Approximate Surrogate Production Functions

Topic: Classical-Keynesian input-output models

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Summary:

The Cambridge debate showed that an aggregation of capital is not possible in general. A recent investigation has found one example for reswitching and several for reverse capital deepening, but the paradoxes seem not to be frequent. The paper provides a theoretical justification of this result and shows how wage curves of input-output matrices with small non-dominant eigenvalues become quasi-linear with some numéraires. Large random systems lead to the genesis of such states. Approximate surrogate production functions then seem possible. A family of economic systems with constant capital composition allows to construct a surrogate production function.