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# The Affordability of Basic Income

## A radical heterodox economics view

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# 1 Introduction – affordability as the prime objection to basic income

The most prominent objection to basic income in public debate is its affordability. This objection was key in the Swiss referendum of June 2016 and in TV debate of the 2015 UK Green Party election manifesto. Basic income is a major macroeconomic proposal which needs to be presented within a comprehensive macroeconomic resolution.

Basic income advocates largely argue within the confines of financial orthodoxy which requires balanced budgets (see Martinelli<sup>5</sup>, van Parijs and Vanderborght<sup>6</sup>, Reed and Lansley<sup>7</sup>, Standing<sup>8</sup>). Their basic income proposals therefore require to be funded by tax increases or other spending cuts, and thus become tightly constrained.

This paper presents a more radical proposal. Its argument is that

- advanced technology economies increase the output/wage ratio
- this reduces the demand/output ratio, creating demand deficiency
- it also reallocates income from wages and benefits to shareholder dividends, raising inequality
- this makes basic income essential to maintain effective macroeconomic demand
- it also makes basic income a policy tool to reduce inequality

A radical heterodox corollary of this argument which crucially demonstrates the affordability of basic income is that

advanced technology economies render fiscal deficit inevitable

This hypothesis is tested within Popperian methodology, by deriving its empirical implications and testing these against empirical data. The paper shows that the data which is available supports and confirms the empirical implications of the hypothesis and thus tends to verify rather than refute the hypothesis.

The conclusion is therefore that basic income is an economic necessity, correctly and inevitably funded by 'Overt Money Funding' or 'helicopter money' ie an annual deficit which is simply written off, as current recurring deficits essentially are written off to ever ascending but entirely notional national debt. An outline of the heterodox theory of money which is necessary for this conclusion is presented.

This offers a radical basic income proposal which avoids the affordability objection of neo-classical financial orthodoxy, thus creating scope for a far more substantial and realistic level of basic income.

#### 2 Hypothesis

In a thought experiment where

- a machine is plugged into earth to produce all output GDP goods and services
- government issues annual new vouchers to distribute the output

#### then it follows that

- 100% of GDP becomes unearned or basic income
- 100% of GDP becomes 'financial' deficit

The nuanced hypothesis from this thought experiment is that

- in high technology, high productivity economies
  - o an element of unearned or basic income is an economic necessity to sustain demand
  - o an element of government financial deficit is inevitable

Elements of this hypothesis are famous from Keynes's treatment which is reviewed in Pecchi<sup>9</sup>.

The important conclusion is that, in the real economy, it is output GDP which renders consumption affordable, not government financial balances. This is also true for basic income which is rendered affordable by output GDP, not government financial balances which themselves derive their value, as does money in general, from output GDP.

#### 3 Testing the hypothesis against empirical data

The ideal empirical test for the hypothesis would be to run a statistical regression analysis of

• a measure of technology intensity in the economy, which would be expected to rise

VS

- the output/wage ratio, which would be expected to rise
- the demand/output ratio, which would be expected to fall
- the unearned/earned income ratio, which would be expected to rise
- financial deficit, which would be expected to rise

Note that unearned income would include pensions, welfare benefits, dividends, consumer credit, and dis-saving. The hypothesis requires these to increase as a proportion of total disposable consumer income as technology increases productivity.

Data to this exact specification is not readily available. Its definition and compilation are part of a research project due to commence at the Institute for Policy Research at the University of Bath, UK from September 2018.

Research of available data sets with the UK Office for National Statistics\*, OECD et al, does however generate sufficient surrogate data to partially test the hypothesis. The paper proceeds by setting out concepts of income and money, before reviewing the empirical data.

<sup>\*</sup> I am grateful to David Matthewson and other staff at ONS for valuable help in defining and interpreting UK income data streams

## 4 The nature of income

The structure and definition of income has changed fundamentally over the last 70 years. The following diagram shows that in the UK economy, aggregate 'labour income', (=wages + self-employed earnings), has declined compared to consumer expenditure, with a turning point in 1995, such that

- 1 From 1948 to 1995, labour income exceeded consumer expenditure 2 From 1995 to 2016, consumer expenditure now increasingly exceeds labour income

Consumption is decreasingly funded by earned income. Unearned income is increasingly essential to the current structure of the economy.

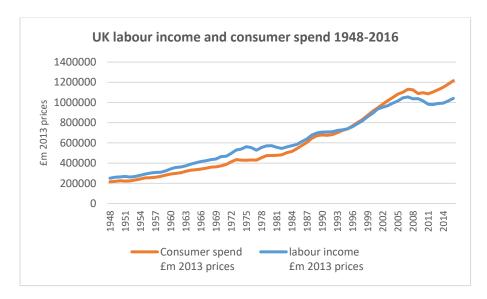


Figure 1: UK labour income and consumer spend 1948 to 2016

Source: ONS <u>www.ons.gov.uk/economy/grossdomesticproductgdp/datasets/uksecondestimateofgdpdatatables</u>
Note that ONS define 'Labour income' = wages + self-employed income.

It is particularly notable that 1995 represents a major turning point in the UK economy when consumer expenditure rose above aggregate wages and self-employed income, requiring various forms of unearned income to sustain consumption.

By 2016, consumer expenditure of £1.22tn was funded by £1.0412tn of labour income and £294bn of unearned income. Labour income thus met only 86% of consumer expenditure, so that 14% of consumption relied on unearned income. Between 1997 and 2016, consumer expenditure has risen from 84% to 91% of labour income. This trend is structural, long term, and inevitable. The claim is that the cause of this is the increased productivity of technology, inevitably and inexorably reducing the wage element of output.

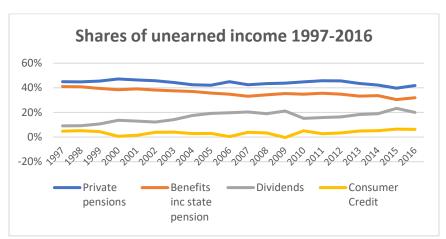
In 2016 UK unearned income accounts for 22% of household income. Basic income is one form of unearned income, and therefore has a significant potential role in modern high technology economies.

The following graph shows that the composition of unearned income has changed significantly over the last 20 years. Whilst private pensions and consumer credit accounted for relatively stable shares of unearned income, the notable change has been that

## Between 1997 and 2016

- Welfare benefits including state pension have reduced from 41% of unearned income to 32%
- Dividend income has increased from 9% to 20% of unearned income

Figure 2: UK shares of unearned income 1997-2016



Source: ONS

 $\underline{www.ons.gov.uk/economy/governmentpublicsector and taxes/local government finance/adhocs/005246 quarterly breakdown of all ukrevenues treams on an accrual sbasis$ 

Wages and benefits have been relatively replaced by dividend income in the UK economy.

This has fuelled inequality as higher income shareholders benefit at the expense of lower income wage earners and benefit recipients.

#### 5 The nature of money

The financial orthodoxy which forces balanced fiscal budgets and thereby constrains basic income proposals to very modest levels, is a false premise. The error results from an accountancy view of the real economy which, as Keynes compelling demonstrated, is a further causal false premise. The consequence is that money is wrongly considered to be real, and to have inherent *a priori* value which then determines economic possibility and affordability. Historically, this view was incorporated in the Gold Standard whereby money in circulation was 'backed up' or constrained by gold reserves. The modern form of this error is that money in circulation is required to be balanced by the sale of an equivalent value of government bonds to investors. The reality is that money is virtual and only has value derived from its referral to output GDP (plus the historic accumulation of output GDP as assets, plus the output GDP potentiality value of land and raw materials).

## Financial orthodoxy insists that

- money has inherent value by its correspondence either historically to gold reserves, or currently to the sale of government bonds, creating national debt
- money is real, cannot be created or destroyed, so that government budgets must balance

It is this orthodoxy, largely a derivative of accountancy rather than economics, which leads to socially harmful austerity policy due to its insistence on balanced government budgets.

Alternative heterodox neo-Keynesian theories of money, such as the models advanced by Mary Mellor<sup>10</sup> and others claim that

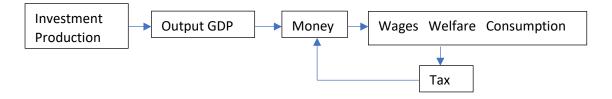
- money has no inherent value but derives its value solely by its correspondence to output GDP
- a sovereign state can issue money without i) creating debt and ii) reference to any other criterion than output GDP
- government financial deficit is inevitable in high technology economies and is entirely manageable

These alternative conceptualisations of money are set out diagrammatically as

Figure 3: Financial orthodox and heterodox neo-Keynesian theories of money



# Heterodox neo-Keynesian theory of money



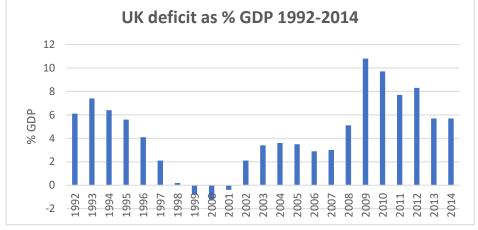
We have thus established a credible robust theoretical foundation for the deficit financing of basic income by 'money creation', otherwise known as 'Quantitative Easing', 'Overt Money Financing' or popularly as 'helicopter money'. The frequent popular objection to this strategy is the concern that it will lead to mass inflation. The most widely known episode of economic history appears to be the Weimar Republic experience of 'printing money' irresponsibly, causing catastrophic inflation. The answer to this concern is that money creation must work within the limit of output GDP. If this constraint is observed, there will be no inflationary effect. There is nothing wrong with 'printing money'. Central banks print money all the time. Commercial banks create virtual money as controlled multiples of their deposits. It's not a question of whether to 'print money', but a question of observing the constraint of output GDP.

## 6 Empirical tests

But is this theoretical outcome sustainable in practice? The following graphs show that both in the UK economy, and the leading G7 economies, deficit has been the common experience over the last 12-20 years.

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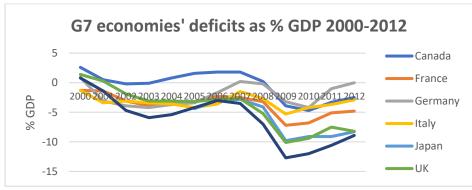
Figure 4: UK deficit as percentage of Gross Domestic Product 1992 to 2014



Source: ONS

 $\underline{www.ons.gov.uk/economy/governmentpublicsector and taxes/publicspending/bulletins/ukgovernmentdebt and deficit for eurostat maast}$ 

Figure 5: G7 economies' deficits as percentages of Gross Domestic Product 2000 to 2012



Source: OECD https://data.oecd.org/gga/general-government-deficit.htm]

Deficit has been persistent, despite the determination of finance ministers to eliminate it. By accumulating this deficit, the national debt has soared, as the following graph shows, from 50%, through typically 100%, to in the case of Japan 234% of GDP.

Figure 6: National debt as percentage of Gross Domestic Product, 2015

Source; OECD https://data.oecd.org/gga/general-government-debt.htm

This demonstrates that, not only is deficit financing practically possible, it is in fact contemporary practical reality, and has been for a considerable period of time. The popular interpretation of this phenomenon is that we are creating an immense 'burden for our grandchildren' which they will labour for decades to pay off. On the contrary, it is this latter view which is impractical. It is simply not the case. The constant writing of financial deficit to national debt which continues to cumulate to a whole year's GDP, demonstrates that, in reality, deficit is inevitable and manageable. It can be written off, as in reality it actually is. It is far better to challenge the assumptions of financial orthodoxy and manage economic reality than to continue with the balanced budget illusion, and its socially harmful consequences of austerity policy.

## 7 Interim conclusions

The above data confirms the empirical implications of the basic income hypothesis ie that in high tech economies

- Unearned income is an economic necessity
- Basic income is a preferable version of unearned income, reducing inequality
- Financial deficit is an economic inevitability

## **8 Policy implications**

Major policy implications are derived from this hypothesis and research ie

## 8.1 Economic crisis policy

The 2007 economic crisis was caused by the need to supplement declining labour income, and then doing this via increased consumer credit which necessarily became unrepayable from the same declining labour income. Basic income replacing consumer credit as a component of unearned income would avoid such economic crisis. Basic income creates less inequality than increasing dividends as a source of unearned income.

#### 8.2 Austerity policy

Recognition of the inevitability of financial deficit renders austerity policy unnecessary. Consumer expenditure, basic income, and public-sector expenditure are all rendered affordable by output GDP and not by the balanced budgets of financial orthodoxy.

#### 9 Conclusion

The paper presents a credible consistent model incorporating the economic necessity of unearned income, the superiority of basic income as form of unearned income, the inevitability of financial deficit to fund basic income, and considers the impact on economic crisis management and austerity policy. Initial research of empirical economic data supports the hypothesis of the model. A revised virtual theory of money enables the model intellectually and practically.

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