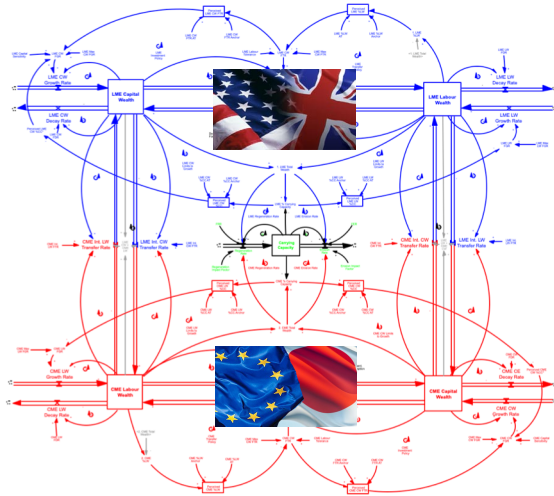


Toward a Theory of the Evolution of the Global Political Economy: Competition between Liberal & Coordinated Market Economies

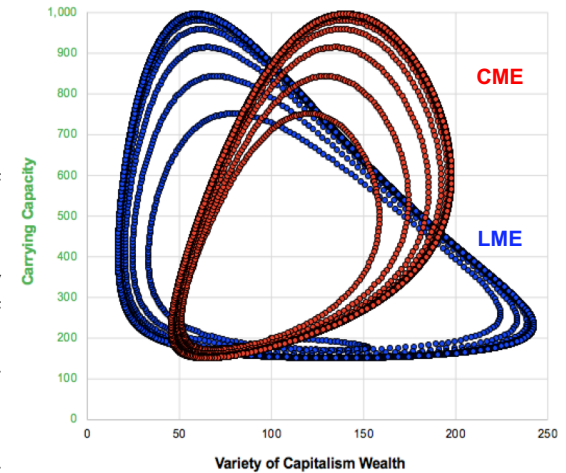
Garry Piepenbrock

Structure



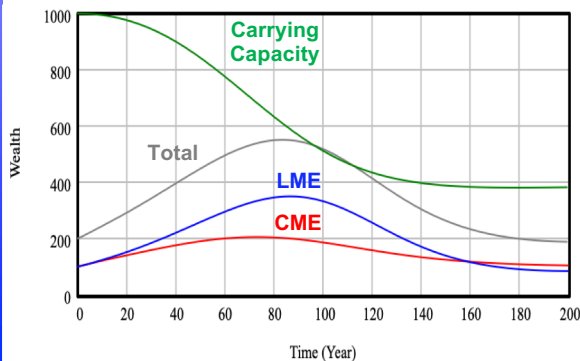
Political economists from Smith (1776) to Marx (1859) have long explored how wealth is created and distributed within and between nations. More recently, Acemoglu (2012) and Piketty (2013) have focused on the role of institutions and capital growth rates respectively to explain this. I integrate these into my exploration of how different forms of advanced political economy function, create performance differentials and co-evolve with the environment (Piepenbrock, 2009). To explore how capital and labour function in different forms of political economy, I use Hall and Soskice's (2001) typology of liberal and coordinated market economies – LMEs and CMEs. To explore the evolution of the political-economic-ecological interactions, I use The Limits to Growth (Meadows et al., 1972) and bounded rationality (Simon, 1957).

Behaviour

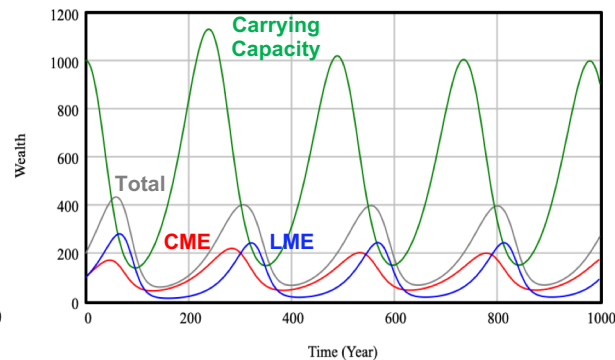


I numerically simulate the nonlinear dynamic behaviour of constrained competition between LMEs and CMEs via coupled differential equations of multi-predator-prey interactions (Lotka, 1925; Volterra, 1926) which generate overshoot (Forrester, 1971), limit cycles (Goodwin, 1967) and chaos (Sterman, 1989). Capital and labour enable and constrain growth endogenously, while the environment does so exogenously. While LMEs outperform CMEs in the shorter term, the converse is true in the longer term, with LMEs maximising capital wealth and efficiency and CMEs maximising labour wealth and equity.

Overshoot and Collapse



Limit Cycles



Deterministic Chaos

