

John Taylor and the Theory and Practice of Central Banking – Some Reflections*

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The organizers have asked the participants in this panel to concentrate on John Taylor's contribution to the theory and practice of central banking. However, let me start with a personal remark.

Before I had the privilege to meet John personally – being still at the university – I was deeply impressed by his monumental contributions to modern macroeconomics. In short it is a vast array of concepts and models that have become common currency in monetary economics. Quoting from John Taylor's list of the five key components of modern macroeconomics (J. B. Taylor, 1997)¹, at least two of them – the *third*: the existence of a short-run trade-off between inflation and unemployment; and the *fifth*: monetary policy decisions are best thought of as rules or reaction functions – rests on John Taylor's own life-time contributions to economic thinking.

Taylor contracts – together with Stanley Fischer's (1977)² alternative specification of sticky wages – have been the technical device through which the newly discovered rational expectations paradigm could start a long transition from abstract theory to applied macro-analysis. I surmise that without Taylor's model of staggered wage formation, that transition would have taken longer. True, Bob Lucas's information-based way to explain monetary policy non-neutralities in the short run under rational expectations provides a beautiful

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¹ J. B. Taylor (1997), "A core of practical Macroeconomics," American Economic Review Papers and Proceedings 87, No. 2, pp 233-235

² S. Fischer (1977), "Long-Term Contracts, Rational Expectations and the Optimal Money Supply Rule", Journal of Political Economy.

alternative theory to sticky contracts. But that beautiful theory still awaits to this very day a convincing empirical validation. Taylor' wage contracts, instead, spawned a great blossoming of empirical models of price and wage rigidities that proved critical to the building of the new macroeconomic consensus. That consensus could solidify, in my view, only because (and now I quote John Taylor, 1997, himself): “[it] is *practical*, in the sense that it is having a beneficial effect on macroeconomic policy, especially monetary policy and has resulted in improvements in policy in the last 15 years.” I suspect that without those practical implications – without a demonstration that rational expectations models can generate reasonable econometrics and fit the data satisfactorily – the rational expectations revolution, and all that it meant for central bankers like myself, could hardly have born all the fruits that it did in retrospect.

“Practicality” is a characteristic which I learned to fully appreciate when I had become a central banker. John Taylor is for me an outstanding – and rare – example combining research at the frontier and demonstrating always a sense for the need of practical policy makers. My gratitude on that is not just abstract, but John Taylor's visit to the ECB when we were in the midst of preparation for the start of our monetary policy was of great importance for us having the opportunity to discuss so many issues in an open and at the same time confidential way with him.

He did not just present wonderful ideas or models but had an understanding for the extreme uncertainty we were in before the start of monetary union – uncertainty on data, models and those related to the interactions of a new central bank with the markets and the public at large.

Let me now come to John's eponymous creature, the most famous of all, and I guess the most beloved by its father, the Taylor Rule.

Once the headline of a U.S. News and World Report article about his monetary policy rule was, "Amaze Your Friends! Predict the Fed's Next Move!" Having spent part of my time as a central banker objecting to statements such as that one; having argued time and again against oversimplifications of the monetary policy problem, let me pay tribute to Taylor's last and perhaps most important invention.

The models we use are nowhere near the point where it is possible to obtain a tightly specified policy rule that could be recommended for practical use with great confidence. Nonetheless, the Taylor rule embodies one fundamental finding of modern economics. At first thought, a discretionary response to shocks might seem exactly what one would expect of a professional central banker. After all, each economic contingency is a unique combination of circumstances that is in its way unprecedented, and will likely never repeat itself again in that precise form. So, each new contingency would seem to command a different, tailor-made – and I apologise for the inadvertent quotation – response on the part of monetary authorities.

There is some grain of truth to this. But 40 years of reflections on the role of expectations in macroeconomics and John Taylor in 1993 have taught us that monetary policy is not a sequence of isolated policy actions. When forming their expectations, agents seek to capture the general pattern of monetary policies, and it is that pattern that matters in shaping their economic behaviour. Therefore, the relevant problem to solve for central banks is not so much, say, about the size and the timing of a given interest rate move in response to a particular contingency. It is about the strategy for repeatedly adjusting the policy instrument in response to the state of the economy, whatever this might be.

The risk of discretionary decisions creating time inconsistency and causing moral hazard is prevalent in so many fields of policy making. John Taylor never lost sight of these problems also when being in politics seeing the need to overcome the trap. Therefore, one should not be surprised to find a headline “Rules versus discretion” also in his recent book “Global Financial Warriors” when analysing the practice of IMF lending.

The Taylor Rule has become a benchmark for monetary policy in many respects. At the ECB we were confronted with extreme uncertainty on data for the output gap and the equilibrium interest rate.³ Notwithstanding this difficulty it was important always to monitor estimates of the Taylor Rule using a variety of data.

In macroeconomics the Taylor Rule also serves as a starting point for many approaches like models on learning.⁴ This conference presents good examples of John Taylor’s seminal contribution

This is what I take away from his revered 1993 paper: a formal, and rigorous and memorable illustration that monetary policy is about commitment and strategic design. Present day monetary theory and best central banking practice are founded on this bed-rock principle, which John Taylor – like only the greatest thinkers can do – has made straightforward and tangible.

³ O. Issing, V. Gaspar, I. Angeloni, O. Tristani (2001), “Monetary Policy in the Euro Area”, Cambridge.

⁴ See e.g. C. Walsh (2007), “The contribution of theory to practice in monetary policy: recent developments”, in: European Central Bank (ed.), Monetary Policy, A journey from theory to practice, Frankfurt.