

Notes on
Monetarism & The Real Economy
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Monetary deception

Summary

The title of this Note is meant to convey a reality that some of the economic or financial theory that relates to monetary policy is a distortion of facts. Therefore, this gives rise to serious misunderstandings when it comes to the question of the explanation of the objectives of monetary policy. This is a vitally important subject because monetary policy, as this Note will explain, has had a long term prejudicial impact on the real incomes of wage earners at the expense of augmenting the wealth of asset holders and traders.

These findings are some of the essential results of the work of the economist Hector Wetherell McNeill¹ who has headed the development of the Real Incomes Approach to Economics since 1975.

Deception has a specific meaning and this is the act of hiding the truth, especially to obtain an advantage by those hiding the truth. Monetary policy is decided and managed within a regulatory and legal framework of governance. Therefore, the notion that monetary policy represents some aspects of advantage to those promoting it and that this advantage is gained as a result of hiding the truth, then we are dealing with a form of fraud. Therefore, the subject matter of this Note is of significance.

This Note explains that what is taught to this day in leading universities on monetary policy is of little utility because it does not relate to the actual economic and financial relationships that exist within the economy. Besides an erroneous theory, monetary policy acts to marginalize the majority of the country's constituents by lowering the real value of their wages and income.

¹ Hector Wetherell McNeill is a British economist and systems engineer – [see Annex 1 for profile](#).

Whereas one of the stated objectives of monetary policy is to reduce inflation in the prices of goods and services, it has in fact acted to create a systemic inflation and therefore an ongoing deterioration in real incomes.

This Note explains why monetary policy theory is incorrect and therefore is detrimental, in practice, to the interests of the majority of the electorate. It in fact reduces the general ability of this country to be produce enough competitive goods and services to pay its way in the world and secure adequate incomes for the majority. As things stand monetary policy is only advantageous to a small faction within the national constituency.

What is described in this Note has profound implications pointing to the need for an enhanced oversight of monetary affairs by the electorate to ensure that their interests are protected. The solution, in terms of alternative economic theory, monetary and overall macroeconomic policy is one that needs to apply very different policy instruments to those currently applied.

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WHY MONETARY THEORY IS WRONG

Some background

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 members and other countries, has exacerbated the cost of living creating increasing hardship, economic failures and general decline in wellbeing of the constituents of this country. The proportion of wage-earners unable to purchase essentials for their families is increasing for a growing proportion of those in work. This reality is also a legacy of inappropriate macroeconomic policies applied since 1975 resulting in loss of real growth in the economy.

For almost 50 years, UK government policies have involved a limitation of macroeconomic management to mainly monetary means. However, it has been well established², based on empirical evidence, that some 60%-80% of real economic growth originates from the application of advances in human learning and technologies. This evolution originates in

² Based on work by Theodore Wright, Nicholas Kaldor, Kenneth Arrow and Robert Solow establishing the most economic growth arises from learning by doing to innovative changes in technologies and technique.

changes in the physical relationships between process inputs, outputs and advancing workforce capabilities within the supply side goods and service production sectors. This vital source of economic growth has been side-lined by a rising policy emphasis on monetarism which has been associated with 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 depressed the supply side establishing a systemic structural inflation.

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 issues followed by the Covid-19 pandemic associated with supply chain disruptions. Lately, the sharp rise in energy prices resulting from a refusal of the government to purchase Russian gas as well as apply sanctions on Russia, has dealt a particularly serious blow to the cost of living. In particular, this has caused a serious inflationary problem.

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 why the fundamental cause is inappropriate policies deployed for almost 50 years.

Recent events

One of the most revealing outcomes of quantitative easing (QE) between 2008 and 2022 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 not represent a basis for price stability. However, if productivity and wages in the economy are rising by an equivalent amount at least purchasing power is stabilized but this is, in no way, can be classified as price stability. 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 against expenditures on public services or vary the degree of borrowing and spending.

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, the commonly used QTM is that devised by Irving Fisher:

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

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 secure 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 because there was full employment 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, for a sector, are between 2% and about 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%. On the other hand, the reach of IT with the World Wide Web can concentrate sales and logistics functions into semi-automated functions that radically reduce the number of people required to exercise these functions in traditional systems leading to substantial savings on this particular information and coordination function. Many High Tech companies have expanded on this basis.

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 simply because they need to remain competitive.

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 - l
- Domestic & commercial real estate - r
- Precious metals - p
- Commodities - m
- Art objects - a
- Shares - h
- Financial instruments - f
- Crypto-currencies - c

As well as into

- Offshore investment - o
- Savings - s

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 alternatives³ 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:

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

Where the variables are as indicated in the listing above. The introduction of savings (s) to the QTM was made by John Maynard Keynes, Arthur Pigou and Alfred Marshall in the form of what

³ The RMT 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.

became known as the Cambridge Equation⁴. However, this did not gain generalised acceptance within monetary circles.

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 various versions of the QTM as the standard "explanation" for policy decisions and during this time most of the asset classes listed also existed, except for cryptocurrencies. Therefore, the QTM was never was a reliable predictor of policy outcomes. Indeed, clearly, the QTM is a quite useless identity and it is a cause for concern that economists over generations did not notice this fact and enquire as to why this was the case.

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 operations research techniques. This is only possible if there is an understanding the mechanisms or cause and effect relationships which make up the model of how a farm works and which can involve the combination of a large number of different crop and animal activities. An understanding of the mechanisms at work is essential in programming optimization techniques so as to maximize profits or minimize costs and environmental impacts. 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 is not a mechanism and surprisingly reflected a fundamental lack of understanding of monetary relationships in the economy. Such an inadequate "explanation" indicated that even at the frontier of monetarist thinking, there remained a significant lack of clarity. This indicated to McNeill that there were/are fundamental problems with the monetary theory related to the QTM, because in spite of its existence, 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 represented⁵ as:

⁴ 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.

⁵ Function (iii) is not a true function but is only has a variable "holding" device with the purpose of illustrating the interaction of asset values (prices) on the variable contained within it. A set of coherent functions containing these variables is the subject of a research paper.

$$Y = (t + w + vc + fc) \dots \text{(iii)}$$

Where Y is income or revenue, t is profit or savings, w is wages or revenue, vc is variable costs such as essentials 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 (r) and land (l) as well as specific arbitrated commodities (m)⁶ such as food and energy products. As can be seen these have a direct impact on variable cost items and fixed overheads. The (l) factor relate to rents and prices of land and the (r) factor relates to the rents and prices of 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:

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

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 (w)⁷ 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.

$$(M - (l - r - p - m - a - h - f - c - o - s)).V = P.(t + w + vc + fc) \dots \text{(v)}$$

Concluding

Much of the above macroeconomic management incompetence was initiated by Denis Healey who effectively abandoned any industrial and wages policy in 1975 and intensified these

⁶ The rupture of the Glass-Steagall Act (1933) in 1991 when the Commodity Futures Trading Commission provided Goldman Sachs with a "Bona Fide Hedging" exemption to be followed by similar exemptions for other banks. From then on banks and later hedge funds extended arbitrage commodity trading into purchasing and hoarding large quantities of food, fibre, feedstocks and fuels to force up prices so as to gain larger margins.

⁷ Wages (w) also indicate that there is employment

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 12 years of operation and £ billions spent, a representative admitted that the Bank was 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 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 an "over the counter" "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 ongoing class action against the Royal Bank of Scotland by thousands of SMEs 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 5% 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 units⁸. 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.

Surprisingly, this was the very same approach introduced by Chancellor Kwasi Kwarteng announced in September, 2022. Anyone who has reviewed the experience with this approach in the past knows that this will not work. Indeed, the market sectors associated with the purchase of government debt also realised this fact resulting in shadow interest rates rising. The Bank of England's response was to raise interest rates yet further.

There is a generally not acknowledged problem that the latest version of monetary theory, referred to as Modern Monetary Theory as well as Monetarism, Supply Side Economics and Keynesianism 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 beneficial to the United Kingdom.

⁸ There are arguments that this approach this approach operates where supply comes from on-the-shelf items See McNeill, W. W., "*The consequences of being a national of shopkeepers*", Cambridge-Economics Network, 2022.

THE INCESSANT RISE IN INCOME DISPARITY – THE MARGINALIZATION OF WAGE-EARNERS

Income distribution impacts

The constitutional impact of financialization

Besides intensifying the decline in supply side production, investment and productivity, QE also sustained the decline in real wages. In assessing the impacts of QE, it became evident that this policy greatly benefited one section of the UK constituency made up of asset holders and traders while it prejudiced those working in supply side goods and service provisions in exchange for wages. Not only did QE greatly increase income disparity between these two groups the main reasons for this disparity became more evident.

The unit prices of goods and services are an important determinant of the real income or purchasing power of the incomes of all constituents. The purchasing power of the currency is determined by its innate exchange value for goods and services and this is determined by the relative levels and movements in prices. Thus, if prices of goods and services are in general falling the value of the currency rises because more real products and services can be purchased for a given disposable income. If prices of goods and services, in general rise, then the value of the currency falls because fewer real products and services can be purchased for the same disposable income. Therefore, inflation lowers the value of the currency and real incomes and deflation raises the value of the currency and real incomes. Unit prices of goods and services determine “real income”.

In Figure 1, the case of wage-earners is shown where price rises (moving from left to right) cause real incomes to decline. Wage-earners make up around 95% of the working population and voters.

Input to supply side production of goods and services

As in the case of wage-earners the relationship of the interests of supply side production sectors is the same in that preference is given to lower input prices which affect production costs. Therefore, the relationship of companies to the prices of their resource inputs and capital equipment and all variable inputs is the same as consumers.

Asset holder and asset transaction constituent sources of income

On the other hand, the situation for asset holders and traders is shown in Figure 2. Asset markets are referred to as encapsulated markets in terms of their separation from the volumes of transactions occurring in the production and supply side goods and service markets. These markets also tend to be managed by a smaller proportion of the constituency involving less than 5% of the working population. With large injections of funds, such as experienced under QE, these markets were characterised by rising speculative prices. As a result, the participants in these markets could make significant margins on transactions by simply holding on to the assets for a period of time so that their sales price rose.

As can be readily appreciated the participants in these markets, gain no advantage from falling prices in assets, simply because what they buy is the same as what they sell and the time factor, as opposed to effort, raises the sales price. Therefore, contrary to the state of affairs in goods and services markets the purchasing power of the monetary value of the asset holding is

Figure 1: Desirable policy impacts for wage-earners

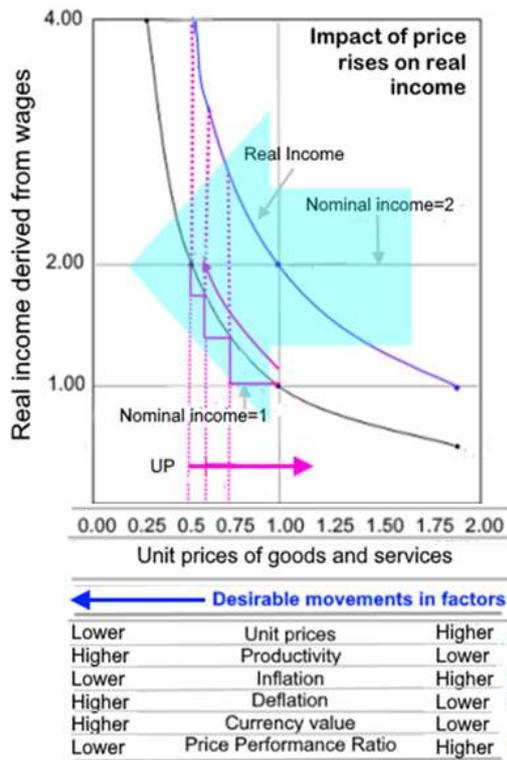
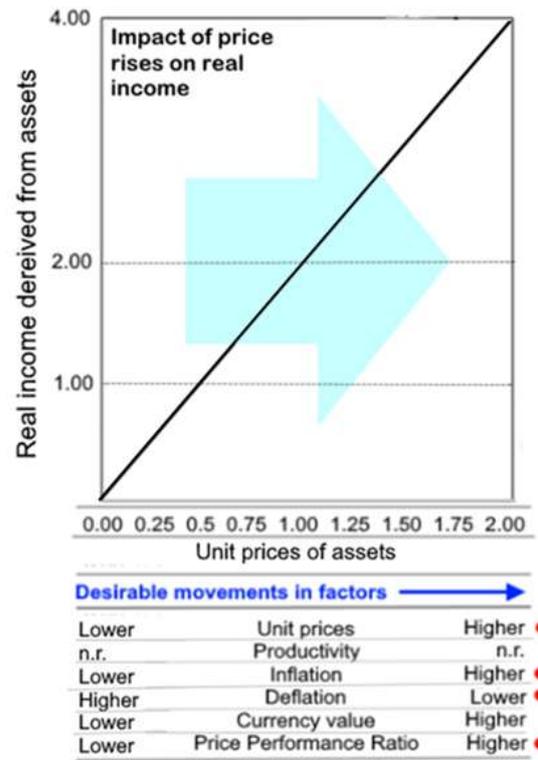


Figure 2: Desirable policy impacts for asset holders & traders



determined by an inverse relationship between assets and its innate exchange value. Thus, if prices of assets are in general falling so does the income and wealth of asset holders. If asset prices rise so does the wealth and income of asset holders.

Inputs to asset trading

In the case of the inputs to asset trading, these are assets to be eventually sold. Based on the early experience in the New York Mercantile Exchange (NYMEX) starting in the 1970s, this was unlike supply side productive sectors, because input prices of assets have no particular impact on profitability because of the assumption of money injections maintaining a rise in values. Therefore, assets trading as well as asset-based income follow the same straight-line positive relationship with prices.

Why are these income lines different?

There is an important difference between wage-earners and asset-holders income responses to variations in the prices of goods and services or assets. In the case of income derived from assets the nominal and real incomes rise as a direct proportion to asset prices, therefore the relationship is a straight line. Quite often income paid in the form of bonuses are proportional to the success of individuals making trades which raise the value of assets held and/or sold. As a result, there is no limiting factor on income levels, they are directly proportional to asset prices.

In the case of wage-earners, wages tend to be fixed over time so rises in the prices of goods and services take up a curved line relationship because although the nominal income (number of currency units earned) is fixed it also becomes a limiting factor when prices rise. This is why the “cost of living” is a common factor in the political discourse of wage-earners.

The real income effects of income sources

Therefore, inflation raises the value of assets-based wealth and deflation lowers the value of assets-based wealth. Therefore, the relative benefits of price movements to constituents earning their incomes from asset transactions on the one hand, and the constituents who earn wages for contributing to the production of goods and services, on the other, have an inverse relationship.

This also represents very different sets of interests on the part of these constituents on the objectives of macroeconomic policy and the potential impacts on their relative interests, according to the policy instruments applied. There is, therefore, the fact that the real incomes of the majority of the population are safeguarded by policy securing stable or falling price in goods and services. On the other hand, there is a minority of constituents who deal in assets, whose real incomes are safeguarded by policies that facilitate the rising prices of assets.

Policy impacts on nominal and real income disparity

The British Strategic Review 2022, described how monetarism has had the tendency to drive up asset prices to the benefit of a minority of constituents. On the other hand, monetary policy has no policy instruments to influence wages even although monetarism and financialization has imposed a prolonged period of deficient investment in plant, equipment and training, and wages have tended to be frozen or adjusted infrequently. The leakage of asset prices through into supply side production inputs represent an increasing income from sales and rents to asset-handling constituents while these same transactions cause cost-push inflation resulting in rising unit prices of goods and services⁹. This results in a decline in the real incomes of wage-earners. As a result, the average levels of assets-based income constituents rise at a faster rate than wage-earners whose real incomes often fall.

Income disparity, therefore, grows on a continuous basis as a direct function of monetary policy.

Constitutional implications of income sources

The constitutional implications of the differential impact of different income sources of income on the wellbeing of the constituents are that, as things stand, the results of monetarism over the last 50 years has been one of bias or discrimination against wage-earners. Policy has diminished the relative wellbeing of the majority, while enhancing the wellbeing of a minority. Naturally these circumstances signify that policy has augmented the extent of the differences in the needs of constituents and their demands in relation to economic policies. This impact is clearly at odds with what would normally be considered to be the constitutional objectives of permitting all constituents to pursue their objectives while preventing the pursuit of objectives by any constituent from preventing others pursue theirs. In this case, each group of

⁹ As illustrated in identities (iv) and (v) on page 9.

constituents pursue their objectives but wage-earners face specific constraints imposed, not by asset holders and traders, but as a direct result of policies that place an emphasis on the injection of money into the economy.

In the context of universal suffrage, where all people over a specific age have the vote and, in theory, at least, voting leads to a public choice on policies, including economic, the majority of voters should be able to decide on policy matters in their mutual interest to be able to advance the wellbeing of all.

THE REAL INCOMES APPROACH

The other new policy that emerged at the same time as “Supply Side Economics” was a theory and policy proposition which was more directly linked to supply side operations. This is based on the Real Incomes Approach. The majority of the development work on this approach has been headed by Hector Wetherell McNeill since 1975. This deploys a completely different approach to economic theory and therefore possesses a different set of policy instruments.

Although McNeill admits he was unaware of this at the time what he developed was very similar to Kaldor’s approach but more fundamentally it was a rediscovery of the work of Jean-Baptiste Say (1767-1832) the French economist and a leading enthusiast for the work of Adam Smith (1723-1790). McNeill stated that economics instruction both at Cambridge and Stanford was so dominated by the Keynesian aggregate demand model dominated by monetary policy, that Jean-Baptiste Say’s explanation for the origin of demand as being wages had become a cause for mirth. Indeed, Keynes went out of his way to criticize Say’s model as being a reason for the Great Depression when in reality it has been caused by a failure in monetary policy and in particular lack of financial regulations. Say’s profound observations had been reduced to a simple statement of “Say’s Law” which states that production creates its own demand. It will be noted that this was the basis of Kaldor’s, without mentioning Say, throwing doubt on Milton Friedman’s view that money creates demand and therefore economic growth.

[Kaldor’s predictions came true](#)

It is worth pointing out that our current state of affairs was predicted by Nicholas Kaldor before Denis Healey 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.

Before elaborating on the theory and policy that has evolved under the Real Incomes Approach, it is of importance to set the current precarious financial state of affairs into a recent historic context. This relates to Rostow’s so-called “*Stages of Economic Growth*” which has the subtitle “*A Non-Communist manifesto*”. There is a significant gap in this work related to its date of publication having missed an important stage in the development of the UK. [This is elaborated in Annex 2.](#)

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.

There is an alternative way forward

The type of solution to the UK's national predicament can be found in the output of the Real Incomes Approach. Rather than follow the aggregate demand paradigm McNeill has based this on an alternative *Production, Accessibility and Consumption model*. This relates production inputs and output and wages to corporate price setting. Unless prices are accessible to consumers who are also mostly wage-earners, consumption will not be adequate.

Therefore, based on the price elasticity of consumption/demand corporate productivity needs to attain a level where wages paid and price set result in increasing consumption. In other words, improvements in productivity result in wages whose purchasing power is enhanced through lower relative unit output prices.

Accessibility has three senses.

1. Locational
2. Informational
3. Affordability

Thus, products and services need to be accessible in terms of its proximity to the consumer, in terms of access to information on descriptions and prices of products and services and in terms of unit prices being within the range affordable by consumers. Thus, real economic growth comes from the judicious investment in higher productivity systems so as to lower unit prices and thereby raise real wages as a result of increased purchasing power.

The combination of competitive unit output prices through a process of rising productivity results in a sustained rise in consumption, even with wages maintaining their same monetary value.

It is notable that Jean-Baptiste's famous economic treatise had a subtitle, "The Production, Distribution and Consumption of Wealth".

As is well established, price is an important determinant of consumption under competitive conditions. Therefore, the fundamental requirement in an economy aiming to raise real incomes and national growth through rising consumption, is the productivity and price-setting of companies. Each company therefore has a measure of performance which reflects productivity and price setting.

One of the proposed Real Incomes Policies is referred to as Price Performance Policy in which the performance of companies is assessed on the basis of a coefficient that combines measures of physical productivity and prices. This coefficient is the [Price Performance Ratio \(PPR\)](#)

which compares changes in output prices to changes in unit input costs. For example, when input unit costs are rising it is beneficial in terms of sales to be able to reduce rises in prices to rates of increase below the rate of increasing costs. To achieve this requires rises in productivity. In order to illustrate the concept, if aggregate unit costs rise by 10% over a specific trading period, then management can react by increasing output prices by 12%, 10% and 8%.

The table below shows the Price Performance Ratios (PPR) associated with each unit price response.

Change in Unit Input Costs	Change in Unit Output Prices	Price Performance Ratio PPR
10%	12%	1.20
10%	10%	1.00
10%	8%	0.80

More generally, companies that increase output prices more than the rate of increase in unit costs end up with a PPR in excess of unity (> 1.00). Companies that maintain the rate of unit output price increases the same as the unit input cost increases have a PPR of unity ($=1.00$). The companies that reduce the rate on increase in unit output prices below that of input cost inflation end up with a PPR of less than unity (< 1.00).

The PPR therefore provides a measure of the degree to which companies contribute, pass on or reduce inflation.

Clearly, all of the factors contributing to the ability of a company to reduce inflation are supply side factors including input acquisition, production capacity, throughput achieved and the yield of saleable produce. The target pricing is governed by the price elasticity of demand across the levels of disposable incomes of target consumers. Sales volumes rise with lower unit prices where there is a trade off between volumes of sales and associated revenues and overall return or profit.

There is a need to align corporate objectives with policy objectives to raise real incomes

Price Performance Policy

The way the Real Incomes Approach has proposed to achieve this is through a policy referred to a Price Performance Policy, to ensure that corporate decisions to lower their PPRs below unity 1.00 are motivated by a set of business rules that are not encumbered by top down policy constraints. It is evident that Keynesian, monetarist, supply side economics and modern monetary theory all rely on the aggregate demand paradigm. Experience in practice has been that such policies create losers, winners and some who remain in a neutral policy impact state. This undermines support for the policies and as a result there is a lack of policy traction¹⁰.

When a company lowers its PPR it will normally, in the short term, lower its per unit margins. However, lower PPRs result in lower relative unit prices in a competitive market enhancing the purchasing power and real incomes of consumers. There would also be a rise in market

¹⁰ Policy traction is the degree to which a policy achieves its objectives within predefined milestones.

share. The majority of consumers are wage earners so as a starting position it is possible to raise the purchasing power of wages by lowering relative unit prices of goods and services. This is why inflation is a significant problem for wage-earners.

Policy-wise, in order to encourage counter-inflationary price setting by companies Price Performance Policy proposes the application of a [Price Performance Levy \(PPL\)](#) which, for example, could replace corporate tax. The PPL can be weighted, for example, to have a basic value of 20% but the degree to which company PPRs fall below unity the PPL will also drop. McNeill has suggested that this should be weighted so that according to corporate price setting and moves to increase productivity it should be possible for companies to drive their PPLs to zero. The benefit is that although no revenue results the boost to real economic growth could be significant. On the other hand, companies who allow their PPRs to drift above unity would face surcharges¹¹.

In terms of industrial strategies and sector strategies there is no need for the conventional forms of “centralised industrial planning” but rather a generic Price Performance Policy making use of the PPR and PPL as performance indicators and instruments, companies remain free to invest and set prices to remain competitive according to their capabilities, access to resources and economic status.

Sector associations remain free to organize amongst themselves the sharing of information on sector wide performance targets, sharing information of leading edge applicable technologies SOTA (State-of-the-Art) and operations decision analysis techniques for optimizing production and maximising real profits and at the same time generating real sustainable economic growth across the economy.

Below is a conceptual map of how average, best attainable (SOTA) and future PPR requirements provide a guide to sector participants where operational efforts are required.

This can help point out, in terms of technical/organizational changes where development emphasis is required to be able to raise productivity so as to lower relative prices. Usually appropriate change and innovation can occur within production units based on shop floor innovation (SFI) involving better process sequencing, layouts and information management. A great deal can be accomplished by simply upgrading to existing SOTA. In some sectors, gains of up to 200% can arise from upgrading to SOTA from a sector average practice.

Investment costs, of course can be entered as contributing components to the input costs calculations for the PPR and eventual price setting and this traded off against the reduction achieved in the PPL. This then needs to be compared with the relative gains or losses according to the price elasticity of demand for the products concerned.

¹¹ One interesting option is that in the case of genuine technical constraints the funds collected under the PPL can be returned in the case where a company requires high investment to reorganize its operational plans to secure higher productivity through technical advances.

*Price Performance Ratios (PPRs)
associated with different unit input value movements & movements in unit output prices*

Unit input costs	Unit output price change %										
change %	-20	-15	-10	-5	0	5	10	15	20		
20	This area represents the innovation target zone				0.00	0.25	0.50	0.75	1.00		
15					0.00	0.33	0.66	1.00			
10					0.00	0.50	1.00				
5					0.00	1.00					
0					0.00	0.00	0.00	0.00	0.00		
-5	0.25	0.33	0.50	1.00							
-10	0.50	0.66	1.00								
-15	0.75	1.00									
-20	1.00										

Innovation target zone Desirable states Undesirable states

The most urgent requirement under current circumstances is for companies to reduce unit output prices in the short term, i.e. now, as opposed to waiting for productivity gains before reducing unit prices. Therefore, the Price Performance Policy is proposed to operate on the basis of realised relative price reductions as opposed to a promise of future reductions. The strategic policy logic here is that, in terms of real economic growth and the cost of living crisis a large proportion of constituents need unit price reductions to become effective as soon as feasible. By applying known algorithms for estimating unit cost trajectories based on existing quantitative Learning Curve algorithms, companies can calculate how much throughput is required to reduce unit costs to levels justifying their current unit price reduction. Against this they need to compare the impact of the lower PPL on their cash flow in the intervening period.

It is self-evident that the ability of companies to respond to Price Performance Policy will vary according to sector and their current operational states.

This approach requires a standardised data collection system which is centralised in terms of calculating PPL values by firm. The benefit is that revenue flows governed by PPL values provide a disincentive for poor performance while providing a strong incentive for a focus on productivity and price setting to achieve corporate and national real growth based on rises in real wages.

The business rules for companies are clear, moving from a somewhat passive marginal price based operations to more proactive competitive price setting under conditions of more predictable revenues enabled on the basis of control over PPR values and PPL schedules.

While not a part of this Note the Real Incomes Approach development includes the specifications of the IT information management requirements have been established on the

basis of Data Reference Modelling based on an Accumulog database system similar to a blockchain to ensure data integrity through immutability.

Naturally far more analysis is required to determine the feasibility of Price Performance Policy and the object here is to outline the overall operational concept of this alternative policy.

Introduction of Price Performance Policy

In order to accelerate the speed of introduction while avoiding a possible over commitment to an untested policy McNeill has suggested that it should be introduced on a voluntary basis alongside the conventional tax regime. Initial analyses suggest Price Performance Policy incurs less risk while providing a strong incentive for innovation and more competitive growth. As a result, it is likely that more companies in any particular sector would opt for this approach.

Annex 1



Hector W. McNeill
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Hector Wetherell McNeill

Hector McNeill is a British agricultural economist and systems engineer. He attended Clare College Cambridge and is a graduate of the University. He also completed post-graduate training agricultural economics, biometry at the Cambridge School of Agriculture and his dissertation concerned “Defects of Commodity Control Schemes” and completed the microeconomics and macroeconomic sequences at the Faculty of Economics and completed the course in project evaluation under Professor David Newbery. He was tutored by David Wallace the pioneer in the use of Gross Margins for business plan optimization and performance benchmarking as a foundation for needs analysis and policy planning.

He also completed post-graduate development economics and systems engineering at the Food Research Institute and School of Engineering at Stanford University, Palo Alto, California.

He is the lead developer of the Real Incomes Approach to Economics, a distinct theory and with policy instruments quite distinct from conventional economic theory and policies.

McNeill initiated this development work in 1975 when he realized that neither Keynesianism nor monetarism contained the appropriate theory or policy instruments to tackle stagflation. He realized that any actions applying these conventional policy instruments would prejudice the majority of constituents of the country. McNeill has observed that because no lessons were learned during the last energy crisis that today the government is attempting to apply the same policy instruments.

McNeill's work has identified the main theoretical reasons for deindustrialization in the UK associated with the rise of monetarism as a dominant macroeconomic policy component since 1975. He has laid out the reason monetary theory in the form of the Quantity Theory of Money is erroneous. He has also explained how the continued application of monetary policy is impoverishing the majority of the British population as a result of transfer of wealth from wage-earners to asset holders and traders.

Today, after some 47 years of dedicated effort, McNeill is an economist with one of the longest track records of work dedicated to the development of economic theory and policies to counter inflation.

During his 54 years of professional experience, including as a TA at the Stanford University School of Engineering on "Population & Food Supplies" and tutor at the Federal University of Rio de Janeiro on applied statistics, he has also managed projects for FAO, NASA, ICO, CBD, SUDENE, FIBGE, FEEMA, EU-STABEX, ECRE, G7, World Bank and the EU Commission, PWC, Unilever, INTERCOMEX and Mars Electronics.

He was a Project Leader with the United Nations Food & Agriculture Organization Plant Production Division stationed in Brazil and was the environmental economist for the G7 Rainforest Trust Fund at the World Bank in Washington managing contracts on agroecological zoning policies in the Amazon regions of Brazil. He was a Senior Scientific Officer with the Information Technology & Telecommunications Task Force (ITTF) of the European Commission in Brussels developing European-wide applications initiatives for sector policy development and business learning and innovation systems. He initiated the work leading to Locational-State Theory at the ITTF which today is applied to ecological and climate change modelling.

Although responsible for a series of advances in economic theory and policy propositions McNeill is not based at an academic institution nor has his development work been funded by third parties. His development work has been self-funded and largely based at SEEL-Systems Engineering Economics Lab which he established in 1983 to:

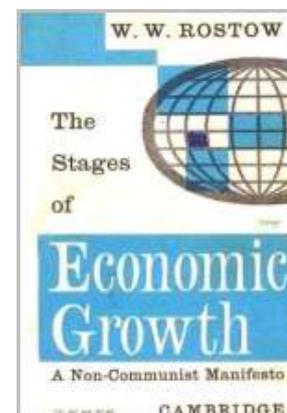
- * track all technological developments and applications on global networks
- * establish a decision analysis capability based on the groundwork established by the Stanford Research Institute Decision Analysis Group headed by Professor Ronald Howard.

Hector McNeill is the Director of [The George Boole Foundation Limited](#) and maintains a general website on the [Real Incomes Approach to Economics](#) where around 200 articles and documents can be accessed.

Annex 2

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, in every case, the national populations of the hegemon in decline became increasingly impoverished. 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 in Britain’s hegemonic cycle made up of the last 60 years in which cannot be classified as a “stage in economic growth” but rather one of economic decline. It is apparent that in every case of former cycles such as Venetian, Dutch, Spanish and other hegemonic cycles the economies had moved away from supply side production of goods activities and had become too dependent on imports. The associated trend, as observed in the case of Britain was the worsening balance of payments in goods position.

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 1,600, 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.