

"Inflation is always and everywhere a monetary phenomenon". Discuss in the context of inflation the UK now faces. (1999 words excluding title, headers and references)

"Inflation is always and everywhere a monetary phenomenon", perhaps Friedman's most recognisable quote, is one of those vague truisms that has dominated economics. But like the litany of other 'pub economics' (Terzi, 2015) phrases, it is one that is connected to a far more disputable theory. It seems, on the surface, quite reasonable, a question of the value of goods in terms of *money* would be a *monetary* matter. But underlying it is a devious twist that goes from that reasonable point to the monetarist and post-monetarist doctrines that see inflation caused purely by the growth of money-supply created by central banks (CB). In my view these downstream theories are theoretically and empirically incorrect and they offer us little insight into the inflation that the UK faces.

The Tautology of  $MV=PT$

To explore how something that is true by necessity can be so misleading, let us look at one of Friedman's earliest contributions to the monetary debate. In 'The Quantity Theory Of Money — A Restatement' (Friedman, 1957), he resurrects the famous Fisher equation,  $MV=PT$ . This is another tautology, and its existence is hardly disagreed upon. But what is disagreed upon is the way in which it is read. Whilst Friedman implies that a growth in the money-supply (provided a fixed velocity of money) will lead to a growth in the price-level, there is no compulsion to read the identity in this manner causatively. Kahn constructs a joking alternative (Robinson, 1933) which reads the same as Fisher's but gives the prescription to increase the production of hairpins to satisfy Papal demand for more piously long-haired women. Naturally, we would recognise the meaninglessness of such a relation, so why take Friedman's arrangement of the equation as the way it should be read? We need evidence before we can make a judgement either way.

Fortunately, that evidence does exist. During the 1980s, when monetarism was on the tongue of ever transatlantic central-banker, it became increasingly impossible for governments to control the money-supply as prescribed by the theory (Kaldor, 1985), they targeted 10% M3 growth and it grew by 15% (Meyer, 1982) until eventually they let go of money-aggregate targeting entirely (Jahan & Papageorgiou, 2014). Instead, it was as if price changes and growth in output led the money-supply itself.

Following this, then perhaps it was that  $PT$  came before  $MV$ ? Reading the equation this way opens up monetarist doctrine to a variety of criticisms that are very pertinent when it comes to the inflation facing the UK.

In Friedman's view, given a particular demand for money, provision of extra supply of money would not be required by consumers and would simply be spent. Prices would be bid up and the only effect in the long-run would be a higher price-level (Abbot, et al., 2012). In the subsequent New-Classical paradigm, the addition of rational expectations excluded growth in the money-supply from having even the short-run effects that Friedman accepted (Sargent, 2002). All of this relied on the creation of money being a separate part of the capitalist economic system- a CB creating money that was then 'money multiplied' up in the fractional-reserve system. This idea of how the banking-system functioned lent itself to initial reading of the Fisher equation and if it were the case then it would certainly seem as if inflation was a monetary phenomenon arising from the printing decisions of CBs- how else would the money-supply rise?

So, what allows us to reconcile the aforementioned inability of the government to control the money-supply with the theoretical side that placed the CB as the originator of all money?

## Endogenous Money

The answer is that Friedman's conception of the banking-system was flawed and that money, generally, is created, not exogenously by the CB, but endogenously by private banks (PBs). As Moore (1988) and many others argued, broad money is created by PBs extending loans before they have sufficient reserves. Instead of a multiplication of base-money upwards, banks first create money and then seek the adequate reserves from the CB. This is a position that is no longer constrained to heterodox thought, with the BoE (Jakab & Kumhof, 2019) adopting a similar position. Of course, CBs do have power, but it is one of 'flexibility' (Borio, 2018) rather than a hard constraint on money-creation. The reality is that the actions of PBs come before any response of the authorities- an idea that allows us to tie-up the threads of the causation of inflation. Now price changes can arise because of distributional-conflict (Kalecki, 1941), supply-chain issues and a whole host of more nuanced reasons. Firms who need to pay higher prices demand more credit to pay for it, banks create it, and the system moves endogenously to producing more money (satisfying the newly reworked equation), rather than the CB mismanaging the precise quantity of base-money required. This also satisfies lingering questions with the existing data around price rises- according to Friedman, Lucas, and their intellectual descendants, these should be general and uniform as the increasing supply of money creates expectations amongst all economic agents and economy-wide prices are increased, wages hiked to deal with this expectation in future money growth. But they are not, in fact uniform, nor general. The standard deviation of price change in the US 'was about 1.5 times larger than the price-change average' (Fix, 2021)- inflation is 'restructuring' (Nitzan, 1992) and based far more in real and distributional factors than the simplistic 'monetary phenomenon' that Friedman describes.

### Why this time is not different?

With this conception of the banking-system under our belt, let us return to the state of UK inflation. Many voices, ranging from continuing-Monetarists (Castañeda & Congdon, 2020) to liberal voices like Summers (Anstey, 2022) have blamed CBs for the inflationary pressures facing the world today. To many, this seems like the perfect test of monetarism- a large increase in base-money, 17% trough-to-peak (BoE, 2022) that quite closely matches the helicopter-delivery of Friedman's own theory (Friedman, 1969). Even if in normal times, the monetarist vision is a world away from the reality of money-creation, then did the Covid response not give some credence to his thoughts and might be useful in explaining current inflation?

This is where my criticism goes further. The idea of endogenous money presented above goes further than allowing blame for price rises to fall to real factors before the monetary but actually to place money not as the neutral veil of Hume (1777) but as central to the workings of capitalism. If every time a loan is made to fuel investment or pay for production before sales, money is created, then money cannot just be a 'medium of exchange' but is in fact a form of social organiser that 'structure[s] real activity' (Mason, 2018). Taking a Graziani-inspired (1989) approach to the monetary circuit, we face the question that challenges that most central of neoclassical tenets, that of money-neutrality, why is government-created money any different to the privately-created money that abounds through most of the economic cycle? Why, if, as Schumpeter (1934) says 'in real life total credit must be greater than it could be if there were only fully covered credit' would that same unit of account, when simply created by a different authority (in this case the CB) not have real long-run effects on the economy?

There is a great deal of evidence that shows a tight link between economic growth and the acceleration of private bank money-creation (M2-M1) (Keen, 2011 [2001]) whilst the criticisms of money non-neutrality are undermined by hysteresis (Furlanetto, et al., 2020) and their backwards conception of the banking-system (Habibullah, et al., 2002). Endogenous money not only counters the Friedmanite idea of money-printing but also forces us to question why, when that does occur, it would even be an issue, when it is already so central to capitalist economics. It seems unreasonable that government money-production, on its own, is meaningfully different enough to that of PBs to guarantee the inflation that Friedman describes but is not inherent to the money-creation of PBs.

But even if the theoretical approach is weak, inflation did nonetheless occur, and currently sits at 10.1% (BoE, 2022). So, what is the competing explanation?

### What really caused inflation?

In short, a multitude of factors are responsible. The stimulus that the UK economy received, like the Furlough Scheme, may have been enough for it to push the economy into several bottlenecks as it bridged further than the output gap, but the faltering recovery today makes one sceptical that these are the main sources. Now we have shown that the money created in the pandemic was not qualitatively different to the money created in usual times, we can return to the original point concerning the Fisher Equation- that the price-level change comes before the money supply change, not the other way around. And in my view, the factors most important to the price-level would be supply-shocks (mainly the war and perhaps even climate-change (King, 2022)), distributional conflict and sectoral-dependency.

These offer a reasonable understanding of why it is that the price of butter (27.1%), of used-cars (30%) (Hull, 2022) and computer-chips (20%) (Wheatley, 2022) have risen sharpest whilst alcoholic spirits have fallen and wages grown only slowly (BBC, 2022). These explanations could be about demand growth and where that intersects with physical shortages (Williams, 2022), elasticity boundaries and capacity of producers (Lavoie, 2009). They could be about bargaining-power of workers and their ability to raise their wages. They could be about supply shocks in the face of poor harvests or sanctions preventing cheap oil from flowing. But what they are not about is CBs rolling the money printers to an excess and causing a *generalised* phenomenon, instead we get that wild divergence of different prices that can only be explained by distributional and sectoral factors, not general ones.

If we extend this out to a more encompassing analysis then the supply-side issues, especially the war, dominate. The huge rises in grain and energy prices (BoE, 2022) have ripple-through effects on the rest of the economy with whether these extra costs are borne out by higher inflation the result of numerous factors- bargaining-power (Unite, 2022), elasticities and sectoral dependence on the commodities at hand. Friedman used to scoff at the idea of cost-push inflation (Nelson, 2007) as misinterpreting inflation's true origins, but once you understand the changes in the money-supply as downstream of the real effects that shift the price-level, then it seems like Friedman is the one who fails to see the real causes.

And even now as we show that the causes of present-day UK inflation are not led by money-supply growth but a range of interacting factors, we also see that perhaps the most influential amendment made by Friedman, Lucas, and others- that of expectations-driven inflation, shows no bearing in the data. In fact, UK inflation expectations are far below the predictions given by many authorities, having capped at around 6.2% (Trading Economics, 2022), hardly

the self-reinforcing spiral that was believed would drive inflation without dramatic CB restraint. Again, inflation is about real-factors- supply-shocks, bargaining-power and sectoral-dependency.

### Conclusion

Friedman and his successors are wrong on many fronts. Their use of a meaningless accounting-identity without justifying the causation they read, their incorrect view of how banks work and their blind conception of money as a neutral veil. Each one of these undermines a realistic conception of inflation and it is only when we re-evaluate the way in which price changes occur (largely from supply, distribution, and sectoral issues), banks react (by producing more money on-demand) and the effects this has on the ‘real economy’ that we can have a clearer view. This may lead us to a conception of inflation that is very different and less simplistic than Friedman’s general-equilibrium view which places the CB as the originator of all inflation, but it is one that explains empirical divergence of price and the history of past attempts at controlling money-supply better and allows a clearer, critical economics concerning the role of banks, money and the ‘real economy’.

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