MA Advanced Macroeconomics:
14. The Future of Macroeconomics

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Part I

What Have We Learned?

Re-Thinking Macroeconomic Policy

- The website links to two papers by Blanchard, Dell'Ariccia and Mauro that focus on the lessons macroeconomists should learn from the global economic crisis.

    1. "Re-Thinking Macroeconomic Policy" from 2010 is an overview of lessons learned.
    2. "Re-Thinking Macroeconomic Policy: Getting Granular" from 2013 focuses directly on implications for central banks, fiscal policy and macro-prudential policy.

- Blanchard is one the world's leading research economists and is currently the IMF's chief economist, so these opinions should hold some sway.
- The next few pages contain some excerpts from these two papers.

Pre Crisis Thinking: "What We Thought We Knew"

1. **One Target: Stable Inflation**: "This was the result of a coincidence between the reputational need of central bankers to focus on inflation rather than activity ... and the intellectual support for inflation targeting provided by the New Keynesian model."
2. **Low Inflation**: "The danger of a low inflation rate was thought, however, to be small ... in a world of small shocks, 2 percent inflation seemed to provide a sufficient cushion to make the zero lower bound unimportant."
3. **One Instrument: The Policy Rate**: "real effects of monetary policy took place through interest rates and asset prices, not through any direct effect of money ... all interest rates and asset prices were linked through arbitrage."
4. **A Limited Role for Fiscal Policy**: "wide skepticism about the effects of fiscal policy, itself largely based on Ricardian equivalence arguments ... lags in the design and the implementation of fiscal policy, together with the short length of recessions, implied that fiscal measures were likely to come too late."
5. **Financial Regulation: Not a Macro Policy Tool**: "largely ignored"
6. **The Great Moderation**: "better macroeconomic policy could deliver, and had indeed delivered, higher economic stability"

What We Have Learned

1. **Stable Inflation May Be Necessary, but Is Not Sufficient**: "both inflation and the output gap may be stable, but the behavior of some asset prices and credit aggregates, or the composition of output, may be undesirable ... and potentially trigger major macroeconomic adjustments later on."
2. **Low Inflation Limits the Scope of Monetary Policy in Deflationary Recessions**: "the zero nominal interest rate bound has proven costly. Higher average inflation ... would have made it possible to cut interest rates more."
3. **Financial Intermediation Matters**: During crises "rates are no longer linked through arbitrage, and the policy rate is no longer a sufficient instrument for policy. Interventions, either through the acceptance of assets as collateral, or through their straight purchase by the central bank, can affect the rates on different classes of assets, for a given policy rate."
4. **Countercyclical Fiscal Policy Is an Important Tool**: "to the extent that monetary policy had largely reached its limits, policymakers had little choice but to rely on fiscal policy ... from its early stages, the recession was expected to be long lasting, so that it was clear that fiscal stimulus would have ample time to yield a beneficial impact despite implementation lags."

What We Have Learned

5. **Regulation Is Not Macroeconomically Neutral**: "financial regulation ... contributed to the amplification effects that transformed the decrease in U.S. housing prices into a major world economic crisis. ... Mark-to-market rules, when coupled with constant regulatory capital ratios, forced financial institutions to take dramatic measures to reduce their balance sheets, exacerbating fire sales and deleveraging."

6. **Reinterpreting the Great Moderation**: "It may even be that success in responding to standard demand and supply shocks, and in moderating fluctuations, was in part responsible for the larger effects of the financial shocks in this crisis. The Great Moderation led too many (including policymakers and regulators) to understate macroeconomic risk, ignore, in particular, tail risks, and take positions (and relax rules) from leverage to foreign currency exposure, which turned out to be much riskier after the fact."

Implications for the Design of Policy

1. **Should the Inflation Target Be Raised?**: "are the net costs of inflation much higher at, say, 4 percent than at 2 percent, the current target range? Is it more difficult to anchor expectations at 4 percent than at 2 percent?"
2. **Combining Monetary and Regulatory Policy**: "The policy rate is a poor tool to deal with excess leverage, excessive risk taking, or apparent deviations of asset prices from fundamentals ... But there are other instruments at the policymakers disposalcall them cyclical regulatory tools."
3. **Providing Liquidity More Broadly**: "The argument for extending liquidity provision, even in normal times, seems compelling ... problems can be partly addressed through the use of insurance fees and haircuts."
4. **Creating More Fiscal Space in Good Times**: "A key lesson from the crisis is the desirability of fiscal space to run larger fiscal deficits when needed. There is an analogy here between the need for more fiscal space and the need for more nominal interest rate room, argued earlier. Had governments had more room to cut interest rates and to adopt a more expansionary fiscal stance, they would have been better able to fight the crisis."

Questions from "Going Granular"

1. Should Central Banks Explicitly Target Activity?
2. Should Central Banks Target Financial Stability?
3. Should Central Banks Care about the Exchange Rate?
4. How Should Central Banks Deal with the Zero Bound?
5. To Whom Should Central Banks Provide Liquidity?
6. What Are the Dangers of High Public Debt?
7. How to Deal with the Risk of Fiscal Dominance?
8. At What Rate Should Public Debt Be Reduced?
9. Can We Do Better Than Automatic Stabilizers?
10. How to Combine Macroprudential Policy and Microprudential Regulation?
11. What Macroprudential Tools Do We Have and How Do They Work?
12. How to Combine Monetary and Macroprudential Policies?

Part II

How Can Macro Be Useful?

Summers: The Scientific Illusion in Macroeconomics

- The global economic crisis has produced plenty of debate about problems with macroeconomics.
- The DSGE modeling approach, in particular, has been criticised being inadequate in light of recent economic events.
- It's worth noting, however, that macroeconomics is a very complicated topic and there have always been fierce debates about how to do useful macroeconomics research.
- One paper very worth reading on this topic is "The Scientific Illusion in Empirical Macroeconomics" written in 1991 by Larry Summers, even then recognised as one of the world's leading economists.
- Here's the abstract: "It is argued that formal econometric work, where elaborate technique is used to apply theory to data or isolate the direction of causal relationships when they are not obvious *a priori*, virtually always fails. The only empirical research that has contributed to thinking about substantive issues and the development of economics is pragmatic empirical work, based on methodological principles directly opposed to those that have become fashionable in recent years."

Deep Parameters versus Pragmatic Research

- "This paper argues that formal empirical work which, to use Sargent's phrase, tries to "take models seriously econometrically" has had almost no influence on serious thinking about substantive as opposed to methodological questions."
- "Successful empirical research has been characterized by attempts to gauge the strength of associations rather than to estimate structural parameters, verbal characterizations of how causal relations might operate rather than explicit mathematical models, and the skillful use of carefully chosen natural experiments rather than sophisticated statistical technique to achieve identification."
- "These views may seem extreme. But I invite the reader to try and identify a single instance in which a "deep structural parameter" has been estimated in a way that has affected the profession's beliefs about the nature of preferences or production technologies or to identify a meaningful hypothesis about economic behavior that has fallen into disrepute because of a formal statistical test."
- Summers provides examples of research he finds convincing and those he does not. I encourage you to read the paper and consider his arguments.

Caballero: Pretense-of-Knowledge Syndrome

- Cabellero is one of the world's leading macroeconomists and his paper "Macroeconomics after the Crisis: Time to Deal with the Pretense-of-Knowledge Syndrome" is a well-written and thoughtful discussion of methodological issues in macroeconomics. I will provide some quotes but you should read the whole thing.
- "The recent financial crisis has damaged the reputation of macroeconomics, largely for its inability to predict the impending financial and economic crisis. To be honest, this inability to predict does not concern me much. It is almost tautological that severe crises are essentially unpredictable, for otherwise they would not cause such a high degree of distress. Of course, it is well-known that certain elements can increase the fragility of a financial system, such as high levels of leverage or mismatches between short-term liabilities and long-term assets, and that these issues may justify policy intervention. But knowing these mechanisms is quite different from arguing that a severe crisis can be predicted. Modern Cassandras will always claim to have seen the crisis coming. What they will not say is how many times they saw things coming that never materialized, or how the specific mechanisms behind the crisis are different from those on which their predictions were based."

Concerns About the Core Research Programme

- "What does concern me about my discipline, however, is that its current core -by which I mainly mean the so-called dynamic stochastic general equilibrium approach–has become so mesmerized with its own internal logic that it has begun to confuse the precision it has achieved about its own world with the precision that it has about the real one. This is dangerous for both methodological and policy reasons. On the methodology front, macroeconomic research has been in fine-tuning mode within the local-maximum of the dynamic stochastic general equilibrium world, when we should be in broad-exploration mode."
- "We are too far from absolute truth to be so specialized and to make the kind of confident quantitative claims that often emerge from the core. On the policy front, this confused precision creates the illusion that a minor adjustment in the standard policy framework will prevent future crises, and by doing so it leaves us overly exposed to the new and unexpected."

Core versus Periphery

- "To be fair to our field, an enormous amount of work at the intersection of macroeconomics and corporate finance has been chasing many of the issues that played a central role during the current crisis, including liquidity evaporation, collateral shortages, bubbles, crises, panics, fire sales, risk-shifting, contagion, and the like. However, much of this literature belongs to the periphery of macroeconomics rather than to its core."
- "The dynamic stochastic general equilibrium strategy is so attractive, and even plain addictive, because it allows one to generate impulse responses that can be fully described in terms of seemingly scientific statements. The model is an irresistible snake-charmer. In contrast, the periphery is not nearly as ambitious, and it provides mostly qualitative insights. So we are left with the tension between a type of answer to which we aspire but that has limited connection with reality (the core) and more sensible but incomplete answers (the periphery)."
- "if the goal of macroeconomics is to provide formal frameworks to address real economic problems rather than purely literature-driven ones, we better start trying something new rather soon."

Cabellero on DSGE

- "My point is that by some strange herding process the core of macroeconomics seems to transform things that may have been useful modeling short-cuts into a part of a new and artificial "reality," and now suddenly everyone uses the same language, which in the next iteration gets confused with, and eventually replaces, reality. Along the way, this process of make-believe substitution raises our presumption of knowledge about the workings of a complex economy and increases the risks of a "pretense of knowledge" about which Hayek warned us."
- "After much trial and error, these core models have managed to generate reasonable numbers for quantities during plain-vanilla, second-order business cycle fluctuations. However, the structural interpretation attributed to these results is often naïve at best, and more often is worse than that. For example, while these models have been successful in matching some aggregate quantities, they have done much more poorly on prices. But in what sense is it a good general equilibrium fit if the quantities are right but not the prices?"

Realism versus Goofiness

- "The periphery uses abstraction to remove the inessential, but a typical periphery paper is very careful that the main object of study is anchored by sensible assumptions. It is fine to be as "goofy" as needed to make things simpler along inessential dimensions, but it is important not to sound "funny" on the specific issue that is to be addressed."
- "Instead, core macroeconomics often has aimed not for a realistic anchor and a simplification of the rest, but for being only half-"goofy" on everything: preferences and production functions that do not represent anyone but that could be found in an introductory microeconomics textbook, the same for markets, and so on. By now, there are a whole set of conventions and magic parameter values resulting in an artificial world that can be analyzed with the rigor of micro-theory but that speaks of no particular real-world issue with any reliability."

Integration?

- "One possible reaction to my remarks is that I am too impatient; that with enough time, we will arrive at an El Dorado of macroeconomics where the key insights of the periphery are incorporated into a massive dynamic stochastic general equilibrium model. After all, there has been an enormous collective effort in recent decades in building such models, with an increasing number of bells and whistles representing various microeconomic frictions. The research departments of central banks around the world have become even more obsessed than academics with this agenda."
- "However, I think this incremental strategy may well have overshot its peak and may lead us to a minimum rather than a maximum in terms of capturing realistic macroeconomic phenomena. We are digging ourselves, one step at a time, deeper and deeper into a Fantasyland, with economic agents who can solve richer and richer stochastic general equilibrium problems containing all sorts of frictions. Because the "progress" is gradual, we do not seem to notice as we accept what are increasingly absurd behavioral conventions and stretch the intelligence and information of underlying economic agents to levels that render them unrecognizable."

Cabellero on Rational Expectations

- “Moreover, the process of bringing the periphery into the core raises an obvious tension about the role of rational expectations. Rational expectations is a central ingredient of the current core; however, this assumption becomes increasingly untenable as we continue to add the realism of the periphery into the core. While it often makes sense to assume rational expectations for a limited application to isolate a particular mechanism that is distinct from the role of expectations formation, this assumption no longer makes sense once we assemble the whole model. Agents could be fully rational with respect to their local environments and everyday activities, but they are most probably nearly clueless with respect to the statistics about which current macroeconomic models expect them to have full information and rational information.”
- “In realistic, real-time settings, both economic agents and researchers have a very limited understanding of the mechanisms at work. This is an order-of-magnitude less knowledge than our core macroeconomic models currently assume, and hence it is highly likely that the optimal approximation paradigm is quite different from current workhorses, both for academic and policy work.”