



LUND UNIVERSITY

A proposal for voluntary degrowth by redesigning money for sustainability, justice, and resilience

Hornborg, Alf

Published in:

Financialisation, Economy, Society and Sustainable Development (FESSUD)

2016

[Link to publication](#)

Citation for published version (APA):

Hornborg, A. (2016). A proposal for voluntary degrowth by redesigning money for sustainability, justice, and resilience. In *Financialisation, Economy, Society and Sustainable Development (FESSUD)* (European Policy Brief). European Commission.

Total number of authors:

1

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00



EUROPEAN POLICY BRIEF

FINANCIALISATION ECONOMY SOCIETY AND
SUSTAINABLE DEVELOPMENT



A Proposal for Voluntary Degrowth by Redesigning Money for Sustainability, Justice, and Resilience

**Alf Hornborg, Human Ecology Division,
Lund University**

October 2016

INTRODUCTION

Background

The period after 1971, which saw the final abandonment of a gold standard tied to the American dollar, has revealed the logical trajectory of the conventional money sign. Since the introduction in Europe of paper money in the fourteenth century, and the first major financial crisis in Florence in 1343, the risks of detaching money volumes from finite, material parameters have repeatedly become evident. In the 628 years between 1343 and 1971, the aggregate consequences of states, banks, and market actors maximizing their monetary assets have included long-term tendencies toward increasing economic inequalities and environmental degradation, punctuated by points of extensive monetary devaluation illustrating the fundamental vulnerability of states, financial institutes, and people at large.

Although a great number of policy suggestions have been presented to attempt to remedy such recurrent tendencies and events, mainstream proposals do not critically scrutinize the inherent features of the money sign itself. This policy brief considers what such a critical scrutiny would entail, and some possible conclusions. It does not belittle the technological and societal accomplishments in Europe since the fourteenth century, but suggests that current concerns with climate change and financial crises offer a historical moment for reflection on how the operation of the global economy might be reorganized in the interests of global sustainability, justice, and financial resilience.

In the wake of the financial crisis of 2008, it has become increasingly acceptable to advocate more elaborate societal regulation of the economy. To counteract the runaway logic of unregulated private finance, there have been calls for innovation in *public* finance. A fundamental challenge for actors representing public interests is how to establish regulatory frameworks for alleviating risk and vulnerability without seriously discouraging private actors from innovative contributions that are of benefit for society at large. In order to progress in meeting this challenge, it is necessary to emphasize some analytical distinctions which tend to be ignored in mainstream discourse, such as between market principles and capitalism, everyday local life versus global finance, and long-term sustainability and survival versus short-term gain. The societal objective must be to strike a balance between such distinct interests and concerns, which in our opinion means establishing means of insulating them from each other, rather than allowing one to be absorbed by the other. We thus need to take seriously the recent surge of voices advocating de-growth, localization, post-capitalism, and the imperative of collectively changing the rules of the game.

A central question for those of us concerned with designing an economics for sustainability must be whether the main concern of economic policy has to be economic growth and maximum employment, or if it might prioritize environmental and social resilience, justice, and long-term survival, even if this would mean less-than-maximum encouragement of growth and employment. How this question is answered hinges on our framing assumptions, for example about the nature of money and exchange. As recent global negotiations have focused on issues no less drastic than drafting policies for *saving the biosphere* from

human destruction (the COP meeting in Paris in December 2015), we need to ask ourselves if there really are limits to how imaginative we can be in proposing policy recommendations for a sustainable economy.

In order to be able to imagine an economy that does not continue to generate increasing inequalities as well as greenhouse gas emissions, biodiversity loss, and other processes threatening to exceed planetary boundaries, we need to consider radically different ways of organizing human societies. This requires us to bracket conventional convictions about the requisites of a well-functioning economy, and to envisage feasible organizational changes that may modify human behaviour patterns so as to increase sustainability and justice. We need nothing less than a *vision* of a more sustainable and egalitarian future human society, and a feasible road map for getting there without abandoning our values regarding democracy, justice, and individual liberty.

EVIDENCE AND ANALYSIS

Outline of a policy proposal for sustainability and justice

Given these challenges, an initial question would be how it would be possible to organize an economy that generates in at least three fundamental ways tendencies which are in directions diametrically opposite to those which can be observed in the world at present. How can human behaviour patterns be encouraged that *increase* rather than reduce sustainability, that *reduce* rather than increase vulnerability, and that *diminishes* rather than increases inequalities?

To generate the first of these goals, the objective must be to reduce transports, emissions, resource use, and waste. To promote the second goal, the ideal must be to enhance food security, diversity, community, and general resilience. To reach the third goal, finally, the aim must be to mitigate economic accumulation, polarization, and marginalization. In more general terms, the vision of an economy which in these three respects distinguishes itself from current trajectories

would be closely aligned with the widely endorsed concept of “degrowth”.

In order to encourage such modifications of human behaviour without resorting to totalitarian politics and severe austerity measures, the following general recommendation for a policy for sustainability and justice is offered: *Each nation state establishes a complementary currency for local use only, which is distributed to all its residents as a basic income.* This very general outline of a policy proposal raises a long list of questions to which only preliminary answers can be provided here. The specific ways in which these questions can be answered represent options for calibrating the proposal with different kinds of constraints, whether particular to different areas or of a more universal nature.

The following attempt to provide preliminary responses to some of these questions should thus be understood as highly preliminary and subject to meticulous negotiation, monitoring, and modification:

1. What is the fundamental goal of this proposal?

The most fundamental idea underlying this proposal is to *insulate local human subsistence and livelihood from the vicissitudes of national and international economic cycles and financial speculation*, and to provide tangible and attractive incentives for people to live and consume more sustainably. It would provide authorities with a means to employ social security expenditures to channel consumption in sustainable directions and encourage economic diversity and community resilience at the local level.

2. Why should the nation state administrate the reform?

The nation state is currently the most encompassing political entity capable of administrating an economic reform of this nature. Ideally it is also subservient to the democratic decisions of its population. The current proposal is envisaged as an option for European nation states, but would seem equally advantageous for nation states anywhere. If successfully implemented within a particular nation or set of nations, the system can be expected to be emulated by others.

3. What is a complementary currency?

It is a form of money that can be used alongside regular currency, without in any way legally restricting the use of regular money.

4. How is local use defined and monitored?

The complementary currency (CC) can only be used to purchase goods and services that are produced within a given geographical radius of the point of purchase. This radius can be defined in terms of

kilometres of transport, and it can vary between different nations and regions depending on circumstances. A fairly simple way of distinguishing local from non-local commodities would be to label them according to transport distance, much as is currently done regarding, for instance, organic production methods or “fair trade”. Such transport certification would of course imply different labelling in different locales.

5. How is the complementary currency distributed?

A practical way of organizing distribution would be to provide each citizen with a plastic card which is electronically charged each month with the sum of complementary currency (CC) allotted to him or her.

6. Who are included in the category of residents?

A monthly CC is provided to all inhabitants of a nation who have received official residence permits.

7. What does basic income mean?

Basic income is distributed without any requirements or duties to be fulfilled by the recipients. The sum of CC paid to an individual each month can be determined in relation to the currency’s purchasing power and to the individual’s age. The guiding principle should be that the sum provided to each adult should be sufficient to enable basic existence, and that the sum provided for each child should correspond to the additional household expenses it represents.

8. Why would people want to use their CC rather than regular money?

As the sum of CC provided each month would correspond to purchases representing a claim on his or her regular budget, the basic income would liberate a part of each person’s regular income and thus amount to real money, albeit restricted only to local purchases. The basic income in CC would reduce a person’s dependence on wage labour and the risks currently associated with unemployment. It would encourage social cooperation and a vitalization of community.

9. Why would businesses want to accept payment in CC?

Business entrepreneurs can be expected to respond rapidly to the radically expanded demand for local products and services, which would provide opportunities for a diverse range of local niche markets. Whether they receive all or only a part of their income in the form of CC, they can choose to use some of it to purchase tax-free local labour or other inputs, and to request to have some of it converted by the authorities to regular currency.

10. How is conversion of CC into regular currency organized?

Entrepreneurs would be granted the right to convert some of their CC into regular currency at exchange rates set by the authorities. The exchange rate

between the two currencies can be calibrated so as to compensate the authorities for loss of tax revenue and to balance the in- and outflows of CC to the state. The rate would thus amount to a tool for determining the extent to which the CC is recirculated in the local economy, or returned to the state. This is important in order to avoid inflation in the CC sector.

11. *Would there be interest on sums of CC owned or loaned?*

There would be no interest accruing on a sum of CC, whether a surplus accumulating in an account or a loan extended.

12. *How would saving and loaning of CC be organized?*

The formal granting of credit in CC would be managed by state authorities and follow the principle of full reserve banking, so that quantities of CC loaned would never exceed the quantities saved by the population as a whole.

13. *Would the circulation of CC be subjected to taxation?*

No.

14. *Why would the authorities want to encourage tax-free local economies?*

Given the several beneficial social and ecological consequences of this reform, it is assumed that nation states will represent the general interests of their electorates and thus promote it. Particularly in a situation with rising fiscal deficits, unemployment, health care, and social security expenditures, the proposed reform would alleviate financial pressure on governments. It would also reduce the rising costs of transport infrastructure, environmental protection, carbon offsetting, and climate change adaptation. In short, the rising costs and diminishing returns on current strategies for economic growth can be expected to encourage politicians to consider proposals such as this, as a means of avoiding escalating debt or even bankruptcy.

15. *How would the state's expenditures in CC be financed?*

Much of these expenditures would be balanced by the reduced costs for social security, health care, transport infrastructure, environmental protection, carbon offsetting, and climate change adaptation. As these savings may take time to materialize, however, states can choose to make a proportion of their social security payments (pensions, unemployment insurance, family allowance, etc.) in the form of CC. As between a third and half of some nation states' annual budgets are committed to social security, this represents a significant option for financing the reform, requiring no corresponding tax levies.

16. *What are the differences between this CC and the many experiments with local currencies?*

This proposal should not be confused with the notion of local currencies, as it does not imply different currencies in different locales but *one* national, complementary currency for local use. Nor is it locally

initiated and promoted in opposition to the regular currency, but centrally endorsed and administrated as an accepted *complement* to it. Most importantly, the alternative currency can only be used to purchase products and services originating from within a given geographical range, a restriction which is not implemented in experiments with Local Exchange Trading Systems (LETS). Finally, the CC is provided as a basic income to all residents of a nation, rather than only earned in proportion to the extent to which a person has made him- or herself useful in the local economy.

17. What would the ecological benefits be?

The reform would radically reduce the demand for long-distance transports, greenhouse gas emissions, consumption of energy and materials, and losses of foodstuffs through overproduction, storage, and transport. It would increase recycling of nutrients and packaging materials, which means decreasing leakage of nutrients and less garbage. It would reduce agricultural intensification, increase biodiversity, and decrease ecological degradation and vulnerability.

18. What would the societal benefits be?

The reform would increase local cooperation, decrease social marginalization and addiction problems, provide more physical exercise, improve psycho-social and physical health, and increase food security and general community resilience. It would decrease the number of traffic accidents, provide fresher and healthier food with less preservatives, and improved contact between producers and consumers.

19. What would the long-term consequences be for the economy?

The reform would no doubt generate radical transformations of the economy, as is precisely the intention. There would be a significant shift of dominance from transnational corporations founded on financial speculation and trade in industrially produced foodstuffs, fuels, and other internationally transported goods to locally diverse producers and services geared to sustainable livelihoods. Considering the drastic and often traumatic changes that have afflicted many traditional industries over the past two centuries, this is a predictable consequence of consumer power. Through a relatively simple transformation of the conditions for market rationality, governments can encourage new and more sustainable patterns of consumer behaviour. In contrast to much of the economic change of the past two centuries, these changes would be democratic and sustainable and would improve local and national resilience.

20. *Why should society want to encourage people to refrain from formal employment?*

It is increasingly recognized that full or high employment cannot be a goal in itself, particularly if it implies escalating environmental degradation and energy and material throughput. Well-founded calls are thus currently made for so-called de-growth, i.e. a reduction in the rate of production of goods and services that are conventionally quantified by economists as constitutive of GDP. Whether formal unemployment is the result of financial decline, technological development, or intentional policy for sustainability, no modern nation state can be expected to leave its citizens economically unsupported. To subsist on basic income is undoubtedly more edifying than receiving unemployment insurance, encouraging useful community cooperation and creative activities rather than destructive behaviour that may damage a person's health.

21. *Why should people be able to receive an income without working?*

Modern nation states provide for their citizens whether they are employed or not. The incentive to find employment should ideally not be propelled only by economic imperatives, but more by the desire to maintain a given identity and to contribute creatively to society. Personal liberty would be enhanced by a reform which makes it possible for people to choose to spend (some of) their time on creative activities that are not remunerated on the formal market, and to accept the trade-off implied by a somewhat lower economic standard. People can also be expected to devote a greater proportion of their time to community cooperation, earning additional CC, which means that they will contribute more to society – and experience less marginalization – than the currently unemployed.

22. *Would savings in CC be inheritable?*

No.

23. *How would transport distances of products and services be controlled?*

It seems unlikely that entrepreneurs would attempt to cheat the system by presenting distantly produced goods as locally produced, as we can expect income in regular currency generally to be preferable to income in CC. Such attempts would also entail transport costs which should make the cargo less competitive in relation to genuinely local produce, suggesting that the logic of local market mechanisms would by and large obviate the problem. However, it is reasonable to expect the authorities to establish a special agency for monitoring and controlling transport distances.

24. *How would differences in local conditions (such as climate, soils, and urbanisation) be dealt with?*

It is unavoidable that there would be significant variation between different locales in terms of the conditions for producing different kinds of goods. This means that relative local prices in CC for a given

product can be expected to vary from place to place. This may in turn mean that consumption patterns will vary somewhat between locales, which is predictable and not necessarily a problem. Generally speaking, a localization of resource flows can be expected to result in a more diverse pattern of calibration to local resource endowments, as in premodern contexts. The proposed system allows for considerable flexibility in terms of the geographical definition of what is categorized as local, depending on such conditions. In a fertile agricultural region, the radius for local produce may be defined, for instance, as 20 km, whereas in a less fertile or urban area, it may be 50 km. People living in urban centres are faced with a particular challenge. The reform would encourage an increased production of foodstuffs within and in the vicinity of urban areas, which in the long run may also affect urban planning. Many people would no doubt also choose to move to the countryside, where the range of subsistence goods that can be purchased with CC will tend to be greater. In the long run, the reform can be expected to encourage a better fit between the distribution of resources (such as agricultural land) and demography. This is fully in line with the intention of reducing long-distance transports of necessities.

25. *What would the consequences be if people converted resources from one currency sphere into products or services sold in another?*

It seems infeasible to monitor and regulate the use of distant imports (such as machinery and fuels) in producing produce for local markets, but as production for local markets is remunerated in CC, this should constitute a disincentive to invest regular money in such production processes. Production for local consumption can thus be expected to rely mostly – and increasingly – on local labour and other resource inputs.

POLICY IMPLICATIONS AND RECOMMENDATIONS

The ecological and societal destructiveness of what is conventionally referred to as capitalism is inherent in the inertia of general-purpose money (GPM): the imperative of minimizing costs and maximizing profits. Given GPM, the most rational thing for market actors to do is to purchase the least expensive commodities, which generally means the commodities embodying the lowest paid labour, significant greenhouse gas (GHG) emissions from transports, and the least concern for the natural environment. The use of GPM

thus inexorably generates increasing inequalities, transports, GHG emissions, climate change, and other forms of environmental degradation. As these processes are inherent consequences of GPM, any attempt to curb them while continuing to comply with the rationality defined by GPM will produce legislation raising the protests of economists and enterprise, such as protectionism and taxation aiming to inhibit economic activity.

A policy for purposive de-growth requires a currency system with a different logic, providing market actors with a special-purpose money (SPM) which incites them to purchase commodities embodying local labour, a minimum of transports and GHG emissions, and concern for the local environment. A voluntary transition to de-growth, if at all possible, would require a democratic transformation of both the structural *conditions* for market rationality and the actual operation of that rationality. Given the new rationality introduced by the option of using CC as outlined here, the notion of “consumer power” would finally approximate the benevolent aspirations of market doctrine professed since the eighteenth century, generating more equitable and sustainable practices as a logical consequence of how the currency system is designed.

RESEARCH PARAMETERS

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent

on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?

PROJECT IDENTITY

PROJECT NAME	Financialisation Economy Society and Sustainable Development (FESSUD)
COORDINATOR	Professor Malcolm Sawyer. University of Leeds, UK: email fessud@leeds.ac.uk
CONSORTIUM	University of Siena, Italy School of Oriental and African Studies, UK Fondation Nationale des Sciences Politiques, France Pour la Solidarite, Brussels, Belgium Poznan University of Economics, Poland Tallin University of Technology, Estonia Berlin School of Economics and Law, Germany Centre for Social Studies, University of Coimbra, Portugal University of Pannonia, Veszprem, Hungary National and Kapodistrian University of Athens, Greece Middle East Technical University, Ankara, Turkey Lund University, Sweden University of Witwatersrand, South Africa University of the Basque Country, Bilbao, Spain
FUNDING SCHEME	FP7 Socio-economic Sciences and the Humanities, topic for SSH.2010.1.2-1, 'Changing the role of the financial system to better serve economic, social and environmental objectives'
DURATION	1st December 2011 to 30th November 2016
BUDGET	EU contribution: 7,923,728.02 euros
WEBSITE	fessud.eu
FOR MORE INFORMATION	Helen Evans: fessud@leeds.ac.uk
FURTHER READING	List up to five current or forthcoming publications the project has produced that might be of interest to policymakers.

Hornborg, Alf. 2013. Revelations of resilience: From the ideological disarmament of disaster to the revolutionary implications of (P)anarchy. *Resilience: International Policies, Practices and Discourses* 1(2):116-129.

Hornborg, Alf. 2016a. *Global Magic: Technologies of Appropriation from Ancient Rome to Wall Street*. Palgrave Studies in Anthropology of Sustainability 1. Houndmills: Palgrave Macmillan.

Hornborg, Alf. 2016b. Artifacts have consequences, not agency: Toward a critical theory of global environmental history. *European Journal of Social Theory*. Advance online publication.

Hornborg, Alf. 2017. Redesigning money to curb globalization: Can we domesticate the root of all evil? In *The Anthropology of Sustainability: Beyond Development and Progress*, edited by Marc Brightman and Jerome Lewis. Houndmills: Palgrave Macmillan. *In press*.

Hornborg, Alf. *Forthcoming*. Resilience, power and money: Limitations and prospects of systems ecology in envisaging a sustainable world economy. In *The Routledge Handbook of International Resilience: Policies, Theories and Practices*, edited by David Chandler and Jon Coaffee. London: Routledge.