

New Directions in Macroeconomics

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Without being overly prescriptive, macro research must meet two standards to keep the field moving in a productive direction: models must be tested empirically and researchers must think carefully about how underlying assumptions restrict the set of questions that can be answered with a given model.

Models move knowledge forward through rigorous empirical testing. Matching moments in model calibration is not enough—nor should it be considered true empirics. When economics is done well, theory and empirics are complements: empirical research disciplines models and theory disciplines empirical research. In recent decades, macro research has tilted very heavily towards theory, forgoing the feedback generated by rigorous empirical testing and, as a consequence, dramatically reducing the ratio of insight to effort.

Macro as a field must value empirical contributions to flourish fully. There has been significant progress in the last decade, but the balance still tilts heavily towards theory. Macroeconomists must stop dismissing empirical contributions as trivial for macro theory to reach its potential. It's not an accident that many of today's best macroeconomists stand out for their work in both theory and empirics: empirical work disciplines their theoretical research.

Over the past 40-50 years, research in short-run macroeconomics has focused on the goal of creating unified, internally consistent models of the macroeconomy. While this is a worthy goal, it has perhaps become too dominant—and imposes hidden costs on research. The emphasis on developing a central baseline model to which idiosyncratic features

are added for addressing a specific problem discourages many researchers from considering the suitability of the underlying model to the specific question being asked.

As economists we are taught that every model is a simplification, so that the relevant question is not whether a model is good or bad but whether it is good or bad for answering a specific question. Yet choosing a single baseline model of the macroeconomy tends to obscure the closeness of the relationship between the model and the question it is used to answer. Often macroeconomists think carefully about the relationship between their question and the idiosyncratic features they add to the baseline model, but many of the assumptions underlying the baseline model become invisible and thus unquestioned. This is understandable given the complexity of modern macro models, but it has high costs. More careful consideration of the assumptions underlying baseline models and their appropriateness to individual research questions can help move the field forward.

Promising Recent Developments

Like a large ship, the direction of research in a field turns only slowly, but macro has seen promising developments in the last decade or so. Many of these changes were driven by the failure of then-existing macro models to address the issues that emerged in the 2008 financial crisis and Great Recession.

The greatest success of macro over the past decade has been the integration of the financial sector into macro models. Understanding the macroeconomy in the

Great Recession depended on understanding myriad financial linkages between banks, households, and firms. The field has seen an explosion of outstanding research in macro finance—an area where integration between theory and empirics has developed beautifully. Modern macro finance can serve as a model for other areas of macro.

While less developed than macro finance, another area of macro that has seen significant progress in the last decade is more realistic modeling of household behavior. The addition of liquidity constraints; heterogeneity; and limits to attention, information, and foresight have begun addressing key weaknesses in the standard models.

These and other promising developments in recent macro research share a few key features: they incorporate insights from behavioral economics, they focus on mechanisms, and they are deeply influenced by empirical research using microeconomic data.

The Value of Micro Data and Macroeconomics History

One of the challenges of studying macroeconomics is that major macroeconomic events such as major recessions and financial crises are relatively rare. In-depth study of a single episode (such as the Great Recession) can be immensely fruitful, but the sample of relevant episodes is often quite small. Controlled experiments are usually unethical and/or impossible to implement (e.g. experimental design gets difficult when spillovers are significant). These difficulties help explain how macro became so dominated by theory to begin with, but they are not insurmountable.

Using micro data to study macroeconomic mechanisms has gained popularity in recent years, particularly in research areas such as macro finance and macro labor. Borrowing identification strategies from applied micro (and then considering general equilibrium effects) allows macroeconomists to do high-quality empirical work focused on a single macroeconomic episode. This approach has dominated studies of the Great Recession and proved itself extremely fruitful, but it still has limits.

For instance, macroeconomists use micro data to study

how inflation expectations influence consumption in the Great Recession. Papers such as [Bachmann, Berg, and Sims \(2015\)](#) help illuminate a key mechanism for unconventional monetary policy, finding that inflation expectations have almost no effect on consumption at the ZLB. The shortcoming of such studies (not specific to any paper, but applying to most studies of a single macroeconomic episode) is that they specifically address one institutional setting. In this case, these studies tell us about the limited influence of inflation expectations on consumption in a setting where many households are highly indebted and inflation expectations are strongly anchored. In theory, lower levels of household debt and more responsive inflation expectations could substantially increase the responsiveness of consumption—increasing the efficacy of unconventional monetary policy in other institutional settings. Empirical studies of the Great Recession cannot on their own tell us how much these institutional details matter.

Macroeconomic history provides additional avenues for empirical research in two ways: by expanding macroeconomic data sets and by allowing researchers to analyze a larger array of macroeconomic events and settings using micro data.

Going further back in time expands the sample of major macroeconomic events: recessions, financial crises, and major wars were quite frequent between 1800 and 1950 (the period usually excluded from modern macro research but for which substantial data is available). Expanding the sample backwards allows for more complete analysis of macroeconomic data, though researchers must carefully consider changes in relevant institutions before choosing a sample period.

Analyzing an array of individual historical episodes using historical micro data complements macroeconomic research involving modern micro data. Discovering how estimates of key macro parameters vary across macroeconomic episodes helps us discover which factors of the institutional environment we should focus on, and can help inform and refine theoretical models.

For example, [Carola Binder and I study the effects of inflation expectations](#) on consumption using household survey data from the Korean War. In early 1951 the Fed wanted to raise interest rates to address

rising inflation but was prevented by the Treasury. The American economy boomed, household debt levels were exceptionally low, and both actual inflation and inflation expectations varied substantially more across time than they do today. We find modest intertemporal consumption shifting: a one standard deviation increase in inflation expectations is associated with a 3 percentage point increase in the likelihood that a household bought durables in the previous year, or a shift of \$222 (about 7% of median income) from planned 1951 consumption to actual 1950 consumption. Comparing our results to those of similar studies on the Great Recession provides a rough estimate for the influence of the institutional features which vary so dramatically between the two settings.

Careful empirical studies of specific macroeconomic episodes and careful consideration of the institutional similarities and differences between them has the potential to give us a much fuller picture of how the macroeconomy functions and can guide macroeconomic theory. This empirical work can be used to improve calibration, but also to test and compare models. Studying multiple macroeconomic episodes in depth provides opportunities for testing models' out-of-sample forecasting capabilities. Using macroeconomic history to expand the boundaries of empirical research in macroeconomics can in turn contribute to better macroeconomic theory.

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