true now? What if the UK is uncompetitive with Chinese industry, German factories and US tech giants? What if the things that the UK remains good at, like finance and professional services, are a function of hysteresis, a legacy from the past that makes switching elsewhere sticky? Now add in BREXIT, and the placing of the UK’s service industries outside the EU and its single market, indeed outside all the major trading blocs around the world. As the major economies move away from open global trading (and especially the US
and China, and the EU and China), where exactly will the ‘sovereign’ UK end up?

And what if the buying-off of recession across the UK, EU member states, the US and China in 2000, 2007/8 and in 2020 through monetary and fiscal stimuli has been an exercise in keeping the standard of living artificially high globally, at the expense of the next generation not just in the UK, but in all these countries? What if the coronavirus pandemic and the lockdowns had real costs which have made us all worse off? All may want a world-class and well-funded health service, a major upgrade of education and the new social care systems, all free of charge at the point of demand, but can we afford them with a balanced budget on the current account after paying for capital maintenance? Is not Robbins’s point again highly relevant?

It is not in the immediate interests of the current major beneficiaries of the social security payments to argue for restraint, nor would the poor want to limit basic income payments, since these are a proportionately higher part of their total income. The poor currently have no direct stake in the overall performance of the economy. An obvious remedy is to give them a stake, in the form of a share in the national dividend. This would be more like equity and come with the broader equity incentives. It would be directly tied up with the national balance sheet, and the delivery of the intergenerational requirements, net of capital maintenance.

It could work as follows. The national balance sheet is established as described in chapter 5. It has the assets on one side and the liabilities on the other. The publicly owned assets, which make up most of the national balance sheet, belong ultimately to citizens, as ultimately do the system assets in the regulated utilities. But so too does all the debt. The assets yield a return on the capital employed. The debt interest is subtracted, to give a net return, and this could then be distributed to all the citizens.

To make it simple, let’s assume that all the systems are in state hands. The cost of capital would be passed through to the required rate of return, which would reflect equity risk and therefore be above the cost of government bonds. Recall that when some of these assets

21 For an early discussion on this, see ‘The National Dividend’, chapter 3 in Pigou, The Economics of Welfare.

22 For the nationalised industries, this was last formally described in the 1978 White Paper. HM Treasury (1978), ‘The Nationalised Industries’, Cmnd. 7131, HM Treasury.
were privatised, they were sold in return for a cash payment. To leave citizens no worse off, this cash payment should have been added to the balance sheet, most likely to pay down debt, and hence reduce the liabilities side to balance the reduction on the assets side. Since the government of the day argued that privatised utilities would be more efficient than nationalised ones, there should have been a premium paid.

If this dividend on the portfolio of assets on the balance sheet is paid to all citizens, then this basic dividend takes up some of the role of the modified basic income payments, and it is asset-related. Any gap would be made up from tax revenues. The dividend might go up and down according to how well the economy is doing net of capital maintenance and in particular how well the assets are performing. It would be as if citizens had a portfolio of shares in all the utilities, public or privately owned, the intellectual capital (Popper’s World 3 we met earlier) and the natural environment. The dividend is the level of payment, net of the requirement to maintain the assets intact.

The incentives on the system network utilities would be rather different. Instead of the massive financial engineering (and massive is the right word), gearing up the private balance sheets, the citizens’ dividend would be net of the debt servicing costs on the national balance sheet.

It might be countered that these are mostly now purely private businesses paid for by customer bills, not taxpayers. The response is that this is a fiction: the assets, as represented by the regulatory asset bases (RABs), are guaranteed by the regulator and hence ultimately the state. The private utilities are running state-guaranteed assets. For this reason, the RABs should be added back onto the national balance sheet, thereby expanding the national dividend to include the cost of capital of the RAB. The sustainable economy could be even more radical, and add back the electricity generation backed by state contracts in its single-buyer model, which have RAB-like characteristics.23

Giving citizens equity in the core infrastructure systems could go further, to include land, given agriculture is everywhere heavily subsidised, and in effect farmers are in receipt of implicit state guarantees. The land has multiple uses, and citizens have a stake in this because they pay not only for the subsidies, but also for the use values. The UK planning system encourages land value uplift for developments, which could go to a land development tax, for example. Land

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23 New nuclear and now CCS projects are to have explicit RABs.
is much more than a cultivated field: it is a vital national asset and a natural capital one too. The national balance sheet might incorporate not only the state’s directly owned land, of which there is lots, including that belonging to the Ministry of Defence, but also rights over notionally private land, including development rights. Interestingly, it was land that provided the main item in William the Conqueror’s Domesday Book.

**Citizens’ Equity**

The discussions of macroeconomics are in the main about debt, money, credit and interest rates. They are rarely about equity, and yet the concept of equity goes to the heart of the citizens’ model and the sustainable economy. Equity is a stake in the assets and therefore in the outcomes. It carries risks. It can go wrong. When governments pick losers and pursue vanity projects, fail to properly conduct procurement and waste resources, this is a loss not to ‘them’, but to all of us. Much of the money spent in the pandemic on personal protective equipment and track-and-trace was, for example, wasted, yet few seem to care much about the consequences.

If citizens have a direct stake, they should care more, and when it comes to elections, citizens as voters might be more willing to demand that politicians and governments explain their stewardship of the citizens’ assets. Citizens should be provided with evidence of that stewardship, audited by institutions like the UK National Audit Office, with an annual report on the national balance sheet and the management’s performance. National accounts, on a sustainable basis, would really matter; they would help to determine how much money was paid out as the modified basic income. Government failures would reduce the basic income. That would sharpen up political debate and accountability, especially if debt was not an option to cover up the mistakes.

The stewardship concept goes deeper. The government is a steward because the balance sheet is open-ended. These are mainly assets-in-perpetuity, in the current generation’s custody for all future generations. The national accounts are a report on how well current politicians are doing in meeting their duty to ensure that these assets are maintained, and that the next generation is on course to inherit a set of assets at least as good as the current one, and hence meet the first principle of the sustainable economy.
Equity further breaks the link between social security and wages. It is a return on capital separate from the return on labour, and becomes ever more relevant as digitalisation cuts into labour. There will still need to be top-ups to basic income to relieve poverty, taken directly from taxation revenues. The return on capital assets is the citizen’s stake in the economy; the return on labour is the income from individual effort. Basic income is calculated as the return on citizens’ equity plus a tax-derived top-up.

This equity approach would have a big impact on corporate governance, noticeably on the systems that have been privatised. The board of a water company would report to citizens as well as private shareholders and debt-owners. There would be less scope for paying themselves supernormal salaries. The citizens are unlikely to see the merit of paying an annual remuneration of £3 million to a chief executive officer, especially where there are manifest management failures. This could be further reinforced if, in these privatised utilities, citizens had a right to sack the managers and impose more reasonable executive pay. This could be further reinforced if, in these privatised utilities, citizens had a right to sack the managers and impose more reasonable executive pay. In effect, utilities would return to being more like public corporations.

Citizens’ Debt and Liabilities

The concept of citizens having a direct stake in the national balance sheet has one implication that might make for a reluctance to go down this path. Having a stake in the assets and a return on them provides for a positive payment. But having a stake in the debt imposes the opposite. It is a liability, and hence a responsibility, of current citizens and not just a debt passed on to the next generation when the debt is incurred to prop up current spending, not asset enhancements and investments. The liabilities side of the balance sheet is piling up, without corresponding assets on the other.

In a business, borrowing to cover current costs would point towards bankruptcy. The accountant would ask for a guarantee from the business owners that they can and will meet the debts. It would have to be an equity injection. In the stewardship model where citizens

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24 This is not the same as proposals to widen the duties of directors, as per some stakeholder capitalism models, as proposed, for example, by Professor Colin Mayer (see C. Mayer (2019), Prosperity: Better Business Makes the Greater Good, Oxford: Oxford University Press). It is a reporting function to the ultimate shareholders, the citizens.
have a direct stake, the accounting call is for them to make good on these debts being incurred for current consumption. It would be analogous to Keynes’s proposal for a capital levy after the Second World War to pay for some of the war costs incurred.\footnote{Keynes, \textit{How to Pay for the War}.}

What is now in fact by default going on is that the guarantee is being provided by the future citizens. The implication is that, once intergenerational accounting is brought into play and the constraint on the national balance sheet is applied, the next generation will inherit a set of assets at least as good as those the current generation inherited. The debt finance of current spending would be replaced by a pay-as-you-go mechanism. Current citizens would have to pay for the increased current spending. That part of the debt which represents genuine enhancements, after capital maintenance and remedial investment, would be the only debt assigned as a liability to future citizens.

Debt for current spending, including capital maintenance, is, in effect, a negative USO. This debt is a liability shared by all citizens. It lowers their expected future income stream, and/or those of the next generation, and hence their standard of living. The national balance sheet lays bare what is really going on, and the extent to which the current generation is living beyond its means, at least in respect of the state’s assets and liabilities. Balancing the books becomes a binding constraint if the economy is to be sustained, and if it is not, there will be a day of reckoning as and when it is not sustained. In the context of the very large deficit spending during the pandemic, this liability has shot up. We are worse off: the citizens’ equity concept makes this explicit. We are back to the Robbins point above.

What, then, about the case for unbalanced books, made in particular by Keynesians we met earlier? This does not apply to good investments: they add assets on one side of the balance sheet against the cost of financing them on the other. No problem here as long as they really are good investments and as long as there are sufficient savings for the investments. The issue comes when Keynesians advocate increased \textit{current} spending backed by debt (and, as recently, the debt backed by QE). Recall the Keynesian argument is that the spending will pay for itself since the unemployed will be employed, and the multiplier will work its magic. The extra current expenditure will boost effective demand, leading to cumulative growth and will therefore be self-financing.
But recall too that the rationale for the Keynesian medicine to restore full employment is that there are inflexible labour markets, and money wages are given. In the basic income/citizens equity model, the wages can be flexible and all unemployment is voluntary. The separation of the relief of poverty from the determination of wages should solve the problem. The reason why it might not is market power in the labour market, and the actions of trades unions. But it is also possible that monopoly market power may be applied on the producer side, keeping output below the competitive level. It may be that the prices in the market economy do not reflect all the costs. The citizens’ USOs plus modified basic income can solve poverty, but the economy may not necessarily be efficient. For this, the prices have to be ‘right’, which in turn involves the state setting the rules – the market constitution – to ensure that market failures do not distort the outcomes. Citizens’ USOs, the national dividend and basic income need an institutional scaffolding. This has two parts: in the regulation of the systems and in the constitution.