The Progressive Direct Expenditure Tax
(Fiscal Policy) as a Tool of Inflation Targeting

In the Wake of a Global Financial Crisis

Can Nicholas Kaldor’s Direct Expenditure Tax
(Fiscal Policy) act as a Tool of Inflation Targeting?

Is a Higher Inflation Target Plausible?

A Theory for Inflation

By Julio Altamirano (Jnr) (2014)
A Short Run Perspective

"In the long run, we are all dead..." JM Keynes

[Topic for Masters or Doctor of Philosophy: - Work in Progress]
WHAT IS A DEPRESSION?

A DEPRESSION is a condition in which business becomes unprofitable. It might well be called The Private Profits disease. Its worst consequences are business failures and wide-spread unemployment. But almost no one escapes a degree of impoverishment. Some of the mightiest and best managed enterprises, such as railroads, are among the worst sufferers. If they do not break, it is often only because they are saved by their reserves. Many rich stockholders, too, are compelled to live on reserves while many persons who had lived modestly are compelled to live from hand to mouth and many who already lived from hand to mouth become jobless and live on charity, or die, or become thieves. In a word, a depression is a form of almost universal poverty, relative or absolute. And though this poverty is transient for society as a whole, it is, for countless individuals, tragically permanent. Irving Fisher in Booms and Depressions
Some of the Macroeconomic Benefits of Raising the Inflation Target…

Without the Costs of Inflation?

Combating the Recessionary and Inflationary Gaps
‘The Role of Fiscal Policy, in Inflation Targeting’

A Challenge to Conventional Monetary Policy

Part II

A Précis of the Thesis

“I would emphasize the important corollary, of the debt-deflation theory, that great depressions are curable and preventable through reflation and stabilization. Irving Fisher, US economist
Lessons from and for Global Financial Crises:

In Reply
Political Economy, then, may be defined as follows; and the definition seems to be complete:—

"The science which traces the laws of such of the phenomena of society as arise from the combined operations of mankind for the production of wealth, in so far as those phenomena are not modified by the pursuit of any other object."  *Principles of Political Economy (1848)* John Stuart Mill

1. **pol·i·cy**

    /ˈpælsē/

    A proposed or adopted course or principle of action.

    Synonyms

    politics¹

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*On “The Politics or policy of the Tax Measure” – Using the Accounting and Tax System as a Tool of Inflation Targeting…*

(Melbourne, Australia)

Australasian Tax Teachers Association Conference

2014
The difficulty lies not so much in developing new ideas as in escaping from old ones. John Maynard Keynes
On Mitigating Recessions and Depressions

- *I know of no severe depression, in any country or any time, that was not accompanied by a sharp decline in the stock of money and equally of no sharp decline in the stock of money that was not accompanied by a severe depression.*
  - As quoted in *The Money Masters* (1995) (Milton Friedman)

- *The Federal Reserve definitely caused the Great Depression by contracting the amount of money in circulation by one-third from 1929 to 1933*
  - National Public Radio interview (Jan 1996) (Milton Friedman)
Hypotheses: (Implications for Future Research)

In raising the inflation target, this fiscal policy instrument as a tool of inflation targeting is fundamental to macroeconomics in overcoming many of the costs of inflation... with income being spent or saved... it provides a solution to the purchasing power of wages and salaries index and that of the Fisher equation...

...complements monetary policy inflation targeting with no lags, can combat the recessionary and inflationary gaps, including depressions, provides a buffer against deflation and adverse supply shocks... thus overcoming the monetary recession... allows for activist monetary and fiscal policy... facilitative of higher economic growth in the short, medium and long runs...

...encouraging work, savings and investment as a progressive tax on consumption thus achieving an optimal tax policy mix...

...allowing for the entrenching of inflationary expectations both - adaptive and rational - without inflation forecasting errors nor money illusion... thus allowing for a short run and (potentially) long run tradeoff between inflation and unemployment... with (potentially) a shift of the long run Phillips curve to the left... but also stimulating demand deficient unemployment... and also combating the policy ineffectiveness proposition... and that of the long run neutrality of money...

...but also... combating that of government debt levels... with higher tax revenues for government...

... depreciating the dollar or other unit of account from a unilateral perspective thus making domestic goods cheaper than foreign goods... furthermore, stimulating net exports... plus that of foreign direct investment...

... but also, ensuring the progressivity of indirect taxes... a simple, flexible, progressive and fair but also efficient tax, suitable for overcoming many of the major macroeconomic problems... without, it is proposed, money illusion nor the distortion of relative prices in the consumption of goods and services... major macroeconomic benefits thereof...
Abstract

This paper challenges conventional wisdom in that only monetary policy can act as a tool of inflation targeting by proposing ‘fiscal policy’, or a progressive direct expenditure tax - as a tool of inflation targeting for either the developed world or the developing and undeveloped nations. At present the literature is deficient in the sense that fiscal policy, namely the accounting and tax system and a progressive direct expenditure tax can act as a tool of inflation targeting, and more importantly, provide for price stability despite a higher inflation target and thus overcome most of the costs of inflation.

More specifically, by extending Nicholas Kaldor’s progressive direct expenditure tax (DET) with a c.p.i adjusted cost of living allowance tax credit or rebate (expenditure and savings / investment based), most of the costs of inflation can be overcome, thus the argument in raising the inflation target with significant implications for macroeconomics generally, but also fiscal and monetary policy.

The paper discusses and illustrates with a model tax return the operation of the direct expenditure tax (DET) and provides a solution to both the purchasing power of salaries and wages index and the Fisher equation as a re-illustration. The paper argues that a higher inflation target can act as a buffer against deflation and overcomes some of the problems associated with monetary inflation targeting.

An increased inflation target and its benefits associated with the monetary policy transmission mechanism (both traditional and balance sheet channels) are addressed to illustrate some of the major macroeconomic benefits to be achieved. Both the Keynesian and Monetarist causes of inflation are addressed.

*The Progressive Direct Expenditure Tax (DET) – fiscal policy, a viable tool of inflation targeting?*
Introduction

Like Milton Friedman in his journal article ‘The Role of Monetary Policy’ today’s lecture will be on ‘The Role of Fiscal Policy’.

In contrast to his dissertation I will answer as a corollary the question – What can fiscal policy contribute?²

To introduce the topic I will argue that the major macroeconomic benefit as it complements monetary policy inflation targeting is that although, as Milton Friedman states: “Monetary policy [i]s a string. You [can] pull on it to stop inflation but you could not push on it to halt recession. You could lead a horse to water but you could not make him drink.”³ Such a theory was soon replaced by Keynesianism.⁴ Maynard Keynes, has offered a counterattack on ‘the presumed impotence of monetary policy to stem the depression’ highlighting of course this argument and why I will argue for a higher inflation target as opposed to the tight quantitative inflation targets of most inflation targeters around the World.⁵ If liquidity preference is absolute or nearly so – as Keynesianism would argue due to high unemployment – interest rates cannot be further reduced by monetary measures.⁶ An alternative – fiscal policy could counter for reduced private investment with tax cuts stimulating consumer expenditures.⁷ But, we have in our tools fiscal policy as a tool of inflation targeting that, complementary to monetary policy can fight inflation but also prevent and mitigate recessions. We can pull on it to overcome the costs of inflation but also push on it to halt recession, thus it is proposed, we have a viable tool of inflation targeting superior in its principles and ability to combat

³ Ibid 1-2.
⁴ Ibid.
⁵ Ibid, 2.
⁶ Ibid.
⁷ Ibid.
recessions, but also inflation, but also complementary to that of monetary policy inflation targeting.
Like Maynard Keynes General Theory, this tool of inflation targeting (as a theoretical development) has perhaps arrived in time for the Global Financial Crisis and thus its potential role in mitigating recessions and depressions, but also in being a fundamental tool necessary in guiding the long term tax and macroeconomic policies of nations.
“A tax will not have respect, and will not deserve respect, unless it is coherent in principle and has a claim to fairness...” (Professor RW Parsons, 1986)

Part I

I What is a Direct Expenditure Tax?

The main features of a direct expenditure tax are that it does not include savings as subject to tax, as opposed to the present Income Tax Assessment Act, and that it allows for progressivity of expenditure on goods and services as opposed to the indirect tax system, for instance, the Australian goods and services tax which is regressive.9

The tax base is thus expenditure on final goods and services – income less savings.10 A progressive tax-rate schedule is then applied to the expenditure base resulting in a progressive tax liability.11 The progressive tax liability can be determined according to taxable income.

II How is Expenditure Computed Under the Direct Expenditure Tax Method?

A key question, how does the direct expenditure tax compute expenditure on goods and services? Simply put, “[e]xpenditure is calculated as income minus the net increase in saving.”12

“Net increase in saving is measured as the amount by which the value of assets added to savings during the period exceeds the value of assets withdrawn from savings over the same period.”13

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9 Ibid.
10 Ibid.
11 Ibid.
13 Ibid.
Unrealized appreciation or depreciation in the value of assets is not taken into account in determining net saving.\textsuperscript{14}

So we arrive at the following formula:

\[
I - (\text{NW ending} - \text{NW beginning}) = E
\]

Where:

- \(I\) is income
- \(\text{NW ending}\) is net wealth at the end of the period
- \(\text{NW beginning}\) is net wealth at the beginning of the period
- \(E\) is expenditure.\textsuperscript{15}

The expenditure tax would require statements A to E.\textsuperscript{16} Statement A which reports income, statement B which reports the purchase and sale of investment assets, statement C which reports borrowing and lending and statement D which reports cash holdings and bank deposits.\textsuperscript{17}

To calculate the amount of expenditure on which to pay tax, from income we subtract the additions of and withdrawals of savings over the respective financial year.\textsuperscript{18} Lending is treated as increments to savings while borrowing transactions are treated as dis-saving.\textsuperscript{19} This gives us a figure for

\textsuperscript{14} Ibid.
\textsuperscript{15} Ibid.
\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid.
\textsuperscript{18} Ibid.
\textsuperscript{19} Ibid.
expenditure of which progressive tax rates are applied depending on the taxable income earned in any financial year.\textsuperscript{20} See Figure 1.1 for an illustration of the operation of the direct expenditure tax.\textsuperscript{21}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{fig1.png}
\caption{Illustration of the operation of the direct expenditure tax.}
\end{figure}

\begin{thebibliography}{99}
\bibitem{20} Ibid.
\bibitem{21} Ibid.
\end{thebibliography}
By a continuing process of inflation, governments can confiscate, secretly and unobserved, an important part of the wealth of their citizens. By this method they not only confiscate, but they confiscate arbitrarily; and, while the process impoverishes many, it actually enriches some…There is no subtler, no surer means of overturning the existing basis of society than to debauch the currency. The process engages all the hidden forces of economic law on the side of destruction, and does it in a manner which not one man in a million is able to diagnose.

The Economic Consequences of the Peace, (John Maynard Keynes, 1919)

Part II

I Inflation and Deflation: Increasing the Inflation Target

I will introduce the paper with what perhaps can be regarded as the problem with a tight quantitative target, namely for instance the 2-3% (approx.) inflation targets evidenced here in Australia, with similar inflation targets for other countries around the world.

At the outset, thus I contrast inflation with deflation with the argument provided by (Blanchard, 2010) to highlight the problem thereof.22

Inflation is a worldwide phenomenon.23 As (Ryckeghem, 1976) provide evidence of world inflation rates and state:24

…chronic unemployment ceased to be, in the developed countries at least, a major economic and social problem; and under the stimulus of dwindling barriers to trade, international trade expanded at an unprecedentedly fast rate. At the same time, however, the quarter of a century witnessed the emergence of chronic inflation as a worldwide problem

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23 Ryckeghem, M. A World of Inflation (1976).

24 Ibid.
which has displaced unemployment as the major concern of governments of developed countries, and which in at least some less developed countries has made economic development more difficult.  

In contrast, the problem of deflation however is also at hand. We observe:

Concerns of a generalized decline in prices in both industrial and emerging market economies have increased markedly since last fall. With Japan, China, and several other Asian economies already experiencing declining prices, the worry has been that deflationary pressures could deepen, and even spread more widely. This concern comes amid massive declines in global equity markets; significant excess capacity and widening output gaps; repeated disappointments over the pace of global recovery; geopolitical uncertainties; and the impact on activity of higher oil prices.  

On the one hand, overly expansionary monetary policy can result in higher rates of inflation. On the other hand, actions that result in too tight monetary policy can result in a recession whereby there is an increase in unemployment and decrease in output. 

Thus, the problem - how can we provide a buffer against deflation, that is, a higher rate of inflation and inflation target without the costs of inflation. If monetary policy can act as a tool of inflation targeting, the question, for macroeconomics, is whether fiscal policy can also act as an instrument of inflation targeting, and thus the necessity in studying the macroeconomic implications of such a measure.

25 Ibid.
27 Above n 22.
28 Ibid.
In the following section I compute the purchasing power index and the Fisher equation and re-illustrate mathematically how the progressive direct expenditure tax with its c.p.i adjusted cost of living allowance tax credit or rebate can keep the purchasing power of the dollar intact and provide a tool that can provide a solution to the Fisher equation and thus overcome many of the costs of inflation.

II The Purchasing Power of the Dollar

In the following section I extend the purchasing power of the dollar equation by the c.p.i adjusted cost of living allowance tax credit or rebate and illustrate mathematically how the progressive direct expenditure tax can keep the purchasing power of the dollar intact.29

The purchasing power in today's money of an amount $C$ of money, $t$ years into the future, can be computed with the formula for the present value where in this case $i$ is an assumed future annual inflation rate, in this example of 7%.30 Thus,

\[
C_t = \frac{\$40,000}{(1 + .07)} = \$37,383
\]

We observe that inflation erodes the purchasing power of salaries and wages by the rate of inflation. However by extending a cost of living allowance tax credit (expenditure based) to the formula equal to the inflation rate keeps the purchasing power of the dollar (salaries and wages) intact.31


30 Ibid.

31 Ibid.
Thus the new equation would be:-

\[
C_t = \frac{C \times (1 + c)}{(1 + i)}
\]

\[
C_t = \frac{$40,000 \times (1 + .07)}{(1 + .07)}
\]

\[
C_t = $40,000
\]

Therefore the cost of living allowance tax credit (expenditure based) equals the difference in the decline of the purchasing power of the dollar, and therefore, the purchasing power of the dollar (salaries and wages) has thus remained stable in \( t = 1 \) years with \( (C_t) \$40,000 \) equalling \( (C) \$40,000 \).\(^{32}\)

### III The Fisher Equation (Solution)

Inflation can have an effect on borrowing and saving – this is factored in the Fisher equation – named after Irving Fisher, one of the great monetary economists that the twentieth century has ever produced.\(^{33}\)

The Fisher equation states that the nominal interest rate \( n \) equals the real interest rate \( r \), plus the expected rate of inflation \( i \).\(^{34}\) Thus, or alternatively, the real interest rate equals the nominal interest rate less the actual or expected inflation rate.\(^{35}\)

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\(^{32}\) Ibid.


\(^{34}\) Ibid.

\(^{35}\) Ibid.
However, the Fisher solution is simply to extend the Fisher equation for a cost of living allowance (c.p.i adjusted) tax credit or rebate equal to the actual inflation rate, that is, \( c = \text{cost of living allowance tax credit equals } i = \text{the inflation rate}. \) I illustrate mathematically as follows:

\[
r = n - i + c
\]

\( n = \text{nominal interest rate equals 10\%} \)

\( i = \text{inflation equals 3\%} \)

\( c = \text{cost of living allowance tax credit or rebate equals 3\%} \)

Thus, we observe as follows:

\[
r = 10\% - 3\% + 3\%
\]

\( r = 10\% \)

Thus the real interest rate of 10\% equals the nominal interest rate of also 10\%, thus providing a solution to the Fisher equation.\(^{37}\)

\[^{36}\text{Above n 29.}\]

\[^{37}\text{Ibid.}\]
Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output. ... A steady rate of monetary growth at a moderate level can provide a framework under which a country can have little inflation and much growth. It will not produce perfect stability; it will not produce heaven on earth; but it can make an important contribution to a stable economic society.

The Counter-Revolution in Monetary Theory, (Milton Friedman, 1970)

Part III

I Keynesian and Monetarist Causes of Inflation

Many governments throughout the World have made a primary objective of their economic agenda to reduce the rate of inflation.\(^3\) This would indicate that inflation is a problem that imposes a cost on society.\(^3\) This would indeed raise the question and of which I must necessarily reiterate, why is low or even moderate inflation such a problem that not only it has become an objective of government policy, but rather an ‘overriding’ objective thereof.\(^4\)

The various causes of inflation will serve as a background to overcoming the costs of inflation.

The Keynesian school of thought sees inflation caused by pressures in the economy being expressed in prices.\(^4\) Although these various types of inflation can be caused by changes in the money supply, this is not the only cause.\(^4\) For instance, Robert J. Gordon calls this the “triangle model” and

\(^3\) McKenna, M. (1990) *Inflation in Modern Economies.*

\(^3\) Ibid.

\(^4\) Ibid.


\(^4\) Ibid..
(Laronda, 2012) identifies numerous causes of inflation which can be classified as (a) demand pull (b) cost push and (c) built in inflation.43

Demand pull inflation is caused by increases of aggregate demand due to for instance higher spending by private and government economic agents. The benefits of demand inflation are conducive to increased economic growth as “…the excess demand and favourable market conditions will stimulate investment and expansion.”44

Cost push inflation, perhaps attributed to supply shocks can be caused by a reduction of aggregate supply.45 This, for example can be caused by natural disasters, or increases in the price of production inputs.46 A sudden decrease in the supply of oil can lead to increased oil prices with producers passing on these increased costs to consumers as higher prices.47

Built-in inflation can be caused by adaptive expectations.48 Often caused by the “price-wage spiral”.49 For example, workers try to keep wages in line with price increases thus protecting the purchasing power of salaries and wages – firms then pass the increased labour costs as higher prices – this would in turn lead to a “vicious circle”.50

43 Ibid.
44 Ibid.
45 Ibid.
46 Ibid.
47 Ibid.
48 Ibid.
49 Ibid.
50 Ibid.
The higher inflation target would allow a higher rate of inflation caused by either a higher rate of demand pull inflation, or also caused by supply shocks, and also, due to lower unemployment which can trigger the price-wage spiral.

II Overcoming the Costs of Inflation

Reiterating, (McKenna, 1990) inflation can be described as a continual increase in the general price of goods and services. These authors accentuate that of an increase in ‘general’ prices, not specific instances of a price rise. In Australia, for instance, it is the consumer price index that is of concern. I must reiterate why inflation is an economic concern. The costs of inflation can be:

- Arbitrary redistribution of real income
- Arbitrary redistribution of real wealth
- Economic efficiency
- Costs of economizing on money balances
- Costs of minimizing outstanding debt
- Institutional distortion
- Balance of payments difficulties.

Arbitrary Redistribution of Real Income

The problem arises here for those whose “money income rises more rapidly than the general price level; the losers are those groups whose money income rises less rapidly than the general price level.”

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51 Above n 38.
52 Ibid.
53 Ibid.
By extending the purchasing power of monies and wages index for a c.p.i adjusted cost of living allowance tax credit or rebate this problem of inflation can be overcome. There is no arbitrary redistribution of real income, the c.p.i adjusted cost of living allowance tax credit or rebate keeps the purchasing power of salaries and wages intact.

Arbitrary Redistribution of Real Wealth

A second point to be made, is that inflation can lead “to a potentially unjust redistribution of real wealth.”\textsuperscript{55} The essential issue is that “the real value of a given sum of money declines.”\textsuperscript{56} For instance, if the general level of prices rise by 10 per cent “people whose wealth consists mainly of assets with a fixed, or virtually fixed, money value such as bank deposits, government bonds and private debt of various kinds will be losers, in terms of wealth, under inflationary conditions.”\textsuperscript{57} “Persons whose assets consist mainly of real property will be gainers because, generally speaking, the money value of real property rises in line with, or even more rapidly than, the general price level.”\textsuperscript{58} The redistribution of wealth would thus in fact be arbitrary and unjust. However, the c.p.i adjusted cost of living allowance tax credit or rebate can be extended and thus should overcome this cost of inflation - the redistribution is just as bank deposits, government bonds and private debt are now in real terms as adjusted for inflation.

\textsuperscript{54} Ibid.
\textsuperscript{55} Ibid.
\textsuperscript{56} Ibid.
\textsuperscript{57} Ibid.
\textsuperscript{58} Ibid.
Economic Efficiency

Inflation can undermine the efficiency of the economic system in numerous ways. When there is inflation, a particular price change may be a relative price change. Or it may also be just part of the general rise of prices. In the absence of inflation households and firms can assume that all price changes are relative price changes. Inflation however can obscure relative price changes.

Therefore, to overcome this cost of inflation, the relative price signal can and ought to be strengthened through the price tag or menu i.e. it can be a reportable requirement that deviations from the inflation target are required to be disclosed for instance if the relative price change deviates by more than 10-30% from the inflation target (+1% to 3% out of a 10% inflation target).

The notation demand pull or cost push can also be disclosed thus providing vital information to consumers on whether the inflation is attributed to demand excess or of rising costs thus strengthening the relative price signal/s.

Costs of Economising on Money Balances

Another cost of inflation is the cost of economizing on money balances. As the general price level rises, real values of money fall. Thus, changing one’s preference for holding money as opposed to

59 Ibid.
60 Ibid.
61 Ibid.
62 Ibid.
63 Ibid.
64 Ibid.
65 Ibid.
in the form of assets is necessary under inflationary conditions.\textsuperscript{66} The costs of economizing on money balances would thus include:

- Time and effort associated with economizing on money balances
- Inconvenience associated with illiquidity.\textsuperscript{67}

With the tool of inflation targeting not only is there no real loss, due to the monetary compensation, but there is no cost associated with the time and effort of economizing on money balances and further no inconvenience associated with illiquidity.

Costs of Minimising Outstanding Debt

Another concern of inflation is the cost of minimizing outstanding debt.\textsuperscript{68} When the interest rate is high there is a loss of interest associated with the outstanding debt and that of exerting pressure for the payment of monies owing.\textsuperscript{69} However, the cost of living allowance savings based tax credit or rebate would allow for compensation equal to the inflation rate thus there would no longer be the cost of minimizing outstanding debt.

Institutional Distortion

The last economic concern in a closed economy is that expressed by Sir John Hicks, “…inflation is undesirable because it distorts the institutions which lie at the heart of modern society.”\textsuperscript{70} That of,

\textsuperscript{66} Ibid.
\textsuperscript{67} Ibid.
\textsuperscript{68} Ibid.
\textsuperscript{69} Ibid.
\textsuperscript{70} Ibid.
“[t]he accounting system, the tax system, even the general legal system, all are based on the assumption of a stable value of money; if the value of money is seriously changeable, they are twisted out of shape.”\textsuperscript{71} However, inflation accounting and indexation of the tax system can overcome this delimitation.

\textbf{Balance of Payments Difficulties}

It has been reported that the world average inflation rate is 5%, with 3\% for developed countries and 6.3\% in the developing world economies as at the year 2011.\textsuperscript{72} It has also been noted that inflation in developed economies is typically 0\% to 4\% and in developing countries anywhere between 5\% to 10\%.\textsuperscript{73}

(Hagger, 1981) however states that it is only inflation in the domestic country higher than the rest of the world that can create balance of payments problems by making domestic goods more expensive relative to foreign goods.\textsuperscript{74}

It is hypothesized that the inflation target can be increased from 5\% to 10\% with an agreement to adopt the tool of inflation targeting in the developed world due to the viability of the tax measure, that is, the developed world through its tax system would allow for a progressive ‘direct’ expenditure tax on individuals, but should also be viewed from the perspective of the magnitude of trade of the developed economies with that of the developed world, i.e. the developed economies account for approximately 65.8\% or two thirds of nominal worldwide GDP. There may however be some

\textsuperscript{71} Ibid.
\textsuperscript{72} Mundi (2013).
\textsuperscript{73} Mundi (2013).
\textsuperscript{74} Ibid.
balance of payments problems as this is an average rate, but, of which will also depend on the inflation rates of our trading partners. This must however be viewed in the light of the exchange rate that will be the basis on future research, i.e. a depreciation or appreciation of the unit of account.

(Blanchard, 2010) summarise some of the costs of inflation also as:-

- Shoe-leather costs
- Money illusion
- Redistribution costs from creditors to debtors.\(^{75}\)

The following discussion will address these and whether the cost of living allowance mechanisms can overcome these costs of inflation.

**Shoe-Leather Costs**

In the medium run, a higher inflation rate results in a higher nominal interest rate making a greater opportunity cost of holding money.\(^{76}\) As a consequence of this higher nominal interest rate, people reduce their money balances with greater trips to the bank – thus the term, shoe-leather costs.\(^{77}\) The higher nominal interest rate would mean that these costs, however negligible, on a weighing up, would still exist but as (Blanchard, 2010) state “…their importance in times of moderate inflation is limited.”\(^{78}\)

\(^{75}\) Above n 22.

\(^{76}\) Ibid.

\(^{77}\) Ibid.

\(^{78}\) Ibid.
Money Illusion

We can begin the discussion of the implications of potentially, the absence of money illusion, with some definitions arrived at. Patinkin (1965) for instance defines money illusion as “…if his excess-demand functions for commodities do not depend solely on relative prices and real wealth”.79 Shafir et al. (1997) interpret “money illusion as a bias in the assessment of the real value of economic transactions, induced by a nominal evaluation.”80 Fehr and Tyran (2004): “Money illusion occurs if, objectively identical situations cause different behavioral patterns depending on whether the situation is framed in nominal or in real terms.”81 Fisher (1928) provides a definition of money illusion as “the failure to perceive that the dollar, or any other unit of money, expands or shrinks in value.”82

It is hypothesized, in terms of the purchases of goods and services, as the nominal values are the real values, that there is no money illusion, thus, perhaps overcoming many of the problems associated with money illusion.

Redistribution Costs from Creditors to Debtors

Debtors borrow from creditors and repay their obligations with interest at a future date. When there is inflation, the real value of money goes down, debtors pay back less in real terms than what they had borrowed, and thus are gainers.83 On the other hand, creditors get less in terms of goods and services than what they had lent, and thus are losers to that extent.84

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79 Patinkin (1965).
80 Shafir (1997).
81 Fehr and Tyran (2004).
82 Fisher (1928).
83 Blanchard (2010).
84 http://www.economics.utoronto.ca/jfloyd/modules/uinf.html
As an illustration, say that you take out debt $1,000 payable in a lump sum at an annual interest rate of 5% per annum in 5 years time.\textsuperscript{85} The amount to be repaid would thus be $1,276.28.\textsuperscript{86} However, let's now say that during this five year period the price level doubles.\textsuperscript{87} Now, because the dollar in debt is worth only half, in real terms, means that you only have to pay back $638.14 of real goods.\textsuperscript{88} You would have taken out debt of $1,000 worth of real goods for five years and paid back less than $640 in real goods.\textsuperscript{89}

Interest repayments could also reflect nominal values as adjusted for inflation thus overcoming this delimitation.

We can thus interimly conclude that most of the costs of inflation are overcome, thus, raising the question…should we raise the inflation target?

\textsuperscript{85} Ibid.
\textsuperscript{86} Ibid.
\textsuperscript{87} Ibid.
\textsuperscript{88} Ibid.
\textsuperscript{89} Ibid.
As the crisis slowly recedes, it’s time for a reassessment of what we know about how to conduct macroeconomic policy – on the Global Financial Crisis (Olivier Blanchard, 2013)

Part IV

I Inflation Targeting Perspectives: Overcoming the Problems

(Mishkin, 2010) cites three major disadvantages of inflation targeting as a monetary policy strategy. This includes: “…delayed signaling, the potential for increased output fluctuations and low economic growth.”

Delayed Signaling

As (Mishkin F. S., 2010) states, “…inflation is not easily controlled by the monetary authorities.”

There are long lags for monetary policy to take effect, that is, “…inflation outcomes are revealed only after a substantial lag.” With the fiscal policy instrument, there are no lags – the cpi adjusted tax credit or rebate is claimed through the tax system, with no lags. An overshooting of the target will still result in the tax credit or rebate being claimed through the tax system.

Increased Output Fluctuations

(Mishkin, 2010) states that inflation targets above zero reflect the concern that low inflation can result in a substantial adverse effect on real economic activity. Deflation for example can result in increased financial instability and a severe economic contraction leading to increased output loss and higher unemployment.

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91 Ibid.
92 Ibid.
93 Ibid.
94 Ibid.
95 Ibid.
(Siklos, 2004) and (Kumar, 2003) define deflation “as a sustained decline in an aggregate measure of prices, such as the consumer price index or the GDP deflator.”\(^{96, 97}\) The concern of deflation attributed to “economic uncertainties, distort resource allocation, entail distributional consequences, and lead to subpar growth performance.”\(^{98}\) It must be understood that although low inflation does have its “economic benefits” it must also be understood that “it also reduces the buffer against deflation and against hitting the zero bound on nominal interest rates.”\(^{99}\) An increased inflation target provides a buffer against deflation and its resultant costs.\(^{100}\)


\(^{98}\) Ibid.

\(^{99}\) Ibid.

\(^{100}\) Above n 90.
Frederic Mishkin “[t]he global financial crisis of 2007-2009 was not only a tsunami that flattened the economy, but in the eyes of some commentators it has flattened the science of monetary policy, requiring a total rethink.”

What is Inflation Targeting? The Objectives of Monetary Policy?

Monetary policy regimes vary across central banks. For instance, the Federal Reserve’s aim is “to promote effectively the goals of maximum employment, stable prices, and moderate long term interest rates”. The European Central Bank on the other hand has price stability as its overriding objective. Some central banks also target exchange rate stability. The International Monetary Fund defines inflation targeting as:

This involves the public announcement of medium-term numerical targets for inflation with an institutional commitment by the monetary authority to achieve these targets. Additional key features include increased communication with the public and the markets about the plans and objectives of monetary policymakers and increased accountability of the central bank for attaining its inflation objectives. Monetary policy decisions are guided by the deviation of forecasts of future inflation from the announced target, with the inflation forecast acting (implicitly or explicitly) as the intermediate target of monetary policy.

The Reserve Bank Act 1959 stipulates the objectives of monetary policy in Australia. This sets out three objectives:

- the stability of the currency of Australia;
- maintenance of full employment in Australia; and
- the economic prosperity and welfare of the people of Australia.

These objectives are made more explicit with the adoption of the Bank’s inflation target. To quote from the latest Statement on the Conduct of Monetary Policy issued in September 2010:

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102 Ibid.

103 Ibid.

104 Ibid.

105 Ibid.

106 Reserve Bank of Australia Statement on the Conduct of Monetary Policy.
The Progressive Direct Expenditure Tax as a Tool of Inflation Targeting

[Theory for Inflation: Part II]

In pursuing the goal of medium-term price stability, both the Reserve Bank and the Government agree on the objective of keeping consumer price inflation between 2 and 3 per cent, on average, over the cycle. This formulation allows for the natural short-run variation in inflation over the cycle while preserving a clearly identifiable performance benchmark over time.\(^{108}\)

The Federal Reserve or as its name implies, the Fed, has two predominant legislated goals, these being: price stability and full employment.\(^{109}\) For instance, in 1978, the Full Employment and Balanced Growth Act required the federal government to advance full employment and reasonable price stability.\(^{110}\)

However, numerous arguments have been advanced to support the reason why the Fed should place more emphasis on unemployment than inflation, the costs of unemployment being greater than those of moderate inflation.\(^{111}\) For instance, to summarise, the problems with placing greater weight on inflation than unemployment can be gleaned from the following points:

- inflation targeters around the world experience double-digit unemployment;
- costs of unemployment are significant as opposed to the costs of moderate inflation;
- a low inflation target cannot provide a buffer in the rise of unemployment associated with an adverse supply shock.\(^{112}\)

Reiterating, in 2007-2009 we experienced perhaps what can be regarded as the most significant recession since the Great Depression, as many have termed it - the *Global Financial Crisis*. Thus, some commentators have raised the debate as to what have we learnt from this crisis, its impact perhaps requiring a complete re-conceptualisation of inflation targeting, one from monetary policy inflation targeting to fiscal policy inflation targeting. Once again, the purpose behind this paper as to whether the accounting and tax system can, namely a progressive direct expenditure tax can act as a

\(^{107}\) Ibid.

\(^{108}\) Ibid.


\(^{110}\) Ibid.

\(^{111}\) Ibid.

\(^{112}\) Ibid.
tool of inflation targeting and, of course, whether it is viable to raise the inflation target without any major costs of inflation, but necessarily, maintaining the benefits of inflation?

For instance, as (Mishkin, 1995) argues, the stabilisation of output and inflation should be carried out by the monetary authorities as fiscal policy “...has lost its luster...” since the 1960s due to large budget deficits, and because of the doubts that exist by both economists and politicians of the timing ability of the political system in making tax and spending decisions in a manner that is timely in its quest in achieving a desirable stabilisation outcome.113 However, in the meanwhile, monetary policy has ever so more been at the center of macroeconomic policymaking.114

Thus, in this light, I will, in part, necessarily rearticulate in summary form the article written by Mishkin (2011) entitled ‘Monetary Policy Strategy: Lessons from the Crisis’ and thus, in some respects, challenge the neoclassical synthesis as it has been termed but also discuss some of the macroeconomic benefits of raising the inflation target.115

The Science of Monetary Policy Before the Crisis

1. Inflation is always and everywhere a monetary phenomenon

2. Price stability has important benefits

3. There is no long run tradeoff between unemployment and inflation

4. Expectations play a crucial role in the determination of inflation and in the transmission of monetary policy to the macroeconomy.

5. Real interest rates need to rise with higher inflation ie the Taylor Principle

6. Monetary policy is subject to the time-inconsistency problem

7. Central bank independence helps improve the efficiency of monetary policy

8. Commitment to a strong nominal anchor is central to producing good monetary policy outcomes; and


114 Ibid.

115 Ibid.
Financial frictions play an important role in business cycles.\footnote{Ibid.}

The first eight of these principles agreed to by almost all academic economists and central bankers.

After the Crisis: Fiscal Policy as a Tool of Inflation Targeting

- Raising the inflation target and inflation have significant macroeconomic benefits?
- Price stability in terms of the maintenance of purchasing power can still be maintained with a higher inflation target?
- Inflationary expectations, to the extent that it can be caught by the accounting and tax system, can be entrenched with implications for the policy ineffectiveness proposition?
- Implications for the time-inconsistency problem?

This takes me to the following point/s, what are the implications of a higher inflation target to the monetary policy transmission mechanism.

\footnote{Ibid.}
“The years between 1929 and 1933 witnessed the worst deterioration in consumers’ balance sheets ever seen in the United States. The stock market crash in 1929, which caused a slump that lasted until 1933, reduced the value of consumers’ wealth by $737 billion (in 2000 dollars), and as expected, consumption dropped sharply (by over $100 billion). Because of the decline in the price level in that period, the level of real debt consumers owed also increased sharply (by over 20%). Consequently, the value of financial assets relative to the amount of debt declined sharply, increasing the likelihood of financial distress. Not surprisingly, spending on consumers durables and housing fell precipitously: From 1929 to 1933, consumer durable expenditure declined by over 50%, while expenditure on housing declined by 80%.” (Mishkin, 2009)

The Transmission Mechanisms of Monetary Policy

(Mishkin, 2009) reports nine channels by which monetary policy may influence the level of aggregate demand and real output. These are:

1. Traditional interest-rate effects
2. Exchange rate effects on net exports
3. Tobin’s q theory
4. Wealth effects
5. Bank lending channel
6. Balance sheet channel
7. Cashflow channel
8. Unanticipated price level channel
9. Household liquidity effects.

It is thus necessary to discuss the implications of raising the inflation target. The major premise of the argument, there is an inverse relationship between interest rates and inflation, the lower the

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117 Above n, 90.
118 Ibid.
interest rates or the greater the expansionary monetary policy, the higher the inflation rate, as evidenced by the empirical evidence of monetary growth and inflation, at least in the short term. So the question, what are the implications of a higher inflation target to the transmission mechanisms of monetary policy and its relationship to Gross Domestic Product (GDP)?

The first and the most widely accepted, is the (1) interest rate channel.\textsuperscript{119} A monetary policy which is expansionary, causes nominal interests rates and, given price rigidity, real interest rates to fall.\textsuperscript{120} Falling real interest rates stimulate investment due to a reduction in the required rate of return of a project (cost of capital) and the cost of borrowing.\textsuperscript{121} As a result investment spending is stimulated.\textsuperscript{122} Similarly, consumption is stimulated which in turn stimulates aggregate demand and thus aggregate output.\textsuperscript{123}

The second channel by which monetary policy can affect real economic activity is through the (2) wealth channel.\textsuperscript{124} Interest rates can indirectly influence the prices of long-term assets such as stocks, bonds, and real estate.\textsuperscript{125} For instance, an increase in the money supply would lower interest rates which would in turn result in an increase in stock, bond, and real estate prices and as the value of these assets increase, households see that their wealth rises and firms see that the cost of financing


\textsuperscript{121} Ibid.

\textsuperscript{122} Ibid.

\textsuperscript{123} Above n 119.

\textsuperscript{124} Ibid.

\textsuperscript{125} Ibid.
investment through long-term securities fall.\textsuperscript{126} As a consequence, investment, consumption and aggregate demand increase.\textsuperscript{127}

Tobin’s $q$ theory is also relevant here. James Tobin developed a theory, known as (3) \textit{Tobin’s $q$ theory}, that explains how the monetary policy transmission mechanism impacts on an economy through its effect on the valuation of equities (stock).\textsuperscript{128} The following transmission mechanism of monetary policy “…defines $q$ as the market value of firms divided by the replacement cost of capital. If $q$ is high, the market price of rims is high relative to the replacement cost of capital, and new plant and equipment capital is cheap relative to the rmaker value of firms.” “Companies can then get a higher price for a stock issue in relation to the cost of facilities and equipment they are purchasing.” Investment spending will thus rise as firms can now purchase new investment goods with only a small stock issue. Thus expansionary monetary policy raises stock prices that leads to a higher $q$ and as a result a higher amount of invetment spending that leads to higher aggregate output.

(Knoop, 2008) and (Mishkin, 2009) further reports that the \textit{exchange rate channel} has an important influence in how monetary policy can affect the domestic economy.\textsuperscript{129} \textsuperscript{130} With the ever so more increasing of the internationalisation of economies coupled with the advent of flexible exchange rates, the impact of how monetary policy affects the unit of account (dollar, mark, crown, lira, etc…), which in turn affect net exports and aggregate demand is ever more so important.\textsuperscript{131}

\textsuperscript{126} Ibid.

\textsuperscript{127} Ibid.

\textsuperscript{128} Above n 90.

\textsuperscript{129} Above n 119.

\textsuperscript{130} Above n 90.

\textsuperscript{131} Ibid.
As domestic interest rates fall due to a monetary expansion, domestic dollar assets become less valuable relative to assets denominated in foreign currencies. The consequence, the dollar depreciates which makes domestic goods cheaper than foreign goods, resulting in an increase in export demand, reduces import demand, reduces the trade deficit and thus increases aggregate demand. (Mishkin, 2009) further supports the view that the exchange rate channel plays an important role in how monetary policy can affect the domestic economy.

The bank lending channel of monetary transmission operates as follows: expansionary monetary policy that results in an increase in bank reserves and bank deposits, increases the quantity of bank loans available which causes an increase in loans which causes investment (and possibly consumer) expenditures to increase and thus aggregate demand and output.

The balance sheet channel operates in several ways, for instance: expansionary monetary policy which causes a rise in stock prices results in an increase in the net worth of firms and so results in an increase in higher investment spending and thus aggregate demand and aggregate output as a result of a decrease in adverse selection and moral hazard problems.

The cashflow channel works by its influence on the cashflow, or the difference between cash receipts and cash expenditures. The expansionary monetary policy that results in lower nominal interest rates

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132 Ibid.
133 Ibid.
134 Above n 119.
135 Above n 90.
136 Ibid.
137 Ibid.
results in an improvement in firms’ balance sheets due to increasing cash flows. The increase in cash flow increases the liquidity of the firm (or household) and thus results in an easier assessment of the ability of a firm (or household) in the payment of its bills. The result, adverse selection and moral hazard problems become less severe, resulting in a rise in lending and economic activity.

The important feature of the cash flow channel is that the nominal interest rates affect firms’ cash flow. This differs in that we are looking at nominal rather than the real interest rate which affects investment.

**Household liquidity effects**

The credit channel focuses its attention on spending by businesses, but as Mishkin (2009) states “…the credit view should apply equally well to consumer spending, particularly on consumer durables and housing.” The balance sheet of a consumer is a major determinant or indicator of the likelihood of consumers’ suffering financial distress. As such, expansionary monetary policy that increases stock prices would result in an increase in the value of households’ financial assets thus reducing the likelihood of financial distress which would increase consumer durable and housing expenditure thus resulting in an increase in aggregate output.

Thus, having concluded the paper, I will raise the important issue of:-

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138 Ibid.
139 Ibid.
140 Ibid.
Issue for Debate…?

What is your view...in raising the inflation target in mitigating recessions and the Global Financial Crisis?

A 10-15% inflation target per annum without the costs, consequences nor effects of inflation...with a further 5% per annum...in a recessionary gap... (Re: consumer and business optimism, termed animal spirits by John Maynard Keynes)? by Julio Altamirano (Jnr)
Conclusion: Significance of Research

The question or key hypothesis of the paper was whether Nicholas Kaldor’s Direct Expenditure Tax (DET) can act as a tool of inflation targeting thus a challenge to conventional monetary policy inflation targeting with major implications to the broad fields of macroeconomics.

We thus have as a macroeconomic tool to combat the inflationary and recessionary gaps, challenging conventional wisdom in that only monetary policy can act as an instrument of inflation targeting:

- is a simple, fair, efficient, flexible and progressive tax on consumption
- acts as a buffer against deflation
- allows for a higher inflation target
- overcomes most of the costs of inflation
- maintains purchasing power
- with no lags
- entrenches inflationary expectations to the extent captured by the accounting and tax system potentially combating the policy ineffectiveness proposition
- allowing for a short run and (potentially) more favourable long run tradeoff between inflation and unemployment
- mitigating recessions and depressions including that of the current Global Financial Crisis
- stimulating foreign direct investment
- facilitating higher economic growth in the short; medium and the long run...

Thus, significant macroeconomic problems overcome and major macroeconomic benefits to be achieved – on the policy or politics of the progressive direct expenditure tax (fiscal policy) as a tool of inflation targeting – should we raise the inflation target?
APPENDIX

Figure 1.1  Model Form for a Direct Expenditure Tax Return

Statement A: Income

<table>
<thead>
<tr>
<th>1.1 Income</th>
<th>10,000</th>
</tr>
</thead>
</table>

Statement B: Purchase and Sale of Investment Assets

<table>
<thead>
<tr>
<th></th>
<th>Purchases</th>
<th></th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Asset</td>
<td>Price Paid</td>
<td>Type of Asset</td>
<td></td>
</tr>
<tr>
<td>Capital Stock</td>
<td>4,525</td>
<td>Bonds</td>
<td>750</td>
</tr>
<tr>
<td>2.1 Total Purchases</td>
<td>4,525</td>
<td>2.2 Total Sales</td>
<td>750</td>
</tr>
<tr>
<td>Net Balance (2.1 minus 2.2)</td>
<td></td>
<td></td>
<td>3,775</td>
</tr>
</tbody>
</table>

Statement C: Borrowing and Lending

<table>
<thead>
<tr>
<th></th>
<th>Lending</th>
<th></th>
<th>Borrowing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Borrower</td>
<td>Amount</td>
<td>Name of Lender</td>
<td>Amount</td>
</tr>
<tr>
<td>Peter Summers</td>
<td>50</td>
<td>Middletown Trust Company</td>
<td>1,000</td>
</tr>
<tr>
<td>3.1 Total Lending</td>
<td>50</td>
<td>3.2 Total Borrowing</td>
<td>1,000</td>
</tr>
<tr>
<td>Net Balance (3.1 minus 3.2)</td>
<td></td>
<td></td>
<td>–950</td>
</tr>
</tbody>
</table>
Statement D: Cash Holdings and Bank Deposits

<table>
<thead>
<tr>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>Amount</td>
</tr>
<tr>
<td>Net increase in cash holdings</td>
<td>Net decrease in cash holdings</td>
</tr>
<tr>
<td>Net addition to bank deposits</td>
<td>Net reduction in bank deposits</td>
</tr>
<tr>
<td><strong>4.1 Total Increase</strong></td>
<td><strong>4.2 Total Decrease</strong></td>
</tr>
<tr>
<td>300</td>
<td>125</td>
</tr>
<tr>
<td><strong>4.3 Balance (4.1 minus 4.2)</strong></td>
<td>...........................................................................</td>
</tr>
</tbody>
</table>

Statement E: Expenditure

<table>
<thead>
<tr>
<th>5.1 Income (1.1)</th>
<th>10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2 Net balance from Statement B (2.3)</td>
<td>3,775</td>
</tr>
<tr>
<td>5.3 Net balance from Statement C (3.3)</td>
<td>- 950</td>
</tr>
<tr>
<td>5.4 Net balance from Statement D (4.3)</td>
<td>175</td>
</tr>
<tr>
<td>5.5 Total (sum of items 5.2 through 5.4)</td>
<td>3,000</td>
</tr>
<tr>
<td>5.6 Expenditure (5.1 minus 5.5)</td>
<td>7,000</td>
</tr>
</tbody>
</table>