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The consequences of being a nation of shopkeepers





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The consequences of being a nation of shopkeepers¹

Hector Wetherell McNeill Director The George Boole Foundation Limited London

Economic policies in Britain are tied to priorities that apply to an economy that is mainly based on the resales of produce made elsewhere and in a largely unaltered state. A metaphor for this state of affairs is that the economy is a shop keeping economy largely involved in distributing and selling products "off the shelf". We can see the consequences of this structure with Britain facing difficult-to-control inflation when the prices of imported commodities and goods rise. There is very little that conventional economic policies can do to correct this problem in a shop keeping economy.

This paper explores the consequences of Britain being a nation of shopkeepers. There is a basic lack of economic security, with the real incomes of a considerable proportion of wage-earners declining and with lower income segments having seen their real incomes decline to levels where they cannot afford to purchase basic essential for survival.

In order to achieve higher real growth and reduce income disparity, Britain needs to develop and expanding manufacturing sector to join the league of the world's most successful countries that have, or are developing, competitive manufacturing sectors.

However, this needed transition will not be possible unless economic policies can impact the direction of short term price movements; conventional policies cannot achieve this

This paper reviews this state of affairs and points to improved economic theories and policies with due reference to the other papers in this series that elaborate these in more detail.

Introduction

Although the mercantile tradition expanded significantly in the eighteenth and nineteenth centuries, there was a relative balance between the significance of manufactured goods in England and services in general including financial services in the economy. In broad terms industry and manufacturing generated an expressive source for growth in real incomes in the post war period between 1945 and 1965 when real incomes rose, income disparity declined and exports of British manufactured products was robust.

As is well established, the British economy has passed through several stages of development starting with an agricultural society and progressing through an industrial revolution and on to a largely service economy. However, in terms of real economic growth a turning point was reached when the balance between industry and manufacturing, on the one hand, and the

¹ In a statement designed to offend, the French revolutionary Bertrand Barère de Vieuzac made a speech to the National Convention in 1794 in which he stated, "*Let Pitt then boast of his victory to his nation of shopkeepers*". Later, during the Napoleonic wars, the British press attributed this phrase to "the French" or to Napoleon.

expanding services sector, on the other, saw the initiation of a decline in industry. This transition point can be roughly located around 1975 when Denis Healey abandoned Keynesianism and a wages policy and immersed the policy regime in monetarism. At the time, Nicholas Kaldor, who was a well-established economic adviser to the Labour governments, advised against this change by elaborating on the importance of building up industry and manufacturing. This Kaldorian theme was not a new one. He had explained the importance of industry to Britain in his inaugural lecture as professor of Economics at Cambridge University in 1966. He was critical of Healey's decisions and became a leading critic of the subsequent adoption of monetarism by the Thatcher government. His overall concern was that pursuing this paradigm the real growth and real wage levels in the United Kingdom would decline together with the balance of payments. Kaldor has been proven right.

We are now in a phase of comparative economic decline which has been caused by successive governments failing to grasp the significance of Kaldor's approach, for almost 50 years.

Today we are mainly a service economy and a nation of shopkeepers or warehouse and distribution logistics service managers for imported industrial and manufactured products. As a country our economy is not renowned, any more, for being the "*workshop of the world*". This, once enviable and important status, remained with Germany with the highest balance of payments in the world and China, which is fast catching up.

The need for real growth

The main problem with a dominance of economic activity and employment being provided by largely service activities is that the scope for generating real growth is diminished. Real growth arises from lower unit prices for goods and services and/or rises in nominal incomes. Real growth is an essential characteristic of an economy that ensures that income disparity does not result in lower income segments being unable to purchase their bare essentials for survival. This signifies lower prices for goods and services when disposable incomes are fixed, or their upward movement, sluggish. The only way to be able to lower unit prices or support rises in nominal income is to improve physical productivity on the basis of more-for-less transitions.

More for less

The economic studies concerning the contribution of learning, innovation and advances in technology and techniques based on learning-by-doing provide the basic description of where real growth originates in an economy. Indeed, over 80% of growth comes from these processes on the basis of more-for-less. More for less signifies that less resources and time are used to produce a specific product.

However, rather than leave this as an intriguing and theoretical concept, it is important to know where in the economy, this can best be achieved. The ability to benefit from the real growth generated by learning and innovation is closely associated with people designing and making things or carrying out repetitive tasks. In terms of the economy this includes all activities that transform physical inputs into physical outputs including agriculture, primary extractive industries, heavy industry and manufacturing. Thus, the processes that create goods of any kind possess a large degree of freedom to benefit from learning and innovation to advance real growth on the basis of increasing productivity.

The empirical evidence for this process can be traced back to Theodore Wright's outstanding work published in 1938 on the learning curve effect resulting in a significant increase in the

productivity of making aircraft frames. Much later on Nicholas Kaldor, Kenneth Arrow and Robert Solow completed studies of the impact of learning and innovation in developed economies and found it to be the most significant source of economic growth.

Antecedents

It is important to note that the antecedents of this understanding of how the economy "grows" can be found in Adam Smith's, "Wealth of Nations" and in the subsequent work of a leading Adam Smith enthusiast, in the person of the French economist Jean-Baptiste Say. Say emphasised the importance of entrepreneurs as innovators bring about essential change through their essential role of recognising opportunities to make a more efficient use of resources and by developing more productive processes. In 1803 Say published his first version of, "A Treatise on Political Economy" which presented the clearest analysis up until that time that made a clear distinction between a nebulous concept of "demand" and "consumption". The subheading of his book was, "The Production, Distribution and Consumption of Wealth." In this work, Say's position was quite subtle in that he introduced answers to the questions, "Where do all these goods and services transacted come from?" and "Where does the money come from to pay for them?"

In general, goods and services cannot be paid for until they have been produced. This means that goods and services are produced and perfected in the expectation that they will be sold. The funds used to purchase this output will have flowed through the economy to those who are going to buy, largely as members of the public who are themselves employed by the companies producing the goods and services.

To understand this basic model, it helps to look at primitive non cash based barter economy exchanges which can only occur when both goods in the exchange have been produced. The exchange value of each is estimated by the proportions of each exchanged in a transaction. The introduction of money meant that the matching of proportions of goods was replaced by unit prices quoted in currency units. However, this does not change the need for the seller to have produced goods and for the buyer having been paid a wage producing other goods or providing other services to be able to pay for purchases².

Say's insight into entrepreneurialism, productivity and the source of money to purchase output was very much related to the fact that he had a considerable experience in manufacturing. He owned a spinning enterprise employing several hundred people located in Auchy-lès-Hesdin in the Pas de Calais, in France.

The cost of living crisis

Today we face a cost of living crisis linked to rises in prices of energy resources (petroleum, gas and derivatives such as fertilizer). This has built upon an already evolving inflationary issue linked to rising prices of and rentals of land, housing, commercial and industrial real estate.

This country went through an almost identical crisis in the 1970s through to the 1990s when OPEC raised the international price of petroleum. The paradoxical state of affairs now, is that in spite of the failure of conventional policies, applied at that time, no lessons were learned as to why the conventional policies applied at that time could not avoid prejudicial impacts on constituents. Although at that time, house prices were relatively more accessible to those on

 $^{^2}$ This basic observation led to the notion of a Say's Law that production creates its own demand but in the context of the contemporary aggregate demand paradigm based on money volumes, Say's Law is not fully understood and, indeed, has become an object of ridicule by monetarists.

average wages, by raising interest rates to exorbitant levels to "reduce inflation" the housing market was disrupted and thousands of families lost their homes as a result of repossession by banks and mortgage companies. This situation was caused by an inappropriate application of monetarism.

Today, the housing crisis persists but the cause is not interest rates but rather the fact that prices have become inaccessible to those on average and below average wages. This situation has been caused by a flow of speculative funds into land and real estate over the last 30 years and, in particular, the last 12 years as a result of an inappropriate application of monetarism in the form of quantitative easing (QE).

The balance of payments and the industrial dependency ratio

Although Nicholas Kaldor argued convincingly against monetarism and for Britain to develop an effective industrial base, mercantilism continued to win the policy day with an acceleration in globalisation, or offshore engineering However, an aspect of Kaldor's arguments was perhaps not emphasised enough or economists, in general, did not perceive its significance.

All of the goods, devices, machines, computers and other goods used by all other sectors are designed and produced by industry and manufacturing companies. The ability of all sectors to improve their productivity and reduce operational costs depends upon the quality and utility of manufactured goods and the competence of those who work in this sector.

The purchase of manufactured goods from foreign suppliers results in that cash flow supporting the employment, margins and investment in the units exporting goods to this country. As a result, during the last 50 years, the industrial and manufacturing sectors in Britain have declined as a source of employment in the United Kingdom while services have expanded. As a result, the dependency of other sectors in Britain on national manufacturing has declined. The balance of payments for goods has become negative.

An important argument made by Kaldor is that in making things there are degrees of freedom that provide opportunities to apply many ways to generate real growth or more-for-less. Therefore, based on the work of many economists including Kaldor, Arrow, Solow and Wright learning by doing in manufacturing produced the products upon which the productivity and real national growth depends. However, Britain's economy has become overly dependent on the innovation of foreign industrialists to whom we pay for imports and thereby support the advance of the learning of the foreign suppliers. In the meantime, British industries have a lower throughout upon which learning is largely based.³ As a result there is a decline in innovation.

In order to achieve a sustainable real incomes growth in Britain there is a need to increase the national industrial dependency ratio by redirecting the demand for goods towards domestic manufacturing so as to increase the rates of innovation and benefit to those sectors using the output. As a result, more effective use of, as well as the substitution of imported inputs and commodities that are facing rising prices can contribute to output from the manufacturing sector stabilising or even reducing prices so as to promote real rising real incomes.

³ The Learning Curve operates on the basis of the completion of repetitive tasks over an extended period of time. It is a welldeveloped quantitative technique for predicting future operational efficiencies linked to unit costs, speed of execution and reduction of waste

Communications difficulties between the sceptred isle of economic theory and the real economy

The empirical evidence generated by Theodore Wright some 84 years ago, and Nicholas Kaldor, Kenneth Arrow and Robert Solow, some 50 years ago, demonstrated, beyond doubt, that learning is the main generator of economic growth (about 60%). The rest of the contribution (40%) comes from the resulting innovation and reconfiguring of advancing state-of-the-art technologies and the use of these goods by the rest of the economic sectors.

One, therefore, has to ask why the leadership, politicians, administrators and, above all, economists in the real economy never grasped the fact that all efforts aimed at real growth needed to concentrate on industry and manufacturing where all of the key activities upon which growth is based, occur. No, rather than engaging in the promotion of such an important transition, most economists and sociologists promoted the further transition to a service-based economy as a "natural" and final stage in economic growth⁴.

This highlights a deplorable state of affairs caused by the fact that quite often economists who advance important concepts of vital importance to the people of this country, are drowned out by other economists who are defencing their "schools of thought" which might possess a differing, and usually wholly theoretical notion, of how the economy works. This common theoretical battle takes place in the hallowed alleyways, nooks and crannies of the processes that govern peer-reviewed professional economic publications largely out of sight of politicians and the public.

The resulting confusion lies well beyond the comprehension of most politicians and the public. As a result, critical facts seldom venture into public domain and discourse let alone anything venturing into the realms of considerations of policy options or political party manifestos.

The flavour of the last half century has been monetarism⁵ and any suggestions that there are alternative better approaches are given short shrift by economists, politicians and the media as a result of a lack of free thought and a practical orientation in the engagements in the field of economics. This field continues to be over-shadowed by the grandees of the monetarist school and the assorted clerics who safeguard their personal interests by being seen to be defending the "school" and attending and worshiping at the TINA⁶ totem pole.

The mythical balancing of payments by financial services

As the balance of payments in goods became increasingly negative the growth in financial capital and financial services were promoted as a means of bringing the balance of payments back into a close to neutral state.

This gave rise to a notion of equivalence of financial services to goods transactions which, in terms of cash flow, is valid. The fact that imported goods might be competitive and lower cost and therefore can be considered to contribute to a rise in real incomes of consumers, is an

⁴ This mistake can be traced to Walt Rostow's 1960 publication, "The Stages of Economic Growth" which omitted the last stage 1960 through 2022 of predictable financial chaos.

⁵ This was given a major boost by the International Monetary Fund which promoted the recirculation of petrodollars followed up by the rise in prominence of Milton Friedman's version of monetarism. A full account of this influence can be found in the <u>2022 British Strategic Review</u>.

⁶ TINA-*"There is no alternative"*. This phrase came to dominate monetarist responses to any propositions of policy alternatives starting in the 1980s and persisting to this day.

argument advanced to justify globalization and the "contribution" of financial services to the growth of the country. However, this "benefit" creates a heavier dependency on production systems over which the country, in terms of economic policy, has no control. This is associated with a high opportunity cost as measured by the deficit in sources of domestic innovation and real growth generated within the country reflected in declining manufacturing employment and falling levels of feasible wage payments.

Therefore, the value of financial services cannot be equated with the value of the goods deficit and certainly cannot be equated with a balance in international goods transactions.

As long as there is a negative balance in manufactured goods there is a deficit in the country's ability to compete on the international stage associated with a state of affairs that is draining away opportunities for real growth. The balance of payments remains an important indicator of the general level of innovation in the country.

International trade agreements and innovation

The concept of "infant industry clauses" refers to the practice of providing subsidies for fledgling enterprises to initiate production and growth in efficiency under a protective umbrella. For low income countries this is an important procedure and a considerable amount of industrial and manufacturing development in the USA took place under such protection.

In terms of "unfair trade practice" where higher income countries might be criticised for resorting to subsidy there is a need to re-evaluate this form of criticism.

The emerging question raised by the need for Britain to increase its competitive industry and manufacturing as a font of real growth call upon Joseph Schumpeter's justification for profits. He considered profits to be the guarantee of future operations and employment. It is, however, important to add to this future employment under conditions of rising real incomes. The reason this is an imperative is that monetarism has created a situation where corporate profits have risen as a percentage if GNP while wages have declined. This, from the standpoint of the Say model of the economy reflects a decline in real income and purchasing power, resulting from an imbalance between innovation and price movements which has prejudiced wage-earners. There is therefore a need to replace monetarism which contains no policy instruments that provide any means of creating incentives for companies to innovate, to establish moderated or even price reductions and/or rises in nominal wages.

Priming the productivity pump

The rule of thumb which proves to be fairly useful in calculating learning curve cost projections, is that productivity rises, measured by falls in unit costs, by a constant percentage of the previous attainment for each historic doubling of throughput. Because this is a constant which is repeated with each historic doubling of throughput it therefore represents a diminishing return to operations over time.

The size of productivity gains from learning is associated with the degree of labour-intensity of a process. As a result, there is no escaping the fact that manufacturing teams can only attain desired future levels of productivity as a result of completing a quantified set of repetitive tasks used to produce a product.

Although automation can help jump to higher levels of productivity in comparison with a more labour intensive process, the automated substitute will have its own characteristic learning curve profile and associated levels of productivity. On the other hand, the more automated a process, the less the potential gains from the operation of the learning curve. Thus, by analogy the first person to use a coin-based coffee vending machine is as efficient as the last because there is virtually no learning involved.

Therefore, in general, the process of raising productivity always involves predictable time delays before target levels of productivity can be achieved. However, the most significant point here is that based on the current levels of productivity and throughput it is possible to predict with some precision the level of productivity at a stated point in the future associated with cumulative throughout. In practice, managers can set prices of output to control market penetration so as to accelerate the rate at which the cumulative throughput rises in order to attain target levels of productivity measured in terms of unit costs, speed of task completion and reduction in waste.

The current cost of living crisis

As a nation of shop keepers policy needs to encourage an expansion in the activities and employment within industry and manufacturing. There is much talk of the "*Green New Deal*" and the leading edge "*Green Economy*" producing, ".. *the jobs of the future*". But this cannot be brought about by continuing with the same conventional policies that are devoid of appropriate policy instruments and therefore is not in a position to stimulate industrial and manufacturing expansion.

The current cost of living crisis faces a short term challenge of a rising proportion of the employed in this country entering a state of "*Malthus at the margin*" where the carrying capacity of the economy as reflected by levels of real wages that cannot support the essential needs of a sizeable proportion of the population. Increasing numbers cannot afford to purchase what are basic essentials and the economy has been driven to a state of "*subsistence*". This is a common state amongst the lowest paid in developing countries and this reflects negatively on the state of economic theory and practice, casting this into a justified classification of irrelevance.

The appeal to the fact that unemployment is at its lowest level and currently more people are employed in the history of this country means little when this simply reflects the rise in the population and where 30% of the employed have exceptionally low wages and face difficulties in making ends meet.

Aggregate demand versus aggregate production models

As was well-established in the previous international petroleum price crisis the basic cause on inflation is cost-push inflation and not demand-pull inflation. In an economy made up by shopkeepers, managing the economy by injecting more money and debt can, indeed, maintain cash flow and stimulate sales. This is the fundamental basis of the ADM and this is why all policy instruments⁷ of all conventional policy paradigms⁸ assume that inflation is demand pull

In the situation of a nation of shop keepers the ADM works to accelerate or reduce the sale of off the shelf items involving relatively simple processes. However, the vital process of the

⁷ Interest rates, money injection through debt, government borrowing, taxation and expenditure

⁸ Keynesianism, monetarism, supply side economic, modern monetary theory

creation of real growth rests within the agricultural, primary and heavy industry and manufacturing sector and not the service sectors. The ADM is not supported by any policy instruments that contribute to the fostering of innovation as the basis of real national growth measured in terms of wage purchasing power as the driver of consumption. The ADM notion of "demand" as money volumes only is an adequate basis for managing the shop keeping economy.

The inevitable growth in the dominance of demand management was a consequence of the past transition from a largely manufacturing economy to a service-dominated economy. However, this policy has ventured too far for the good of the country.

This transition to mercantilism or shop keeping goes some way to explaining why the development of the Aggregate Demand Model (ADM) and a simplistic supply and demand diagram commonly used today, came to dominate the thinking of economists. To put it mildly this approach and representation is at odds with the approach which is now required in Britain to bring the country back from a dire state of economic affairs.

National economic resilience

The sequence of events such as BREXIT, Covid-19 pandemic and the Ukrainian crisis have demonstrated the importance of economic resilience or the ability of the country to adapt to changes occurring in world markets. An over-dependency on imported goods from food to energy resources and equipment has taken its toll on economic growth, government debt and the trajectory of personal taxation and private debt facing the constituents of the United Kingdom.

There are arguments to suggest that the country is, in reality, highly exposed to decisions and events that are out of the hands of the people of this country and its government. As a result, there is very little that policy can do to help increase resilience in the short to medium term. It would have been better to not have become so exposed, as a result of reducing the size of our manufacturing sector. The notion of free trade and globalization has a very obvious downside signifying that policies need to be developed to lower the exposure of the country to such risks. This is a question of national economic security.

The Production, Accessibility and Consumption Model

It is therefore evident that the notion of shifting stuff off shelves through increasing the level of "demand" is beneficial for shopkeepers but of less consequence for manufacturing since most funds flow into imports produced by foreign manufacturers. Jean-Baptiste Say considered entrepreneurialism to be an essential role in promoting real growth and Nicholas Kaldor explained why a more resilient circular economy possesses a manufacturing sector of a critical minimum size so that the growth of wages in the manufacturing sector resulting from increasing productivity, sets a datum line for the whole economy. The concern of policy, therefore, is not "demand" but rather "real incomes" so that the functional role of manufacturing productivity and wage levels is embraced by policy.

All of the policy instruments under Keynesianism, monetarism, supply side economic and Modern Monetary Theory including interest rates, monetary injections (debt), taxation and government loans and assignment (Keynesianism) are in support of the ADM concept which, as has been explored, is inadequate for the growth of manufacturing and productivity. Manufacturing is different from service activities and shop keeping and it requires policies and policy instruments adapted to its needs.

Policy and instruments need to provide positive incentives for manufacturing to dedicate more effort, at a lower risk, to advancing the <u>tacit knowledge</u> of workforces and product innovation. There needs to be more effort to encourage "shop floor innovation" to constantly improve processes and to compensate labour for advancing productivity so as to raise affordable real wage levels. In this context, the ADM "trickle down" concept is replaced by a bottom up "real incomes diffusion" originating from within the manufacturing processes.

The simplistic ADM approach would support the notion that raising wages will create costpush inflation⁹ whereas the reality is that raising productivity with real wages can occur with no impacts on inflation because unit costs remain stable or even decline. An explanation of these relationships can be found in, "<u>Options worth considering in solving the cost of living</u> <u>crisis</u>" under the subheading: *Notions of relationships between productivity and the Phillips Curve*.

Real Incomes Policy

The paradox in policy and media circles is that in realizing that something is wrong with monetarism, all of the discussions and solutions proposed involve monetarists who over the last 50 years have never been able to resolve the question of balancing productivity and wage rates and as a result there is a deficit in consumption. Monetarists see this as a deficit in demand, as opposed to productivity, and manipulate policy instruments to inject money and raise debt as their "solution" to the issue. Today, the government's short term tactic includes offering grants or subsidies to consumers to pay for goods and services while prices continue to rise rather than introducing policies to encourage companies to lower prices.

There is an urgent need to set Britain on a course, similar to that followed by developing countries which deployed infant industry clauses but geared to economic activities that have the potential to increase productivity on the basis of the equivalent to "*industrial transition support clauses*". This could be controversial if based on government subsidies direct to industry and manufacturing. The normal operation of subsidies is one where the benefit of any investment for any funds received occur sometime in the future. On the other hand, subsidies provide no guarantee that those receiving subsidies will invest in higher productivity activities and end up with competitive prices and also share the proceeds with labour.

There is therefore, a need to adopt a Real Incomes Policy (RIP) which provides an incentive to manufacturers based on the degree to which they reduce prices in the short term and then work to bring productivity up to levels that justify the reduced price in commercial terms. In this way short term price moderation or reduction is combined with the needed medium to long term rise in productivity. The price reduction effect is immediate and this alone generates an immediate real income benefit for consumers.

The relative risk to manufacturers of not attaining the desired level of productivity is low as long as price setting and the rate of market penetration is carefully adjusted by estimating the price elasticity of consumption for the production line concerned.

 $^{^{\}rm 9}$ The assumption is based on the a restricted view of the Phillips Curve

The financial risk only involves the initial lower margin per unit of output, which, in some cases could be negative. It is here that RIP comes into its own.

Real Incomes Policy instruments

Real Incomes Policy is designed to address the incentive gaps in the ADM by providing direct incentives for companies to control the relationship between input cost variations and unit output price adjustments. This relationship can be measured by the <u>Price Performance Ratio</u> (PPR) which measures the change in unit prices associated with a change in unit input costs. A <u>Price Performance Levy</u> is paid according to the level of the PPR.

In broad terms a PPR of more than unity (>1.00) increases inflation. A PPR of unity (1.00) maintains the output inflation rate at the rate of input. A PPR of less than unity (<1.00) reduces inflation. The objective of policy and competitive companies is to reduce inflation which can be achieved on the basis of variations in price setting and/or increases in productivity. Therefore, the policy needs to permit companies to make marginal investments in productivity enhancing changes and assign any costs associated with this investment to the calculation of the PPR.

Through the application of simple business rules companies, can on the basis of management and workforce agreement, adjust innovation rates and set competitive prices and compensatory wages while reducing the PPR to levels which result in there being no levy payment. With no levy payment corporate profits are maximised.

Clearly, such possibilities will require a rethink of conventional approaches by manufacturing ownership to the Trades Unions and by Trade Unions to manufacturing in order to provide a foundation for the establishment of rational real incomes policy frameworks.

As a result, policy and appropriate policy instruments can help provide a positive incentive for growth in the manufacturing sector and a growth in national real incomes.

Hector McNeill Portsmouth, 20th June, 2022

Main foundation references:

Wright, T., "Factors Affecting the Cost of Airplanes", Journal of Aeronautical Science, Volume 3, No.2, pp. 122-128, 1936.

Arrow, K. J., "The economic implications of learning by doing". The Review of Economic Studies. Oxford Journals. 29 (3): 155–73, 1962.

Solow, R. M., "Technical change and the aggregate production function". Review of Economics and Statistics. 39 (3): 312–20 ,1957.

Solow, R. M., "Learning from "LEARNING BY DOING", Lessons for Economic Growth", Stanford University Press, Stanford, 1997.

Kaldor, N., "A Model of Economic Growth", The Economic Journal, Volume 67, Issue 268, Pages 591–624, 1957.

Kaldor, N., "Causes of the Slow Rate of Economic Growth of the United Kingdom". An Inaugural Lecture. London, Cambridge University Press, 1966, 40.

Matthews, R. C. O., 'Why Has Britain Had Full Employment since the War?', Economic Journal, 78, London, 1968.

Moore, G. E., "*Cramming more components onto integrated circuits*", Electronics, Volume 38, Number 8, April 19, 1965

Nagy, B., J. Farmer, J. D., Bui, Q. M., Trancik, J. E., "Statistical Basis for Predicting Technological Progress", 2012, Santa Fe Institute, St. John's College, and Engineering Systems Division, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA. 2012

McNeill, H. W., "On the Problem of Technological Ignorance amongst KM Economists", Charter House Essays in Political Economy, HPC, December 1981, ISBN: 978-0-907833-10-9

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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 applications on global communications networks and was the Environmental Economist for the *G*7 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 demandpull 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".

*

"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." "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".