## A Basket of Externalities

Joseph Mark sjeohp@gmail.com

June 10, 2021

#### Abstract

Environmental degradation reflects the failure of a market to account for economic externalities, meaning costs to the environment that are not priced into the cost of production. History suggests economic growth and environmental degradation are strongly coupled. Monetary policy is typically concerned with regulating currency inflation (as measured by the price of a basket of commodities) and by extension economic growth. An increasing money supply stimulates growth, whereas a fixed or decreasing supply dampens it. Measuring inflation by the price of a basket of commodities and externalities would place environmental preservation under the purview of monetary policy. This dovetails with growing interest in local, decentralised currencies and monetary controls.

### **Externalities**

Negative externalities are costs of production offloaded (or externalised) onto the broader community instead of being accounted for in the price of the product. They are often but not always subsequently internalised via taxes, subsidies, et cetera, or controlled by industrial regulation.

- 1. The degradation of a river or lake, measured in the concentration of pollutants, is typically a byproduct of industry or agriculture that is not factored into the cost of doing business.
- 2. Increasing concentrations of atmospheric greenhouse gasses trap heat and destabilise the climate, yet the industries responsible for those emissions are again typically not forced to account for them.
- (1) and (2) are examples of local and global negative externalities respectively. All environmental and social degradation that is not explicitly paid for by someone is a negative externality. There also exist positive externalities, which are unaccounted for benefits to a community.

### Growth

Economic growth has historically been correlated with greenhouse gas emissions. Recent data show this correlation breaking down somewhat as efforts to internalise the cost of emissions increase and low emission technologies improve. Degradation of forests, rivers, et cetera has similarly accelerated in lockstep with local economic growth. Communities, local and global, have an interest in decoupling these phenomena. If it is not possible to fully decouple them, communities have an interest in limiting economic growth to prevent their own eventual dissolution or the loss of their way of life.

# Money

Economic growth is tied to the supply of money. An increasing money supply, relative to the value of the economy, encourages borrowing and spending as the value of cash and debts decays, stimulating economic growth. A decreasing supply encourages saving and makes debt more expensive, which dampens growth. Price inflation is an indication of the supply of money relative to the value of an economy. The price of a particular basket of commodities is treated as an indication of the cost of living. However commodity prices alone fail to capture the full cost of living as they do not represent externalised costs borne by the community. Therefore a more useful measure of inflation would be determined by the price of both commodities and

externalities, where the externalities would include measurements of environmental pollutants, et cetera. Decreasing the money supply in response to environmental degradation would benefit the environment to the degree that its degradation was coupled to growth, and encourage decoupling.