

Comment on Francisco Souçã: Endogenous Changes in the Economic Dynamics: from Frisch's Pendulum to Long Swings

Marco Lippi, Einaudi Institute for Economics and Finance, Roma

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Some observations on Louçã's talk and some stimulated by the talk. Also some questions for Francisco and the audience.

1. Theories of the business cycle: pendula, double pendula and all that.

I am not enthusiastic with the pendula. This kind of models is based implicitly on a representative agent: there is evidence that the economy oscillates, so let us find an equation which can reproduce such oscillation. But the unknown of the equation is an aggregate x_t .

I prefer the theories, or fragments of theories, in which the aggregate behavior is explained by explicitly combining individual patterns.

Examples:

- a. Standard production functions resulting from many Leontiev techniques.
- b. Distributed lags as the result of simple behaviors of heterogeneous agents responding with different lags to impulses, as opposed to reproducing evidence as the result of forward looking dynamically complicated behaviors.
- c. S-shaped responses to technological shocks as the result of heterogeneously lagged adoptions rather than of optimizing behaviors of the firms.

2. But let me mitigate what I have said before. There are beautiful models of the pendulum family: Kalecki, Goodwin, the research on non-linear dynamic equations. However, they are prototypes, very far from empirical applications.

Just in the same way as the standard macroeconomic models. They provide a good fit, when they do, and sometimes good predictions in the short-medium run (say one year), but their interpretation requires a great deal of wishful thinking.

Incidentally, the debate [deterministic equations versus stochastic equations] is also difficult to understand when one considers actual data. We do not observe the AGGREGATE INCOME, INVESTMENT, CONSUMPTION. Statistical agencies provide the result of statistical models for those concepts, nothing more.

To conclude on this point, beautiful models are welcome, but then you have to link them to actual data. You need an individual equation AND the distribution of its parameters.

Recent developments in this direction are factor models. However, the data they use are macroeconomic time series at a lower level of aggregation as compared to the main macroeconomic aggregates. On the other hand, panel data are not of much use as far as dynamic behavior is concerned.

3. Crisis.

Let me insist that Crisis is not the same thing as the troughs of the business cycle. So we need much more than pendula.

Of course I appreciate Louçã's slides on mainstream macroeconomics and the recent crisis. I share his sarcasm entirely. Do you remember R. Lucas: We have conquered the business cycle.

However, the idea that crises are inevitable in a capitalist economy does not mean that we have a theory of the capitalist crisis. And even if we had a theory, this does not mean that we can predict crises.

Again, I do not think that pendula can provide a theory of crises. These are collective phenomena occurring in huge populations of interacting agents.

Question for some of you: has the work on self-organizing systems done some progress in this direction?

4. History I.

Another question.

Maybe we may obtain a good model of the business cycles but not for crises.

Maybe explaining crises is a job for historians rather than equation and model analysts.

Maybe the possibility of crises is permanently there but actual crises are different from one another.

In the same way maybe you can construct automatons which can do marvels. But try and construct a robot displaying a nervous breakdown.

5. History II.

Most urgent, for historians again. The effect of the fall of the Soviet Union on capitalism. Not only the end of communist parties but also of Social Democracy. Who needs it anymore? More pronounced business cycles, crises, unemployment, inequality, who cares?