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Fed
Focus

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# Comments Before The Money Marketeers Club: A Brave New World

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Thank you, Ray[1]. And thank you, my many dear friends, for being here tonight. I met Ray, and many of you, when I first came to Wall Street in 1983. We were the cottage industry called Fedwatchers, and we lived and breathed the H4.1 report, the weekly snapshot of the Fed's balance sheet. Most of us carried the title of economist, but we really were plumbers. Our job was to forecast the so-called operating factors, the normal and very seasonal flushing of reserves through the banking system.

This was not intrinsically interesting itself, but rather a means to an end: forecasting how many reserves the Fed would need to add or drain so as to hit its discount window borrowings target. And the level of discount window borrowings was not intrinsically interesting, either, but merely a means to another end: forecasting the Fed funds-to-discount rate spread. And that spread was not intrinsically interesting, either, but merely another means to an end: forecasting the damn Fed funds rate!

I was never as good as men like Ray in this game, in part because I wasn't as technically competent in my understanding of some of the operating factors: I was a second rate plumber. More fundamentally, however, the whole process bored the living daylights out of me. We Fedwatchers were all smart people, but what we were doing didn't seem to me to smartly add value to society. We spent our days chasing operating factors 'round the Fed's plumbing system, forecasting whether the Fed would need to add or drain reserves at 11:40 am, in order to hit its discount window borrowings target. It was a silly game played by otherwise serious people.

But it was a necessary game, because the Fed refused to tell us its Fed funds rate target. We had no choice but to crawl around in the Fed's plumbing system, exposing our backsides to innocent bystanders, to figure whether the Fed's open market operations were simply technical maneuvers to keep the so-called "degree of pressure on bank reserve positions" constant, or signaling a policy change – to wit, a change in the Fed funds rate. It drove me nuts, because I knew the Fed could and should simply tell us its Fed funds rate target! In which case, we Fedwatchers could then snug up our shorts and go do something productive with our lives, like being economists.

## The Day the War Began: October 6, 1979

That was a long time ago, in the early years of the Fed's war against inflation. Paul

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Volcker had initiated the war on October 6, 1979, when he announced that the Fed was trading in its Keynesian trousers for monetarist jeans: the Fed would no longer target the price of bank reserves, the Fed funds rate, but rather target the quantity of bank reserves, more specifically the quantity of non-borrowed reserves, so as to target growth in the money stock.

It was all a ruse, of course, giving the Fed political cover to let the Fed funds rate go as high as necessary to induce a nasty recession, the only tried and true means of breaking a secular inflationary episode. The ruse ended in the summer of 1982, when the necessary recession threatened to become a depression, in which case the Fed chucked the notion that it was targeting growth in the money stock – which conveniently had become distorted relative to growth in nominal GDP by financial de-regulation – and cut the Fed funds rate big time.

But the Fed couldn't quite bring itself to admit that it had gone back to targeting the Fed funds rate, because to do so would have required admitting that the Fed's fling with monetarism was nothing more than a smokescreen for a Fed funds rate high enough to induce a recession. So, the Fed adopted a regime of indirectly targeting the Fed funds rate, via a discount window borrowings target.

## Eventually, Reality Prevails

That ruse eventually ended, too, in part because the demand for discount window borrowings structurally declined after the run on Continental Bank in the spring of 1984, transforming any given discount window borrowings target into a higher and more volatile Fed funds-to-discount rate spread. Indeed, I remember arguing with Ray about this in the summer of 1984, when the Fed kept its discount borrowings target unchanged, even as the Fed funds rate went up 100 basis points. I argued that this was a tightening, while Ray said it wasn't.

I still think I'm right, but our friend Neal Soss, who was Paul Volcker's assistant, says that Ray was right. Yes, the Fed funds rate did go up 100 basis points in the summer of 1984, but the Fed didn't mischievously bring about this outcome, Neal says, so it wasn't really an active tightening. The Fed was, he argues, simply caught by a structural change in the discount window borrowings function that it didn't recognize, which induced a passive tightening. I'm not sure I buy this, but Neal swears that it is true.

What I do know is that way back then, the Fed really did hate admitting it had the power to peg the Fed funds rate, a technique associated with the inflationary 1970s, and also a technique that Volcker had explicitly rejected when he declared war on inflation on October 6, 1979. It was a long, long time before the Fed could bring itself to publicly admit what everybody knew: the Fed had the power to peg the funds rate. And that pegging the funds rate was, in fact, what the Fed was doing, explicitly after the Crash of 1987, which undermined the discount window borrowings function once again. Indeed, it was not until February 1994 that the Fed finally started announcing changes in its Fed funds target. Finally, Fedwatchers could become full time economists again, turning in their plumbing tools!

## Fuzzy Implementation, But a Clear Goal

As I think back on those ancient years before February 1994, I am struck by how much has changed in the last ten years. The Fed is now amazingly transparent about the fact that it has the power to peg the Fed funds rate, that it is indeed pegging the Fed funds rate, and what the peg is. Bravo! At the same time, I have the nagging suspicion that I know less about the Fed's goals now than I did in my youth.

Back then, we all knew that the Fed was waging a war against inflation, that there was a place lower the Fed wanted to go with inflation, the promised land of effective price stability. We also knew that the Fed was waging this war with an opportunistic battle plan, not explicitly inducing recessions (after Volcker's opening battle), but rather opportunistically welcoming them when they inevitably happened, because recessions pay disinflationary dividends. We also knew that the Fed would try to lock-in these disinflationary dividends by preemptively tightening in following recoveries. Cycle by cycle the Fed would fight this war, slow to ease and quick to tighten, until victory was achieved.

Indeed, the Fed's reaction function became so transparent that you could model it, notwithstanding the cat and mouse game in the Fed's implementation of that reaction function. The most famous specification of the Fed's reaction function is, of course, John Taylor's, for which he got himself named a Rule. I must admit, I'm envious. Must be really, really cool to have a Rule named after you!

## Riding the Phillips Curve

Particularly a Rule with Keynesian foundations, as the case with Taylor's Rule. His rule is very nicely founded on the simple proposition that monetary policy influences inflation via its impact on aggregate demand relative to aggregate supply potential, otherwise known as an output gap. And the output gap is, of course, just one Okun's Law step from the Phillips Curve, which does exist in the cyclical short run, even if not in the secular long run.

At its core, Taylor's Rule is simply a formula for the Fed to play the Phillips Curve, with one disinflationary innovation: a penalty term for fighting inflation that is above target. More specifically, Taylor's Rule says that the Fed should hold the real Fed funds rate above its long-term "neutral" level by 50% of the amount that inflation is over target. For example, if inflation is at 4% and the target is 2%, and assuming there is no output gap, Taylor's Rule says that the Fed should hold the real Fed funds rate one percentage point higher than "neutral."

Which is just another way of saying, of course, that if the inflation rate is above the Fed's target, the Fed should seek a secular average for the unemployment rate that is above NAIRU, so as to secularly bear down on inflation. That's what the Fed did during the war against inflation, which is why Taylor's Rule so nicely captures the data of the 1980s and 1990s.

The whole campaign was, at its core, about running a real Fed funds rate sufficiently high to maintain, on average, an army of the unemployed (or pool of available workers, as Mr. Greenspan used to like to say) to fight inflation. And we in the Fedwatching fraternity all knew the Fed's game plan, even during those years long ago that we had to spend our days running round the Fed's plumbing system, trying to figure whether some operating factor had just flushed or if the Fed had changed its non-targeted Fed funds rate target.

Now, the whole world knows the Fed's Fed funds rate target, and instantaneously knows when the Fed changes that target. **But, I submit, the world knows a lot less about the Fed's goals now than it did when the Fed was fighting the war against inflation.** The Fed won that war, finally declaring official victory a year ago, when the FOMC introduced the concept of "unwelcome disflation" into its lexicon. The Fed wisely, even if belatedly in my view, declared victory in the war against inflation and announced a secular campaign to win the peace of effective price stability.

## A New Campaign Requires a New Reaction Function

Ever since, we in the markets have been trying to figure out what this means for the Fed's reaction function or, put differently, specification of the Fed's Taylor Rule. Which brings me to my real axe to grind tonight: the time has come for the Fed to stop working so hard on transparency in its operations, and spend more time working on transparency about its goals!

During the war against inflation, it really didn't matter if the Fed had an explicit inflation target. We all knew that the Fed wanted inflation to go lower over time. And I personally was against the Fed announcing an inflation target, since I knew it would be below the prevailing inflation rate, which would create a presumption that the Fed should err on the side of achieving it sooner, rather than opportunistically later.

Once effective price stability was achieved, however, I changed my mind and became an advocate of an inflation target. Indeed, I came out of the closet on this almost exactly a year ago, when Bill Dudley and I wrote an Op-Ed for the *Financial Times*, advocating that the Fed adopt an inflation target of 2% as an exit strategy to a pre-commitment strategy of accommodation. At the time, of course, the Fed and the markets were having a hot fling with unconventional monetary ease – definitely not Taylor Rule stuff! More specifically, the markets were romancing the notion of the Fed targeting/pegging longer-term rates, and putting the Open Market Desk's money behind its words.

It always made no sense to me for the Fed to peg long rates, unless and until it had employed the tool of a pre-commitment to not hike the Fed funds rate. The only question for me was how the Fed could both announce such a pre-commitment strategy while also announcing an exit strategy from the pre-commitment. Accordingly, I became an advocate of explicit inflation targeting, with an inflation target of some 2% becoming the Fed's pre-announced exit strategy from its pre-commitment to not hike the Fed funds rate. Bill Dudley and I argued strenuously that the Fed should eschew a commitment to not hike for some time period, as such a pre-commitment would make the eventual exit hostage to fortune, rather than economic circumstances.

The FOMC did not, of course, listen to me and Bill, and in August introduced a calendar-driven commitment to remain accommodative for a "considerable period." The decision was, as the WSJ's Greg Ip has masterfully reported, a contentious decision, in part because a pre-commitment strategy was indeed an unconventional policy maneuver. The FOMC had always – at least in modern times – resisted rhetorically tying its hands as to future policy. Indeed, until February 1994, the Fed wasn't even willing to tell us what the spot Fed funds target was, much less comment about its intentions relative to the forward Fed funds curve. Thus, the decision last August to commit to the world that it would remain accommodative "for a considerable period" was a profound change in the Fed's policy regime. And regime changes are always contentious for Committees to implement.

My hunch, and it is only that, is that the

FOMC's decision last August was made more contentious than it needed to be by Chairman Greenspan's longstanding resistance to the FOMC announcing an explicit inflation target, or at least, as Governor Bernanke has advocated, a definition of effective price stability. Without an explicit inflation target or definition, the FOMC was limited in its options as to pre-defining the exit strategy in its pre-commitment strategy of remaining accommodative.

## Remembering Harry's

Thus, the FOMC regrettably drove itself into a rhetorical cul de sac, with the implicit objective of producing a rational bubble in asset valuation. Say what, you retort? A rational bubble in asset valuation?!?! How can a bubble be rational? Let me give you an example.

Suppose you went into Harry's Bar 'round the corner (which, I learned just earlier today, has been regrettably closed), and the bartender told you that he was offering happy hour prices and would continue to do so for a "considerable period," rather than simply an hour. It would be rational, would it not, for you to ring up friends and invite them to join you at Harry's? You wouldn't know just how long a "considerable period" would be, of course, but you would know that the bartender has a duty to give you a heads-up as to when happy hour prices will end, rather than just cavalierly hike prices. Thus, it would be rational to have all your friends come over, particularly as long as the bartender keeps saying that happy hour prices would continue for a "considerable period" or that he will be "patient" in lifting them.

Would there be a bubble in customers over at Harry's? Yes. Would it be a rational bubble? Also yes. It would be a stable disequalibrium: everybody having a good time quaffing cheap beer, which they know will not always be cheap, but which will be cheap for a long enough time to have a party, which will end when the bartender signals that it is over. Ergo, a rational bubble.

That was precisely the Fed's goal last August when it uttered the words "considerable period": the Fed wanted we-the-markets to discount into asset valuations a 1% Fed funds rate, even while knowing that if we did, thereby stocking aggregate demand, a 1% Fed funds rate would no longer be appropriate. **<u>This is the paradox inherent in a pre-commitment strategy to remain accommodative: if the markets believe the commitment, then the commitment will eventually need to be broken</u>**. Put differently, in order for the Fed to successfully fight deflation risk, it is necessary for we-the-markets to believe that the Fed will fail, creating wealth via levitating asset valuations – on the notion of 1% Fed fund rate forever! – that stokes aggregate demand, thereby generating reflationary success.

## End of Happy Hour

Which brings us to where we are right now: it is time for the Fed to withdraw the 1% happy hour price for Fed funds, getting the last laugh on those who believed that the Fed couldn't win its battle against deflation risk. It is time for the Fed to end the party in asset valuation on Wall Street, because the party in itself has successfully generated a renewal of risk appetite on Main Street, notably in the willingness of businesses to invest and to hire.

Speculative asset valuation on Wall Street paid the bill for Main Street businesses to check into the Betty Ford Center for Balance Sheet Rehabilitation. And now, Main Street business is back to the capitalist pursuit of profit through growth, rather than survival through retrenchment. Accordingly, it is now time for Wall Street to check itself into the Betty Ford Center for Negative Real Fed Funds Dependency.

The Fed's mission is to make sure the hand-off of the growth baton from Wall Street to Main Street is as smooth as possible. We think a great deal about the hand-off at PIMCO; indeed, the simple phrase "the hand-off" has become code for our entire economic outlook. When will the world be safe for the Fed to end happy hour prices for money, and will Wall Street's withdrawal pains have a benign or contagious influence on Main Street's renewed capitalist mojo?

The FOMC no doubt asks itself precisely this question, so our job at PIMCO is not just to figure out what we believe, but what the FOMC believes. So, here goes with what we think, as well as what we think the FOMC thinks.

- Inflation is presently too low, in that there is no buffer of inflation between here and "unwelcome disinflation" in the event of a negative shock to aggregate demand. Such a shock could emerge from a variety of places, including an adverse Wall Street reaction to the Fed's removal of happy hour prices for Fed funds. Thus, the Fed cannot be preemptive in the removal of accommodation, even though it preaches that it can. Bottom line, the FOMC really would like to see inflation a bit higher than it is, even though the Committee won't admit that.

- The inflation outlook remains benign, despite pipeline pressures from many commodity prices. Key here is that unit labor costs are deflating, literally deflating, not just disinflating. This is proof positive that slack still exists in the labor market, or if you prefer, that the current unemployment rate, while low by historical standards, is still well above the NAIRU. Thus, the Fed, who worships at the shrine of the (expectations-augmented) Phillips Curve, has no justification for expecting a **sustainable** acceleration in inflation until unit labor costs turn up sharply. That could happen via a sharp deceleration in productivity growth and/or a sharp acceleration in wage growth. And even then, there is a lot of room in profit margins to absorb a shift in shares of aggregate income from the business sector to the household sector, as Greenspan has intoned.

- Notwithstanding a fully-benign inflation outlook, when using a Philips Curve, or Output Gap, set of spectacles, the FOMC really does want to hike the 1% Fed funds rate, so as to withdraw moral hazard from the markets, a monetary technique called *moral hazard interruptus.* And the sooner the Fed does this, the better in terms of limiting bubble valuation in financial market risk premiums.

- Accordingly, we look for the FOMC to start tightening at its earliest possible convenience, which doesn't seem reasonable until the August 10th FOMC meeting, when the Committee will have seen four more monthly employment reports. If those reports show an average of 150K+ job creation, then the FOMC is likely to pull the tightening trigger.

- But before the FOMC pulls the trigger for the first time, there is good reason to expect the FOMC, and more particularly for Chairman Greenspan, to tell us at least something about the number of bullets in its gun. More specifically, I expect – and I stress this is me talking, not PIMCO necessarily – that the FOMC will give us at least a hint as to its estimate of the "zone of neutrality." And indeed, in early January in San Diego, Mr. Greenspan himself gave us a hint that he will give us this hint, when he said:

*"…we observe that every time we move, or even indicate that we might move – you can see the whole structure of the yield curve change. That is beginning to tell us that as we start on any particular pattern of monetary policy, we have to ask ourselves where does it end."*

- As I have been writing ever since last fall, I believe that the near universal assumption, as per Taylor's Rule, that the "neutral" real Fed funds rate is 2% is wrong. Put differently, I believe the notion that the real short rate should be just a touch below potential real GDP growth (assumed to be 2½% when Taylor came up with his Rule) is wrong. I believe "neutral" is about one-half of one-percent.

- Essentially, my thesis is that overnight money, carrying zero price risk, zero credit risk and zero liquidity risk should not yield a real, after-tax return. A 50-basis-point real rate in the context of a 2% inflation rate – my definition of "effective price stability" – would translate to a zero real rate on money: a 2½% nominal rate, with 50 basis points going to Uncle Sam for taxes (assuming an average marginal tax rate of about 20% in this country) and 200 basis points making the holder of money whole for inflation.

- In contrast to my axe to grind with Taylor (and everybody else, it seems!) about the "neutral" real short rate, I have zero problem with using potential real GDP growth as a rough cap for the "equilibrium" real long-term rate for high-grade private sector obligations. Common sense, the most powerful tool in portfolio management, Bill Gross has pounded into me, says that over the long run, the return on financing GDP cannot be above the internal rate of return of GDP.

- Thus, I think that the "neutral" real long-term private rate is now probably about 3½%, my rough guess as to potential GDP growth. Subtract a long-term swap rate, and that implies a "neutral" real long-term Treasury rate in a range of 3%-3½%.

- The contrast between my assessment of the "neutral" real short-term rate and the "neutral" real long-term rate implies a market segmentation view of the yield curve, of course. It also implies a very, very steep real yield curve. And I have no problem with that: real returns should be connected to the longevity of risk that an investor is underwriting.

- A market-segmentation view of the yield curve is, I acknowledge, in conflict with an expectations-driven view of the yield curve, which states that the yield curve is a forward curve on the Fed-controlled Fed funds rate, plus a risk premium for uncertainty about the forward Fed funds rate. Yes, my market-segmentation view implies a structural reward for levering up into the carry trade. And, indeed, that was definitionally the case during the era of Regulation Q, when banking was about borrowing short at 3%, lending long at 6%, and hitting the golf course at 3 pm. 3-6-3 banking it was called.

- Thus, if the Fed were to enforce my view of the "neutral" real short rate, the Fed and other financial regulators would need to also enforce quantitative rules on growth in levered players' balance sheets, so as to prevent unbridled growth in credit creation via the carry trade. And indeed, that's precisely what is on the table for the maestros of the carry trade, the housing finance agencies. Thus, in a world of effective price stability, in which there is no justification for the Fed to richly reward the holders of money with a hefty return for taking no risk, I anticipate that regulatory tools, rather than the interest rate tool, will become the dominant governor against excess credit creation.

It's a Brave New World, my friends. For most of our professional lives, the Fed has been fighting a war against inflation, called opportunistic disflation, fought with preemptive tightening and reactive easing. That war is over, because we won it. Now, the Fed is waging a campaign to win the peace of price stability, in a world in which inflation risk is two sided, from a starting point too close to deflation.

Thus, the Taylor Rule, an empirical evaluation of the Fed's reaction function during the war against inflation must now be specified using theory, not data, as we have no data in our life times for the type of campaign that the Fed is now waging: maintaining, rather than achieving effective price stability.

I thank you for letting me share my thoughts on this Brave New World, and look forward to your questions.

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