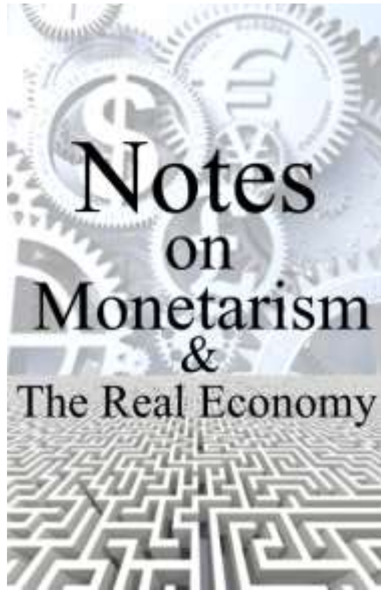
Note 3



Notes on
Monetarism & The Real Economy
provide an extended explanation
of content in the
British Strategic Review 2022

http://www.britishstrategicreview.com

Notes are prepared in response to reader queries by the Strategic Decision Analysis Group, SEEL-Systems Engineering Economics Lab, Hampshire, UK.

15th April, 2022

Why the Bank of England cannot solve the cost of living crisis

Summary

An unfortunate lack of realpolitik geared to the interests of the wellbeing of the population of the United Kingdom has witnessed the British government participate in a campaign of applying sanctions against Russia. This, combined with similar efforts by EU countries, is exacerbating the cost of living issue and creating increasing hardship, economic failures and general decline in wellbeing. The proportion of wage-earners unable to purchase essentials for their families will increase to a growing proportion of those in work. This reality is a legacy of inappropriate macroeconomic policies applied since 1977 resulting in loss of real growth in the economy.

During the last 45 years, UK government policies have involved a limitation of macroeconomic management to mainly monetary means. However, some 60%-80% of real economic growth originates from the application of advances in human learning and technologies. This growth originates in changes in the physical relationships between process inputs, outputs and workforces within the supply side goods and service production sectors. By ignoring this vital source of economic growth, the result has been greatly diminished manufacturing and industrial sectors in the United Kingdom. This has been associated with a loss of well-paid employment opportunities. Since 2008, quantitative easing (QE) has further depressing the supply side establishing a systemic structural inflation.

Having helped create this state of affairs, the Bank of England, has no means of curing this through monetary means.

The need to apply an analytical logic

The deterioration in the state of the economy is variously associated with act of leaving the European Union (Brexit) and administrative supply chain issues followed by the Covid-9 pandemic and its associated supply chain disruptions.

Since the declining state of the wellbeing of an increasing proportion of the population advances, exchanges concerning policy have tended to become emotive, fractious and assertive. There is, therefore, a need to review evidence and analyse the validity of the theory and practice of economics to identify where policies have contributed to our current state. This paper explains explain why the fundamental cause is inappropriate policies deployed for over 40 years.

Recent events

One of the most revealing outcomes of quantitative easing (QE) between 2008 and 2021 has been the generation of evidence to show that the Quantity Theory of Money (QTM), long, the standard logic used by monetarists to justify policy decisions, is of no value at all.

It is assumed by the general public that when the Bank of England spokespeople refer to a policy aimed at "price stability" that they are referring to the prices of significance to wage-earners such as food, rent or mortgage payments, transport, energy and other essentials. In this context, central banks have suggested that a constant rate of inflation of around 2% p.a. represents a preferred state of "price stability" and indeed, here they are talking about the very same prices as those of concern to wage-earners.

A 2% rise in inflation does represent a basis for price stability only if productivity and wages in the economy are rising by an equivalent amount. Thus, as the revenue increases resulting from improved productivity are divided in to shares of profits and wages, both rising at the same rate, then the unit price levels and real incomes, or purchasing power of disposable incomes of wage-earners, remain in a state of "stability". If, on the other hand, revenues are channelled mainly into profits and wages remain fixed, a 2% inflation rate translates into a fall in real incomes of up to 18% each decade. Since wages across the economy make up the bulk of demand such an imbalance will reduce economic growth.

Policy instruments

The Bank of England believes that it can manipulate two basic levers to "manage" inflation. These are base interest rates and exercising some control over money volumes in the economy. A fiscal lever managed through government directly is to increase or decrease taxation.

Fundamentally, there is an assumption that inflation is an entirely a monetary phenomenon in that excessive money volumes cause inflation and that reductions in money volumes can even cause price declines and deflation. In explaining this relationship, central bankers refer to the QTM. This is a simplistic identity purporting to show a relationship between the quantity of money in the economy (M), the velocity of circulation of money (V), the average level of prices (P) and the quantity of goods and services purchased (Y).

Thus:

$$M.V = P.Y \quad \ldots \quad (i)$$

The determinants of real incomes and purchasing power for any level of income, are average unit prices (P) and real income (Y). It will have been noticed by many that with the introduction of QE, involving massive amounts of money being infused into the economy via bank and corporate financial asset purchases, the QTM predicts a massive rise in unit prices of goods and services. This did not happen at all. Real incomes of wage-earners stagnated and corporate investment linked to production productivity declined. Prices remained relatively stable.

So, the question was, "Why did all of this money, over the initial decade of QE, have no impact on the prices of goods and services predicted by the QTM ?"

The QTM could not predict this outcome because the QTM and monetarist theory have absolutely no relationship to how the economy works. To establish this fact, it is necessary to review some background on economic theory and practice.

Why was QE introduced?

It is necessary, first of all, to decode the statements and declarations surrounding the introduction of QE to understand its intent. The stated theory was that by reducing interest rates to very low levels and purchasing bank assets to regenerate bank balance sheets then the low interest rates might result in support for the real economy.

Assumptions

The need for bank finance?

The typical monetarist's presumption was that to get productive investment there is a need for bank finance. British experience has demonstrated that this is not the case. In the 1970s the economist Nicholas Kaldor explained that only about 10% of investment funds came from Banks most came from corporate earnings. This statement was made following the period 1945 to 1965, a period analysed by the economist Robin Matthews, which experienced unprecedented growth, most private sector growth was the result of recycling revenue into investment. This period saw rising investment, productivity and real incomes and falling income disparity. What should also be noted is that during the period 1945-1965 no Keynesian policies were applied and, in reality, policy was highly deflationary.

The power of interest rates?

QE involves lowering interest rates to close to zero the policy arbitrarily exacerbated the state of affairs for those living off fixed incomes from savings, such as pensioners and pension funds. However, this level of interest rates, rather than result in more supply side investment, resulted in a major diversion of funds from the productive supply side into assets. This perverse result was very damaging.

Investment for real growth

Another observation by Nicholas Kaldor countered the assumption that exogenous or new money was necessary to secure economic growth based on the assumptions of the aggregate demand model. Thus, demand is considered by monetarists to be the governor of the economy in the sense that by augmenting money volumes "economic growth" would occur as a natural consequence. Nicholas Kaldor explained that productivity investment requirements are

generated by the supply side production sectors according to their internally generated requirements and investment decisions. Therefore, investment leading to expanded and more efficient production was an endogenously-generated requirement and not one resulting from exogenous money supply volumes.

Hector McNeill, having reviewed the work of Nicholas Kaldor, Kenneth Arrow and Robert Solow produced in the 1950s through 1970s, concerning the impact of technology and human learning on economic growth, concluded that the supply side productive sector has a close to fixed ability for bringing about the changes associated with growth in productivity. The key changes are closely associated with learning by doing, the development of operator skills or tacit knowledge and innovation in technologies and techniques. Indeed, learning and ability to bring about change in a structured technical sense accounts for between 60%-80% of real economic growth. However, the average macroeconomic gains in physical productivity over the long term are about 2-5% each year. Specific technologies such as IT and the ability to miniaturize components with logical packing density (Moore's Law) possess very high rates of productivity increase. However, once the rest of the range other technologies deployed in all other sectors are combined with IT, the overall rates of natural physical productivity growth for the whole economy remains at around 2%-5%. Even if money was no object the overall supply side productive sectors of the economy cannot absorb more funds and use them productively because of limitations of the natural rates of advance in learning by personnel and change in technologies. An important factor in these considerations is lead times between decisions to invest, the process of investment and the final impact of that investment

The implications is that no matter how much money is infused into the economy this will make little difference to the ability of the supply side productive sectors to make use of such funds. Naturally, if the state of the economy is depressed, there will be lower funds available to invest from corporate revenues and bankers will consider productive sector investments to entail too much risk if there are more attractive options.

Free market competition

The natural consequence of the analysis presented is that under normal circumstances companies invest to become more competitive. The principal indicator of an ability to penetrate markets is unit output prices. Therefore, no matter how much money is infused into the economy the productive supply side sector, in a competitive market, will not raise unit output prices as a result of higher money volumes.

However, under competitive conditions the main cause of companies needing to raise unit prices is rises in unit costs arising from rises in prices of inputs. Indeed, one of the main findings of McNeill's analysis of inflation in the 1970s, leading to the formulation of the Real Incomes Approach, is that overall inflation exists not as a function of money volumes as such but rather on the indirect impacts on the costs of inputs, that is, cost-push inflation causing unit output price setting to be adjusted upwards to maintain rates of return..

The diversion of funds from supply side and wages

As is now generally understood, for the first decade under QE the unit prices of goods and services did not rise to any significant degree. However, Investment declined along with productivity and real wages also fell.

The growth in the asset economy

The reason for this was the diversion of funds away from the supply side productive sector was that increasing amounts of QE funds flowed into the speculative asset markets listed below:

- Land and real estate - r
- Precious metals - p
- Commodities - m
- Art objects - a
- Shares - h
- Financial instruments - f
- Crypto-currencies – c
- Offshore investment - o

How does the QTM handle this reality?

The QTM contains absolutely no reference to the asset economy where all of the significant price rises have occurred.

Hector McNeill has developed various alternatives[1] to the QTM to include the components of the asset economy as a series named as the Real Money Theory (RMT). An example of an RMT identity is provided below:

$$(M - (r + p + m + a + h + f + c + o + s)).V = P.Y \quad \ldots \quad (ii)$$

Where the variables are as indicated in the listing above. The additional factor is ‘s’ for savings[2].

Notice that the asset class speculative price rises caused by an influx of excessive quantities of money, in the inner parentheses, are subtracted from the M leaving less money to flow into the real economy. This is why unit prices of goods and services remained static and real wages declined as a result of a depressed market offering no means of raising wages.

Conclusion on the utility of the QTM

The most revealing aspect of McNeill’s analysis is that monetary policy has been run for centuries making use of the QTM as the standard “explanation” and during this time most of the asset classes listed also existed, except for crypto-currencies, so the QTM never was a reliable predictor of policy outcomes. Clearly, the QTM is a quite useless identity and it is a cause for concern that economists over generations did not detect this fact

Mechanisms

McNeill has stated that he first doubted the QTM when studying economics both at Cambridge and Stanford Universities. McNeill’s first degree was in agriculture and besides studying macroeconomic and microeconomics he had been trained to plan farms applying

---

[1] The RTM models used depend upon the level of granularity of analysis required. Thus, working down from an aggregate model, it can be further differentiated into sectors, disposable incomes and profits and, of course, investment.

[2] The economists, John Maynard Keynes, Arthur Pigou and Alfred Marshall all others did work on a QTM alternative to which they had added savings or liquidity as a preference of ways to assign money. However, this was not developed further. This version was referred to as the Cambridge equation.

operations research techniques. This is only possible if there is an understanding the mechanisms involved and therefore an ability to model planning optimization decisions using the factors that determine the outputs of the mechanism . This is why, on the question of the QTM, he noted that lecturers and professors could never explain the mechanism whereby money volumes translated into price rises. This became an important topic in 1973 when the international price of petroleum started rising (seven-fold within a decade). McNeill noted that even Milton Friedman a leading monetarist, could also never explain, in the context of policies to counter slumpflation, the mechanisms of transfer of money volumes into average price inflation. His default "explanation" was that, "*... it happens in the "long run*". As McNeill observed this reflected a fundamental lack of understanding of monetary relationship in the economy and constituted a "cop out" explanation. This lack of clarity indicated to McNeill that they are fundamental problems with the monetary theory related to the QTM, because no functional mechanisms could be identified. Therefore, it is not a model representing the real economy.

Systemic structural inflation caused by monetary policy

The Y in the RMT or the QTM is essentially disposable income spent on items with an average price of P. Therefore, for illustrative purposes Y can be represented as:

$$Y = (p + w + vc + fc)$$

Where Y is income or revenue, p is profit or savings, w is wages or revenue, vc is variable costs such as essential for wage-earners or inputs for companies and fc is fixed or overhead costs such as rent or mortgage payments.

Primary inflation

The result of QE has been to drive up the prices of real estate and land (r) as well as specific commodities (m) such as food and energy products. As can be seen these have a direct impact on variable cost items and fixed overheads. The (r) factor relates to the rents and prices of land, apartments and houses, offices, retail units, industrial units and warehouses.

The translation of the speculative price rises generated by QE over a decade to primary inflation in goods and services can be seen in the illustrated identity below:

$$(M - (r + p + m + a + h + f + c + o + s)).V = P.(p + w + vc + fc) \quad \dots \quad (iii)$$

Primary diversion of funds

Besides draining the purchasing power of money as a result of inflation and economic depression, QE has also resulted in companies buying back their own shares (f) as opposed to investing to increase productivity as well as channelling funds offshore (o) into manufacturing and other ventures that compete with British activities and depress employment. The offshore investment proceeds are often rotated to reinvest and profits held offshore to avoid British corporate taxation leading to lower revenues by the tax authorities.

The combined effect of these elements is to have a direct impact on wages[3] as a result of the opportunity cost of not investing in productivity and channelling funds offshore.

This structural problem can be seen in the illustrated identity below.

$$(M - (r + p + m + a + h + f + c + o + s)).V = P.(p + w + vc + fc) \quad \ldots \text{(iv)}$$

Concluding

Much of the above macroeconomic management incompetence was initiated by Denis Healy who effectively abandoned any industrial and wages policy in 1976 and intensified these conditions in agreement with the IMF Managing Director Johannes Witteveen in 1977. The Thatcher government took up this monetarist approach with some enthusiasm and accelerated the manufacturing and industrial decline. The independence of the Bank of England added no benefits. This was because the seriously erroneous nature of monetarism was never examined or questioned. In spite of mounting evidence, succeeding governments accepted this paradigm without question. However, the inevitability of the current parlous state of the economy was a result of inadequate oversight and understanding of the effects of monetary policy by successive British governments and chancellors each of whom have fallen under the spell of the treasury and Bank of England clerics who themselves in turn only had, and have, a poor understanding of the actual structural impact of monetarism on the real economy.

The Bank of England's predicament

Image

The image of the Bank of England as an effective manager of monetary policy is in decline. This was made evident in the recent evidence sessions of the House of Lords review of QE. The Bank of England submissions were inadequate and seemingly incapable of explaining the reasons for QE, its impact and the current practical issues at hand in plain English. There seemed to be no acknowledgement of the negative impacts on the real economy. At one point it was admitted that after billions of £ spent, the Bank is still learning about the effects of QE.

With good reason the Lord's entitled their report: "***Quantitative easing: a dangerous addiction?***" Given the level of faith in a scheme that the Bank did not fully understand, the word addiction seems to be appropriate. However, Andrew Bailey the current governor thought this word was inappropriate because it gave the wrong impression to constituents.

Limited beneficiaries

However, most of the damage was not accomplished under Bailey's governorship but rather under the governorship of Mark Carney. On the other hand, QE was launched under the governorship of Eneuvin King, who, while leaving his post he did comment that QE seemed to have only benefitted a small group. However, subsequent governors did not return to this

[3] Wages (w) also indicate that there is employment

important topic to examine how QE might have been managed to increase its general level of benefits to the rest of the British constituents.

Absence of effective financial regulations and sanctions

Most of the erosion and corruption leading up to the 2008 financial crisis was a result of lack of an effective regulations framework covering the finance, real estate, new financial instruments, insurance and share dealing. As a result, the levels of fraudulent activities increased both in bank to bank and bank to customer transactions including unacceptably bad deals for some local authorities and the National Health Service.

The derivatives market took off in the early 1970s as a result of Black & Scholes computer-based options hedging model leading to the growth of a grey market growing to several times the GNP of countries and beyond the scope of any central bank oversight or control. Corporations were permitted to buy back shares to artificially raise their values. Banks became involved in the purposeful bankrupting of commercial companies as a means of enforcing takeovers and to asset strip or sell off at a handsome margin. For example, the class action against the Royal Bank of Scotland by thousands of SME who allege that the bank's Global Restructuring Group orchestrated the drives to bankruptcy.

Banks, participated in fixing LIBOR rates to their advantage impacting contracts worldwide inflicting as yet uncalculated prejudice. Banks, through subsidiaries began to participate in commodity markets in physical trading with subsidiaries handling logistics and cornering specific markets to gain price hike profits while increasing the prices for those normally operating in these markets. After the failure of the Gold standard and Bretton Woods Agreement in 1971, there have been proactive manipulation in the precious metal markets and in particular gold and silver..

As recounted in this paper, QE was not a solution but has only resulted in other types of activities that have raised income disparity and impoverished a large proportion of Britain's working population while asset holders and traders have benefitted. These, almost exclusive beneficiaries constitute less than 0.25% of the British population.

No policy instruments

The Bank of England does not have the policy tools to influence the critical mechanisms to reverse the continuing trends towards inflation, falling real incomes and declining living standards.

The "alternatives" all apply the same dogma

The failure of monetarism is strictly linked to the notion that demand equates with the volume of money in the economy measured in currency units. The aggregate demand model has demonstrably failed. Between 1973 and today two alternatives paradigms were developed. One was Supply Side Economics which has nothing to do with the supply side but is simply a fiscal variant which provides marginal tax reductions for the higher tax brackets in the hope that the windfall gains would be invested in the supply side. This failed in its application under the Thatcher and Reagan administrations and the associated high interest rates led to the loss of thousands of family homes and family farms through bank repossessions and a steep rise in income disparity. The latest "alternative" is the Modern Monetary Theory. The problem is that

Monetarism, Supply Side Economics, Keynesianism and Modern Monetary Theory are not alternatives but rather variants on the theme of the aggregate demand model.

Following the logic to what is presented in this paper, it is evident that the aggregate demand model based on monetary factors has not been beneficia to the United Kingdom.

Kaldor's predictions came true

It is worth pointing out that this outcome was predicted by Nicholas Kaldor before Denis Healy opted for monetarism in 1975. Nicholas Kaldor withdrew his advisory support for the Labour government, because of this, in 1976. Hector McNeill has provided a more generalised explanation of why Kaldor considered support for manufacturing and industry to be so important.

All sectors of the economy make use of gadgets, equipment and goods which are produced by the manufacturing and industrial sectors. Thus agriculture, mining, fishing, processing industries, manufacturers and service sectors all make use of products from manufacturing.

The Stages of Economic Growth

In 1960 Walt Rostow published a book, "*The Stages of Economic Growth*" using the example of the economic development of Great Britain, as a model. However, up until 1960 the manufacturing sector in Britain had performed well. As mentioned the period 1945 through 1965 saw unprecedented growth, falling income disparity and rises in real incomes and wellbeing. Rostow nominated this state in 1960 as the final stage of economic development as the "age of high mass consumption".

The gap in this story

However, it is evident that Rostow had not ventured further afield in his research to examine the full economic development cycles of other dominant countries. There is much evidence to be found in the study of Hegemonic cycles where all end up with serious monetary problems because of the loss of manufacturing capabilities. Thus, hegemonic studies show that manufacturing productivity is essential to the initial economic growth of a nation initially supplying home and then export markets generating significant amount of money. The subsequent expansion of the financial services sectors tends to take over ownership of manufacturing and influence political decision making. This becomes associated with a degradation and reduction in the size of the manufacturing sector as a result of offshoring parts of processes or whole industries to locations with lower unit costs as a way to increase financial returns. While this enriched a mercantile financier class this part of the cycle impoverished, in every case, the national populations of the hegemon in decline. The final collapse is characterised by debasement of the currency, inflation and quite often warfare. Rostow's stages of economic growth therefore missed out the most crucial stage which Britain has been passing through in the last 60 years.

Avoiding the catastrophe

While not referring to these historic facts Kaldor did explain how this could be avoided. This is by investing heavily in ***policies that support manufacturing as centres of learning, innovation and sources of real growth resulting from the diffusion of constantly improving manufactured devices, equipment and tools used by every sector in the***

economy. Thus, all sectors come to depend on the levels of innovation in the national manufacturing sectors to improve their own incremental but constant improvements in productivity and real growth. This makes possible the expansion in well paid employment resulting from innovation, in an applied entrepreneurial sense, being the source of real economic growth.

The decline and fall under the weight of monetarism

Since the publication of Rostow's book, the United Kingdom and the United States of America have declined to take up the two lowest negative positions in the world balance of payment rankings, Germany and China take up the leading positions. These countries not only have the leading manufacturing sectors in the world, they also produce the largest range of produce. While the UK has perhaps 120 internationally competitive manufacturers, Germany has in excess of 1,200, most of which are SME and family owned companies.

The monetarists protest that financial services help make up the gap in the British balance of payments. However, these services cannot compensate for the structural systemic gap which can only be filled with a larger and more innovative manufacturing sector generating the goods which, through diffusion to all sectors, can maintain the real growth across the whole economy.

There is an alternative way forward

The type of solution to the national predicament can be found in the alternative Production, Accessibility and Consumption model upon which the Real Incomes Policy (RIP) is based and which provides incentives for companies to become more entrepreneurial and innovative. This system does not involve pay outs and tax breaks but depends upon management and workforces responding to policy incentives. These encourage the simultaneous raising of productivity, profits and wages while moderating or even lowering unit prices so as to generate real income growth streams for business owners, shareholders, workforce and consumers. Monetarism cannot achieve this.

Update 24/04/2022: to correct identities (ii), (iii) and (iv) – added outer parentheses to make net money volume a single reduced total to be multiplied by V.

OTHER NOTES

No.1 - 19th February, 2022 Some aspects of inflation

No.2 - 08th April, 2022 From earned income to pauperism and back

No.3 - 15th April, 2022 Why the Bank of England cannot solve the cost of living crisis

No.4 – 17th April, 2022 Technology, technique and real incomes