Macroeconomics in Crisis since the Crisis?

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Initial Remark

This talk is an attempt at a summary of my forthcoming 36-page paper "Erfolge und Probleme der modernen (Mainstream-)Makroökonomik" in the List Forum (hopefully in 2019).

Thematic and Methodological Diversity

This is modern macroeconomics:

- Endog. growth theory with detailed modelling of R&D investment and empirical research on patent micro data.

- Computerlinguistic approaches with text corpora from the internet and economic policy institutions such as the Fed.

- Survey methods to figure out expectations, uncertainties, reasons and time use of economic agents.

- Clever new identification methods with panel and time series data to test basic ingredients of larger models.

- Simple two-period, two-agent models to highlight a theoretical mechanism.

- Estimation and simulation of DSGE models (including those with heterogeneous agents) to quantitatively model the business cycle and stabilization policies.

- New fields like family and environmental macroeconomics, etc.

Thematic and Methodological Diversity

And so much more.

I can't even pretend to give justice to this diversity.

So I won't.

I will also not talk about:

- Anything long-run.
- International macro and trade.
- Macroeconomics in policy-advising and policy-making institutions.
- The teaching of macroeconomics.

All interesting and important topics in their own right.

Outline

- Very briefly: DSGE not as a model class but as a model philosophy.
- New data, new empirics, new modelling, new shocks, and new topics.
- Serious critiques of modern macro, beyond the "I don't like DSGE-rational agents-representative agents-markets-mathematics" bullshit.

Yet, I can only fail in this task, given its vastness.

Dynamic ...

"Dynamic" is about the future and expectations about this future (with Heidegger: it's about **Sorge** as a fundamental feature of existence).

Without a dynamic element you cannot do macroeconomics, which is not physics, where particles have no expectations about the future. Therefore: no feedback loop through the future to the present.

Beware: just because there are differential equations in a model does not mean it is dynamic in this sense (Econophysics and Complex Systems guys will try to convince you of the contrary).

. . . and Stochastic . . .

"Stochastic" means that the future is uncertain and this matters.

General Equilibrium . . .

"General equilibrium" means systemic interdependence, not: perfect competition. It means that markets spillover to each other, resources cannot appear out of nor vanish into thin air.

In addition:

- Micro foundations: the principal unity of macro- and microeconomics and the rich treasure of microeconomic data that we need to distinguish between macro models empirically.

- Modularity: DSGE models are incredibly modular and versatile where researchers can easily bring new elements into play in a very transparent way.

Dynamic Stochastic General Equilibrium

There will never be a **static deterministic partial non-equilibrium** macro!

DSGE as a concrete model

That some of you don't like the Smets-Wouters (2007, AER) model with:

- representative perfectly rational agents
- complete financial markets
- no housing or banking sector
- no strategic interaction
- no political economy
- very reduced-form frictions
- etc.

Whatever - I have my reservations, too. Doesn't mean it is not useful for some stuff.

"New" data

- Panel Study of Income Dynamics (PSID)
- National Longitudinal Survey of Youth (NLSY)
- Survey of Income and Program Participation (SIPP)
- Current Population Survey (CPS)
- Consumer Expenditure Survey (CEX)
- Survey of Consumer Finances (SCF)
- German Socio-Economic Panel (GSOEP)
- Einkommens- und Verbrauchsstichprobe (EVS)
- Eurosystem Household Finance and Consumption Survey
- Panel on Household Finances (PHF)
- Michigan Survey of Consumers
- Survey of Consumer Expectations
- ifo business and investment sentiment surveys
- American time use surveys
- Annual Survey of Manufacturers (ASM)
- Business Employment Dynamics (BDM)
- Job Openings and Labor Turnover Survey (JOLTS)
- Kauffman Firm Survey of new firms
- CPI and PPI micro data
- USTAN, Kombifid and Afid firm data in Germany
- Text corpora like online news, federal open market committee transcripts, social media
- All manner of administrative data

"New" data - what have we learned?

- The nature of income, wealth, consumption and leisure inequality. Inequality as a multi-dimensional phenomenon.
- Social mobility studies.
- The overall, life cycle and cyclical nature of earnings risk.
- The role of firms in inequality.
- The job and worker flows in the labor market, including job ladders.
- The lumpiness of investment and resulting nonlinearities.
- Price setting behavior of firms and its relation to their financial situation.
- Inflation expectations and their role for expenditure decisions; also their long-run origins.
- Business expectation formation and business uncertainty.

New Empirics

- Search for natural experiments like the reunification
- Microeconometrics
  - Relationship between local house prices and demand
  - Relationship between local credit supply and economic activity
  - Regional fiscal multipliers
- Time series econometrics
  - Narrative approaches to shock identification
  - Sign and high-frequency restrictions to shock identification
  - State-dependence of stabilization policies
- Business cycle accounting: what are the relevant wedges for aggregate fluctuations?

New Modelling

- Models with incomplete financial markets, including aggregate shocks, the role of job search and job ladders: to model income risk and inequality.
- Models of frictional labor markets, lumpy investment and price setting (including incorporation of oligopolistic structures) away from the Calvo fairy.
- Models of imperfect information: sticky and noisy information acquisition, which can now be tested with survey expectation data.
- Financial frictions models: nature of borrowing constraints and lending constraints; role of collateral for macroeconomic fluctuations.

New Modelling

Standard critique: you guys model only one deviation from the standard model / one friction at a time.

Not true!

- Combination of incomplete markets, market segmentation and nominal frictions: HANK model - recovers many Old Keynesian insights (quantities matter, perhaps more than relative prices) but fully microfounded.
- Combination of nominal frictions and job ladder models that suggest that rather than using the unemployment rate, one should use job-to-job transitions as an indicator of slack (or lack thereof).

New Shocks

- Aggregate demand shocks, now microfounded:
  - Incomplete information can lead to coordination failures and demand-driven fluctuations.
  - Search and shopping behavior can lead to what looks like TFP fluctuations but are really changes in aggregate demand as well as multiple equilibria and self-fulfilling prophecies.
  - Precautionary saving in unemployment traps can lead to persistently depressed aggregate demand recessions.
- News shocks (intrinsic boom-bust cycles)
- Uncertainty shocks (real options, precautionary saving and financial effects)
- Financial shocks

New Topics

- Family macroeconomics: the role of families as both shock source and shock absorber.

- Environmental macroeconomics.

- The macroeconomics of time use: what do people actually do in their "leisure" time?

But Where is....

- strategic interaction;
- network interaction;
- radical uncertainty;
- economic and political power;
- connection between short-run and long-run?

I readily admit that modern macro is underdeveloped in these areas.

First Attempts Are Being Made:

- network models
- models without the law of large numbers holding and large agents mattering (granular models)
- replacement of monopolistic with oligopolistic competition in DSGE models
- business cycle models with Knightian Uncertainty
- etc.

More Fundamentally...

How much DSGE?

I disagree with those that say that DSGE – even understood as a modelling philosophy – is the only game in town.

I am with Blanchard (2018) that many more approaches are useful: fundamental models, DSGE models, policy models like multi-equation econometric models, toy models, forecasting models, partial equilibrium models, etc.

I am also open to agent-based models, even though I think they have yet to prove their usefulness.

Even More Fundamentally...

I think there is a legitimate question whether the shock-propagation paradigm in business cycle macro should be the only game in town. Is there something to be learned from multiple equilibrium and even endogenous-cycle approaches?

I am open to learning what can be learned from complex systems theory.

But I am not open to bringing in French Critical Theory into macroeconomics.

Finally...

Modern macro is sociologically not diverse enough: certainly as far as gender is concerned, but also with respect to ethnic and racial backgrounds. Too many old white men ...

In *this* particular sense, macro is also almost surely not intellectually diverse enough.

The State of Macro

I hope to have convinced you that there is absolutely no evidence of modern macro being a monolithic and even degenerate scientific paradigm.

Whoever claims this, willfully disregards the evidence and has a very different agenda than scientific progress.

The State of Macro

Two quotes:

1. Blanchard (2008): "The state of macro is good."
2. Reis (2018): "On top of this, asking an active researcher in macroeconomics to consider what is wrong with macroeconomics today is sure to produce a biased answer. The answer is simple: **everything is wrong with macroeconomics**. Every hour of my workday is spent identifying where our knowledge falls short and how can I improve it."

An Invitation...

... to the young researchers in the room, interested in macro: come join this exciting endeavor that is modern macroeconomics.

Don't do armchair philosophizing about how to do macro.

Your are too young for that.

Just Do It!