Keynesianism and the 'Green New Deal'

The new, green economy would provide a new engine of growth, putting the world on the road to prosperity again.

This is about growing the world economy in a more intelligent, sustainable way.

Achim Steiner, October 2008'

One of the most striking features of the global financial crisis of 2008 was the consensus on the need to re-invigorate economic growth. From the 'International Monetary Fund (IMF) to the United Nations Environment Programme (UNEP), from political parties across the political spectrum and from within both liberal and coordinated market economies, the call was for mechanisms that would 'kick-start' consumer spending and get the economy growing again.

The reason is obvious enough. When spending slows down, unemployment looms large. Firms find themselves out of business. People find themselves out of a job. And a government that fails to respond appropriately will soon find itself out of office. In the short-term, the moral imperative to protect jobs and prevent any further collapse is incontrovertible.

The clarion call from every side was to get the economy 'back on the growth path.. And this call was not just to increase the GDP It was quite specifically to stimulate consumption growth: to restore consumer confidence and stimulate high-street spending. It was, in effect, a more or less united call to re-inspire the dynamics described in Chapter 6, the dynamics that will continue to drive unsustainable throughput.

Those inclined to question the consensus wisdom were swiftly denounced as cynical revolutionaries or modern day luddites. 'We do not agree with the anticapitalists who see the economic crisis as a chance to impose their utopia, whether of a socialist or eco-fundamentalist kind', roared the *Independent on Sunday* late in 2008.

'Most of us in this country enjoy long and fulfilling lives thanks to liberal capitalism: we have no desire to live in a yurt under a workers' soviet. 2

With that confusingly attired bogey-man looming over us, kickstarting consumer confidence to boost high-street spending looks like a no-brainer. And internecine warfare is all saved for arguing over how this is to be achieved.

This chapter outlines some of those arguments. It highlights, in particular, the international consensus that emerged around a very simple idea. Economic recovery demands investment. The transition to a low-carbon society also requires investment. Let's put the two things together and create an investment package with multiple benefits. Specifically, a 'green stimulus' has the potential to secure jobs and economic recovery in the short-term, to provide energy security and technological innovation in the medium-term and to ensure a sustainable future for our children in the long-term.

Although this idea makes a great deal of sense, the default assumption of even the 'greenest' stimulus package is to return the economy to a condition of continuing consumption growth. Since this condition is unsustainable, it is difficult to escape the conclusion that in the longer term something more is needed. That's something we take up in the next chapter.

Options for kick-starting growth

There are four main contenders for the boot that will kick-start growth. But none of them is risk free. The first is hardly a boot at all; it's 'do nothing' option. The argument here is that, given time and left to its own devices, the economy will recover by itself Unemployment will rise, but that will push down wages, reduce the cost of goods and so stimulate both more consumption and a higher demand for labour.

The difficulty with this option, aside from its political unacceptability, is that while things are recovering, life could get very tough indeed, particularly for those without jobs. Worse, if there are long-term trends at play in labour or capital markets, recovery could be a long time coming, as Japan found out to its cost during the 1990s.

A second option is to stimulate demand through monetary expansion. This was the way the consumer boom was protected for so long throughout the 1990s and early 2000s. And there is a sort of logic to it. Stimulating credit increases the availability of investment capital to firms and at the same time reduces the cost of debt to consumers. We've seen already how crucial both of these things are in keeping consumption going. 3

But making credit easier and cheaper also played a critical role (Chapter 2) in creating the global financial crisis. The danger is that many advanced economies are already at the limits of consumer indebtedness and face a sharply rising public sector debt as well. Pushing these any further stretches the boundaries of financial prudence.

Reducing the interest rate also reduces the incentive to save. At a point when savings rates have collapsed, this route appears to be an encouragement away from economic prudence by firms and households. Although, perversely, as we see below, this may work in favour of recovery.

The third option is to put more money in people's pockets by cutting taxes or increasing benefits. The risk here is that government doesn't have much control over where this extra money gets spent. Some of it may get spent on imported goods and contribute nothing to domestic recovery. Some of it may get saved. People are more inclined to save during a recession anyway. If your financial security looks threatened, it's not a bad idea to have something put away for the future . Ironically, more saving is the last thing that governments want in these circumstances, in spite of widespread concern over levels of consumer indebtedness.

This is what economist John Maynard Keynes called the 'paradox of thrift'. The normal rules of prudence are turned on their head. It's entirely rational for each individual (or firm) to save a bit more in a crisis, But it turns out to be bad for the economy - at least with the system designed the way it is right now. Increased saving reduces high-street spending still further, deepening and lengthening the recession. 4

A further challenge lies in funding these tax cuts. At a time when the tax base is already declining and social costs (for instance to meet unemployment benefits) are rising, this can only be done by increasing public sector borrowing. If we're going to put ourselves deeper in debt, many argue, then perhaps we should be doing 'it through some form of meaningful investment in the future.

This is the basis for option four, a classic Keynesian public spending programme. The most well-known example of this was Franklin D. Roosevelt's New Deal in the 1930s, implemented as the world struggled to escape the great Depression. The New Deal entailed a massive investment in public sector works. It may not have had the short-term effect some claim for it. It didn't in fact achieve a full economic recovery within Roosevelt's first two terms in office. But its long-term impact was enormous. 5

As Paul Krugman, winner of the 2008 Nobel Prize for economics, has pointed out: 'The New Deal famously placed millions of

Americans on the public payroll via the Works Progress Administration [WPA] ... To this day we drive on WPA-built roads and send our children to WPA-built schools.", Not surprisingly, there was a lot of talk about the New Deal during the financial crisis. Krugman called for a Keynesian-type stimulus equivalent to 4 per cent of the US GDP. 7

Green New Deal

The most interesting variation on this theme during 2008 was the call for a (global) Green New Deal. If the public sector is going to spend money to re-invigorate the economy, argued its advocates, wouldn't it be as well to spend it investing in the new technologies that we know we are going to need to address the environmental and resource challenges of the 21st century?

Investments will soon be pouring back into the economy, suggested Pavan Sukdhev, the Deutsche Bank economist leading research on UNEP's Green Economy Initiative. 'The question is whether they go into the old extractive short term economy of yesterday, or a new green economy that will deal with multiple challenges while generating multiple economic opportunities for the poor and the well-off alike. 8

By early 2009, a strong international consensus had emerged in support of the idea of a 'green' stimulus. Targeting public sector investment carefully towards energy security, low-carbon infrastructures and ecological protection could offer numerous benefits, including: freeing up resources for household spending and productive; investment by reducing energy and material costs; nreducing reliance on imports and exposure to the fragile geopolitics of energy supply; providing a boost to Jobs in the expanding 'environmental industries' sector. 9 ; making progress towards the demanding carbon emission reduction targets needed to stabilize the global atmosphere; protecting valuable ecological assets and improving the quality of our living environment for generations to come.

Consensus had also formed around the appropriate targets for a green stimulus. During 2008, the Green New Deal group (a UK based group with representatives from business, the media and non-government organizations (NGOs) suggested that stimulus spending should be focused on the twin challenges of climate change and energy security. The group put forward proposals for a low-carbon energy system that would make 'every building a power station' and the creation and training of a "carbon army' of workers to provide the human resources for a vast environmental reconstruction programme. 10

Later in the year, UNEPs global Green New Deal widened the remit of spending to include investment in natural infrastructure: sustainable agriculture and ecosystem protection. Ecosystems already provide tens of trillions of dollars worth of services to the world economy. 11 So protecting and enhancing ecosystems is vital to economic productivity in the future, UNEP pointed out. They also called for substantial investments in clean technologies, sustainable agriculture and sustainable cities.

The case for a stimulus focused on energy and carbon is clearly strong. Re-capitalising the world's energy systems for a low-carbon world will be a major investment challenge over the next 50 years. The International Energy Agency (IEA) has estimated that energy investment needs between 2010 and 2030 will be in excess of $35 trillion. " Bringing forward some of this investment and targeting it specifically at renewable energy, low-carbon technologies and energy efficiency could pay massive dividends later. 13

In a report published towards the end of 2008, the Deutsche Bank identified a 'green sweet spot' for stimulus spending, consisting of investment in energy efficient buildings, the electricity grid, renewable energy and public transportation. One of the reasons that the "green sweet spot" Is an attractive focus for an economic stimulus is the labor-intensity of many of its sectors' claimed the Bank. 14

A study by the University of Massachusetts Political Economy Research Institute supported that view. It identified six priority areas for investment: retrofitting buildings, mass transit/freight rail, smart grid, wind power, solar power and next generation bio-fuels. The authors calculated that spending $100 billion on these interventions over a two-year period would create 2 million new jobs. By contrast, the same money directed at household spending would generate only 1.7 million jobs and directed at the oil industry fewer than 600,000 jobs. 15

Strategies for job creation

If replicable elsewhere, these findings provide vital insights into the appropriate way to approach economic recovery. Job creation is one of the key alms of an economic stimulus programme. Not only are jobs essential for economic recovery. Meaningful employment is itself a key constituent in prosperity (Chapter 3).

Understanding how best to protect employment is vital. Several strategies are possible, including the direct creation of public sector jobs, financial support to boost employment in specific sectors of indirect support for jobs through measures to stimulate demand.

Public sector employment was the route favoured in Roosevelt's New Deal. Apart from the obvious social benefit in providing jobs, public sector employment seeks its return in several ways. Firstly, there are the benefits to the economy from investment in productive infrastructure (road building, for example, in the New Deal). In addition, public sector jobs generate a part of what has been called the 'social wage' - a return to households from government spending in the form of wages, health and education benefits and social services.16

The stimulus packages to emerge from the 2008 crisis favoured a mixture of strategies. Specific sectors received (or sought) direct support from government in a number of different countries. Most obviously of course, enormous sums of money were committed to the direct support of the financial sector. By the end of 2008, an estimated $7 trillion had been spent globally in underwriting toxic assets, recapitalizing banks and attempting to restore confidence in the financial sector and stimulate lending (Chapter 2).

Direct recovery packages were also sought (and sometimes offered) in other sectors. Most notably, the car industry received direct support in both the UK and the US. The US government committed over $23 billion to ball out the ailing giants GM and Chrysler at the end of 2008. 17 Early in 2009, the UK government promised to underwrite loans to the car industry totalling $2.3 billion.

Perhaps most bizarrely, representatives from the US porn industry approached US Congress for support early in 2009, following the car industry bailout. 'Americans can do without cars and such, but they cannot do without sex' argued Larry Flynt, the founder of *Hustler* magazine. 18 Surely more of a publicity stunt than a serious claim, the call nonetheless highlights the profound mess created by the financial crisis, with the vulnerable and notso-vulnerable alike lobbying for direct support in the matter of their livelihoods.

Beyond direct support to specific sectors, a number of wider fiscal recovery packages were established across the world during 2008 and 2009. One of the first acts of the Obama administration was to bring in a fiscal stimulus package equivalent to 5 per cent of US GDP (spread over a decade) through the American Recovery and Reinvestment Act 2009 (ARRA). The $787 billion package comprised around $290 billion in tax cuts and almost $500 billion in 'thoughtful and carefully targeted priority investments'; its aim to create and save 3 to 4 million jobs, jumpstart our economy, and begin the process of transforming it for the 21st century. 19

The potential for 'green' recovery

In principle, each of these different approaches to economic recovery could have contained a 'green stimulus' component. Public sector employment could be directed explicitly at 'green jobs'.

Direct support for the financial sector could be allied with requirements that lending be preferentially targeted at sustainable investments. Sectoral bailouts like those afforded to the car industry could be made conditional on shifting towards greener manufacturing and low-carbon vehicles.[20]

In practice not much of this happened. All the same, by early 2009, the idea of linking fiscal stimulus with green investment was taking hold. As an HSBC Global Research report remarked at the time, the 'colour of stimulus' was going green. Out of a total commitment of almost $2.8 trillion to economic recovery plans to date, $436 billion (15.6 per cent of the total) Could be characterized as green stimulus, according to the HSBC analysis .[21]

As Table 7.1 illustrates, the extent of green stimulus varied considerably across countries. Some plans had no green component at all while others (notably China, the EU package and South Korea) incorporated green investment that represented a very substantial proportion of the recovery funding.

The 'greenest' recovery package was in South Korea where over 80 per cent of the stimulus was targeted towards environmental goals. The funding was allocated to four main areas: conservation (low-carbon vehicles, clean energy and recycling); quality of life (green neighbourhoods and housing); environmental protection (including flood defence); and infrastructure (IT and green transport networks).

Table 7.1 Green elements of economic stimulus plans - February 2009

Country/Region	Fund $b	Period	**Green Fund $b**	**% Green**
Asia Pacific				
Australia	26.7	2009-12	2.5	9.3
China	586.1	2009-10	221.3	37.8
India	13.7	2009		0
Japan	485.9	2009-	12.4	2.6
South Korea	38.1	2009-12	30.7	80.5
Thailand	3.3	2009		0
Subtotal	**1,153.8**		**266.9**	23.1
Europe				
EU	3&8	2009-10	22.8	58.7
Germany	104.8	2009-10	13.8	13.2
France	33.7	2009-10	7.1	21.2
Italy	103,5	2009-	1.3	1.3
Spain	14.2	2009	0.8	5.8
UK	30.4	2009-12	2.1	6.9
Other EU States	308.7	2009	6.2	2.0
Subtotal	**634.2**		54.2	16.7
Americas				
Canada	31.8	2009-13	2.6	83

Chile 4.0 2009 0
US EISA 185.0 10 years 18.2 9.8
US ARRA 787.0 10 years 94.1 12.0
Subtotal **1,007.8 114.9 11.4**
TOTAL 2,796 436 15.6

Note: EESA, Emergency Economic Stabilization *Act of 20%*

Source: HSBC 2009

Employment benefits were estimated to include the creation of 960,000 new jobs over the next four years. Interestingly, the government seems to view its Green New Deal as a way of placing South Korea at the forefront of 21st century economies. Launching the package on 6 January~ South Korea’s Prime Minister Han Seung-soo said: 'We are in an unprecedented global economic crisis. We must respond to the situation in an urgent manner... The Green New Deal will provide these. The 2 1 st century global environment is here and we will find new growth engines for this era. '22

The largest absolute level of commitment to a green stimulus came through the US ARRA. A-round $ 94 billion (12 per cent) of the total stimulus of $787 billion could be characterized as green stimulus according to HSBC Global Research. This included $26 billion for low carbon power (mainly renewables), $27.5 billion for energy efficiency in buildings, $4 billion for low-carbon vehicles, around $10 billion for rail and $11 billion to upgrade the electricity grid.23

Even these commitments may have been too low. The total stimulus commitment of $2.8 trillion identified in the HSBC report amounted to a little over 5 per cent of global GDP ($55 trillion) at the time. Spread over the three years or so of the commitment programmes, this implies a stimulus commitment at a level of approximately 1.5 per cent of GDP. But the green component of this commitment represented less than a quarter of a per cent of global GDP. 24

By comparison with Krugman's suggestion of a 4 per cent stimulus or indeed the 2-3 per cent resource costs that might be required to achieve a transition to a low-carbon society, this could simply be too little too late. A report from the Grantham Institute early in 2009 suggested that green spending should comprise at least 20 per cent of a 4 per cent stimulus package. The UK Sustainable Development Commission (SDC) went even further arguing that green spending should be at least 50 per cent of a 4 per cent stimulus package. 25

In the event, nothing anywhere near as substantial as this emerged from the stimulus spending commitments in advanced economies. Nonetheless, the argument for a substantial green stimulus remains strong. A much higher level of investment is clearly essential if we are to have a chance of meeting climate change targets and protecting against energy scarcities.

Equally, there is a nasty possibility that generic recovery spending - with no green focus - will jeopardize sustainability. Investing in road building, for example, may be a decent-ish way of protecting jobs and boosting economic activity. But it won't lead to green growth. On the contrary, it's quite possible for stimulus investments in high-carbon infrastructures to make it all but impossible to achieve environmental targets later. The US stimulus package included $27 billion to be spent on new roads - dwarfing the much smaller sums set aside for low-carbon electric and hydrogen vehicles.

Perhaps most strikingly of all, a fiscal stimulus dedicated towards a generic increase in high-street spending could have entirely per-verse consequences. Even if it is successful in boosting consumption - evidence suggests that households are just as likely either to save the additional income or spend it on non-domestic goods and services - there is no way of targeting this spending towards low carbon outcomes. 26

In short, there is a clear case to suggest that green investment and green jobs should be seen not as a marginal addition to conventional packages, but as the single biggest element in economic recovery. The returns on such spending appear to be at least as good as those on more conventional stimulus spending. And green investment is absolutely essential to achieve sustainability targets.

Funding recovery

Any recovery package - and certainly something of the size proposed above - raises the question of how it is to be paid for. One of the advantages of a green stimulus is that it offers the potential for direct financial returns to the economy. These returns take a variety of forms. Most obviously they arise in the form of fuel and resource savings. For instance, some simple measures to improve the energy efficiency of the domestic housing stock have payback times of less than two years.

Some - but not all - of these returns accrue directly to government and can therefore offset the fiscal costs of stimulus spending. Direct returns include fuel cost savings to government, as well as savings in public expenditure resulting from reduced health costs, lower congestion and lower levels of pollution. Internalizing some of these costs - for instance through a carbon price - would increase the visibility of these direct returns to the government purse (Chapter 11).

Some of the returns accrue to businesses and households rather than to government. In a recession, this is clearly in the national interest, because it boosts household income and reduces the pressure on firms. But it also raises the question of where government is to find the funding.

The broad assumption in Keynesianism is that fiscal stimulus is funded by increasing the national debt (deficit spending). This is)ustified because such spending stimulates growth through a 'multiplier' effect. 27 By growing consumption (and incomes) now, governments can pay off the debt through higher tax revenues in the future.

Nonetheless there are reasons to be wary of this rationale. One of them is that existing levels of public sector debt are already high. And increasing this exposure, particularly if it's achieved through greater external debt, could be costly later." At the very least, it could take decades to recover from a rapid rise in national debt.

Besides, there are also questions of 'saturation' in conventional debt markets, with a real prospect of failure in some governments, ability to fund conventional debt. 29

So there's a strong case for serious consideration of other funding options.

Green bonds are one such option. These are bond issues linked directly to low-carbon (or green) investments. The idea is interesting for a variety of reasons. In the first place, it is clear that many of these investments offer considerable returns, at a time when the returns on conventional household savings mechanisms are disappearing.

The absence of suitable savings vehicles is particularly frustrating when the propensity for households to save is finally emerging from the doldrums - even in the liberal market economies. Keynes's paradox of thrift' is frustrating for government policies aimed at encouraging people to spend. But Instead of going against the grain of people's natural prudence at such times, there is a good case for providing robust and credible vehicles to save in a form which could provide the basis for stimulus funding. And the evidence from consumer research suggests that people are desperate for options not just to change their lifestyles to be 'greener', but also to shift their investment decisions."

In summary, green bonds provide a differentiated savings product when the propensity to save is high and conventional bond markets are saturating; and in doing so they inject investment funds directly into green recovery. Nonetheless, bond issues of any kind increase the public sector debt at a time when it is already high. So other mechanisms for recovering the rewards from public sector investment are going to be needed. Broadly speaking, there are two options here.

One of them is fiscal tightening - using existing or new local or national taxes to recover investment spending. A pure Keynesian would reject this measure, at least in the short-term, precisely because it could suppress or even wipe out the multiplier effect. But with rising national debt, there will clearly be a need to re-assess the long-term sustainability of the tax base in advanced economies. The idea of an ecological tax reform - a shift towards environmental taxes - should be a part of that discussion. We'll return to this in Chapter 11.

Secondly, there are arguments to suggest that government itself could take an equity stake in energy-related assets. The argument here is not dissimilar to the one used to justify public ownership in the banks. There is a legitimate public claim on the return from public investment, wherever those funds are directed. The case for public equity funding in the energy sector is at least as strong as it is in the financial sector.

One thing is clear: achieving long-term social goals in the energy sector already requires innovative thinking and creative approaches to asset ownership and investment architecture. The case for a green recovery package simply pulls these issues to the fore. Before consigning the nation to additional years of public sector debt, it's clearly crucial to explore the full range of funding options in much greater depth.

Beyond recovery

In summary, the idea of a green stimulus has many strengths. Investment in the transition to a sustainable economy is vital. Targeting stimulus spending towards that investment makes perfect sense. Stimulus measures which support the least well-off are particularly to be welcomed. The poorest will inevitably be hardest hit through the recession and are already struggling with rising costs for food and fuel. Income inequality is higher in the OCED nations than it was in the mid-1980s. 31

An unequal society is an anxious society, one given too readily to positional consumption' that adds little to overall happiness but contributes significantly to unsustainable resource throughput. A Green New Deal worthy of the name would signal clearly to the post-crisis world that we are serious about fighting climate change, preventing resource scarcity and creating a fairer society.

At the same time, the broad assumption behind all the recovery packages put forward through the crisis was that they would help to stimulate consumption growth. Credit would flow, consumers would spend, business would invest and innovate, productivity would return and the wheels of the machine would start turning again. This is the logic of Keynesianism. 32

Recovery means a return to business as usual. Let's kick-start the circular flow of the economy and watch it grow again. The outcome (assuming it works) will be thoroughly predictable. Business innovation (creative destruction) and consumer demand (novelty seeking) will drive consumption forwards again. And with employment depending on it, there's no chance of anyone getting off the treadmill. We are right back at the structural impasse identified in Chapter 6.

Clearly, the Green New Deal advocates weren't proposing a return to the status quo. UNEP called for 'transformational thinking'. The call was for a different kind of growth - what Achim Steiner, Executive Director of UNEP, called a 'green engine of growth. But growth nonetheless. 'Any public spending should be targeted so that domestic companies benefit, and then the wages generated create further spending on consumer goods and services', argued the UK group.33

And yet, it is difficult to escape the conclusion that in the longer term, we're going to need something more than this. Returning the economy to a condition of consumption growth is the default assumption of Keynesianism. But for all the reasons highlighted in preceding chapters this condition remains as unsustainable as ever.

There is still no consistent vision of an economy founded on continual consumption growth that delivers absolute decoupling. And the systemic drivers of growth push us relentlessly towards ever more unsustainable resource throughput. A different way of ensuring stability and maintaining employment is essential. A different kind of economic structure is needed for an ecologically constrained world. It is to this possibility that we now turn.