

Friends Confront the Growth Dilemma

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Introduction

When I was about three years old, I remember my father carrying me outside on a cold winter night on Cape Cod, and pointing overhead to a speck of light moving across the sky, and telling me about Sputnik, the Soviet satellite that launched the space race. Children's games changed from cowboys and Indians, to astronauts and aliens. The cultural message was clear: the frontier remains boundless, it's just moving from the wild west and into outer space. When Apollo 11 finally reached the moon, the astronauts captured dramatic photographs of the earth as seen from the moon,¹ people began to understand earth as a spaceship – an idea proposed by the Quaker economist, Kenneth Boulding, in 1965², then popularized by R. Buckminster Fuller in his *Operating Manual for Spaceship Earth*, published in 1969³. Meanwhile, the cost of launching people and freight into space remained fairly steady at about \$10,000 per pound, despite decades and billions spent on research. The dream of transferring our growth economy to the final frontier of space remains out of reach nearly 50 years later. It seems that we will have to stop playing cowboys and Indians, and learn to live as good astronauts must – within the limits of our finite spaceship earth. In this essay, we'll examine one of those limitations, the limits to economic growth and how our Quaker testimonies can help us to achieve a life that is rich in Spirit, and abundantly blessed within the limits of good stewardship.

Growth

Most of us are familiar with growth through our own childhood development. We look forward to growing taller and stronger, as our minds and bodies gain new abilities. This growth has a natural limit, and tapers off as we reach our 20s. However, there is another kind of growth process that continues so long as there is sufficient energy to sustain it. This is geometric or *exponential* growth, in which the amount added, is proportional to the amount already present. Such growth will occur in yeast cultures, so long as there is sufficient food and dissipation of waste products. In the first period, one yeast organism buds and becomes two, then four, then eight, and so on. If births exceed

¹ NASA archives: http://www.apolloarchive.com/apollo_gallery.html AS11-44-6549 20 July 1969.

² Boulding, Kenneth E.; *Earth as a Spaceship*, an Essay for the Committee on Space Sciences, Washington State University. 10 May 1965. Archives (Box #38) Colorado State University, and online at <http://www.colorado.edu/econ/Kenneth.Boulding/spaceship-earth.html>

³ Fuller, R. Buckminster; *Operating Manual for Spaceship Earth*. Carbondale: Southern Illinois University Press. (1969)

deaths the population will grow. Rates of growth are constant so long as conditions remain the same, but for humans, conditions have changed dramatically.

Using the United Nations' estimates of worldwide population⁴, there has been a remarkable decrease in the time needed to double the population – a consequence of agricultural and technological advances that favor survival and longevity. Between the end of the Roman Empire and the time of the First Crusade, world population grew hardly at all, increasing by only about 3% over the first millennium. But with advances in agriculture at the end of the Middle Ages, the doubling time dropped to 1450 years. After a brief setback due to the Black Death in the 1400s, growth increased and the doubling time dropped further to 500 years. With the industrial revolution, the time between doublings fell markedly to just about 100 years at the beginning of the 20th century. Further improvements in basic healthcare now yield a doubling every 60 years. People now in their eighties are the *first humans ever* to witness a tripling of world population in a single lifetime, from 2 billion in 1930 to the nearly 7 billion of the present day⁵.

While these population trends are alarming, they are compounded by the fact that the economic activity of these 7 billion people is also growing exponentially, independent of the underlying population growth. That is to say, there are systemic factors that drive us to a growth economy even in countries where the population is relatively stable, as it is in much of the developed world. Between 1980 and 2009, the global gross domestic product increased by more than a factor of two, correcting for inflation. This is considerably faster than the 60 year doubling of the population itself, and while, this is partly due to economic explosions in Asia and South America; growth is baked-in to our present day economy by the fact that it is almost entirely based on debt.

Money

Traditional teaching about money is that it developed as a medium of exchange motivated by convenience. Rather than trying to exchange half of a cow for forty geese, we turned to exchanging tokens of value – tokens that could be divided into small enough units for little transactions, but sufficiently compact to be transported and to accommodate large transactions as well. The first currencies may have been beads or shells, then copper, silver, and gold coins; but the important fact about them was that they were difficult to fabricate or obtain independently. The bearer of a certain amount of currency could reasonably be assumed to have provided a certain amount of value to the economy in his or her past transactions in order to have accumulated those tokens. This is a fundamental assumption about money, and the reason that counterfeiting has been dealt with so harshly over the years. If one is allowed to participate in the economy with falsely obtained or fabricated tokens, then the good faith of a value-for-value exchange is corrupted.

⁴ *Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2008 Revision*, <http://esa.un.org/unpp>, 28 Dec 2010.

⁵ Kunzig, Robert; *Population 7 Billion*. Writing in *National Geographic*, v.219, n.1, Jan. 2011.

The practice of lending money is ancient, and Jesus both preached about it [Luke 6:34] and engaged in direct action against it [Matt 21:12]. Lending is encouraged in the Old Testament, but usury – the charging of interest – is forbidden [Ex 22:25 and Lev 25:37]. Yet lending at interest is the cornerstone of modern banking and indeed, the global monetary system itself. Prior to the time of George Fox, loans were made in actual coin, and while the money was in use by the borrower, it could not also be in use by the lender. Sometimes, such loans were made to a monarch, generally for the prosecution of war, and then, depending on the outcome, the loans were sometimes not repaid.

In 1694, the Bank of England was created to solve this problem⁶. Rather than lending gold and silver directly, the aristocracy could place their money on deposit at the bank, and the bank would lend it to the crown, to be repaid with interest. In return for their deposits, the lenders were given a bank note, certifying their deposit. These bank notes soon began to circulate as if they were the money itself. As the practice of using paper money gained acceptance, the gold and silver could stay in the bank, and both the government's soldiers and the aristocrats' merchants came to accept the paper money in lieu of actual coin. This meant that the same amount of money, in actual gold and silver, was now backing *twice* that amount in circulation. Moreover, one half of that amount was to be repaid with interest. This was the birth of fractional reserve banking and the original reserve ratio was 50%, which is to say that gold and silver deposits were backing 50% of the paper in circulation. Now at the time, only a small portion of the total money supply was circulating as paper currency, and while some of the coin in circulation was also borrowed money, the overall economic load of the interest was still relatively small.

Over the years, bankers have worked to decrease the reserve requirement to under 10%, which means that 90% of the money in circulation is borrowed at interest, and only 10% represents depositors' funds. Moreover, the legal ties between currency and precious metals like gold and silver have been broken, and so today's money is a *fiat currency* with no intrinsic value. Bankers essentially create money every time they make a loan, and in the USA they are allowed by law to lend \$9 for every \$1 they hold in reserve. Unfortunately, this is precisely the situation described earlier, in which some are allowed to participate in the economy with fabricated tokens, and even though this is perfectly legal, the fundamental good faith of a fair, value-for-value exchange is broken.

Consequence

The wholesale adoption of fractional reserve banking by banks throughout the world has had several disturbing consequences. One is that there has been a global explosion of debt. According to the CIA, the total public and private debt globally in 2009 was just under 57 trillion dollars, which is about the same as the global gross domestic product. Even if private debt is excluded, government debt is equal to about 56% of global GDP. All of this debt, public and private, is earning interest. But how is

⁶ Bank of England Act of 1694, established by Royal Charter of William & Mary, sealed 27th July 1694. <http://www.bankofengland.co.uk/about/history>

all this interest to be paid?

One way of dealing with excessive public indebtedness is to *monetize* the debt, essentially debasing (alloying) the coin or printing paper money to pay back the creditors. Historically, this has resulted in hyperinflation because there is a large increase in the money supply, without a matching increase in the supply of goods and services. Most of the world's governments are no longer at liberty to do this, as their debts are often in the form of *sovereign bonds*, which are denominated in a foreign currency. Even the USA has to observe restraints, in that the recent *quantitative easing*, proposed by the Federal Reserve, is targeted to inflate the currency by only 3%.

The other alternative is to become more productive. In an earlier age, this was accomplished by growing the population and settling the frontier, thereby increasing the size and scope of the nation's economic output. As the frontier closes, the only other alternative is to improve technology and reduce costs – often by outsourcing – to achieve higher production at lower expense. Unfortunately, this increased production is pointless if there is insufficient demand for the additional product. This is why there is such emphasis on consumer marketing these days.

Yet another consequence of this indebtedness is that it has tilted the economic *production function* – the combination of capital, labor, land and resources needed to make a product – so that nearly all of the rewards now go to capital. Labor and the other factors have become commodities to be sourced by the lowest bidder in a global competition for the table scraps of the world economy. Symptoms of this are the increasing disparity between rich and poor, and the rampant unemployment and underemployment of both skilled and unskilled workers in all but the lowest-wage markets.

Like alcoholics, we first need to recognize that our over-consumption and our private and public indebtedness are a form of addiction and we have to want to break the cycle of borrowing, spending, consuming, and wasting what God has entrusted to us. Annie Leonard remarks that 90% of what we buy ends up on the trash heap within 6 months of purchase⁷. We must learn to be good stewards and live within not only our economic means, but our ecological niche as well. Our consumerism is harming the planet: melting the ice caps, extinguishing species, and infringing on our own health and well being, or at least that of our poorer neighbors. Changing this will not be easy. The current economic system has been hundreds of years in the making and those who profit from it will not simply walk away from their game without an argument.

Quaker Testimonies

Fortunately, the wisdom of earlier Friends can serve as a guidepost. The testimonies point the way toward a fulfilling, spirit-led life of abundant sufficiency that can liberate us from the growth dilemma. Yet here are several ways in which our

⁷ Leonard, Annie; [The Story of Stuff](#). The Free Press – Simon & Schuster (2010).

testimonies are in direct conflict with the world today:

We believe in equality, but economic inequality has increased dramatically, both nationally and internationally. Moreover, it is the world's poor who bear the brunt of environmental damage caused by consumerism.

We strive for integrity, yet the Gross Domestic Product (GDP), which drives our policies, is a false measure of prosperity; it includes spending on war, and on waste and destruction we ourselves create. To be truthful, our measures should reflect all social and environmental costs, including costs to future generations of our uses and abuses of earth's resources.

We turn toward simplicity, while our "growth economy" depends on ever-increasing consumption, fueled by debt, and damaging the fragile ecosystem on which our lives depend.

We value community, however, the number of people without secure employment, without health insurance, and confined to prisons is increasing, while our communities and the commonwealth of life, created by God, are steadily diminished by materialism.

We work for peace, but worldwide strife and devastation are the direct result of our dependence on fossil fuels. Try, Friends, whether the seeds of war have nourishment in our energy-intensive life-styles.

Is God really calling us to "dominion" or to "stewardship?"

Call to Action

As Meetings and as individual Friends, we need to begin a process of discernment about how we are led to respond to this concern. A movement is gathering toward Friendly Households, in which we begin to walk more gently over the earth. While many of us are becoming more aware of the little things we can do in our own lives to live simply and in a more eco-friendly way, these are not, by themselves, enough to save the planet or solve our economic problems. We also need to become involved as families, meetings, and local communities in taking direct, non-violent action toward change. Some of this is straightforward, though perhaps not easy.

Begin with *simplicity*. John Woolman recognized that when we live more simply, we have more time for attending to our inner Guide, and more resources to devote to God's work. Debt is a complication in life, and getting out of debt, especially consumer debt, is the first step toward simplification of one's life. Wealth is also a complication in life. Begin moving your money. One step is to move your funds out of the mega-banks and into local credit unions and thrift institutions where lending is less likely to support global financial speculation and more likely to support the community. Another is to reorganize your investments. There are three levels to consider:

- *Do no harm* – invest in funds that have "green-screens" as well as "ethics-screens."
- *Do some good* – invest in funds that work to promote social justice, through microcredit, or social entrepreneurship.
- *Do what Jesus would do* – invest in God's work directly, by giving to charities and "right-sharing" with others.

Examine your own consumption patterns. Economists tell us that we are rational

consumers, each one maximizing our own *utility* and minimizing our costs. But if anything, we have been *irrational* consumers. Do we really need what we buy? Is it made to last? Is it made in a way that minimizes damage to the environment? Is it fixable and/or recyclable? Is it made by people who were paid fairly for their efforts? We have been acting as though the advertised sticker price is the full cost of owning a thing, but I assure you it is not.

Work to build your community. The relentless pursuit of economic growth has torn the fabric of our society. The maximization of profit and minimization of cost have left whole segments of our society adrift without rudder or sail. What skills do you have in comparison to those your grandparents and great grandparents had? So many of us now specialize, whereas our ancestors were successful *precisely because* they were generalists. Build your skill set, and encourage diversity of skills in your community by teaching if you can, and by hiring local talent when you need something done. Get to know who does what, and help other people make connections. Plant a garden. Share what you grow. Join a co-op or support community agriculture. We are still villagers at heart.

Speaking of villages, work to get your local government out of debt. While some projects can't be financed without public debt, too many politicians find it expedient to support borrowing and spending, rather than taxing and belt-tightening. A strong community can find creative ways to accomplish things that are impossible or extremely expensive for governments in dysfunctional communities.

Early Friends asked "How fares the Truth with thee?" Consider how the cause of peace might be advanced if that were the first concern of everyone. Speak out for justice in your community, in your nation, and in the world. So much war and injustice is waged to protect the profitable interests of the wealthy. Shine a light on these connections when you see them and work against public financing of such evil. Some may be called to civil disobedience or direct, non-violent action in their witness. Others might be called to engage with the policy makers to effect change.

As a people, we need to begin to be stewards of the spaceship that God has placed us on, and also recognize that we aren't the only passengers. Here are a few policy changes that will move us toward the steward's role:

Understand the burdensome yoke that sovereign debt has placed on the shoulders of the world's poor. Friends active in Haiti relief are aware that the abject poverty that nation endures to this day, is largely because of a reparation debt after the Slave Revolt of 1791-1804 that was so enormous it was not paid off until 1947! By forgiving sovereign debt, or at least the interest on it, these nations would have resources to develop necessary infrastructure and sustainable energy systems.

Work toward or fund the education of women in the developing nations. This is likely the most effective way to limit the growth in population.

Ask policy and business leaders to consider moving toward a shorter work week and encouraging job sharing. This will do much to distribute employment opportunities more equitably so that those willing to work can find meaningful employment.

Engage policy makers in questioning the fractional reserve banking system. The fact that over 90% of the money in circulation is debt that requires interest payments, is an enormous burden on society at every level. What rule says that money must be created from debt? Perhaps a gradual and controlled monetization of the debt, with a concomitant increase in reserve requirements, is in order. While this may cause inflation, it can be controlled by adjusting the reserve requirement. Moreover, inflation might be considered an alternative tax, and one that is somewhat more progressive than current income tax, since it tends to diminish the value of hoarded wealth, while wage earners, and even social security and welfare recipients will see their incomes eventually adjusted to cover the loss in currency value. The threat of inflation can drive wealthy investors toward higher-risk, higher-reward investments, which may also be good for employment.

We are beyond the point where our spaceship can be turned away from collision between our economic misbehavior in the past and the ecological damage in the present and future. But we are in a position to make it a glancing blow rather than a head-on impact. We, as Friends, can be the trim-tabs that Buckminster Fuller talked about, working to counteract the turbulence as the world finally recognizes and begins to confront the growth dilemma.