Innovation for a sustainable economy

Towards feasible alternatives

CAMBRIDGE ECONOMICS NETWORK

Closing the gaps in theory & practice

Contributions of the Real Incomes Approach
to economic thought
A resumé

Working Paper

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Contributions of the Real Incomes Approach to economic thought - A resumé

Contents

Contributions of the Real Incomes Approach to economic thought - A resumé

This paper

The economic orientation page on the Cambridge Economics Network website presents a list of 16 significant items referred to as,

"Notable contributions of the Real Incomes Approach and RIP to economic thought and analytical concepts during 1975-2022"

In the last update to this document was on 4th November, 2022 when three additional items were added to this list making the number of significant distinctions between conventional economics and the Real Incomes Approach being some 19 items.

This working document provides an explanation of each item in this list.

As is the case of all economic theory and practice the contents of this document represent the current state of a work in progress.

Feedback from readers to point out errors or to request clarifications as well as to provide elaborations on additional considerations that help specify RIP theory and practice more rigorously are welcome.

4th November, 2022

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We have been here before – Jean-Baptiste Say (1767-1832)

Although this paper lists alternative approaches to conventional economic theory and practice, it is not as if the concepts involved are somehow original. The theoretical concepts presented are, in reality, a modern interpretation of the seminal works of Jean-Baptiste Say (1767 – 1832) the French economist and industrialist who was one the most enthusiastic European supporters and disseminators of the economic approach and propositions of Adam Smith (1723 – 1790). The key aspects of Say's work, which the Real Incomes Approach explains in terms of theory and advances in terms of new policy propositions, were his emphasis on the role of entrepreneurship in increasing productivity of economic production to generate wages which in aggregate represent the demand for output. This supply side model

of the economy is the Real Incomes Approach model and which is based on the Production, Accessibility & Consumption (PAC) model as opposed to the Aggregate Demand Model (ADM) upon which Keynesianism, monetarism, supply side economics and modern monetary theory depend. The Real Incomes approach places the means of advance into the hands of companies the means to promote productivity and rising real consumption to defeat inflation and sustain real economic growth. The PAC model is, in reality, a formalization of Say's approach and has the same sense as the subtitle to Say's Economic "*Treatise on Political Economy*", as "*The Production, Distribution & Consumption of Wealth*"

The essential message from Say and providing the motivation for the Real Incomes Approach is that economic units need to be price setters and to gain market share in a way that benefits all constituents. They need to compete in terms of output prices. On this basis the purchasing power of consumers who are, after all, those working in the economy in exchange of wages and who constitute the majority of consumers and voting constituents.

A more detailed and separate paper concerning the Real Incomes Approach interpretation of the relevant aspects of the works of Jean-Baptise Say is in preparation.

The Real Incomes Approach, having accepted the operational model of Say, adds a policy dimension that proactively promotes and supports competitive price setting through incentives to encourage a more proactive and dynamic real economic growth. This is an essential policy foundation to move macroeconomic management away from the current stasis of an over-emphasis on "balancing the books" limited to government revenues and public outlays, to focusing a government policy promoting effective real economic growth based on the Say model, as a priority and as a foundation for guaranteeing future growth and employment.

A policy to guarantee counter-inflationary productivity

Price Performance Policy (3P), a Real Incomes Approach policy proposition, is not an "industrial policy" along the lines of the 1945-1965 experience in the UK. This top down approach involved a so-called tripartite commission made up of government, trades unions

and industrial representatives. This did not have any negative effects but, on the other hand, did not deliver any major quantitative benefits. 3P, on the other hand, places all of the decision-making in the hands of competing companies with no top-down conditional arrangement other than an equivalent to a relatively low corporate taxation which, as an incentive, varies according to corporate performance. In other words, by applying transparent business rules, companies can secure tax reductions as a function of their individual performance in terms of productivity and competitive prices. However, 3P ensures that government tax benefits can only arise from delivered performance.

Another policy developed over the same period as the Real Incomes Approach, is Supply Side Economics, an approach adopted by the Reagan and Thatcher administrations. This was based on a fiscal variant that provided marginal taxation reductions in anticipation that windfall gains would be used to invest and improve productivity as a counter-inflationary factor. However, there was no positive or direct linkage between post-tax windfall gains and any rises in productivity and counter-inflationary results. As a result, a proportion of the post-tax windfall gains were not invested to raise productivity but contributed to a significant rise in income disparity.

On this basis, 3P is a more efficient and effective basis for ensuring that tax incentives result in promotion of counter-inflationary actions based on delivered productivity.

Introduction

The Cambridge Economics Network website lists the current principal differences of the Real Incomes Approach, which are designed to secure a **positive systemic consistency** through sustained real economic growth, by applying a different theory and policy to those applied in conventional theory and policy propositions.

Conventional theory and policy propositions are the Aggregate Demand Model (ADM) and the Quantity Theory of Money (QTM) adopted by :Keynesianism, monetarism and supply side economics as well as the more recent development of the New Monetary Theory, all of which apply the same mix of policy instruments as the setting of base interest rates, monetary injections based on debt, government borrowing, taxation and government expenditure.

There are some 19 principle differences between these conventional economic theories, policies and policy instruments and the Real Incomes Approach to Economics. These include the following distinct differences:

1. Establishment of real incomes as the principal macroeconomic target

2. Establishment of the over-riding principle of positive systemic consistency

3. A disproof of the money volume average price relationships assumed in Quantity Theories, including QTM, the Cambridge equation and the Real Money Theory (RMT) as a major extension of the Cambridge equation

4. Based on items 3 and 4, established that Quantitative Easing is a policy with no coherent theory

5. Replacement of the Aggregate Demand Model (ADM) with the Production, Accessibility and Consumption Model (PACM)

6. Development of the transactional envelope analysis to show the relationship between disposable incomes and accessibility to goods and services according to the feasible maximum prices, unit cost curves and margins - to replace static supply and demand curves – and the identification of "occluded" transactional envelope areas as market conditions that deny lower income segments access to basic essentials

7. A full explanation of the constitutional issue surrounding the fact that there are demonstrable diametrically opposed interests in policy priorities on the part of: a. Asset-holders and traders, and b. Wage-earners

8. Sustainable real incomes require real incomes growth which is determined by corporate price setting and wage settlements. The sustainability of price setting and wage settlements is determined by the trajectories of corporate physical productivity. A real incomes policy has to provide incentives to attain a state of increasing output-for-less input.

9. An extension of the logic and evidence to explain why the United Kingdom needs to expand its manufacturing sector and raise import substitution

10. The introduction of the price performance ratio (PPR) as a measure of corporate performance

11. The introduction of a family of price performance levies as the RIP corporate incentive for real incomes growth

12. The ability to arrest short term inflationary rises and to reverse inflation through a microeconomic price-setting strategy which remains viable as a result of the ability of companies to manage policy instrument values and levies

13. The ability to maintain medium to long term physical productivity trajectories based on the learning curve and innovation to facilitate future unit price adjustments to be moderate or counter-inflationary

14. A practical extension of constitutional economics by aligning corporate choice logic with policy objectives

15. Removing the contention from public choice as creating incentives to align the interests of shareholders, work forces and consumers to support actions and decisions to augment real incomes, the policy objective.

16. Creation of a state of positive systemic consistency by reducing the zero-sum nature of monetarist policy impacts and creating support for generalised win-win state of affairs leading to medium to long term policy traction and real sustainable economic growth

17. The Real Incomes Approach changes the concept of the notion of Value-added:

18. The Real Incomes Approach changes the concept of the economic growth multiplier with a dynamic approach to income distribution.

19. The Real Incomes Approach changes the nature of micro-economic marginal cost price logic.

Each of these items can be covered by a very extensive treatment but this is not the intention of this paper which elaborates in more detail each item to a level which is sufficient to establish why the items represents an element of a different approach to conventional theory and practice. These notes are presented below under the list item acting as the title of each section:

1. Establishment of real incomes as the principal macroeconomic target

The Real Incomes Approach was developed as a result of economic analysis into the causes of stagflation and to enquire as to why conventional policy instruments could not manage this state without creating considerable prejudice for constituents.

The principal policy instruments of basic interest rate setting, monetary injection based on debt, government borrowing, taxation and expenditure tend to address a cycle of principal targets, such as inflation rates, unemployment, balance of payments and exchange rates. Because none of these instruments can control all of these factors they invariably rise to prominence leading to a need to change policy actions. As a result, Keynesianism, monetarism and supply side economics are characterised by a lack of traction and an associated generation of winners, losers and those who remain in a neutral policy-impact state.

Over a 50 years period, starting in 1975, there has been a constant rise in income disparity.

The establishment of real incomes of shareholders, wage-earners and consumers as a macroeconomic target integrates what are disparate difficult to control factors into a single function leading to a smoother operation of the policy guidance to keep policy on track and to secure traction. How this is achieved is elaborated in a stepwise fashion in the following list item descriptions.

2. Establishment of the over-riding principle of positive systemic consistency

The combination of policies which generate income disparity and the markets which intensify this effect, result from policy decisions being based on zero-sum rationales. For example, a decision to assist a particular social group, or expand medical facilities results in this gain being made possible through government revenue-seeking such as future taxation which is paid, quite often by those who did not receive benefits from the previous government outlays. The same is true of taxation in general or interest rate setting which are centralised impositions on a community of constituents, companies and work forces all facing very specific and different conditions and therefore will be impacted to different extents. Thus, attempting to "level the playing field" centrally is not possible because the needs and capabilities of each constituent and company are different.

It is these inconsistencies which also contribute to income disparity and lack of policy traction.

A positive systemic consistency is a state where policy establishes conditions that do not rely on zero-sum reasoning or outcomes but rather aims to ensure that shareholders, workforces and consumers all benefit to varying degrees from the operation of policy frameworks.

3. A disproof of the money volume average price relationships assumed in Quantity Theories, including QTM, the Cambridge equation and the Real Money Theory (RMT) as a major extension of the Cambridge equation

The experience with quantitative easing (QE) resulted in a massive flow of funds into assets and away from supply side production of goods and services. The Quantity Theory of Money (QTM) is commonly represented by the following identity:

$$M.V = P.Y$$

Where:

M is the money volume;

V is the velocity of circulation;

P is average prices;

Y is disposable income.

This identity contains no variables to account for money volume M flowing into assets, savings or offshore investment.

The Cambridge equation[1] does contain savings and was created to illustrate the fact that money can be held in non-circulating form and this reduces the size of M.

$$(M-s).V = P.Y$$

Where:

s is savings.

Work on the real incomes approach extended the Cambridge equation by adding an additional eight variables to account for different types of asset and overseas investment. This extended Cambridge equation is referred to as the Real Money Theory[2].

$$(M - (l + r + p + a + c + b + f + y + s + o)) .V = P.Y$$

Where:

Assets or non-circulating money includes:

l - land;

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[1] This identity was variously elaborated by Alfred Marshal, John Maynard Keynes and Arthur Cecil Pigou [2]
McNeill, H. W.

r - real estate & construction
(domestic and commercial);

p - precious metals;

a - objects of art and rare items;

c - commodities;

b - shares;

f - financial instruments (e.g. paper
and derivatives);

y - is cryptocurrencies;

Other non-circulating money includes:

s - savings;

o – offshore monetary flows e.g.
investment.

One of the results of the early development work on real incomes was the affirmation that money volumes have no effect on short term prices because prices are set by companies according to their market circumstances such as unit costs, technologies and techniques deployed. Under competitive conditions there is no reason why a company would raise prices as a function of M in a competitive market, since this would simply result in a loss of sales.

Indeed, in reality, there is no functional connection between M and money circulation velocity (V) and the setting of prices (P) against disposable incomes (Y).

This is also the case in the Cambridge equation and the RMT.

4. Based on item 3, it is established that Quantitative Easing is a policy with no coherent theory

Following the 2007-2008 financial crisis largely caused by an over-extension of financialization and, in particular the size of grey market in financial instruments (such a derivatives) having been disrupted by fraudulent dealing leading to banks holding worthless capital, the emphasis of policy-makers was to help " *... adjust and build up bank balance sheets* ."

As has been elaborated in the previous sections, the underlying monetary logic summarised in the QTM offered no explanation for the result of QE. Banks, rather than build up their balance sheets leading to increased loans to the supply side production of goods sector, lent money to clients, as well used low base rate money on their own account, to raise their shareholder value to purchase and hold assets where prices rose substantially. The QTM provides no possible way to foresee this development because assets do not feature in this identity. On the other hand, the RMT provides an oversight of where QE funds ended up. The RMT was only developed in 2021 on the basis of the results of QE and therefore QE was a policy, at the time of its launch, without any theory to support it.

5. Replacement of the Aggregate Demand Model (ADM) with the Production, Accessibility and Consumption Model (PACM)

Some 50 years of monetarism and increasing financialization has witnessed the deindustrialization of Britain, a diminished manufacturing sector and a large expansion in service activities, metaphorically turning the country into "*a nation of shop keepers*."[2]

The fundamental paradigm of Keynesianism, monetarism, supply side economics and the new monetary theory is the aggregate demand model (ADM) which equates money volume M with demand for goods and services.

As has been demonstrated by the review of the QTM, Cambridge equation and the RMT, demand, in so far as it affects goods, has no functional relationship to M, except a tenuous connection that remains once assets have absorbed a large proportion of M. Even then, the actual determinant of prices is decision making at the corporate level.

The disconnect between M and demand is troublesome because there is a lack of theory and indeed analysis to tackle the evolving problem. This is the increasing proportion of the constituency faced with not earning enough through employment to be able to afford to purchase basic essentials. This is because the question of price accessibility across the full range of disposable incomes from wages has not been adequately accounted for in monetary policy. Macroeconomic analysis also has gaps in supply and demand analysis.

Since most wage-earners receive their pay from goods and service providers who employ them and it is these companies who set prices then there is clearly a functional relationship between

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[2] McNeill, H. W., "The consequences of being a nations of shopkeepers", CEN, 2022.

wages, corporate margins and prices. This relationship can be summarised in a Production, Accessibility and Consumption Model (PACM). This is designed to provide a macroeconomic analysis of these relationships.

6. Development of the "transactional" envelope analysis to show the relationship between disposable incomes and accessibility to goods and services according to the feasible maximum prices, unit cost curves and margins - to replace static supply and demand curves - and the identification of occluded transactional envelope areas as market conditions that deny lower income segments access to basic essentials

The PACM model logic replaces the standard supply and demand diagram which is presented as a graph with axes for unit prices and quantities of goods purchased and two lines: S-S as the supply line which indicates the quantity supplied at each possible unit price and D-D the demand line that indicates the change in demand according to unit prices.

Where these lines cross at point E a market price is defined.

Figure 1: The popular supply and demand diagram
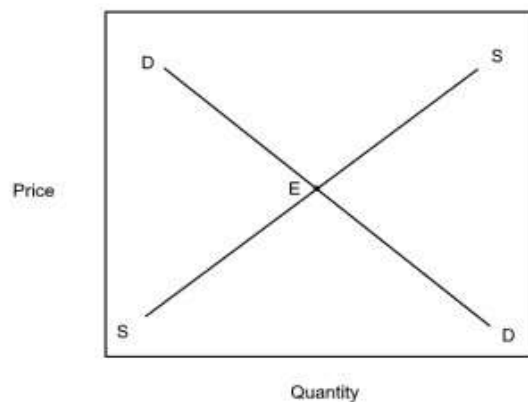
The Production, Accessibility and Consumption Model replaces this representation with a "*transactional envelope*" which is a space with coordinates representing maximum feasible prices as an upper boundary and unit production costs at current capacity of output as the lower boundary, across all disposable income groups. Transactions can take place anywhere within the "transactional envelope" however the competitive prices that remain inaccessible to lower income groups become evident.

The transactional envelope in the low income segments has a declining upper boundary set by the maximum feasible price a person with a specific disposable income can afford. Therefore,

where the unit costs level at that disposable income will not enable the company to sell at a profit there will be no products available at the desired price. This results in occluded areas of the transactional envelope where lower income segments cannot afford and therefore unable to purchase the products they desire.

What is lacking in this presentation is any indication of the accessibility of prices to people with different disposable incomes. The process of price-setting needs to consider:

- Unit variable costs
- Overhead costs
- Physical productivity
- Financial productivity
- Margins and return
- Levels of consumption according to price and consumer disposable incomes
- The price elasticity of consumption according to consumer disposable incomes
- Knowledge of competing product prices

In order to understand these inter-relationships, the Production, Accessibility and Consumption Model (PACM) is applied. This combines, in a single diagram, the maximum prices payable by individuals on different disposable incomes for a specific product. This sets an upper boundary of feasible prices FP-FP. In the same diagram the unit costs of production UC-UC associated with aggregate total volumes of throughput can be plotted to indicate the lowest feasible price cut off point associated with a zero margin. Between this unit costs line and the maximum feasible price line lies a "transactional envelope" for a single product across the range of disposable incomes. The different feasible prices and margins can then be mapped out according to their relative location of prices between the maximum feasible price and unit costs lines.

The production, accessibility and consumption "transactional envelope" for goods

Figure 2: The transactional envelope

The characteristics of the transactional envelope is that to ensure larger sales, products need to accommodate the price needs of lower income segments by lowering them as can be seen by the drop in the upper price boundary with falling disposable incomes in Figure 2.

On the other hand, with higher production throughput, unit cost curves tend to be lower so that the loss in margins associated with the lower price boundary is less. At lower levels of throughput unit costs tend to be higher. In competitive economies the furthest right position of prices tends to set the prevailing prices for the whole market[3].

The further to the right of the transactional envelope the higher will be the accessibility of a product resulting in a rise in purchasing power and real incomes of lower income segments. However, there are sections of the transactional envelope where realizable margins are too low and representing an operational limit of the market concerned.

This results in a tail end area within the low income segment where there can be no viable sales at the desired prices by the constituents resulting in a zone of "market occlusion" or non-accessibility indicated by the red area with the nA tag.

The transactional envelope for assets under QE

One of the notable impacts of QE was the flow of funds into very expensive assets which were out of reach of the feasible purchasing power of medium to lower income segments of the population. As a result, the transactional envelope's location spans just the medium to high income segments while most of the below average and low income segments are

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[3] The movement from left to right in this diagram can represent the trajectory of the initiation of production and expansion of a product which is sold to higher income consumers first and then gradually penetrates more of the market as a result of lowering unit costs and prices. Mobile phones and other digital products tend to follow this trajectory.

excluded from these markets due to the effect of "market occlusion" caused by insufficient disposable incomes.

In this case, as was observed under QE with each tranche of QE funding, the prices and costs (CP) of assets rose. This trend can be observed in Figure 3 as CP1, CP2 and CP3.

The transactional envelope is restricted and located in the higher disposable income segment of the transactional envelope diagram while increasing amounts of QE money is absorbed in an increasingly restricted higher prices transactional envelope with feasible price lines moving from FP1, to FP2 and FP3.

Figure 3: QE impact on assets transactional Envelope
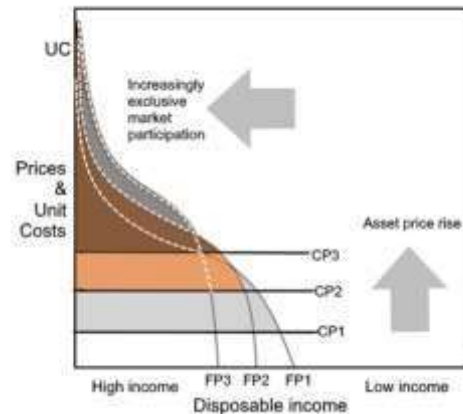
General impact of QE on the transactional envelope for goods

Figure 4. QE impact on goods transactional envelope
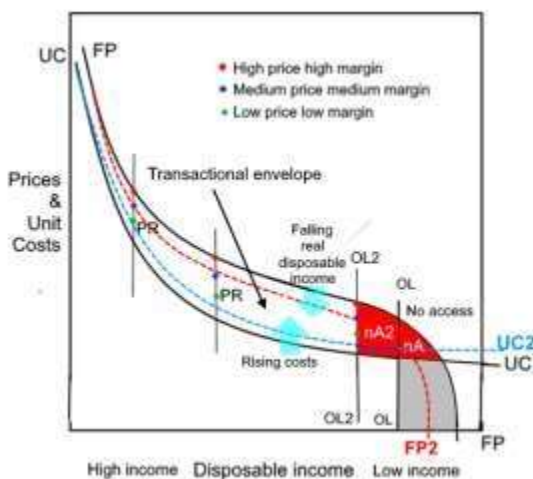
The absorption of QE funds by assets reduces the amount of money in the goods markets and as real wages decline the effective real disposable income declines. Therefore, the feasible price line drops vertically from FP-FP to FP-FP2 indicated by the red dotted line in Figure 4.

The leakage of asset inflation into supply side production inputs such as land, real estate and commodities results in the unit costs line rising vertically from UC-UC to UC-UC2.

As a result, the market occlusion area (nA is expanded by an additional areas nA2 resulting in the locking out of increasing numbers of lower income constituents from an

ability to secure the product concerned. The operational limit for feasible goods supply at accessible prices moves from OL to OL2.

7. A full explanation of the constitutional issue surrounding the fact that there are demonstrable diametrically opposed interests in policy priorities on the part of:
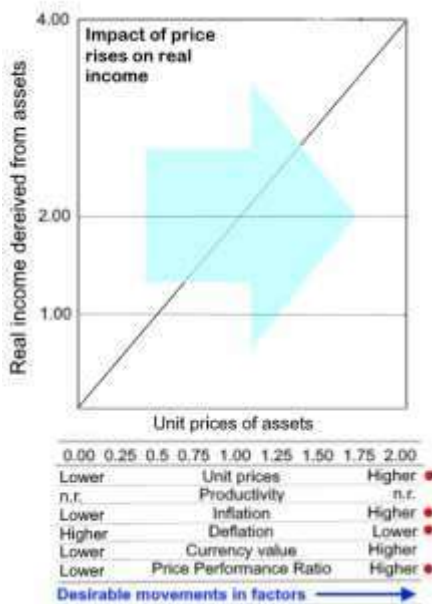## a. Asset-holders and traders, and b. Wage-earners

Monetarism creates, and is unable to resolve, a significant constitutional problem created by the creation of a marked income disparity centred on two groups of constituents. This effect became most obvious during the twelve years of operation of QE. The two groups consist of:

- Those who deal in the holding and trading of assets, consisting of no more than 5% of the British constituents
- Those whose main source of income is wages in exchange for intellectual or physical effort, consisting of the other 95% of the constituency.

Experience with QE and the elaboration of the RMT as an extension of the Cambridge equation and the additional analysis related to transactional envelopes illustrating the predicament of those on low wages, makes clear that monetarism favours the interests of asset holders and traders and it prejudices the interests of wage-earners.

The Figures 5 and 6 illustrate the diametrically opposed interests of asset holders and traders, on the one hand, and wage-earners, on the other. Asset holders and traders have a direct interest in the prices of assets rising and therefore the speculative impacts of QE sources funds into assets helps these constituents accumulate wealth in a somewhat passive manner. The basic interests of this group are shown in Figure 5.

Figure 5. Price movement preferences of asset holders and traders

McNeill, H. W., "*British Strategic Review – Monetarism and The Real Economy*", HPC, 2022

Wage-earners have an interest in the prices of goods and services declining or remaining steady as long as wages compensate for any price rises. The basic interests of this group are shown in Figure 6.
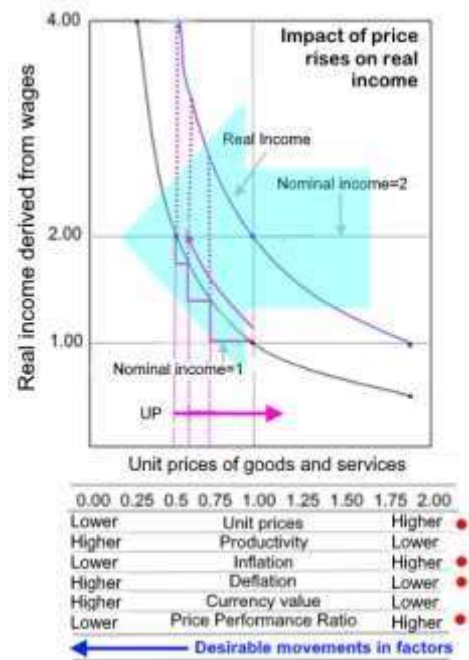
The constitutional dichotomy between these groups is that their interests, in terms of price movements are diametrically opposed. In terms of constitution, policy would be expected to rationalise this state of affairs by removing the bias in policy towards asset holders and traders. However, no attempt has been made to achieve this balance.

There is a self-evident tendency for monetarism to enhance the wealth of asset holders in real terms because the inflation or rises in prices of assets, has outstripped the inflation rate or prices of goods and services during the twelve years of QE . The grey derivatives markets between 1976 and 2008 resulted in the accumulation of wealth of asset holder and traders. As a result, the compensation of this group of constituents as expressed as net incomes also rose to the same degree. On the other hand, real wages, affecting around 95% of constituents fell as a function of rising goods and service prices.

Figure 6: Price preferences of wage-earners.

McNeill, H. W., "*British Strategic Review – Monetarism and The Real Economy*", HPC, 2022

The Bank of England maintains that price stability can be considered to be an annual inflation rate of around 2%. This is equivalent to a real wage drop of around 18% over a decade while many assets during the QE period went up in value by at least 5% each year resulting in a cumulative gain in real incomes (assuming a 2% inflation) and asset values, in real terms of around 35% over a decade. In fact, during the first decade of QE the cumulative rise in asset values, on average, was in excess of 50% because there was very low to negligible inflation during that period.

There is therefore a need to change conventional policy targets and instruments to address this significant constitutional question which is not so much a result of "free market mechanisms" but is a direct result of intensive and uncontrolled financialization supported by monetarism

and a set of inappropriate policy instruments which result in an unjust distribution of incomes and opportunities.

Part of the constitutional issue is the habit of politicians to never address this constitutional question in an objective manner but rather to accept the assertion by the Bank of England (BoE) that 2% inflation should be a policy objective without explaining that this will also reduce real wages. At the same time, the Bank of England has no mandate on questions relating to how to maintain a growth in real wages so as to compensate for any rate of inflation deemed to be acceptable. Governments, operating on the fiscal front have also failed to come up with practical policies to compensate for the reduction in real wages imposed by BoE policies.

Government is left with borrowing, taxation and expenditure options, none of which can have any impact on real wages. Like prices, that have no direct connection to M, wages also have no direct connection to either government fiscal or BoE monetary decisions. Like prices, wages are a matter for individual company decisions.

8. Sustainable real incomes require real incomes growth which is determined by corporate price setting and wage settlements. The sustainability of price setting and wage settlements is determined by the trajectories of corporate physical productivity. A real incomes policy has to provide incentives to attain a state of rising physical productivity or more-output-for-less inputs.

The copious build up evidence of the source of real macroeconomic growth being learning and innovation started with the work of Theodore Wright who identified the learning aspect of this combination by measuring what became known as the "*learning curve*" effect in the production of aircraft frames in a 1936 paper[4].

This provided an analysis of quantitative data on the gains in productivity in producing aircraft frames. These gains come from the learning effect resulting from teams carrying out repetitive tasks. The result is increasingly efficient production, the completion of tasks within shorter periods of time and incurring less mistakes or waste, leading to falling unit costs, or more-for-less.

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[4] Wright, T.,

Operations managers across most of industry and manufacturing subsequently established the same type of relationship in all production activities. An important observation was the fact that each combination of workers and types of technologies have similar learning curve gains. These gains which are a constant feature and in some instances achieved for each historic doubling of throughout made it possible to project future unit costs related to future cumulative production. Because the constant percentage lowering of unit costs is achieved, for example in a specific case, with each historic doubling of production, the gains exhibit a diminishing return to output, as shown in Figure 7.

Figure 7: Learning curves showing 10% and 20% reductions in unit costs
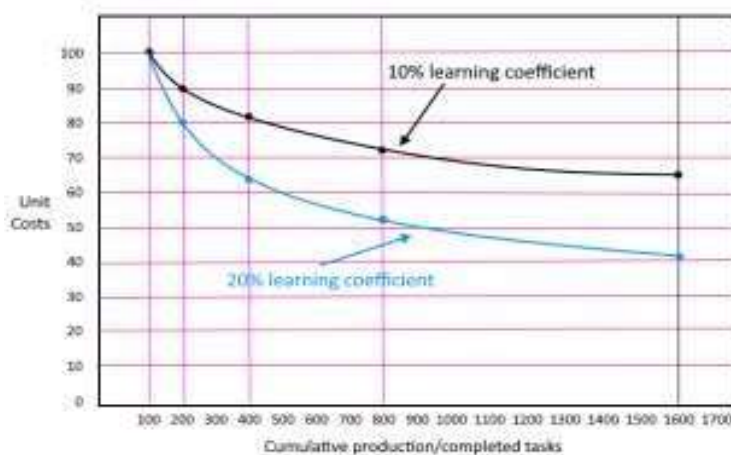
Work by Nicholas Kaldor[5], Robert Solow[6] and Kenneth Arrow was concerned with the role of technology and technological change in economic growth at the macroeconomic level. Kenneth Arrow's paper on learning by doing[7] marked an important milestone in that an analysis of the USA macroeconomy showed that something like 60% of economic growth was the result of learning by doing.

However, much of the macroeconomic work by that time had demonstrated that technological change, or innovation, also has a significant impact on economic growth. Therefore, by adding the learning curve effect and the innovation effects together, one ends up with an unchallenged explanation of where most real growth originates. Naturally, with learning, individuals

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[5] Kaldor, N.,

[6] Solow, R.,

[7] Arrow, K.,

accumulate a personalized expertise and this can contribute to the entrepreneurial function of identifying more efficient ways to accomplish tasks.

An important point is that the degree of impacts of learning and innovation on real growth is larger in activities concerned with making things in industry and manufacturing. The more efficient production is the more flexibility there is to moderate prices as well as pay workers more compensatory wages. In addition, all other activities in an economy, including distribution and the large services sectors, depend on well-designed devices, equipment and telecommunications to operate efficiently and all of these goods are produced by industry and manufacturing. This spells out another important fact, that industry and manufacturing are the sources of the goods that spread real growth throughout all other sectors. Therefore, manufacturing is a vital sector whose dimensions have a direct impact on the ability of a country to achieve real growth.

Real Incomes Policy therefore has to provide incentives to attain a state of increasing output-for-less input and to achieve this it requires policy instruments that influence the mechanisms to support learning and innovation. This can help companies deliver real growth through the parallel functions of price-setting and wage payment settlements.

9. An extension of the logic and evidence to explain why the United Kingdom needs to expand its manufacturing sector and raise import substitution

In 1975, Denis Healey, as a Labour Chancellor, abandoned a wages policy for industry and introduced monetary concepts, marking the initiation of a period of Britain's industrial and manufacturing decline. Nicholas Kaldor who had up until that time been a leading economic adviser to the Labour government, withdrew his support and explained that Britain needed to invest in industry and manufacturing to achieve a sustainable growth and sound wage rates. Kaldor continued to be an advocate for this approach and was a leading critic of monetarism as deployed under the Thatcher Conservative government.

Kaldor's approach was summarised in his Inaugural Lecture[8] as Professor of Economics at Cambridge University in 1966. Kaldor predicted the likely outcome of Britain ignoring the development of a robust national industrial and manufacturing base. His prognosis of

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[8] Kaldor, N.,

deindustrialization, loss of manufacturing jobs and a decline in real wages proved to be correct.

Having caused this outcome, there is nothing in the conventional theory or policies that can bring about the type of development which is needed to reverse the rising income disparity or the decline in the British economy.

Therefore, rather than treat industrial policy as a piece meal and ad hoc response to industrial and manufacturing lobbies, it is essential for any policy wishing to deliver real growth, to make learning and innovation in an expanding industrial and manufacturing sector, the foundation of the macroeconomic framework.

10. The introduction of the price performance ratio as a measure of corporate performance

Taking learning and innovation as given, companies need to be able to set prices and wage levels according to the existing levels of physical productivity.

This statement is a restatement of the macroeconomic operational concept proposed by Jean-Baptiste Say in his "*Economic Treatise*" of which had the sub-title "*The Production, Distribution and Consumption of Wealth.*"[9] Say explained that wages paid by manufacturers set the levels of consumption possible within the economy and therefore one of the crucial roles of entrepreneurialism was to identify improved ways to allocate resources to accomplish existing tasks more efficiently or develop new ones so as to increase productivity so as to end up creating growth and an ability to pay higher wages which circulate and generate higher levels of real growth as measured in increased consumption. Rather than make a distinction between labour forces in industry and manufacturing and constituents as consumers, Say sets out an important principle. By serving consumers better in terms of moderated or lower unit prices, by the same score, this reflects on the purchasing power of wages. Thus, if unit prices fall as a result of increased productivity, then even fixed wages benefit from the resulting rise in purchasing power generating a rise in real wages.

The test of the degree to which companies are increasing their physical productivity can be measured in terms of prices. A convenient short hand way to measure this trade-off between productivity and unit prices is to measure the Price Performance Ratio (PPR)[10]. The PPR is

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[9] Say J-B.,

[10] McNeill, H. W.,

the degree to which unit output prices change in response to changes in aggregate unit input costs.

$$PPR = \frac{\delta uP}{\delta uC}$$

Where:

δuP is the change in unit prices associated with a change in in aggregate unit costs δuC.

Under inflationary conditions there are some specific relationships between the PPR and the impact of the company's price setting on inflation and real incomes.

One of the benefits of reducing the inflation rate of output prices is that the relative prices resulting will fall below those of competing companies producing the same or similar product. In an inflationary environment this would provide the company concerned with a pricing advantage and an ability to penetrate the market according to the price elasticity of (consumption) demand for the products concerned. Indeed, overall income could rise as well as net aggregate margins although unit net margins might fall.

Inflation and the Price Performance Ratio			
PPR value	Impact on input rate of inflation	Price productivity	Real incomes
› 1.00	Output price inflation higher than input inflation	Lower	Fall
= 1.00	Output price inflation equal to input inflation	The same	Fall
‹ 1.00	Output inflation lower than input inflation	Higher	Rise

The general business rules on price-setting do not follow the normal microeconomic theory of marginal pricing where a "market price" is used to establish the most profitable point of production where marginal costs are equated with marginal return.

Under inflationary conditions the market price is moving and therefore the business rule needs to change to one of companies responding, not to a market price, but rather to setting the price which can achieve a market penetration or increased market share. Notice that this strategy has two effects.

Increased market share and as a result a measurable contribution to enhancing consumer real incomes by enhancing the purchasing power of wages.

The resulting penetration of markets resulting from a relative moderation or reduction in prices augments throughout and thereby advances the benefits of reduction in unit costs following the normal learning curve effect.

11. The introduction of a family of price performance levies as the RIP corporate incentive for real incomes growth

The reduction of the PPR below unity (< 1.00) has the per unit of output impact of reducing unit percentage margins even although the number of units sold is likely to increase. Because of the time delays between relative price reductions and the rise in aggregate margins is often uncertain, it is necessary to introduce a reliable financial analysis based on the learning curve unit costs calculation associated with cumulative physical output (referred to in item 8). This can be used to determine the volume of units that need to be produced/sold to reduce unit costs to levels that make reduced prices feasible.

The conventional application of the learning curve analysis is to establish long term production and pricing strategies. However, under inflationary conditions the resolution reduction in the rate of price rises is the essence and the shorter the period within which prices can be reduced the better.

Common manufacturing supply contract conditions can include suppliers undertaking to introduce constant reductions in unit prices at different milestones in the contract and according to the duration of the contract. This sees the unit price follow the trajectory of the learning curve.

Under inflationary conditions it is imperative to bring about unit price reductions in the short term and therefore Real Incomes Policy advocates the reduction of unit prices to levels that require a unit costs level to be attained in the future. In the period between the "immediate price reduction" and the time that unit costs fall to levels that justify that price, a Price

Performance Levy (PPL) would be applied that is a function of the PPR attained by a company and measured using the relative reduction in unit price.

It is possible to create a family of PPLs combining base rates and PPRs as shown here. These are to be added to this document. [Some can be found here](#)

12. The ability to arrest short term inflationary rises and to reverse inflation through a microeconomic price-setting strategy which remains viable as a result of the ability of companies to manage policy instrument values and levies

Therefore, using the PPL, it is possible to introduce short term relative reductions unit prices and to receive compensation as a result of the PPL payments.

By way of example, the PPL could consist of a base rate, say 20% and a moderator function of the PPR such that if the PPR is greater than unity (PPR › 1.00) the base rate is increased to the degree that the
PPR exceed unity. If the PPR is one (PPR = 1.00) the base rate is paid and it the PPR is less than unity (PPR ‹ 1.00) the base rate is reduced.

Depending on the price reduction the base rate would vary in this example from 20% to 0%.

In other words, the PPL payment depends upon the pricing decisions taken by the company and is not an arbitrary centrally imposed levy.

The PPL formula can be designed to render the PPL as 0% at benchmark PPRs[11] and this could depend upon the degree of incentive required to get the system to gain traction.

13, The ability to maintain medium to long term physical productivity trajectories based on the learning curve and innovation to facilitate future unit price adjustments to be moderate or counter-inflationary

Naturally, once a relative price reduction has been introduced it is important for a company to be able to attain the projected reduction in unit costs and for this there can be a combination of the passive learning curve costs reduction effect associated with throughout (number of repetitive tasks) as well as changes and innovations designed to improve productivity to

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[11] Policy steer

attempt to bring unit costs down to the LC projection within a shorter time. This can be achieved as a result of marginal introductions of automation, changed layouts, task sequences and changes to work practice. At all time, procurement procedures on inputs and possibilities for input substitution provide avenues to secure unit costs reduction.

Any marginal costs involved can be accounted for in the PPR so here there is a link up between price productivity and the entrepreneurship of marginal improvements in resource allocation to enhance efficiency through augmented physical productivity.

14. A practical extension of constitutional economics by aligning corporate choice logic with policy objectives that benefit all constituents

The objective of constitutional economics of establishing laws, rules, regulations including those that pertain under macroeconomic economic policy frameworks and that support the state, communities and each individual, can only be realized if policy objectives accord with an even-handed support of the interests of the state, communities and individuals.

Under list item 7 it has been explained that the current monetarist approach is not even handed in the treatment of constituents because asset holder and traders benefit from policy significantly more than wage-earners.

RIP introduces mechanisms which provide incentives for the supply side production sector to manage its affairs in a way that benefits all constituents be they shareholders, wage-earners and/or consumers. To this degree RIP advances the application of constitutional economics by bringing pubic choice, as the decisions on price-setting and labour force agreements as being an essential basis for choice on behalf of constituents which are designed to generalise the benefits of the operation of the policy.

RIP has no direct impact on the asset markets but it balances the degree of incentives and raises the cash flow in the supply side production sector so as to raise real incomes and aggregate real growth.

Naturally the impacts of RIP on currency value and in bringing the cost of living into areas of the transactional envelopes that serve all.

15. Removing the contention from public choice as creating incentives to align the interests of shareholders, work forces and consumers to support actions and decisions to augment real incomes, the policy objective.

The overall operation of RIP in providing a more constitutional economic approach helps reduce contention within society as a result of an even-handed treatment of all constituents. This should engender a generally positive view with regard to the role of government and economic policy in particular in delivering practical outcomes for the constituents of the country.

16. Creation of a state of positive systemic consistency by reducing the zero-sum nature of monetarist policy impacts and creating support for generalised win-win state of affairs leading to medium to long term policy traction and real sustainable economic growth

RIP provides a foundation to achieve a positive systemic consistency of the benefits accruing to each individual community and the state by resulting from an elimination of the negative effects of zero-sum decision outcomes that are associated with a National Accounts approach to policy decision making.

17. The Real Incomes Approach changes the concept of the notion of Value-added:

The notion of value-added is transformed from an internal monetary capture concept to an integration of internal and external considerations based of the work of Roger Kaufman as an internal real income relationship between prices, margins, shareholder return and wages.

18. The Real Incomes Approach changes the concept of the economic growth multiplier with a dynamic approach to income distribution.

The income or economic growth multipliers effect shifts from a monetary and velocity related indicator to a price and market penetration resulting from price elasticity of demand.

19. The Real Incomes Approach changes the nature of micro-economic marginal cost price logic.

With companies all acting as competitive price-setters the passive response to market prices that underwrites marginal cost price logic is replaced by a price setting logic designed to capture mare share.

Status of this paper

This paper was first published and circulated on 25th June, 2022 providing a 6 month period for feedback and commentary. It was updated on 4th November 2022 for a review to be held 5 – 6 November 2022. After this review it will be considered to be complete but remaining a working paper subject to alterations and additions since the field of Real Incomes Approach is advancing relatively rapidly.

The author: Hector Wetherell McNeill

Hector McNeill is a British economist. Born in Portsmouth Hampshire. He completed undergraduate studies as a member of Clare College Cambridge completing the Agricultural Tripos at the Cambridge University School of Agriculture followed by post-graduate agricultural economics including biometry, project evaluation and economics at the Faculty of Economics. His dissertation was entitled, "*Defects of Commodity Control Schemes*".

As a Fellow of the Food Research Institute at Stanford University he completed studies in economics at the Department of Economics and systems engineering at the School of Engineering.

He was a Project Manager at the Plant Production Division of the Food and Agriculture Organization managing successful development projects in the coffee sector in Brazil. He was a Senior Scientific Officer with the Information Technology and Telecommunications Task Force (ITTTF) of the European Commission, Brussels, concerned with the development of learning for innovation systems applications on global communications networks and was the Environmental Economist for the G7 Brazilian Rainforest Trust Fund.

His economic research and development work has been largely oriented to the analysis of the causes and solutions to inflation and stagflation. His work on this topic started in 1975 when he observed the impact of the large rises in the international price of petroleum that started in 1973. His motivation for pursuing this line of research was that he had realised that all conventional policies and their policy instruments could not solve this issue without imposing significant prejudice on constituents. This is because, conventional policies were never developed to address cost-push inflation but rather demand pull inflation. As a result, conventional policies were never evolved to address this type of inflation and stagflation in particular. This is why the government is at a loss in identifying the required actions to solve the cost of living crisis.

As a result of McNeill's work, Real Incomes Policy (RIP) was developed which represents both a cogent theory and a set of derived policy instruments which are quite distinct from those applied under conventional policies. RIP is unique in representing a transparent alternative to conventional policies.

Comments made by the author concerning RIP in response to Agence Presse Européenne (APE) correspondent queries:

"*There is little that is unusual in RIP. It is largely based on the logic of applied decision analysis in the management of microeconomic units. This identified the significant gaps in conventional macroeconomic practice thereby pointing to gaps in theory. The final form of RIP provides a transparent reflection of how the economy works which conforms with the viewpoints of the economists Adam Smith, Jean-Baptists Say, Theodore Wright, Nicholas Kaldor, Kenneth Arrow and Robert Solow*".

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"*Adam Smith's emphasis on "interests" and Say's on the role of entrepreneurialism combine with Kaldor's emphasis on the importance of manufacturing to Britain. Kaldor's, Wight's, Arrow's and Solow's focus on the role of technology and learning as the principal generators of advancing real economic growth complete the process of shaping a more appropriate*

basis for macroeconomic management. Their work helped place Say's emphasis on entrepreneurialism and innovation as a more central function supporting productivity and real economic growth as the basis for the RIP paradigm."

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"The operation of RIP is not based on debt or taxation options that severely constrain conventional policy decision analysis. This is because the control of the outcome of policy rests entirely in the hands of companies and their workforces in responding to the needs of constituents. This model is a variant on public choice and, as such, I consider RIP to be closely related to the approach to constitutional economics developed by the economist James Buchanan. In this sense constitution includes law, regulations and procedural rules on the desirable ways in which social and economic activities are conducted. As Buchanan set out, constitutions are created for at least several generations of citizens. Therefore, they must be able to balance the interests of the state, society, and each individual."

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"The interest of each individual is to have the wherewithal to afford what they consider necessary to satisfy their needs and therefore, as a minimum condition, society needs to bring pressure on the state, through democratic means, to ensure that the constitution and macroeconomic policies ensure that such a state of affairs is maintained."

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"With a constitutional economic perspective on policy, integrating all aspects of government decision making, including foreign policy, cost of living crises, impacting specific constitutes as a result of income disparity, reflect a failure in our policy conduct under our current constitutional settlement. Therefore, the current ad hoc actions by government need to be replaced by a more permanent arrangement that ensures that policy sustains real incomes growth for all so as that income disparities do not result in any one being disadvantaged as a result of past and current policies".