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Central Banks and Income Distribution: Does the Taylor Rule Push Up Rentier Incomes?

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The effect of monetary policy on the functional distribution of income

It was not too long ago, in the aftermath of the Great Financial Crisis (GFC), that fears of deflation associated with worries about secular stagnation increasingly concerned policymakers. However, since late 2021 and early 2022, inflation anxiety, resting on fears of a potential wage-price spiral that would sharply erode the purchasing power, especially of financial asset holders, has once again become the driving force behind current macroeconomic policy after a very long hiatus going back some four decades to the late 1970s and 1980s.

Subsequent to the initial implementation of strong fiscal stimulus packages adopted early during the COVID-19 crisis in 2020-2021, the heavy work of returning our COVID-battered economies to the pre-pandemic macroeconomic order associated with a 2 percent inflation target now rests primarily on central banks. As their response to inflation in the form of persistent interest rate hikes has come to dominate monetary policy actions both in the US and internationally, the Taylor rule has also returned as a significant policy concern with increasingly overt political pressure for its official (and not just its implicit) adoption at the US Fed.

The Taylor rule has now become a policy hot potato in this inflationary crisis, with the Fed often charged with being “behind the curve” in a partisan blame game over why central bankers have not done enough to prevent inflation from taking hold during the pandemic. Some US Republican representatives have argued that the Fed had been given too much discretion in the pursuit of its current dual mandate *cum* its official 2 percent inflation target “add on” in 2012. As recently pointed out, these advocates are asking that actions of the Fed should be set on automatic pilot and bound by a formal interest rate rule like the Taylor equation. Others, such as former Fed chair Janet Yellen, have suggested a more traditional Keynesian interpretation of the Taylor rule by tilting the weights in the standard Taylor equation strongly in favor of closing the unemployment gap relative to the inflation gap.

In our new INET working paper, we analyze the consequences of an “inflation first” monetary policy on the functional distribution of income by adopting a post-Keynesian socioeconomic class analysis. We focus on how the post-1970s “inflation first” policy commitments of central banks came to be crystallized in the Taylor-rule scheme and how this consistently favored the income of rentiers (i.e., the savers/financial asset holders or net creditors within a community) at the expense of non-rentier groups (or net debtors).

The so-called Taylor rule was officially put forth as a possible framework to conduct monetary policy only in the early 1990s. Yet, it synthesized a set of ideas that became fashionable following the almost complete abandonment of the traditional Keynesian priorities of high employment and real output growth, which had dominated before the high inflation environment of the 1970s. Starting from the mid-1970s, associated with a series of major oil-price shocks, a policy consensus developed internationally that emphasized controlling inflation over all other possible macroeconomic goals. Hence, when monetarism “crashed and burned” in the 1980s, following the Volcker shock mythology, a New Keynesian *cum* Neo-Wicksellian view of macroeconomic policy emerged in response to demands for a new inflation policy anchor, as the latter slowly appeared within a precise monetary policy framework.

As is well known, by the 1990s these events opened the door to the Taylor rule approach to monetary policy formulation, which is normally described in the now standard Taylor rule formula:

$$i = \rho + \pi + \alpha (\pi - \pi^*) + \beta (q - q^*) \quad [1]$$

where i is the nominal central bank benchmark rate of interest, ρ is a constant term, which in real terms ($i - \pi$) (i.e., when $(\pi - \pi^*) = (q - q^*) = 0$) was interpreted as some constant “natural” or “neutral” rate of interest; α and β are policy coefficients, π and q are the actual inflation rate and real output respectively, with π^* being the target inflation and q^* some sustainable “full capacity” level of output compatible with a Friedmanite “natural” rate of unemployment (u^*) (or perhaps the so-called NAIRU). Given the presumed theoretical link between potential output and the natural rate of unemployment, one could easily restate the output gap as an unemployment rate gap ($u - u^*$) and use it interchangeably as in equation [1'] below:

$$i = \rho + \pi + \alpha (\pi - \pi^*) + \delta (u - u^*) \quad [1']$$

The policy appeal of this central bank reaction function represented by equation [1] (or its *alter ego* [1']) is important to highlight. The new policy framework fits unequivocally the pro-rentier “inflation first” priority that became politically anchored from the late 1970s onwards when central banks became obsessed with combating an inflation rate alleged by many to be spiraling out of control, as in the textbook accelerationist hypothesis popularized by Milton Friedman at the time.

In this context, the monetary policy focus was reduced operationally to getting the inflation rate under control, via the use of a single interest-rate instrument, the central bank-administered benchmark interest rate, i . This entailed the monitoring of basically two measures: the actual inflation rate vis-à-vis its target, and the output or unemployment gap. The monitoring of these two gaps was important because, within the Taylor equation, the output gap was never conceived within a reaction function as an independent argument to target by a central bank (as would a Keynesian policymaker). In contrast to the Keynesian perspective as understood within the US Fed’s dual mandate that envisaged the output or unemployment gap as an independent gap to close, in the Taylor framework it was solely an indicator upon which the central bank can react to combat future inflation preemptively when setting its benchmark interest rate, i . Hence, through the compounding effect arising from the setting of its operational interest-rate instrument, i , both “gaps” in the Taylor reaction function would be

“informing” the monetary authorities of the measured distance from its single ultimate focus, namely the central bank inflation target to be reached both within the current time period and over time.

According to the specific logic of the Taylor rule reaction function, central banks were to raise the benchmark nominal rate and, by implication, the real rate, $r = i - \pi$, whenever the actual inflation rate inched up above its target and whenever the unemployment rate would be below its “natural” level from which these output gap measures were (often indirectly) derived. This view of the Taylor rule is quite different from what is sometimes referred to as the more Keynesian Yellen rule that interpreted the two policy gaps in equation [1] as independent objectives in line with a more genuine dual mandate.

From a theoretical perspective, the Taylor relation is a key pillar of New Keynesian/Neo-Wicksellian macroeconomics. As partly discussed in Seccareccia (1998), while being a lineal descendant of the monetary theories put forth by Knut Wicksell over a century ago, the current Taylor rule framework differs from the original Wicksellian approach for at least four important reasons analyzed below, which as we shall see renders the Taylor framework somewhat problematic in its adoption.

Firstly, Wicksell had made it very clear that what central banks are actually doing is setting the money rate of interest, i , in relation to price changes within a certain period and *not* the real rate as in the Taylor rule reaction function. The real rate is merely the outcome of the setting of the money rate in relation to the inflation rate, which a central bank can perhaps try to predict, but, in reality, it can only know or measure it *ex-post*. Secondly, Wicksell ignored the output gap or, at least, he thought that actual output was always tending towards potential output or full employment, thereby excluding the output gap from his reaction function; and, thirdly, for Knut Wicksell, it can be said that the achievement of price stability meant that $\pi^* = 0$ and not the usual 2 percent target of central banks nowadays. This latter concern is a somewhat minor distinction but, as we shall see below, it does imply a peculiar type of central bank reaction function.

Finally, and most importantly, unlike Taylor who can approximate econometrically his ρ value residually (i.e., ρ is the residual estimate when the two output gaps are constrained to zero values), Wicksell assumed that the “natural rate” ρ is unobservable and, thus, cannot be known directly. It can only be understood from logical inference. What actually the central bank can do in responding to changes in prices is presumably to bring the “money rate”, i , closer to this unobservable “natural rate”, ρ . Hence, one can merely presume that a central bank would know that i is getting closer to ρ only *ex-post* because it observes the rate of inflation/deflation slowing down and that $\rho = i$ when the rate of inflation/deflation has come to a halt.

Because of these differences in their theoretical structures, it has been argued elsewhere (see Seccareccia 1998, p. 186) that, unlike the Taylor rule, the “Wicksell rule” could take the form of what we can describe as a mere nominal variant of the Taylor relation:

$$i = c + \alpha' (\pi - \pi^*) + \beta' (q - q^*) \quad [2]$$

Additionally, the Wicksell rule can be reduced to an even more elemental central bank reaction function when assuming, as did Wicksell, that $\pi^* = 0$, and $(q - q^*) = 0$, that is:

$$i = c + \alpha' (\pi) \quad [2']$$

where c is a constant term not to be confused with the unknown “natural rate”, ρ , in Wicksell. Instead, α' and β' are coefficients as previously discussed vis-à-vis the Taylor equation. Furthermore, it can also be observed from equation [2'] that, depending on the value of the coefficient α' , the *ex-post* real rate, c , can be a constant, or it can fluctuate counter-cyclically or pro-cyclically. Hence, depending on whether $\alpha' = 1$, we can describe this central bank response function as “proportional” (or “full”) adjustment to shocks to the inflation rate. On the other hand, we could describe the central bank response function as a “partial” adjustment when $\alpha' < 1$, and “over-proportional” adjustment of i to π when $\alpha' > 1$.

In contrast, because of the postulated pro-cyclicality of the adjustment of the real rate to π , the Taylor rule framework points to a distinct central bank rule of adjusting i to π , thus implying systematically an “over-proportional” adjustment of interest rates by the central bank, that is, a reaction function consistent with a value of $\alpha' > 1$ in equation [2']. From our Wicksell and Taylor-rule reaction functions estimated in our INET working paper, we observe from our econometric estimation that there is a systematic “over-proportional”

response behavior of central bank interest-rate policy toward changes in the inflation rate, on average, during the whole period of 1973-2022, in several industrialized countries. This thus implies empirically the *de facto* dominance of the so-called Taylor principle, which means a value of $\alpha' > 1$, for the entire period. Indeed, primarily before the GFC, money interest rates had been persistently over-adjusted by central banks to more than offset changes in the inflation rate, thereby reflecting an overzealous response function towards price inflation patterns and, at the same time, little or no concern over changes in unemployment rates. Despite this behavior of prioritizing inflation deviations that is compatible with both the Wicksell and Taylor rules, the apparent abandonment of unemployment or real output considerations is more consistent with a straight and unambiguous Wicksellian single-goal response function.

At the same time, we also find evidence suggesting a significant change in central bank behavior after the GFC, implying a reweighting of the policy parameters toward a more Keynesian-type reaction function that tries to balance for both changes in the inflation *and* the unemployment rates. This reweighting in the policy response parameters, however, does not mean that central banks had now switched to a Wicksellian “partial” adjustment or that they consistently violated the Taylor principle. It, instead, merely implied less over-compensation in real interest rate policy and a greater weight given to changes in the unemployment rate. Therefore, our findings would be adverse to the recent claims of some influential economists such as Bordo and Levy and BIS General Manager Agustín Carstens. These economists have been arguing that the policy of “too low for too long” interest rates and the systematic violation of the Taylor principle that prevailed in the several years prior to the COVID-19 inflationary surge, are part of the structural causes of high and sustained inflation and financial instability in the 2021-2023 late pandemic epoch.

Summing up, in our INET working paper we distinguish a regime of high rentier income shares during the 1980s all the way to the GFC, in line with a staunch “rentier first” monetary policy of responding aggressively to increases in the inflation rate. In parallel, we identify a regime of low-rentier income shares during the oil-price shock era of the 1970s and then after the GFC when, in the latter case, the fears of deflation and secular stagnation came to prevail among many central bankers internationally, as reflected in the adoption of “flexible” inflation targeting (IT). During the post-GFC decade before the COVID-19 pandemic, this new “flexible” IT environment turned out to be more compatible with a genuine dual mandate policy framework, which rendered an overall income redistribution somewhat more in favor of non-rentier income groups in the economy.

We believe that, particularly in regards to a central-bank dual mandate, what has been occurring since the GFC in some industrialized countries is that a variant of the Taylor rule – due to the inclusion of a fairly independent output and unemployment objective, as in the so-called Yellen rule – can open the door to be interpreted in a Keynesian framework in which not only inflation and unemployment are interpreted as separate policy targets to pursue, but where fiscal policy can be coordinated with monetary policy ultimately to tackle two macroeconomic goals with two instruments.

Non-hyperlinked references:

Seccareccia, M. (1998), “Wicksellian Norm, Central Bank Real Interest Rate Targeting and Macroeconomic Performance.” In *The Political Economy of Central Banking*, ed. by P. Arestis and M.C. Sawyer, Cheltenham, UK: Edward Elgar Publishing, pp. 180-98.



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benleet

2 hours ago edited

This paper ignores the role of exorbitant corporate profits in the equation of rising inflation. The Federal Reserve's Flow of Funds report of June 2023 shows that the pre-tax profits of nonfinancial corporations rose by 89% from 2019 to 2022, from \$1.235 trillion to \$2.342 trillion (an increase of \$1.107 trillion), which added on average an additional \$8,450 of expenses to all 131 million households in the U.S. The median household income was \$70,784 in 2021, so this is a considerable unaffordable increase for most households and families. The U.S. Pulse Surveys recently show that 80 to 90% of respondents living in households with less than \$60,000 annual income find it extremely difficult to adjust to these price increases. The role of interest rate increases from the Fed will dampen output no doubt and cause higher unemployment, but will that reduce the corporate appetite for pressing mark-ups and profits higher and higher? Also, the increasing imbalance of income distribution creates a societal-economic dysfunction as the well-to-do drive most consumption and drive-up prices, leaving the majority with

less purchasing power. Pre-tax income for the top 10% in the U.S., with incomes above \$200,000, comprise 53.1% of all

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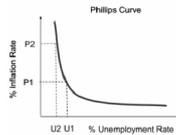
Berkeley. Post-tax income for the top 10% of households is 41.7%, up from 32% in 1976. My blog:

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JUL 2023

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ARTICLE By Mario Seccareccia and Guillermo Matamoros Romero

JUN 30, 2022

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Karl Polanyi Levitt

ARTICLE By Mario Seccareccia

FEB 26, 2020

kept the inflation target an elusive dream, which means inflation actually always above the target, the real rate thus was negative. The continuance of such an action and with consistent messaging, the markets have continued to adjust such that the expectations of the market has preceded the setting of the target rates for inflation.

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The output gap on the other hand has moved from highs to and then to highs, while the real rates have not moved from the anchored negative territory. The recent case makes it clear that even when the Fed funds rate has moved up in a consistent trajectory, the output gap has shrunk in the



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quarter where the rate reached the highest point, which tells us the Fed funds rate when anchored at a net negative real rate, the prices in the economy cannot be tamed and neither can it serve to influence the output gap.



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stagnations of the rentier class and the debtors combine to a near perfect adjustment of the discounting rates that provide munition to keep asset prices buoyed that can take the brunt of the inflation in the economy; in other words real asset price changes can continue to be positive.

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Edward Dodson

a day ago

The tools utilized by central banks are ineffective because they ignore the fact that all increases in land prices meet the definition of inflation (i.e., rising prices for an asset with an inelastic supply). Why do land prices increase and tend to increase to the point where they impose price and cost stresses on the wider economy? This is the result of the under-taxation of the potential annual rental value of all locations (whether urban, rural, resource laden or simply a natural asset with an inelastic supply). The economic literature is clear that the public recapture of rents would bring down the price of assets with an inelastic supply to near zero.

Rents should replace public revenue derived from the taxation of income earned by producing goods and providing services. Tangible assets that depreciate over time should not be taxed. And, for good measure, we should consider the removal of all tariffs and sales taxes.

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Charles St Pierre → Edward Dodson



15 hours ago

It is also clear from the literature that the renter derives no benefit from a rented asset. The farmer who farms rented land can only recover his costs, since competition for the land drives the up the rent until the surplus income is zero. That is to say, the entire surplus/profit of production taken from the asset goes to the rentier class. None to the rest of