



Forum for Stable Currencies

Advocating Economic Democracy
through Freedom from National Debt

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The “Stick” of Green Taxation v the “Carrot” of Green Funding Environmental Economics from a Mathematical Perspective

A Supplementary Memorandum to “[Green Credit for Green Purposes](#)” [See www.greencredit.org.uk]

Executive Summary

1. The Forum for Stable Currencies [‘FSC’] submitted its Memorandum - “Green Credit for Green Purposes” - to the Treasury Select Committee on Jan 16th 2007 in response to its inquiry into climate change and the Stern review.
2. In this Supplementary Memorandum, FSC addresses two major issues identified in oral evidence to the Committee: the ethical dimensions of the economics of policies and of climate change and the use of taxation to make environmental gains.
3. “Green taxation” has been proposed as a means of reducing environmentally damaging behaviour. Whilst hoping to see such behavioural change, the FSC agrees with Prof Mark Maslin [see www.ucl.ac.uk] that current policies will not be sufficient to achieve these targets.
4. The Forum for Stable Currencies recommends that, in addition to green taxation, “green grants” be introduced to fund green activities in all sectors. This will stimulate beneficial economic activity to the effect that: a) unemployed people could become actively involved in environmental activities, and b) grants to improve energy efficiency and reduce emissions would benefit small and medium enterprises.
5. “Green grants” should be funded by an increase in the Government issued share of the money supply. That is, public money should fund environmentally desirable activities at the pace required to address climate change. The FSC believes that this would be the most effective and sustainable funding mechanism for the practical measures needed to address climate change.
6. By using green taxation as a ‘stick’, environmentally detrimental behaviour may be reduced, but economic growth is stifled. Instead, by using money as a ‘carrot’, “green stick” taxes could be matched by growing “green carrot” grants.
7. “Green carrot” grants could match “green stick” taxes on individual and corporate levels or gradually increase at the rate determined by the *cash/credit ratio* over short and long time periods.

The Context

8. While the “economics of policy” is a term used by Sir Nicholas Stern in his oral evidence, it does not yet form part of the debate. We use the term to mean “considering issues or policies that, in a systemic approach and from a high level perspective, are derived from the mathematical rather than the sociological analysis of data”. The “hard” science of data analysis must complement the “soft” social science of economics.

*A Voluntary Initiative of Parliamentarians and Concerned Citizens
across the full political spectrum and from all religious persuasions*

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9. Systemic data analysis must include
 - a. the rate of growth of
 - i. *cash* aka M0 or state-created and interest-free
 - ii. *credit* aka M4 or bank-created and interest-bearing
 - iii. the supply of money as a whole
 - b. the use of *ratios* as a measure that can be equally applied over short, medium and long term periods
 - c. procedures for increasing interest-free public spending in order to ameliorate climate change.
10. The “structural and procedural conclusions” derived from such data analysis should contribute to the public discourse and should include the analysis of the Bank of England’s publicly accessible data.
11. “Structural conclusions” concern the imbalance of power between financial institutions in the City and the budget of Government. Compared with the credit supplied to the private sector by monetary and financial institutions, the Government’s budget went down from 42.7% to 37.3% while credit rose by 44.7%. [See page 9 of our submission.]
12. “Procedural conclusions” cover the ways in which economic growth is measured only short term.
13. The “economics of policy” needs to address ways of increasing public funding for our environment.

The Argument

14. In his oral evidence, Sir Nicholas Stern identified the importance of resolving ethical questions, commenting that these ‘should be put at centre stage’ in discussion of climate change policies. He went on to say: “If one is talking about making decisions now which have an impact over 50, 100, 150 or 200 years, the ethics of how one makes judgments, as between changes in investments in the next few years and their implications 150 years down the track, raise some quite difficult questions. We felt that the *economics of policy* [emphasis added - NB] could not be taken on without confronting those things.” [See Tuesday, 6 February, answer to Q.2]
15. The Forum for Stable Currencies endorses this approach. We believe that long-term thinking is necessary when quantifying economic growth for long-term sustainability. This is both an ethical as well as an economic issue. In ethical terms, we need to apply equity for all peoples, and responsibility for Earth as our common environment. In this context, short-term thinking means honouring the contract between our generation and the next. Long-term thinking means practising environmentally sustainable development and “green growth”, so that Earth remains habitable for future generations.
16. In economic terms, short periods of 1 to 3 months are used for measuring inflation, while annual data is used for measuring GDP. These indicators cannot cover impacts over 50 – 200 years. Therefore, inflation and GDP ought to be measured over comparably long periods.
17. Additional per capita indicators such as *income per person*, and *national debt per person* need to be used to quantify the economics of climate change, as well as *CO₂ emission per person*.
18. Economic policy should therefore cover GDP and inflation over longer time periods and include the following considerations:
 - a. for environmentally sustainable development to take place, the mechanisms of amortisation need to become equally sustainable over short and long terms, at home and in developing countries, for public and private investments
 - b. measuring inflation as an increase of prices needs to be accompanied by measuring the increase of the money supply for investment and economic activity

- c. when measuring the growth of investment and the money supply, the increase of its two components *credit* and *cash* needs to be measured independently and in parallel
- d. *credit* relates to *cash* as *capital* relates to *interest*: one-off long-term investments are paid off by small short-term payments
- e. measurements of economic growth should therefore be the same for short and for long term time intervals
- f. the Government's payment of interest on funds budgeted annually for the legitimate financing of public expenditure cannot be prioritized over the substantial shift of human energy and resources which may be directed into saving the environment. The Public Sector Borrowing Requirement [PSBR] and the National Debt are an artificial burden on the nation. In these times of crisis and emergency they should be reconsidered from a long-term perspective.
- g. for the same reason of emergency, there should be no financial limit on the Government's budget to fund environmentally beneficial activities.
- h. The Treasury could cut its Public Sector Borrowing Requirements as far as zero and reduce interest payments.
- i. The Treasury could use its ability to issue cash as "green carrot" payments to increase the Government's budget to fund environmentally beneficial activities.

19. In his oral evidence, John Healey MP told the Committee that "the ultimate test of effectiveness of tax in the green territory is not the overall tax revenue ... from what are classified as green taxes but ... the behavior changes and the environmental gains that come as a result of the tax policies". [See Wednesday, 7 February 2007, answer to Q.258]

20. Change of behaviour by using money as a stick addresses environmentally detrimental behaviour. Fostering environmentally beneficial behaviour means funding green activities in all sectors and on all levels: individual, corporate and Governmental.

21. To fund the government's programme of activities to mitigate climate change, it will be necessary to make public buildings energy efficient, provide carbon neutral transport systems and supply energy from renewable sources.

22. The Forum for Stable Currencies proposes a transparent *cash/credit ratio* to meet these environmental, social and economic needs. All agreed measures should be given full cross-party support so that changes of government do not reverse this commitment to the health of the environment, surrounding seas and atmosphere.

23. When formulating climate change policies short-term thinking needs to be combined with long-term thinking: honouring the contract between this generation and the next has to be measured in the same way as practising sustainable development and "green growth", to ensure that Earth remains habitable for future generations.

24. In a covering letter to members of the Treasury Select Committee [16.1.07], the FCS's chairman, Austin Mitchell MP, notes the short term nature of current economic thinking and practice, which is not directed towards environmental protection, renewable energy, conservation of energy, better public transport and research into such measures which require long-term investment and public spending. He urges government to regain control of the money supply and the ability to direct funds to these activities.

The Ethical Dimensions of the Economics of Policies for Climate Change

The Mechanics of Sustainable Globalisation

When considering the time periods of 50 – 200 years, referred to by Sir Nicholas Stern, the only relevant data available are supplied by the National Debt Management Office. [See www.dmo.gov.uk]¹

25. In a finite world, infinite exponential growth is not possible. But this type of growth is only a human measure of man-made activities that are fuelled by money. For economic growth to become sustainable, the right levels of growth need be found for every country, in the same way as nature knows when to stop and when to change. This requires an understanding of timing and of processes over time.
26. In that vein, a current *cash/credit ratio* will have to be determined for each country and global comparisons will lead to sustainable percentages of external investment versus interest payments and internal credit and cash.
27. With a view to developing sustainable globalisation, currencies need to be stabilised such that their purchasing powers do only depend on internal price rises and not on international speculation.
28. The concept of “economic growth” therefore requires additional economic measures and indicators that are derived from a mathematical perspective in the context of Earth ethics.
29. This demands per capita measures on the basis of human equity, stabilisation mechanisms on the basis of currency equity and converging *cash/credit ratios* in the supplies of national currencies.

Using the *Cash/Credit Ratio* to Measure “Green Decline” and “Green Growth”

30. In addition to measuring inflation, we recommend the *cash/credit* ratio of the money supply as an indicator of the value of a national currency and its purchasing power at home.
31. In the UK, this ratio has fallen from around 30% to around 3% since the late 1960s, thus indicating a “green decline”. The Club of Rome published its *Limits to Growth* report in 1972, and simple Excel calculations will show the differences between “green growth” and “green decline” by changing the *cash/credit* ratio over 30 years: differences in public spending power through reducing interest payments and increasing the share of interest-free money.

“Green Grant” Funding for Environmental Gains

32. The Forum for Stable Currencies believes that public credit for public purposes is not only the most effective but also the most sustainable funding mechanism for activities that not only adapt and mitigate but also prevent climate change from worsening.
33. Just as states of emergency are called for in times of war and catastrophe, so does a state of “financial emergency” require new mechanisms for adapting national and global economies to meet our common challenge.

¹ The UK National Debt was established in 1695 with £1.2 million at 8% interest. The debt was cancelled after 1815 because it was simply not repayable and reintroduced in 1854.