## Remarks at the ECB and Its Watchers XXI Conference

Jordi Galí (CREI, Universitat Pompeu Fabra and Barcelona GSE) 30 September 2020

Good morning. Thanks a lot, President Weidmann, for your kind introduction. It's a pleasure to be back at this event

The outline of my presentation is straightforward. I will just go over a list of four changes in the ECB strategy that I think are warranted. The four changes are ordered from less to more controversial, as I perceive them. Here is the list:

- 1) Adoption of a *symmetric* inflation target
- 2) End of the two-pillar structure
- 3) Adoption of average inflation targeting
- 4) Adoption of a higher inflation target

I'll discuss each of those briefly.

Why a symmetric inflation target? I think it's pretty hard to make a case for the current asymmetry in the "below, but close to, 2%" formulation of the ECB inflation target, and for the downward bias that it implies for inflation. I think the experience of the past decade with very low inflation and a policy rate close to or at its effective lower bound (ELB) over the more recent period has made it clear that low inflation can be at least as problematic as high inflation. On the other hand, I don't think there is an obvious drawback for adopting a symmetric target. In practice, the ECB seems to have made decisions in a way consistent with such a symmetric target. Given the current circumstances in which inflation has been persistently below the 2% target, an announcement of a symmetric target going forward could only help raise inflation expectations, even though the impact is likely to be marginal. In addition to a symmetric target, I think the ECB should consider the adoption of a (symmetric) target band. The latter would make precise what is meant by inflation "being close to" the chosen numerical target. Currently this is not the case, which prevents an external observer from judging whether the ECB is meeting its objective or not at any point in time. Again, I don't think the adoption of a target band would make much difference in practice, but it would render the ECB target more transparent and facilitate its accountability.

Let me turn to the second change I propose, namely, the elimination of the two-pillar structure of the ECB strategy. The existence of the monetary pillar that may have been justified in the early years on the grounds of continuity with the practices of the Bundesbank, a central bank that had a solid reputation at that time. But after two decades the ECB has established a very good reputation on its own. I don't think these legacy issues should be a consideration anymore. Furthermore, the monetary pillar was introduced on the grounds that there is a fundamental direct relationship between monetary aggregates and the price level. According to that view, a central bank that aims at stabilizing prices must necessarily stabilize monetary aggregates to attain that goal. I think this view is over-simplistic. Modern monetary theory certainly doesn't endorse a direct link between monetary aggregates and the price level. Instead, monetary policy affects prices only indirectly, through its effects on aggregate demand, output, employment, marginal costs and, eventually, the pricing decision of firms. There is no direct link whatsoever between monetary aggregates and the price level.

Now, in practice, I don't think the existence of this monetary pillar has been harmful in a significant way. I don't have time now to elaborate on this. I have a paper (Galí (2012)) that was published in 2012 called the *Monetary Pillar and the Great Financial Crisis* published in an online volume edited by the ECB, in which I make the case that despite the large fluctuations in M3 growth, no significant

monetary policy decision taken during the financial crisis or earlier hinged in a significant way on those monetary developments. On the other hand, the monetary pillar may have been a "distraction": given its central role in the formal definition of the strategy, the ECB felt compelled to justify the deviations of monetary aggregates from their reference trajectory, having to rely on a variety of ad-hoc factors, even though those deviations were arguably irrelevant for any developments in the real economy.

The review of 2003 both broadened the content of the monetary pillar, while downplaying its reference value. In particular, it put more emphasis on financial indicators and the study of the components and counterparts of M3 rather than M3 itself. Variables like the growth of loans to households and firms are important indicators that the central bank should follow and monitor closely, especially to the extent that they have been shown to be early warning signals for financial crises. From that point of view, it is important that the central bank monitors those indicators. In the case of ECB, this is particularly true given its role in the monitoring of financial system vulnerabilities. Yet, from the point of view of monetary policy proper, I think those financial indicators can be subsumed in the so-called economic analysis, as indicators that provide evidence on likely evolution of aggregate demand and hence on output, employment, costs and eventually on prices, as it is the case for other variables (e.g. business confidence indexes or the evolution of energy prices) that the ECB monitors continuously.

Finally, I think it's very important to note that any formal or informal bounds on the evolution of monetary aggregates could impose undesirable constraints on the asset purchase programs currently in place, since those programs, generally viewed as highly desirable in order to avoid the fragmentation of euro area financial markets, can potentially imply large fluctuations in monetary aggregates.

A third change I would propose is the adoption of some form of average inflation target, whereby in the face of a persistent shortfall of inflation from target, the central bank should aim at overshooting the target for some time. Average inflation targeting is an interesting idea. It has been shown to have very nice properties in our theoretical models. One may interpret it as a way of formalizing forward guidance, thus reducing the uncertainty about the intended outcomes of the latter.

I think it's important if some average inflation targeting (AIT) strategy is adopted that this is done in a way as informative and transparent as possible. I don't think the Fed's recent announcement was very successful in this respect. So let me mention some desirable features that, in my opinion, an AIT strategy should have and that should be made explicit at the outset if that strategy is adopted. First, I think the ECB should make clear that this an AIT strategy would be asymmetric, in the sense that it would not aim at lowering inflation below target after a period in which the inflation has overshot the target. Among other things, this would not be credible: No one believes that the central bank would engineer a recession just to make up for inflation having overshot the target in the past. Secondly, I think the AIT strategy should be "double-contingent." Firstly, it should come into effect only when the ELB is binding; otherwise the ECB should just pursue a conventional flexible inflation targeting strategy, letting bygones be bygones. Secondly, the policy rate should remain at the ELB until average inflation remains above the target over a specified period of time and/or by a given (cumulative) amount. Both benchmarks could be specified as function of the duration and/or size of the previous undershooting. In the absence of these clarifications, I think the adoption of AIT is bound to have very little impact, as it has been the case with the recent Fed announcement.

What are the weaknesses of an AIT strategy, if any? A first limitation is that it hinges critically on anticipation effects, which work well in our theoretical models, but it's not so obvious that they would work so well in practice. Secondly, it requires near-surgical capabilities from the central bank in order to steer inflation towards the desired levels. Given the flatness of the Phillips curve that

requirement might raise some doubts about the ECB's ability to deliver its AIT-related commitments. From that viewpoint, I think it is clear that there is a trade-off between how specific are the details of an AIT strategy, and the central bank's ability to implement it successfully, with the consequent credibility risks. Choosing a suitable degree of detail in the specification of the AIT strategy may thus prove as important as the decision to adopt it itself.

The final modification to the ECB strategy that I would propose is the adoption of a higher inflation target. From a theoretical point of view, the adoption of a higher inflation target is a logical consequence of a permanently lower  $r^*$ , the real interest rate consistent with a long run equilibrium with full employment and inflation at its target level. If the ECB believes that  $r^*$  has gone down as a result of factors independent from monetary policy, as it has recognized repeatedly, the case for a higher inflation target is very hard to avoid. If the inflation target remains unchanged, the average nominal interest rate will be lower than it has been historically and the incidence of binding ELB episodes will increase accordingly. Of course, that implication has to be counterbalanced with the costs of the higher average inflation that would presumably accompany the adoption of a higher inflation target.

Let me show you a picture (Figure 1) from work in progress with Philip Andrade, Hervé le Bihan and Julien Matheron based on the welfare analysis of an estimated DSGE model for the euro area (Andrade et al. (2020)).

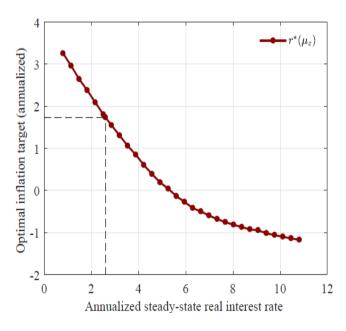


Figure 1: r\* and the optimal inflation target. Source: Andrade et al. (2020)

The figure displays the optimal inflation target (vertical axis) as a function of r\* (horizontal axis). The dashed vertical line marks the estimate of r\* before the financial crisis, a value slightly above 2%. Note that the implied optimal inflation target delivered by the model corresponding to that value of r\* is below but close to 2%, which happens to be consistent with the ECB target. As you can see, if we allow r\* to go down to, say, 1%, that implies an optimal inflation target of about 3%. The near one-for-one relation between the two variables implied by our analysis for low levels of r\* suggests that the costs of marginally higher inflation are small relative to the benefits of having more policy space in order to respond to adverse shocks.

Of course, the problem with a higher inflation target is the transition, especially given the persistent undershooting of the 2% target over the past few years. Thus, an announcement today or in the near future of a higher inflation target may be little credible.

In my view transitional considerations should not be an impediment to the adoption of a higher inflation target if the latter viewed as desirable in the absence of those considerations (i.e. if the strategy was to be designed from scratch, with no history record). In that case, the ECB could time the adoption of a higher inflation target on the basis of two principles: *gradualism* and *opportunism*. Gradualism means that the ECB could announce that it may be open to consider the possibility of revising the numerical inflation target upward, due to the decline in r\*, *sometime* in the future. Opportunism comes into place through the adoption of that higher target at a time when inflation has been persistently above the current target and closer to the new desired target. Given that the change would have been announced earlier, there should be no suspicion the ECB is trying to manipulate the target to match current inflation.

Let me conclude. I have put forward four elements of the ECB strategy that are worth reconsidering: the asymmetry of the target, the two-pillar structure, the specifics of the inflation targeting strategy and the numerical target for inflation. Other central banks that have undertaken strategy reviews like the one that the ECB is undertaking now, have preempted discussion on certain aspects of the strategy by treating them upfront as being off limits. I very much hope that this is not the case for the ECB. Furthermore, it is important that all the key elements of the new strategy are properly justified and explained, independently of whether they have been changed or not in the context of the current strategy review.

Thank you.

## References

Andrade, Philippe, Jordi Galí, Hervé le Bihan and Julien Matheron (2020): "Should the ECB Adjust its Strategy in the Face of a Lower r\*?," work in progress.

Galí, Jordi (2012): "The Monetary Pillar and the Great Financial Crisis," in *The Great Financial Crisis: Lessons for Financial Stability and Monetary Policy*, European Central Bank, 74-95.