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We may like it or not, ours is a monetary civilization, since ~ 5000 years. The last 250 years saw the rise of the monetary production economy, with the latest consequence that all human needs are now reduced to the need for money. This technical 'simplification' of economic complexity comes with a high price, concerning the physical sustainability of the human-nature-capital interplay. Money (m) has become physical access to all types of energy (e), drives the temporal (t) length (l) of economic production (p) cycles and determines the 'speed' of the human economy. The cybernetic wave circuit reads: m/quantizes/e=e/quantizes/t=t/quantizes/p. Every economic wave length (l) is quantitatively proportional to the liquidity frequency (f); the greater the monetary volume (x) in a wave, the higher is f (l=f (x/r); r (reserve requirement) is the decisive factor in this equation. The temporal (t) acceleration of p (e.g. machine operating time, logistics) is a result of x in demand for e (p=t (x/e); every customer payment finalizes p. As a result, the economic behavior of gradual monetary excess increases the exponential need for energy and causes the temporal acceleration of economic wave cycles (crises). Only an efficient monetary technique of narrow reserve banking can lead to more economic systems sustainability.

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