Green Money: Reclaiming Quantitative Easing

Money Creation for the Common Good

Written by Victor Anderson
Commissioned by Molly Scott Cato MEP
Funded and published by the Green/EFA group in the European Parliament

Foreword by Molly Scott Cato

I am delighted to be able to launch this report which offers a Green perspective on the innovative monetary policy known as QE, or quantitative easing.

While I was still working as an academic economist I watched the financial elites and the politicians who serve them moving almost invisibly between two totally inconsistent positions.

They began by arguing for their role as guardians of an efficient and stable financial system and for the continuation of their role as monopoly providers of private-sector debt-based finance. When the credit crunch blew a hole in this argument they came back with an equally strong argument that they had the answers to revive the economy they had destroyed if only they could be given the liquidity to permit them to enable this.

But, as Victor Anderson argues below, the reality has been that the debt-based financial system was always unstable and unjust. For those of us who had long called for the power of finance to be brought back under the control of the people this has been an interesting period.

It is time for us to liberate the power of money and make QE our own

The financial crisis we foresaw was used not to challenge the power of finance but has actually enhanced it. Meanwhile, the policy of direct credit creation by government which we had advocated was translated into QE which, as argued in this report, has further benefited wealthy elites.

But quantitative easing is just a technique and one that could be used to create the money we need to invest in the sort of future we envisage as Greens, a future where we can generate our energy from safe, clean renewable sources and provide safe clean homes for all the citizens of our continent. QE could provide the money to do all this if we took political control of the extraordinary power of money creation.

So it is time for us to liberate the power of money and to make QE our own. We need to reclaim the huge potential offered by direct money creation to provide investment in the green transition. The power of public investment this will unleash can create jobs for the thousands of unemployed across our continent while simultaneously enabling the investment in green infrastructure that is long overdue.

This report explain how this is possible and why it is so urgently necessary. All that has been lacking so far is the political will.

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In producing this report, we have benefitted greatly from comments by Andrew Waldie, Fran Boait, Colin Hines, Richard Murphy, Francisco Padilla Olivares and Grace Murray.

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1. Introduction

Europe's economies have still not recovered from the 2008 financial crash. Austerity policies have failed to secure prosperity and employment opportunities, despite some success in calming the finance sector.

The continuing economic crisis could also be seen as an opportunity

However both the EU and member state governments have generally proved very reluctant to use significant government spending on public services, infrastructure, or welfare benefits as a way out of the crisis. Amongst the consequences, we still see disastrously high rates of unemployment in many EU countries, with figures for Spain and Greece around 25%.

Looked at a different way, this continuing economic crisis could also be seen as an opportunity. The immediate need for economic revival should be put together with the more long-term need to restructure economies to fit them for what has been called "the great transition" – the historic shift from carbon-intensive and resource-intensive industrial production to smarter and greener ways of working and living.

Without this transition, the world is going to be stuck with rising temperatures and rising seas, and continued deterioration of the ecosystems worldwide. Leaving the path of ecological disaster will require a fundamental economic transition, but this has happened before: the revolutions which created agriculture and industry are particularly powerful examples.

No such transitions happen without investment, and without some allocation of resources into making them happen.

2015 could see a needed economic boost combined with structural change for transition to a sustainable economy

2015 is a time both of immediate need for a boost to the economies of Europe and historic need for structural change to help bring about the transition to a sustainable economy.

This report proposes a policy for taking action based on putting the two together. This policy can best be described as "green quantitative easing". This report will set out what non-green quantitative easing (QE) is, and what has happened in practice when it has been tried in recent years. The report will then discuss what a green version of QE would look like, how that would work in practice, and some of the political issues which this idea raises.

Context: the paradox of "green growth"

It looks like there's a paradox here. Economic growth is strongly correlated with environmental impact of a whole variety of sorts, ranging from increased carbon dioxide emissions to the concreting over of land with high biodiversity. Yet in advocating green QE, this report is proposing a policy which will, if successful, lead to resumed or increased economic growth, at least in the short term. How can this be justified?

The argument for green QE starts from a recognition that not absolutely all economic growth has negative environmental consequences, even though the overall correlation is strong. By being selective, we can find sectors of the economy, and ways of doing things throughout the economy, that would contribute to economic growth if they were to be expanded. However, at the same time these activities can have a positive environmental impact (or at least can help to steer the economy in the long term towards a positive or much lower negative environmental impact). This is where green QE would focus: this is how the "green" in green QE would be defined. More detail on the definition of "green" is given later in this report.

This policy is in contrast to two others: indiscriminate economic expansion, which has negative environmental consequences; and an indiscriminate no-growth policy which keeps the structure of the economy as it is now but simply addresses the issue of its size. That form of no-growth economics would overall have a less damaging impact on the environment, but it doesn't provide the basis for a serious green transition, and would have the effect of increasing unemployment and poverty.

Transition to a green economy has to involve a change in the structure of the economy.

The transition to a green economy has to involve a change in the structure of the economy, including its composition as between different economic sectors, the nature of the labour market, and changes in technologies. If 'no-growth' means the existing economy at the existing size, it will not solve the problems.

Green QE is therefore best seen and implemented as part of a longer-term and more comprehensive strategy for changing the structure and nature of the economy as a whole. It will represent one of a variety of forms of investment in what has been called "the great transition", the transition to a greener economy. However this report is not primarily about the overall picture, which has been discussed elsewhere. Here the focus is specifically on green quantitative easing, what role it can play in economic change, and on the practical details of how it would work.

Context: the crisis in Europe

Before considering QE and green QE specifically, it is important to note that the other key part of the context for these proposals is the continuing financial crisis in Europe. Europe has suffered from a combination of factors:

1. A world economy made vulnerable by a risky financial system in which there are very high levels of debt.

2. Rising world commodity prices (oil, metals, food) in the first half of 2008, which threaten the short/medium term prospects for continued economic growth in the West, creating difficulties for the repayment of debt and the payment of interest, precipitating the financial crash.

3. In the Eurozone, a lack of flexibility over exchange rates and interest rates created by a single currency being applied over a large region with very different degrees of susceptibility to the financial crash.

4. A lack of mechanisms for an adequate European response:
    - monetary union without any fiscal union
    - an unaccountable European Central Bank with a very limited role (prioritising price stability above everything else)
    - banking with an international scope but without a corresponding international regulator
    - a dominant power (Germany) within Eurozone politics with an extreme aversion to inflation and therefore a high degree of anxiety about measures of reflation

- an economic sector (finance and banking) with far too much power and influence within economic decision-making.

Europe has suffered from a large "perfect storm" created by this combination of factors. Green quantitative easing is suggested here as just one part of the way out of this storm. Green QE is not a substitute for measures to address the dysfunctionality of the global finance system or the workings of the Eurozone, which are necessary because the underlying causes of the 2008 crash have not gone away. However green QE does have a role to play, in helping to rescue the economies of Europe from the immediate problems which face it now, and to make progress in the transition to a greener economy.

2. Current use of QE

Central banks only use quantitative easing in exceptional circumstances

Before setting out proposals for how green quantitative easing could work on an EU-wide basis, it is important first to look at how 'ordinary' or non-green QE has worked so far, and at what its consequences have been. This should provide the background for understanding why it is now necessary to move on to green QE instead.

What QE is and why it was introduced

Central banks only use quantitative easing in exceptional circumstances. Their preference and usual practice is to operate through altering interest rates. Lowering interest rates makes it easier for firms to borrow, which makes it easier for them to expand, and in the process take on additional employees. Similarly, it becomes easier for individuals to borrow and spend money, encouraging firms to expand to meet growing spending power.

However, the problem with this policy comes when interest rates are already low and there is very limited scope for lowering them further. When official interest rates fall as low as, for example, 0.5%, central banks have to think of something else – and what they have thought of is QE.

The policy of "quantitative easing" means that a central bank creates new money when it buys assets – normally these assets are mostly government bonds. These bonds were issued in the first place by governments wishing to borrow money. They are pieces of paper (or the electronic equivalent) which give the buyer the right to their money back, plus interest, after a defined period of time, in return for lending their money to the government.

By entering the secondary market and buying these bonds, the central bank is putting new extra money into the economy. This should, its advocates claim, have the effect of boosting the economy by increasing the overall level of demand: there is more money around and people therefore have more money with which to buy things.

This should increase sales, reduce unemployment, and increase GDP; and any money that people put into their bank accounts as a result of this should increase the willingness of banks to lend to firms for expansion, again reducing unemployment and increasing GDP. However there is evidence (which we will outline later) that QE does not necessarily work as successfully as this.

QE since the crash

QE is an exceptional policy by the standard of the past 40 years, and it was introduced in the exceptional circumstances created by the 2008 financial crash (as well as earlier, in the different circumstances of Japan in the 1990s and 2001). Before evaluating its effectiveness, it is useful to briefly outline the steps which have been taken. The most notable feature has been the very large sums of money involved. Since the crash, in the USA, Japan, UK, and Eurozone there have been the following QE measures introduced:

USA

November 2008: Quantitative Easing 1 (QE1) – The US Federal Reserve ("the Fed") started buying $600 billion in mortgage-backed securities from commercial banks. This flooded banks with excess cash in their reserve accounts, which put downward pressure on short-term interest rates. By March 2009, the Fed had $1.75 trillion in bank debt, Treasury bills, and other assets on its balance sheet. In June 2010, the Fed had reached a peak of $2.1 trillion in assets. As debt matured, the Fed bought more Treasury bills at a $30 billion monthly rate to keep its balance sheet above the $2 trillion level.

November 2010: Quantitative Easing 2 (QE2) – The Fed indicated it would buy an additional $600 billion in Treasury securities by the second quarter of 2011.

September 2012: Quantitative Easing 3 (QE3) – The Fed announced an additional bond purchasing programme of $40 billion a month of mortgage-backed securities. In December 2012, it was announced that open-ended purchases would be increased from $40 billion to $85 billion per month. That amounted to $45 billion in Treasury bills on top of the $40 billion a month of mortgage-backed securities.

October 2014: Announcement of the end of the USA's QE, which ended with that month's purchases.

Japan

October 2010: Bank of Japan announces intention to buy 60 billion dollars of assets.

August 2011 & April 2013: This QE programme was greatly expanded.

October 2014.: Bank of Japan announces further expansion of the programme, amounting to 712 million dollars per year. This brought Japan's level of central bank assets as a percentage of GDP to around double that of the USA, UK, and Eurozone. Japan has been attempting to combat a long period of economic stagnation, beginning well before the 2008 crash.

UK

March 2009: Bank of England starts QE, with purchases in March, May, August, and November.

October 2011 & February 2012: Further QE purchases by the Bank of England, bringing the total to £375 billion. This has been combined with a policy of austerity in direct public expenditure.

Eurozone

May 2010: European Central Bank (ECB) purchased government bonds totalling 220 billion euros.

December 2011: ECB launched 'Big Bertha I', a package of three-year loans, amounting to 480 billion euros.

March 2012: 'Big Bertha II': three-year loans totalling 530 billion euros.

January 2015: ECB announces 60 billion euros of QE per month, buying Eurozone government, European Investment Bank (EIB), and private sector bonds, to run from March 2015 until at least September 2016 (total: 1.1 trillion euros minimum).

It is clear that this scheme was adopted despite opposition in Germany, both from its central bank and its government. German opposition is said to have been responsible for two modifications in the scheme. Government bonds will mostly be excluded from the Eurozone's sharing of the risk of losses, with the purchase of a government's bonds mainly being carried out by its own national central bank. The ECB announcement implied a warning that bonds of some governments (perhaps Greece and Cyprus) may not be included in the scheme at all.

This new programme has turned out to have the effect of reducing the value of the euro in the foreign exchange markets. However the overall economic impact is still unclear.

Economic effects of QE

As those sequences of events make clear, quantitative easing has been tried on a very large scale. A great deal of hope and a great deal of money have been invested in it. But what effects has this non-green QE actually had in practice? Has it achieved what those who decided to implement it claimed it would achieve?

A great deal of hope and money was invested in quantitative easing

QE did have the predicted effect of providing money to the banks. However, as a result of the financial crash, banks were anxious to build up their reserves, and were also under pressure from politicians to do so in order to reduce the amount of risk in the world economy. Banks also wanted to retain senior staff and stop their share price from falling. The consequence of all this was a strong tendency for banks to give preference to building up reserves, bonuses, and dividends.

In fact, in the UK, bank lending actually fell. [1] QE therefore did not provide a lending boost to firms, and hence to output and employment, that its advocates had hoped for. One consequence of this was that the distributional impact was regressive: money for bonuses and dividends, but not for bringing unemployed people into employment. This was confirmed by a Bank of England report assessing the effects of QE in the UK. This showed that QE had unintended consequences. Through reducing the availability of government bonds, which were being bought up as part of the policy, money belonging to pension funds and individual savers was being shifted over to shares and commodities instead. This raised share prices and made shareholders better off and at the same time inflated food and other commodity prices. [2]

Political effects of QE

One of the main political implications of QE has been to reassert the importance of monetary policy, after a period in which there has been a strong tendency to remove it from democratic control, through the establishment of the "independence" of the Bank of England and the European Central Bank. This arrangement has created problems for the co-ordination of fiscal and monetary policy, which in some cases (as in the UK recently) have moved in opposite directions.

For the ECB, QE has meant a dramatic change of role, from its establishment as a bank primarily concerned with limiting inflation and limiting the money supply, to a bank now in 2015 attempting to deliberately raise the rate of inflation, with recession seen as a more important risk than high inflation. This has added to German dissatisfaction with the way the Eurozone operates. At the same time there is rising dissatisfaction in countries such as Greece and Spain. The 2015 ECB QE programme limits the extent to which there is risk sharing across the Eurozone, putting a question mark over the idea that the ECB is truly a central bank. It also makes it look in some respects like a co-ordination mechanism for separate national central banks.

Principally through its effects on inflation rates, QE adopted within a particular country, or within the Eurozone, may also affect currency exchange rates, and therefore international trade. The January 2015 ECB announcement, for example, led to a substantial fall in the euro against both the dollar and the pound.

Inflation also reduces the real value of debt, making it easier for indebted governments to pay off their loans. At times of particularly low (or negative) inflation, an additional inflationary push can also help to prevent recession by persuading consumers that delaying their purchases will not give them cheaper prices. QE is of course only one of a range of different policies which can have this effect on inflation, and not the most efficient in terms of money spent compared with anti-recessionary impact.

Lessons from the record of QE in practice

The record of QE in practice implies a number of lessons for future policy:

- QE was introduced at the wrong time, when banks were anxious to build up their reserves following the 2008 crash. If they had been required by regulators to build up their reserves before the crash, the introduction of QE after the crash would have been more likely to provide the boost for bank lending to firms that its advocates hoped for.
- QE depended on the relatively efficient functioning of the banking system. The 2008 crash shows the completely dysfunctional nature of the global finance and banking system, making this dependence not credible. In addition, it is well-established practice that banks prefer to lend for asset purchase, such as housing, rather than for productive and generally more risky purposes. QE would therefore have been more likely to work had there already been an efficiently functioning banking system in place.
- In the absence of an efficient banking system, there could at least have been temporary strings attached to the transfer of money to the banks, perhaps in the form of purchases of bank shares in return for the money. This was not done, missing an opportunity to put pressure on the banks to change the way they operate, including the way they still incentivise employees to take irresponsible risks.
- Even if QE had been timed and designed in such a way as to boost bank lending to productive firms, this boost would have been indiscriminate as regards different economic sectors. It would have helped to reflate and expand the economy, but it would have done nothing to contribute to the structural economic transition needed to halt climate change and ecological deterioration. It would still have wasted the opportunity to introduce policies combining low-carbon and ecological investment with reflation. Without such a combination, we will either have economies stuck in recession or economies expanding but in a way which races towards ecological disaster.
- None of these considerations is a fundamental objection to QE as such. However they do strongly indicate that if QE is to play a useful role, it will in future have to be designed very differently.
- There is also a need for extreme caution about the calls for “structural reforms” which frequently accompany advocacy of QE. This phrase tends to be used as code for further free

market neoliberalism, shifting the distribution of income and wealth in the direction of greater inequality.

- There is also a need for greater co-ordination between fiscal and monetary policy, which is difficult to achieve in a period when monetary policy has been hived off to "independent" central banks.

Notes

[1] 'Trends in Lending' (Bank of England October 2014). Page 4.
http://www.bankofengland.co.uk/publications/Documents/other/monetary/trendsoctober14.pdf

[2] 'The Distributional Effects of Asset Purchases' (Bank of England July 2012).
http://www.bankofengland.co.uk/publications/Documents/news/2012/nr073.pdf

3. What is Green QE?

Traditional quantitative easing misses the opportunity to contribute to structural economic transition

Even in cases where quantitative easing has some success in boosting bank lending to firms, it does so on an indiscriminate basis. It misses out on the opportunity to make QE contribute to the structural economic transition which now urgently needs to take place - the transition to a low-carbon and pro-environmental economy. Before considering the details of how green QE would be implemented, this section of the report looks at the question of what in this context is meant by "green".

The basic idea

The basic idea of the version of green QE advocated here is that a central bank, or agency making use of money created by the central bank, buys debt not principally from the banks but instead from private sector businesses, local and regional governments, and social enterprises, where those organisations can demonstrate that the central bank's money will be used for green purposes.

This form of QE would – rather than boosting banks' reserves and profits – boost the green sector of the economy, and green activities, practices and projects throughout the economy.

By itself, this wouldn't be sufficient to bring about the thorough economic and social transition that is needed. Other policies would be required as well, and suggestions for these have been set out in many other publications. [1] The claim made here is simply that green QE has a part to play, not that it could replace the need for stronger regulations, increased consumer awareness and boycotts, direct government expenditure, and so on. It is not a "silver bullet" but it would help.

Quantitative easing could be used to boost the green sector of the economy.

The proposal put forward here is for a green QE programme to be operated on an EU-wide basis, funded by national central banks, and organised through a new department in the European Investment Bank. The details of these points about implementation (and other possible options) will be discussed in section 4.

There are two clear reasons for preferring green QE to non-green QE. One is the need for transition to an increasingly green economy. QE provides one opportunity and mechanism for funding such a transition.

The other reason is that green QE provides money to productive projects, rather than hoping it will reach such projects via the finance system, which runs the risk that money will stay within the finance system and not be passed on. Green QE is not the only way of achieving this: this could be done through funding non-green productive projects, cutting taxes, or increasing government expenditure. However, when combined with the first reason, the need for green economy transition, there is a powerful case specifically for green QE. (2)

Is there a problem about "state aid"?

It is often believed, at least by people who have not looked into the details of this question, that the EU has firmly prohibited itself from any form of discrimination as between different economic sectors. It would therefore follow that any proposal such as the one outlined here would be ruled out from the start.

However, this is not the case, even though the EU has a general presumption against "state aid" favouring a particular firm or sector. The Lisbon Treaty in fact set out a list of exceptions, in Article 107. These include (3b), "aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State"; and (3c), "aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest". [3]

Green QE could easily fall within both of these two categories of exceptions, as well as being very closely aligned with many of the EU's statements and declarations on innovation, climate change and sustainable development. [4]

It could be argued that QE in the form in which it has been implemented so far has in fact unfairly favoured the finance sector relative to other economic sectors. And certainly the European Commission's proposals (launched 26.11.14) for a new investment scheme envisaged a focus on specific sectors, such as broadband and energy networks and renewable energy. [5]

What do we mean by "green"?

Which types of projects and enterprises would qualify as "green"? They would have to be making a contribution, however large or small, to the process of transition to a greener economy and society. For example, their work might be leading to a reduction of carbon emissions or of negative impacts on ecosystems.

The areas this implies are now pretty well-established, and include:

1. Insulation and ecological design and construction of buildings
2. Public transport, walking & cycling schemes
3. Arrangements for the collection, recycling and/or re-use of materials, and for waste minimisation
4. Renewable energy projects
5. Energy, water, metals and other resource efficiency promotion & implementation

6. Nature conservation schemes

7. Research, development, and application of environmental technologies for monitoring and measurement, e.g. for pollution control

8. Environmental and sustainability education and awareness raising

9. Ecologically sound agriculture and food production

10. Noise reduction barriers and technologies

11. Land and soil decontamination

Projects in these areas can make a significant contribution to achieving a variety of goals the EU has set for itself, for example on climate change, technological innovation, employment, biodiversity conservation and sustainable development.

In addition, there could also be provision for helping any enterprises or projects that have the effect of increasing the resilience of local or regional economies and societies, for example through financial provision for locally-owned SMEs.

The criteria

Whilst the list above is fairly familiar, it is also necessary to have some clear criteria for assessing specific proposals, including assessing projects which are not covered by this list but which are nevertheless claimed to be "green" and worthy of support.

There has been a long and complex debate within the environmental movement about appropriate indicators relevant to this. From within that debate, two concepts in particular currently stand out as being at the cutting edge. These are the "four footprints" analysis associated with Friends of the Earth and the nine "planetary boundaries" analysis put forward by the Stockholm Resilience Centre.

The point about local/regional economic resilience would require another sort of indicator: the likely impact of the project on reducing the dependence of a defined geographical area on external trade or finance. This would act as a much-needed counterweight to all the pressures for expanding international trade and globalised finance. This is tending to leave localities and regions almost everywhere vulnerable to economic change anywhere in the world, as well as adding to financial volatility and insecurity, and of course to freight transport and its associated carbon emissions.

The "four footprints" analysis moves on from the concept of a general "ecological footprint" to distinguish between four different categories of footprint:

1. impact on greenhouse gas emissions
2. impact on water use
3. impact on the use of metals and other materials
4. impact on land use

Biodiversity impact is not measured separately and directly, but is seen as an outcome from (1), (2), & (4). This analysis has been set out in detail for Friends of the Earth by the Sustainable Europe Research Institute in Vienna. [6]

The nine "planetary boundaries" analysis moves on from the idea that there is a limit to the safe or acceptable extent of climate change to a more thorough overall picture in which there are nine such limits or boundaries. These boundaries are essentially determined by the levels at which there are tipping points for the earth system, but they are set at a precautionary distance from those tipping points, in order to provide a margin of safety for the possibility of a change in direction before the tipping point is actually reached. The indicators implied by this analysis are then the likely effects of a project on moving towards or away from each of the nine boundaries. These boundaries concern: climate, biodiversity, land use, water use, nitrogen and phosphorus, ocean acidification, aerosol loading, the ozone layer, and chemical pollution. [7]

The planetary boundaries picture has been the subject of a great deal of discussion. Particularly persuasive criticisms have been made about the biodiversity boundary, as it may be necessary to separate this out from being treated in terms of a global total, and instead regard the states of major biomes, such as tropical forests and polar icecaps, as themselves each representing separate boundaries in their own right. [8]

In January 2015, an updated version of the planetary boundaries analysis was published, highlighting three of the nine as "core" boundaries. These are: biosphere integrity (in place of simply "biodiversity"), climate change, and novel entities (clarifying the concept of "chemical pollution"). This update does not, however, make much difference to the proposal here to use the nine boundaries as a basis for evaluation of what counts as "green". [9]

In addition to these specifically green criteria used for assessment, there will also obviously need to be more standard criteria applied, regarding the clarity of the project, the credibility of it being delivered, local needs and available skills, quality of management, cost-effectiveness and risk.

Notes

[1] See 'Funding the Green New Deal: Building a Green Financial System' (Green European Foundation 2011). http://re-define.org/sites/default/files/GEF-Funding%20the%20GND%20web.pdf

[2] For more on the idea of green QE, see: Richard Murphy & Colin Hines: 'Green Quantitative Easing: Paying for the Economy we Need' http://www.financeforthefuture.com/GreenQuEasing.pdf (Finance for the Future, 2010). Richard Murphy: 'How Green Infrastructure Quantitative Easing would work' http://www.taxresearch.org.uk/Blog/2015/03/12/how-green-infrastructure-quantitative-easing-would-work/ (Tax Research UK 2015)

[3] See extracts from the Lisbon Treaty in http://ec.europa.eu/competition/state_aid/legislation/compilation/a_01_03_11_en.pdf

[4] See for example the EU's 7th Environmental Action Programme (in force from Jan 2014): http://ec.europa.eu/environment/newprg/

[5] European Voice 27.11.14. Page 9.

[6] 'State of Play of National Consumption-Based Indicators' (Sustainable Europe Research Institute 2013). http://ec.europa.eu/environment/enveco/resource_efficiency/pdf/FootRev_Report.pdf

[7] Johan Rockstrom et al.: 'Planetary Boundaries: Exploring the Safe Operating Space for Humanity' (published in 'Ecology & Society' 2009). http://www.ecologyandsociety.org/vol14/iss2/art32/

[8] See Georgina Mace et al.: 'Approaches to Defining a Planetary Boundary for Biodiversity' (in 'Global Environmental Change' Sept 2014). http://www.sciencedirect.com/science/article/pii/S0959378014001368

[9] Will Steffen et al.: 'Planetary Boundaries: Guiding human development on a changing planet', in 'Science' 15.1.15.

4. Implementation

How would a green QE programme actually be implemented? It would be an ambitious scheme to put into practice, and it would need to be implemented across the whole of the EU's member states. This section sets out how it could be done.

Who could do it

There are a number of different options for organising the implementation of a green QE programme on an EU-wide basis. In this report we are proposing a new department within the European Investment Bank (EIB), essentially because of limitations on the remit of the European Central Bank, which is the other obvious (perhaps more obvious) body to initiate such a programme. The ECB is currently limited by the Maastricht Treaty to monetary policy and the control of inflation, which green QE clearly goes beyond.

However, changing economic circumstances have led politicians to create some flexibility in the interpretation of the ECB remit, so it could now provide a means for green QE implementation, and it could certainly do this if the Treaty provisions were to be amended.

There is also the question of whether the programme should be implemented directly by some part of the EIB or ECB, or whether a special purpose vehicle linked to one of these banks should be created. A combination would also be possible in which a new department of the EIB acted as a special purpose vehicle on behalf of the ECB.

These are essentially to some extent technical financial issues, to some extent matters of legal interpretation, and to some extent matters of political will and political acceptability. These are important issues but they are not the primary focus of this report, which is to advocate the argument for EU-wide green QE and an overview of the ways it might be put into practice. However, in order to put forward a proposal here which is as concrete as possible for purposes of discussion, we are setting out one particular option, which is to implement green QE through the European Investment Bank.

Implementation through the European Investment Bank

A green QE programme is a form of investment, spending money in the near future in order to bring about both revived economies and green transition.

This programme will require the skills of a bank which is able to deal with multiple clients. This is because it would not be a centrally or nationally operated scheme, but would be dependent on a large number of implementers in private, public and third sectors, as well as those working at EU level. The parts of the programme which would be centrally operated would be the provision of funding, the assessment of applications for funding and the monitoring of expenditure and delivery.

Green QE would therefore need to be implemented through some form of investment bank. There are already two such institutions closely associated with the EU: the European Investment Bank (EIB) and the European Bank for Reconstruction & Development (EBRD, which operates mainly in countries outside the EU). However, neither of these has so far been organised with the aim of promoting green transition. In fact, particularly through their investments in the coal industry, both bodies have been operating policies directly opposed to the EU's ambitions on sustainable development and climate change. [1]

Proposal 1: Establish a new green department within the European Investment Bank

The EIB is an already established institution, with much of the expertise and connections that would be required. The organisation of a new programme of green QE could be housed within it. This would most effectively be achieved through establishing a new department of the EIB, with clarity about its green objectives and with staff who are committed to achieving them, rather than viewing this as simply a variation on existing programmes of work.

The new department would be set up initially with the sole purpose of implementing the green QE programme. It would be established simply by agreement amongst EU heads of government. This would not require any alteration to EU treaties.

The new EIB department would lead the operation of the programme of green quantitative easing, which would be like other QE programmes in the sense that it would primarily consist of the buying of bonds, thereby putting money directly into economies.

Where it would differ from standard QE is that it would not heavily - or in fact at all - discriminate in favour of the (dysfunctional) financial sector, but instead would promote the green sector and green economic activity, and thereby contribute to overall green transition as well as to economic recovery.

Proposal 2: An executive committee for the new department should be appointed by the European Parliament

The new EIB department should have some degree of independence and coherence of its own, so that it is able to carry through consistent programmes of work in a professional way, with a different approach from that of the rest of the Bank. It therefore requires its own executive committee, operating at arm's length both from direct political control and from the EIB Board of Directors.

Committee members would not be on the board as representatives of separate member states, and should be required to work on behalf of the EU as a whole. This would be more easily achieved if they were not the appointees of member state governments. We therefore believe that the executive committee members should be appointed by the European Parliament, where a variety of divisions cut across national differences. In order to provide a link to encourage policy coherence, there should also be a representative appointed by the European Commission.

The committee should be required to publish regular quarterly reports on its strategy, current economic and environmental analysis, its investments and their actual and potential outcomes. These reports should be considered by scrutiny sessions of the European Parliament's Economic and Monetary Affairs Committee and the Committee of the Regions.

Proposal 3: The green QE programme operated by the EIB should be funded through the creation of new money by the ECB, together with the central banks of EU states outside the Eurozone

Perhaps the most politically sensitive question about green QE is where the money would come from. This is in some ways a strange topic, because currently most money is created by banks, which do so without any direct political control over that activity, with their own profit-making objectives in mind rather than any obligation to serve society as a whole. A change in this situation, establishing public control over money creation, would of course not abolish the need to be wary about adding to inflation through creating additional money on an excessive scale: the power to create money has to be used responsibly. This raises some general and larger questions about debt, credit, and the creation of money, which will not be pursued here, although they have become increasingly controversial and relevant following the 2008 financial crash. [2]

Public bodies do, however, have an influence on money creation through the use of interest rates (and through ordinary quantitative easing), but they are not in direct control of it. It is a peculiar situation, to say the least, to find that something so central to the functioning of society as money is largely outside public control.

The obvious principal body for the purpose of creating the money necessary for green QE is the European Central Bank, working alongside the central banks of the EU member states outside the Eurozone (which include those of the UK, Sweden, and Poland).

There would be no need for the ECB and the national banks to co-ordinate activity on the lending and expenditure of the EIB. All that would be needed is initial agreement on the amounts of money to be created and contributed by each bank. The EU already has formulae to determine member state contributions to funding, and some modification of these could be applied.

The role of the central banks would simply be the creation of the money, through their power of direct credit creation, necessary for the programme to work. In doing so, they would be using monetary policy to avoid economies falling into recession and the possibility of negative or very low inflation.

In order to comply with the provisions of the Maastricht Treaty, the role of the ECB and the other central banks in this programme would have to be strictly limited to the creation of the money necessary to finance it. They would not be involved in the 'green' part of the programme, which would be the responsibility of the EIB and national investment banks. The ECB would provide the money to the EIB as one of a number of different means for achieving its inflation target.

Another option would be for the ECB and the other central banks to provide funding to a special purpose vehicle (SPV) linked to the ECB rather than the EIB, with a specific remit for implementing the green QE programme.

Proposal 4: The EIB then uses the money to buy bonds issued by a wide range of organisations, thereby funding green economic projects.

The bonds issued would be used to provide finance (mostly loans) for large companies, SMEs, social enterprises, co-operatives, and regional and local governments. These loans, organised as bond purchases, would be selective, in the sense of going to projects meeting green criteria of the sort which we have set out in the previous section. [3]

These bonds would be bought in the market, not directly from the companies and others issuing them (again, this should avoid any conflict with the Maastricht Treaty). In some cases, the EIB could buy bonds which had been issued by national government green investment banks, or indeed from any institution providing a route for finance to reach green projects which can also contribute to the avoidance of negative or very low inflation.

Proposal 5: The EIB would in some cases provide money for grants

As with the bond purchases, EIB grants would be used to fund and support green economic projects. Although the term "quantitative easing" is often used to refer solely to funding through the purchase of bonds, there is no particular need in operating the policy advocated here to restrict it in this way. In a minority of cases, grants may be more appropriate than bonds, and there is no reason in principle to rule this out.

Proposal 6: The EIB would have limited proactive capacity for seeking out green initiatives

The EIB's new department would operate predominantly on the basis of receiving and assessing applications for QE funding. It would not proactively seek out all the organisations it buys bonds from. However in some cases there would be advantages in achieving synergies between different organisations and projects, for example between the collection of recycled materials and their re-use, and the Bank would therefore need to have some capacity to take an intelligent view about how such projects might fit together.

In some exceptional cases, it would buy shares rather than, or as well as, funding debt (or providing money for grants), where that proved likely to be useful for the purpose of achieving long-run accountability or substantial policy input.

The EIB would also need to consider the geographical distribution of its funding through this programme, in order to ensure that the regions with the highest rates of unemployment are not underrepresented when funding is allocated. If this became a problem, then again there would need to be a limited proactive aspect to the new department's work, carried out in this case in collaboration with regional authorities in the areas concerned. Regional and local authorities can in any case be expected to actively take part in assisting potential applicants in putting proposals forward.

Notes

[1] On the record of the EBRD regarding fossil fuels, see: http://www.theguardian.com/global-development/poverty-matters/2013/sep/10/ebrd-coal-european-development-bank

[2] See for example: 'Sovereign Money' http://www.positivemoney.org/our-proposals/sovereign-money-creation/

[3] For a slightly more complex version of this proposal (though confined to climate/carbon), see: 'A Proposal to Finance Low Carbon Investment in Europe' – Michel Aglietta, Etienne Espagne, & Baptist Perrissin Fabert (France Strategie 2015).

5. Politics and process

Is this practical?

This report has so far set out:

- The meaning of "quantitative easing"
- The record of QE in practice
- The basic idea of green QE
- The criteria that would be applied
- The means of implementation
- How it would be funded
- The possible barriers presented by state aid rules and the Maastricht Treaty

It is essential to recognise quantitative easing is a highly political topic

These are the most important aspects that need to be considered in order to establish a feasible proposal for European green QE. None of the proposals put forward here is organisationally impractical or economically irresponsible. However, policy recommendations on their own are of limited value unless consideration is also given to the approach and strategy that might be used in order to navigate through to putting the policies into practice.

It is essential to start off by fully recognising the obvious fact that this is a highly political topic. Green QE will be controversial, it will have opponents, and the path to achieving it will involve a series of difficulties.

The transition to a green economy is essential from any perspective that takes the long term seriously, whether it is businesses seeking to minimise the risk of ecological catastrophe or citizens seeking to create a more democratic and fairer economy. Every part of the world needs a reasonably stable climate, with reasonably good air quality, water supply, soil, and biological resources. This ideally ought to be sufficient to bring everyone together in pursuit of what is a shared common good.

However, politics and economics are not as straightforward as that. The transition to a green economy is currently still being obstructed by people and organisations which put their own short-term interests first; as well as of course through simple bureaucratic and intellectual inertia.

Some stand to lose from Green QE

The most predictable source of opposition to green QE is the fossil fuel lobby: big oil, gas, and coal. These companies have built their businesses on the basis of maximum extraction of fossil fuels. Rather than diversify and move on, their instinct is to oppose any measures which would decarbonise the economy. Some fund climate science denial organisations and politicians (a major problem particularly in the US Congress), some seek to curry favour with the public through misleading advertising and sponsorship of art galleries and museums. All of them lobby governments to maintain and even increase public spending subsidies, or favourable tax arrangements, for further extraction, including the subsidies which take the form of military expenditure on intervention in oil producing countries.

For these irresponsible companies Green QE is yet another challenge to their business model. Out of all the sectors of the world economy, even including finance, the fossil fuel sector has become the most anti-social, with the damaging effects from its activities extending far into the future. However, as climate change worsens, renewable energy technologies are being developed and continue to come down in price. Also disinvestment gathers pace and fossil fuel share prices tend to fall, while regulations tighten. It is therefore becoming increasingly clear that diversification and innovation are essential even from the perspective of the self-interest of these companies.

This may not happen quickly enough, however, and we can expect opposition to green QE proposals from the big fossil fuel companies, possibly in alliance with the finance sector which stands to gain from QE measures continuing to be non-green.

Green QE is a challenge to the finance sector because it is a form of QE no longer biased in their favour. It also represents a vote of ‘no confidence' in the banks' ability to serve the wider economy. And through the democratic accountability proposed for the European Green Investment Bank, this policy represents a challenge to the undemocratic nature of finance, manifested in so many ways, ranging from lack of transparency of private sector banks to the “independence” of the ECB.

These two powerful sectors – fossil fuels and finance – can be expected therefore to oppose Green QE. Green QE cannot be regarded as a merely technical proposal. There will have to be political campaigning and pressure to counteract the opposition it will almost inevitably receive.

Conclusion

The report has made clear the benefits of a Green form of QE. So what would have to happen in order for a Green QE policy to be implemented? This report is just a first step to make the case. Our task now is to build political support to make the idea a reality.

Given the European Commission's emphasis on the importance of investment via the Juncker Plan, it is of concern that at present there is a very limited amount of new money to fund the plan. We would strongly recommend that they consider the route of new money creation rather than the highly leveraged system which might introduce its own instability and would also influence the sorts of projects that would be funded. The long-term nature of investment for the green transition requires patient capital of the sort that Green QE could provide.

What is needed above all is a determination to take some political control over the finance system. There is absolutely no need to accept that banking and the creation of money are matters which have to be left to the private sector, when they are so crucial to the functioning of the whole economy, and when they have recently gone so badly wrong. This lesson was learned by policy makers who introduced conventional QE but they have not used that power strategically and, as argued earlier, the money they have created has not provided useful investment and has increased inequality.

We need to respond to both crises: the crisis of climate destabilisation, and the after-effects of the 2008 financial crisis. Green QE is a practical plan to tackle both finance and the global environment together. Doing so would create a more stable, secure and prosperous Europe.