



richardheinberg.com

MuseLetter #270 / November 2014 by Richard Heinberg

This month's Museletter is the text of a talk I gave at a [Teach-in on Techno-Utopianism and the Fate of the Earth](#), organized by the International Forum on Globalization, October 26, 2014, at The Great Hall at The Cooper Union, New York City

How to Shrink the Economy without Crashing It: A Ten-Point Plan

The human economy is currently too big to be sustainable. We know this because Global Footprint Network, which methodically tracks the relevant data, informs us that [humanity is now using 1.5 Earths' worth of resources](#).

We can temporarily use resources faster than Earth regenerates them only by borrowing from the future productivity of the planet, leaving less for our descendants. But we cannot do this for long. One way or another, the economy (and here we are talking mostly about the economies of industrial nations) must shrink until it subsists on what Earth can provide long-term.

Saying "one way or another" implies that this process can occur either advertently or inadvertently: that is, if we do not shrink the economy deliberately, it will contract of its own accord after reaching non-negotiable limits. As I explained in my book [The End of Growth](#), there are reasons to think that such limits are already starting to bite. Indeed, most industrial economies are either slowing or finding it difficult to grow at rates customary during the second half of the last century. Modern economies have been constructed to require growth, so that shrinkage causes defaults and layoffs; mere lack of growth is perceived as a serious problem requiring immediate application of economic stimulus. If nothing is done deliberately to reverse growth or pre-adapt to inevitable economic stagnation and contraction, the likely result will be an episodic, protracted, and chaotic process of collapse continuing for many decades or perhaps centuries, with innumerable human and non-human casualties. This may in fact be the most likely path forward.

Is it possible, at least in principle, to manage the process of economic contraction so as to avert chaotic collapse? Such a course of action would face daunting obstacles. Business, labor, and government all want more growth in order to expand tax revenues, create more jobs, and provide returns on investments. There is no significant

constituency within society advocating a deliberate, policy-led process of degrowth, while there are powerful interests seeking to maintain growth and to deny evidence that expansion is no longer feasible.

Nevertheless, managed contraction would almost certainly yield better outcomes than chaotic collapse—for everyone, elites included. If there is a theoretical pathway to a significantly smaller economy that does not pass through the harrowing wasteland of conflict, decay, and dissolution, we should try to identify it. The following modest ten-point plan is an attempt to do so.

1. Energy: cap, reduce, and ration it. Energy is what makes the economy go, and expanded energy consumption is what makes it grow. Climate scientists advocate capping and reducing carbon emissions to prevent planetary disaster, and cutting carbon emissions inevitably entails reducing energy from fossil fuels. However, if we aim to shrink the size of the economy, we should restrain not just fossil energy, but *all* energy consumption. The fairest way to do that would probably be with [tradable energy quotas](#).

2. Make it renewable. As we reduce overall energy production and consumption, we must rapidly reduce the proportion of our energy coming from fossil sources while increasing the proportion from renewable sources in order to avert catastrophic climate change—which, if allowed to run its current course, will itself result in chaotic economic collapse. However, this is a complicated process. It will not be possible merely to unplug coal power plants, plug in solar panels, and continue with business as usual: we have built our immense modern industrial infrastructure of cities, suburbs, highways, airports, and factories to take advantage of the unique qualities and characteristics of fossil fuels. Thus, as we transition to alternative energy sources, the ways we use energy will have to adapt, often in profound ways. For example, our food system—which is currently overwhelmingly dependent on fossil fuels for transport, fertilizers, pesticides, and herbicides—will have to become far more localized. In the best instance, it would transition to an ecological, perennial-based agriculture designed for the long haul.

3. Restore the commons. As Karl Polanyi pointed out in the 1940s, it was the commodification of land, labor, and money that drove the "[great transformation](#)" leading to the market economy we know today. Without continued economic growth, the market economy probably can't function long. This suggests we should run the transformational process in reverse by decommodifying land, labor, and money. Decommodification effectively translates to a reduction in the use of money to mediate human interactions. We could decommodify labor by helping people establish professions and vocations, as opposed to seeking jobs ("slavery on the installment plan"), and by promoting worker ownership of companies. As economist [Henry George](#) said over a century ago, land—which people do not create by their labor—should be owned by the community, not by individuals or corporations; and access to land should be granted on the basis of need and the willingness to use it in the community's interest.

4. Get rid of debt. Decommodifying money means letting it revert to its function as an inert medium of exchange and store of value,

and reducing or eliminating the expectation that money should reproduce more of itself. This ultimately means doing away with interest and the trading or manipulation of currencies. Make investing a community-mediated process of directing capital toward projects that are of unquestioned collective benefit. The first step: cancel existing debt. Then ban derivatives, and tax and tightly regulate the buying and selling of financial instruments of all kinds.

5. Rethink money. Virtually all of today's national currencies are loaned into existence (usually by banks). Debt-based monetary systems assume both the growing need for debt, and the near-universal ability to repay it, with interest—relatively safe assumptions when economies are stable and expanding. But debt-based money probably won't work in an economy that is steadily contracting: as the amount of outstanding debt ebbs in tandem with rising numbers of defaults, so does the money supply, leading to a deflationary collapse. In recent years the panic to prevent such a collapse has led central banks in the US, Japan, China, and the UK to inject trillions of dollars, yen, yuan, and pounds into their respective national economies. Such extreme measures cannot be maintained indefinitely, nor reverted to repeatedly. When debt-based currencies do fail, alternatives will be needed. Nations and communities should pre-adapt by developing an ecosystem of currencies serving complementary functions, as advocated by alternative monetary theorists such as [Thomas Greco](#) and [Michael Linton](#).

6. Promote equity. In a shrinking economy, extreme inequality is a social time bomb whose explosion often takes the form of rebellion and revolt. Reducing economic inequality requires two simultaneous lines of action: First, reduce the surplus of those who have the most by taxing wealth and instituting a maximum income rate. Second, improve the lot of those who have least by making it easier for people to get by with minimal use of money (prevent evictions; subsidize food and make it easier for people to grow their own). This effort can be helped through the widespread cultural glorification of the virtue of material modesty (the reverse of most current advertising messages).

7. Reduce population. If the economy shrinks but population continues to expand, there will be a smaller pie to divide among more people. On the other hand, economic contraction will entail much less hardship if population ceases growing and starts to decline. Population growth leads to overcrowding and hyper-competition anyway. How to achieve population decline without violating basic human rights? Enact non-coercive policies to promote small families and non-reproduction; wherever possible, employ social incentives rather than monetary ones.

8. Re-localize. One of the difficulties in the transition to renewable energy is that liquid fuels are hard to substitute. Oil drives nearly all transportation currently, and it is highly unlikely that alternative fuels will enable anything like current levels of mobility (electric airliners and cargo ships are non-starters; massive production of biofuels is a mere fantasy). That means communities will be obtaining fewer provisions from far-off places. Of course trade will continue in some form: even hunter-gatherers trade. Re-localization will merely reverse the recent globalizing trade trend until most necessities are once

again produced close by, so that we—like our ancestors only a century ago—are once again acquainted with the people who make our shoes and grow our food.

9. Re-ruralize. Urbanization was the dominant demographic trend of the 20th century, but it cannot be sustained. Indeed, without cheap transport and abundant energy, megacities will become increasingly dysfunctional. Meanwhile, we'll need lots more farmers. Solution: dedicate more societal resources to towns and villages, make land available to young farmers, and work to revitalize rural culture.

10. Promote the pursuit of social and inner sources of happiness. Consumerism was a solution to the problem of overproduction; it entailed engineering the human psyche to become more individualistic and to demand ever more material stimulation. Beyond a certain point this doesn't make us happier (in fact, just the opposite), and it can't go on much longer. When people's ability to afford consumer products wanes, as does the economy's ability to produce and deliver those products, people must be encouraged to enjoy more traditional and innately satisfying rewards—including philosophical contemplation and the appreciation of nature. Music, dance, art, oratory, poetry, participatory sports, and theater can all be produced locally and featured at seasonal festivals: fun for the whole family!

* * *

More recommendations could certainly be fielded, but ten is a nice round number.

Surely many readers will wonder: Isn't this just running "progress" in reverse, and isn't doing so antithetical to our core value as a society? Yes, during the past few centuries we have become hooked on the idea of progress, and we have come to define progress almost entirely in terms of technological innovation and economic growth—two trends that are approaching dead ends. If we wish to avoid the cognitive pain of having to relinquish our deep-seated infatuation with progress, we could redefine that word in social or ecological terms. Similarly, many people who judge that society is far too wedded to the pursuit of economic growth to be persuaded to give it up advocate redefining "growth" in terms of increasing human happiness and societal sustainability. Such efforts at redefinition have some limited usefulness. Certainly the act of collective self-limitation involved in deliberately shrinking the economy would denote a new level of species maturity that would likely be reflected throughout our culture. Socially and spiritually, this would be a step forward—and is hence perhaps describable as progress or growth. But it is hard to monopolize the redefinition of terms like "progress" or "growth": there are already powerful interests hard at work tying new meanings of the latter to inventive interpretations of manicured and manipulated GDP, employment, and stock market data.

It might be more honest to refer to the program outlined above as a simple reversion to sanity. It is also our best chance for preserving the best of civilization's scientific, cultural, and technological achievements over the last few centuries—achievements that could

be lost altogether if society collapses in a way similar to past civilizations.

The recommendations above imply the ability and willingness of elites to turn the ship around. But both their ability and willingness to do this are questionable. Our current political system seems designed to prevent collective self-limitation, and also to resist serious attempts at reform. The plainest gauge of the likelihood of the implementation of my ten-point plan is a simple thought exercise: name a single prominent politician, financier, or industrialist who would propose or advocate even a small portion of it.

Still, there's a deep irony here. While there's no support for degrowth among elites, many if not most of the elements of the above plan have a very large real or potential constituency among the populace in general. How many people would prefer life in a small, stable community to existence in an overcrowded, hyper-competitive megacity; a profession to a job; debt-free life to the chains of onerous financial obligations? Maybe by articulating the plan and its objectives, and exploring the implications in more detail, we can help this constituency coalesce and grow.