Synopsis

In a world of plenty many people ask why charities exist at all?

Those that exist are struggling to raise funds for the people and projects they support.

This essay calls on World Governments and financial institutions to recognise and enact new institutions which the new Bretton Woods accords have failed to introduce. (The new Bretton Woods agreement has essentially modified existing institutions, and is due to be implemented January 2013)

A financial institution needs to function correctly and to ensure its sustainable viability this essay also looks at the reasons/objections which have been raised to totally transforming the worlds economy from a poverty accelerator, into a poverty reducer, without class distinction.

Firstly it calls for a new NGO (Non Governmental Organisation) as a non – private central bank to shelter the most vulnerable in the world, namely Children, those who are not able bodied, and traditionally Woman.

Secondly in Appendix 1 a survey of just how much is available to the worlds poor is available. In Appendix 2 a look at a previous dissertation in 2005 (economics in the construction industry) and how it looked to remove the threat to the public and wider society from collapse, due to the accepted world finance system, any project or home employs (unsustainable debt economics). Since then the world economic system collapsed.

Contents

Synopsis Page 1

Abstract Page 3

- 1.0 Working Title. Introduction Page 4
- 2.0 Summary Background and Motivation Page 4
- 2.2 Objectives Page 5
- 3.0 Rationale. Page 5
- 4.0 Literature Review. Page 9
- 5.0 Research Methodology page 20
- 5.4 Research approach & methodology page 21
- 5.5 Analysis Page 32
- 5.6 Conclusion Page 43
- 5.6 Programme.Page 45

Appendix 1 "A Portfolio for the Poor" page 46

6.0 Bibliography & Literature. Page 51

7.0 References (Notes) Page 57

<u>Appendix 2</u> Dissertation 2005 Pages 60 - 259 "Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?)"

"Interest rates, (raising or lowering) does it control inflation or cause inflation"?

Abstract

"One reason is that some believe that the charging of interest sets up a growth compulsion in the economy and that, as perpetual economic growth is unsustainable, the development of a no-interest bearing banking system is a key towards building a sustainable economy"

Douthwaite, Richard and Jopling, John (editors) 2004.

1.0 Working Title.

Interest rates, (raising or lowering) does it control inflation or cause inflation?

2.0 Summary

This Thesis aims to discover if inflation can truly be controlled by raising or lowering interest rates. Alternatively if inflation or hyper inflation continues within our economic system, can it be shown that interest at any rate charged, may be the main cause of inflation.

As the inflation and expansion of the money supply increases, and as the deflation and decreasing of the money supply decreases, the value of the available currency is regulated within this monetarist model.

As the currency is the method of exchange within this model, the general level of prices of goods and services is set by the rise and fall of the amount of currency in circulation, since the currency and its value is set by this system.

Therefore can the highering and lowering the rate of the interest charged to the public and business on monies in circulation, control inflation, and therefore prices (*Hill, Griffiths & Lim 2008 page 3*)¹ or further exasperate inflation of goods and services, (*Soddy Frederick Professor 1961*)² or can fiscal policies such as income tax rates and decreasing or increasing government spending bring about the same result. (Freidman, Milton (1968) A Monetary and Fiscal Framework *1968*)³

The question as to whether fiscal adjustment decisions are secondary to the inflation or deflation of the currency in circulation, or whether the supply of currency determines fiscal policy is a question which is naturally realised by determining the answer in the working title. (*Lewis, Kenneth A, Seidman, Laurence S* 2005)⁴

2.1 Aim(s).

The aim is to examine the problem in the summary at 2.00 and ascertain which would be the correct course of action amidst increasing inflation. Whether to increase or decrease interest rates or contract or increase the amount of currency in circulation, or would it be wiser to adjust tax rates or government spending.

Do domestic fiscal policies arise from government at cabinet level or from the supply of the currency in circulation determining prices, in turn determining economic forecasts, from which government fiscal policies and adjustments take shape.

2.2 Objectives

The two aims above will be achieved by comparing the historical cases for against the idea of how or what money should do and what it actually is.

Further in Appendix 1 entitled "A Portfolio for the Poor" we will take three models of debt and poverty relief and calculate how much (as far as the available data permits) money any one person or government could expect to realise)

3.0 Rationale.

Wealth, virtual wealth and debt, Professor Soddy (1961) explains writing in 1933

"The state of Europe at the present time, and of its once proud nations reduced severally to internal chaos and many to despair, is eloquent to the rule of the banker" and

"This is the natural consequence of a scientific age in which there would never be any fear of shortage of wealth to distribute, if the money supply did its proper part in distributing it. That is the only real issue – Are people artificially to be kept poor by the money system or allowed naturally to prosper" ⁶

The first statement can be applied not just to Europe but to the whole world, as can the second statement.

Professor Soddy is also implying that the scientific age has documented far more complicated matters and solved them far more easily than the problem of wealth, virtual wealth and debt.

Taking his rationale, simply stated we are all implicit in this internal chaos and despair, of worldwide poverty amidst riches.

When we realise that the <u>BIS Basel 3</u> report "Consultative Document Strengthening the resilience of the banking sector" Page 2 April 2010 states,

"Ultimately the public sector had to step in with unprecedented injections of liquidity, capital support and guarantees, exposing the taxpayer to large losses", BIS Basel 3 report April 2010

Ana Carrie (now Ana Nelson, earned her Phd in Economics at Trinity college Dublin) explains that her analysis of interest free banking in Sweden produced positive results, (below) and explain Richard Douthwaite and John Jopling (editors)

"One reason is that some believe that the charging of interest sets up a growth compulsion in the economy and that, as perpetual economic growth is unsustainable, the development of a no-interest bearing banking system is a key towards building a sustainable economy" Douthwaite, Richard and Jopling, John (editors) 2004.

Therefore the search for the real cause of inflation is placed upon society for its own benefit.

Here we have one rationale for finding the main cause of inflation in society, unsustainable growth (every country in the world has resultant debt)

A further concern is that interest rates act like a tax (an extra unnecessary tax) on incomes and prices and therefore living standards. Ron Paul a US election candidate in 2008 and is an American Medical Doctor and Republican U.S. Congressman for the 14th congressional district of Texas. Paul serves on the House Foreign Affairs Committee, the Joint Economic Committee, the Committee on Financial Services and is Chairman of the House Financial Services Subcommittee on Domestic Monetary Policy.

Here Ben Bernanke chairman of the federal reserve bank is agreeing with Ron Paul that interest as inflation is indeed a tax. Yet this tax costs Trillions and can never be repaid

http://www.youtube.com/watch?v=D4yBrxmEOkY&feature=related Bernacke, Ben (2008) inflation is a tax Video

Continuing with the question as to what causes inflation?

Since we are eloquent to the banker, (as one opinion, see above) the public and commercial business (which are in effect one and the same)

'we live, sleep and work within a monetarist money system, which employs the "multiplier effect" model the banks employ, itself presented by the (MO,M1,M2, M3 & M4), MO – M4 "Compensating money supply" system.

"As a brief explanation of this model, which will be demonstrated by a chart & graph in this thesis, coins ands notes, known as

1. "MO", i.e. cash, = the debt free money created by the government in existence.

2. "M4", the money supply, which is in two parts:

Part 1) The total debt of borrowed money, (a lending counterpart of)

Part 2) The total money supply.

Since 1982, the lending counterpart (part 1,the debt) has exceeded the total money supply; (part 2), the latter is in any case borrowed into the economy itself as interest bearing loans. (Bank of England, 1982).

Example total money supply 800 billion, total debt 850 billion and therefore all the money created (M4) is created as debt.(except the current MO no 1)

Without calculating the money multiplier effect, (the ratio of MO/M4), in 1997, the total amount of MO (debt free cash) was 3.6% of money supply, compared to 19% in 1967. (Bank of England, 1967).

If the MO was substantially increased, (i.e. a source of debt free money already in existence) many firms may well face less of a strain, with simply having no interest to repay as it could be lent as credit without having to charge interest. Companies borrowing £125 million at 7%, have to pay back over £8 million a year in interest, and this is a meagre borrowing requirement compared to many other industries and firms.

This could apply to any and every procurement model we employ.

Private finance initiatives are financed by borrowing (Begg et al) from the banks.

Government bonds are "iou's" set against the current level of the national debt, which once purchased, promise's higher rates of return in the future. As the national debt increases so does the size of the bond, even though its increase is a negative. (stocks and bills known as gilt edge securities).

As payments to meet the increase value of the bonds is also made from taxation there is a massive shortfall in government revenues, which the government raises by selling more bonds, to fund the PSBR (public sector borrowing requirement), a continuing re-mortgaging of debt and maturing bonds. (essentially an "iou" merry go round which is never repaid).

The increased value of the bond is known as the interest on the national debt which increases the national debt and so on.(this profit known as interest, is therefore interest on a debt, a negative amount, a double negative producing a positive but not for the public)

Whether these bonds are bought by banks to pass on as capital to produce credit to the construction industry or by private institutions/ individuals to fund a construction project, all of it was originally borrowed into existence at some point and acquired by the government in the M0/M4 model, at interest yet still having its origin from the nations taxes.(Rowbotham)

Those taxes service the national debt repayments, and the private construction industry and the public sector additionally pay interest on money from the banks, which it raises from bonds or by credit directly from the bank of last resort, itself borrowed into existence against a large negative of debt, itself accumulating interest.?

Therefore the public sector if financed directly from the government, or projects financed through PFI, all have interest charges to contend with. Even the "private" funding originated in public taxation. True private funding of a project would involve a consortium of individuals who invest their savings directly into a project.

Many PPP (private public partnerships funded by private finance initiatives, are often subsidised causing similarities to the funding of projects prior to 1979 but post world war 2 models of nationalised ministries in health, education and transport).

An increase in the MO (a source of debt free money/credit), is the only other alternative short of the public knocking up a building themselves out of natural materials they already own. An increased source of MO could become a new type of procurement model itself, which we could call C. (Traditional government funded being A, PPP and PFI being B). As current borrowing means construction firms feel they are working for the banks, the new procurement model C, could be funded 100% by taxpayers money (our money) directly, and save the public purse money to boot.(i.e. credit without interest)

The bidding process for PFI projects can cost a contractor/consortium up to £100 million a year in red tape and transaction costs (Allen et al), a new procurement model may attract, new bidding models and consortiums/contractors, this however is outside of this current research.

As the "multiplier effect" model (as any economic model) is only possible due to the taxes (and taxpayers), funding it. Any easing in a construction company's operations could help increase time for decisions, quality and value for money. If so, this could bring a viable benefit to the construction industry and the public. As we examine many countries debts today, we see that they are above 100% of GDP, whilst MO (debt free money) has decreased? Working within this model (which requires a working explanation), not having to pay interest may ease the company's worries, and it is to their outgoings that this rationale is primarily concerned' **Kelly 2005**⁹.

4.0 Literature Review.

In 2002 Ben Bernanke suggested making interest rates to Zero %, to ease a credit crisis and avoid a repeat of the great depression, when credit was frozen causing hardship and poverty to business and consumer alike and also mass unemployment. ¹⁰(Bernanke, Ben S. 2004).

Ben Bernanke is the current chairman of the Federal Reserve Bank in America, arguably the largest lending institution in the world and although he has said that many decisions of government are government fiscal policy decisions alone.

"The arithmetic is, unfortunately, quite clear. To avoid large and unsustainable budget deficits, the nation will ultimately have to choose among higher taxes, modifications to entitlement programs such as Social Security and Medicare, less spending on everything else from education to defence, or some combination of the above. These choices are difficult, and it always seems easier to put them off, until the day they cannot be put off any more. But unless we as a nation demonstrate a strong commitment to fiscal responsibility, in the longer run we will have neither financial stability nor healthy economic growth" ¹¹Bernanke, Ben S 2010

It is obvious that monetary initiatives are framing fiscal objectives. Bernanke like Milton Friedman believed it is simply possible however too helicopter in large amounts of credit (by quantitative easing, or a credit glut or outpouring) to curb deflation and stimulate the economy (monetarism), yet still simultaneously require fiscal tightening to

"To avoid large and unsustainable budget deficits, the nation will ultimately have to choose among higher taxes, modifications to entitlement programs such as Social Security and Medicare, less spending on everything else from education to defence, or some combination of the above" Bernanke, Ben S 2010 and therefore also take a Keynesian philosophy, in effect separating the two theories from a standpoint of a monetarist position or institution.

In other words having (almost) two methods of finance running alongside each other, one bailing out the banks, the other restricting credit to governments and departments of finance.(i.e. society), but this is also recognised by Nobel peace prize winner Muhammed Yunus

"Can conventional banks run microcredit progammes? Of course they can" Yunus, Muhammed. (2007)

Whilst Marxist economics are entirely controlled by the state, (post earlier Soviets) including the means of production, Under National Socialism the veneer of private ownership is maintained, but actual control lies in the state, exercised via regulations and government controlled trade associations. In so called free enterprise economies both the means of production and the economy and banks are controlled by private concerns with only a veneer of government, whilst Keynesianism provides a third way, called interventionism. The free market is kept but is massively regulated and interfered with to support the Bankers Prerogative to create their own money from thin air. Such practices are incompatible with the gold standard, Keynes advocated in his book the General Theory that the gold standard be replaced with a 'green cheese factory' in the form of a central bank.¹⁴

"In this way, the interest rate becomes the essential element of the economic activity. This interest rate is considered by Keynes as a pure financial variable which level is determined not by the supply and demand of loans (as the traditional economics assumes, because the supply and demand are not linked) and rather by the supply for money and the demand for liquidities. Consequently, the interest rate is transforming, according to Keynesian theory, from a price determined by the trade off between present and future, in a price of money or, in other words, a price of liquidity. In this context, a decrease in interest rate is the same with an increase in the quantity of money and because "free market economy is like a broken car or a car without a driver" [Skousen, 1997]" 15

Serban, Oprescu George-Laurentiu, Serban, Oprescu Anca Teo Dora (2000) page 471

However if all the worlds Gold or majority of it is also bought by private central banks then they still control the price of money, and not society, which is one stage further than either, Marxism, National Socialism, Keynesian interventionism or private unregulated government backed by a central bank.

Professor Yunus is advocating a new system from the ground up to support the world's poor who are in the majority, whilst recognising that the poor "They have no control over capital. The poor work for the benefit of someone else who controls capital" Yunus, Muhammed. (2007) page 114

Increasing the money supply and restricting it may lead to inflation of the currency in a monetarist model, and deflation of the currency in a Keynesian model, with the hope that zero interest rates (at base rate) will further lead to desired low inflationary model the federal reserve requires.

Borrowing remained above base rates of zero for mortgages and loans during this period, and recently the Bank of England has admitted that inflation still occurs when base interest rates are 0.5 % or less

"Scariest of all, Andrew Lilico, chief economist at think tank Policy Exchange, suggested that interest rates might have to rise to 8% if a double-dip is followed by an inflationary boom, a ruinous prospect for many British households. The RPI index is running at 4.8% and CPI – the measure targeted by the Bank – at 3.1%, forcing governor Mervyn King to put pen to paper for the third time this year to explain to the chancellor why he has missed his 2% goal; it is turning into an expostulatory bad habit.

There has been plenty of speculation over why inflation remains so stubbornly high.

The Bank points to temporary factors such as the high oil price, the rise in VAT and the weakness of the pound, which has made imports more expensive. Monetary policy committee member Paul Fisher theorized in a recent speech that the actions taken to mitigate the effects of the slump – low rates and quantitative easing – meant the UK economy behaved differently than in previous downturns. Fewer companies have gone under; dole queues are shorter than in the 1980s and 1990s recessions, as employers have kept workers on part-time, and many firms have maintained prices, rather than cutting them. Optimistically, the recovery might be a mirror image of this". ¹⁷

Sunderland, Ruth (24 Aug 2010) http://www.guardian.co.uk/business/2010/aug/24/bankofenglandgovernor-interest-rates

The Federal Reserve Bank of America considers interest rates to be a factor in inflation,

"The improvement in labour market conditions will doubtless have important follow-on effects for household spending. Expanding employment should provide a lift to personal disposable income, adding to the support stemming from cuts in personal income taxes over the past year. In addition, the low interest rates of recent years have allowed many households to lower the burdens of their financial obligations.

Although mortgage rates are up from recent lows, they remain quite attractive from a longer-run perspective and are providing solid support to home sales. Despite the softness of recent retail sales, the combination of higher current and anticipated future income, strengthened balance sheets, and still low interest rates bodes well for consumer spending".

Bank of international settlements Federal Reserve Board (July 21st 2004) *Semiannual Monetary Policy Report to the Congress* Alan Greenspan (5th paragraph) http://www.federalreserve.gov/boarddocs/hh/2004/july/testimony.htm

On the evidence it seems as if low interest rates do give rise to inflation, as the attractive rates encourage borrowing and cheap credit. Employment is also expanding, again combining contradictory expected results from opposing schools of economic thought.

Whether it is 2003/2004 or 2010 inflation continues with high employment or low employment, or whether credit is contracted or expanded? Further interest rates have been kept low as quantitative easing continues worldwide, and whilst some schools believe that inflation can only be checked in the short to medium term under normal economic conditions, the Trillions which have been helicopterd (Ben Bernanke quote) in from the central banks since 2008 (and before) to date in 2011 means that this three year period could be considered a longer period at least in terms of the amount of currency issued by the central banks.

Bernacke's move to make interest rates 0% in a monetary model would lead to inflation of the currency, yet in a credit crunch perhaps, a 0% rate = inflation does not occur. There has been a credit glut in quantitative easing at near levels of 0% interest since 2008? in contrast to the credit crunch all combined with rising unemployment and housing repossessions worldwide? Can it be argued that when interest rates are at 0% a liquidity trap follows? **Pigou, Arthur Cecil (1951)**¹⁹ (liquidity trap, inability to issue credit as bonds with attached interest)

Silvio Gesell was an advocate of "free money" Gesell Silvio, (1934)²⁰ a term that implies it is free from repayment and naturally interest also, in effect money acts like a credit instead of a debt, and he was admired by both Irving Fischer and John Maynard Keynes. Social credit sought to alleviate over production in the capitalist and socialist systems "through its proposal to sell goods below cost and to make up the difference to the manufacturer and vendor by an issue of social credit"²¹ Soddy Frederick Professor (1961)

Major Douglas, (social credit) argued that having a National Public debt and reducing its burden by issuing increased credit to manufacturing (causing prices to rise) is a circular argument. If issued to the consumer it would balance out the equation of the rich get richer and the poor poorer. **Douglas C.H** (1933)

Marx (1906) traces the origin of banking to both Genoa in the 14th century, and to Amsterdam in 1603, and from there to England in 1698, being as the bank of England was modelled directly on the bank of Amsterdam. Forming a marker also of the internal revolutions in the Dutch Republic, which directed and preceded the English civil war and the Glorious revolutions of Britain.

Going back into history further this type of economics has been prevalent since the dawn of history

Plato regarded the creation of Credit as an implication of a lack of trust and was hostile to its use, Scott B MacDonald,

Albert L Gastmon

Whilst his pupil Aristotle (who later tutored Alexander the Great) commented on the "types" of money.

The Philosopher said of credit with interest "The most hated sort, and with the greatest reason, is usury which makes a gain out of money itself and not from the natural use of it." **Backhouse**

Aristotle concluded;

"Exchange of one good for another was important because it made the goods consumerable shoes could be measured in terms of wheat. But if the shoemaker did not want wheat, or the farmer did not want shoes, exchange could not take place, making it impossible to compare the two goods. How was this problem to resolved? Aristotle's answer was money."

Backhouse

Through the ratios of their exchange both shoes and wheat could be compared "and it is demand that makes goods consumerable, and money acts as a representative of demand".

Backhouse

Wealth and its acquisition however concerned Aristotle

"On the other hand, exchange simply for the purpose of making money is unnatural, for goods are not being used for their proper purpose. The unnaturalness of such activities is revealed in that creating wealth by exchange suggests that wealth could be accumulated without limit-something Aristotle believed to be impossible"

Backhouse

"Men by be rich in coin, he argued but starve for lack of food" **Backhouse** (quoting Aristotle)

These matters of right and wrong were related in Aristotle's Nichomachean Ethics and moral issues arising from natural Justice, laying the foundation for democratic ideals up until today.

"The loans enable the government to meet the extraordinary expenses, without the taxpayers feeling it immediately, but they necessitate as a consequence increased taxes" Marx (1906) which of course the nation pays increasingly.

Taxes are not collected for the benefit of the taxed Heinlein,Robert 2004

As much of tax revenues collected go to pay not only the national debt but also now to bailout banks.

"On the other hand, the raising of taxation caused by the accumulation of debts contracted one after another, compels the government always to have recourse to new loans for new extraordinary expenses." Marx (1906)

"A government can decide to make anything legal tender" Mayer

"The creation of money" writes **Martin Mayer** "is a political act, and the Roman Emperors, portraits are on the Roman coins for reasons beyond the vanity of the gentlemen involved, the enforcement of official money as a medium of exchange is one of the key attributes of sovereignty" **Mayer**

"Interest was forbidden by two synods (of the Christian church) in 787"

In 1552 there was a fresh prohibition against it, but legalised again under Elisabeth 1st

"wealth is a positive physical quantity, but debt is a negative quantity. It has no concrete existence, and is to the physicist an imaginary quality." **Soddy Frederick Professor** (1961)

The influential **Mandeville** in 1714, in his "Fable of the bees or public vices turned public benefits" introduced the philosophy that activity whether, it be building, crime, war, death and birth are all acceptable regardless of moral or conscience.

"Mandeville's fable was about a large, prosperous hive, well stocked with bees. Vice abounded, in that all the bees were driven by lust and vanity. Wealth was unequally distributed, but all the bees, even the poorest, were better off than they would otherwise have been. The reason was high consumption created employment. Every bee was kept busy attempting to satisfy another's demands. Even crime and fraud provided opportunities for honest employment — burglars provided employment for locksmiths" **Backhouse**

In construction terms money may be lent from the hive regardless if the bees can construct to any degree of competence quality is not the issue, "shortermism" is.

More familiar is **Adam Smith** and his wealth of nations "The pursuit of individual self interest was the quickest route to the improvement of the collective welfare" this view became the "predominant economic driver" **Allan et al,** but individual self-interest however natural is not the natural way to collective welfare.

"In the United states, prison-building companies lobby and bully state and federal authorities to introduce tougher penal policies and increase the incarceration rate, with striking success. As the power of corporations increases, it is not hard to envisage a situation in which law and order policies are driven by financial vested interests. This is a prospect which appeared to thrill Adrain Montague when he was head of the governments PFI'S taskforce. 'The prison sector' he boasted 'is becoming a commodity product, it is almost a production line' Monbiot

At the instigation of the Bank of England, (1660 to 1707) it had considered many proposals from the finest brains as to how it could be achieved to maximum effect for expansion. As many as 120 schemes were considered. One of them John Locke commenting on the new system said

"He (Locke) began by stating as a principle that there is only one difference between the Government which debases the coins and the criminal who clips them, viz, that the Government can oblige the people to accept the debased coins" of course they could also oblige the people to accept paper money, just as easily.

Locke continues after pointing out that such conduct would cost the state dear

"debasement will defraud the King, the church, the Universities and hospitals," he adds

"it will weaken the public faith"

Andreades.

day the trick was;

how gravity acted as a force bringing objects down to earth, eventually lost millions in the "south sea bubble". The South Sea Company simply tried to tie in its shares into the national debt, but was unable to sustain its expansion, and the Bank of England was left as sole venturer into this new scheme. **Hutchinson**The bank initially raised £120 million from its shareholders in the City, but its continued and simultaneous expansion was afforded by instigating, and controlling a national debt, raising its capital as credit gleaned not just from its reserves, but also from the debt of the national debt, which was classed as wealth or intrinsic money and able to generate more credit on money already classed as debt, and so on until a spiral of debt was created. To fund this to this

A participant in the way the Bank's philosophy would surface was Sir Isaac Newton, who although was able to foresee

"they issued a £1, the holder of the £1 note had the right to demand that the bank give him cash for his note, but, if he made that demand, the Bank had the right to demand the Government raise the £1 by taxation and repay the £1 worth of debt to the bank so that the bank might repay its £1 to the note holder" (the £1 they issued was created by the Bank, it did not exist before a loan request was received by them)

The plan had many critics even on the committee

Hollis

"Everyone can create money (quoting the economist Hyman Minsky speaking in 1986), the problem is getting it accepted." Mayer

A further development is the bank of England also had (From the original charter)

"The bank hath benefit on the interest of all monies which it creates out of nothing"

Hollis

The bank charged interest on taxes collected, back to the Government and to all.

This has led to the phenomenon of inflation, (John Lockes debasement worry above) which seeks to avoid any connection with debt economics, and it is debt which causes inflation **Rowbotham** (1998)

The explanation is there is too much money, chasing too few goods, yet everyday experience is; people (consumers) have too little money, (in their pockets) and there are too many goods, goods are piled high in the shops, and advertised everywhere incessantly. The gap between prices and incomes is never blamed. This gap is filled always by borrowing (mortgages, credit cards, bank loans, PPP and PFI projects bank loans). The very term inflation arose when banks inflated paper money as the currency, as paper (beyond its reserves), as debt, this inflation is caused by printing currency at the stroke of a pen into existence, causing the gap between prices and incomes, which needs more borrowing to meet the gap (the national debt) **Rowbotham**.

Much of this gap in 2004 was plugged by 'non-status lenders' or loan sharks to the tune of £16 billion, with APR's as high as 365 % and 1,564 % on the original loans.

http://www.neweconomics.org/gen/z_sys_PublicationDetail.aspx?pid=129

Valuing the labour of the worker, (as opposed to the hirer) as a commodity, and giving the worker (or taxpayer) the total profits as a result of that labour (and controlling the method of manufacture), was a method of filling the gap between prices and wages **Marx**

"And with the rise of National debt making, want of faith in the national debt takes the place of Blasphemy against the Holy Spirit" Marx

Therefore and since no philosophic or religious view, aligns debt with faith the consuming taxpayer could benefit from non-inflationary, interest free loans, if they were available?

"So it is clear that a fault exists in the money-lending function of the banking system. The very mechanics of the lending produces misrepresentation; it is dishonest. Yet it has become an accepted practice. It has been legitimised."

Tomlinson 22 Kelly (2005)

Adam Smith the "father of capitalism" said

"The legal rate ought not be much above the lowest market rate. If the legal rate of interest in Great Britain, for example, was fixed so high as eight or ten per cent, the greater part of the money which was to be lent would be lent to

prodigals and projectors [promoters of fraudulent schemes], who alone would be willing to give this high interest. A great part of the capital of the country would thus be kept out of the hands which were most likely to make a profitable and advantageous use of it, and thrown into those which were most likely to waste and destroy it.

When the legal rate of interest, on the contrary is fixed but a very little above the lowest market rate, sober people are universally preferred, as borrowers, to prodigals and projectors. The person who lends money gets nearly as much interest from the former as he dares to take from the latter, and his money is much safer in the hands of the one set of people than in those of the other. A great part of the capital of the country is thus thrown in the hands in which it is most likely to be employed with advantage". ²³

Naked Capitlaism blog http://www.nakedcapitalism.com/2009/04/adam-smith-warned-against-subprime.html April 6, 2009

Therefore advocating limits on usury lending practices.

Noam Chomsky describes Adam Smith as follows, "He's pre-capitalist, a figure of the Enlightenment. What we would call capitalism he despised" Chomsky Noam (1996)

Adam Smith as a pre-capitalist figure may not have envisaged current central banking monetarist problems, which have also eaten into the choices made by fiscal decision makers. At the very least fiscal alterations envisaged by Ben Bernanke in reforming the United States health care system would be eased considerably if taxes collected did not have to repay internal national debts or fund increased borrowing requirements. Fiscally limiting the money available too taxpayers is also a monetarist creation, and the circular argument of which school of thought between Milton Friedman, John Maynard Keynes and the Austrian school are negated at the origin of their opening discussions, and can never close on the arguments, in the circular incomplete assessment.

Ben Bernanke in his speech to the Federal reserve bank of America in November 2002,

"But the U.S. government has a technology, called a printing press (or, today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at essentially no cost. By increasing the number of U.S. dollars in circulation, or even by credibly threatening to do so, the U.S. government can also reduce the value of a dollar in terms of goods and services, which is equivalent to raising the prices in dollars of those goods and services. We conclude that, under a paper-money system, a determined government can always generate higher spending and hence positive inflation.

Of course, the U.S. government is not going to print money and distribute it willy-nilly (although as we will see later, there are practical policies that approximate this behavior). Normally, money is injected into the economy through asset

purchases by the Federal Reserve"²⁵ **Ben S. Bernanke, Federal Reserve Board (November 21, 2002)** http://www.federalreserve.gov/boarddocs/speeches/2002/20021121/default.htm

Debt is itself an asset as are bonds also first produced as debt via a central bank of origin. However it is clear that before a fiscal policy can be arrived at a government department must first borrow its starting capital as an asset to be repaid as a liability, like any business in operation today, yet who do not have the added advantage of receiving quantitative easing (bailouts), like a private central bank can make to its banks of second instance.(high street banks, commercial banks)

Fiscal policy is therefore secondary to monetary policy and must work for it. Raising interest rates or lowering then will control inflation of new money into circulation in the short term, but charging interest from source as debt instead of credit can only lead to more debt and increased interest payments requiring more money to be circulated increasing inflation.

Since this is the source of the money supply it must be the first instance of inflation. Prices (such as oil or scarcity of oil must logically be a secondary source of inflation, both causing inflation) everything else remaining equal or the same (*Ceteris Paribus*). In a linear model, bonds for instance carry more risk over a longer time period, despite Ceteris Paribus, making risk in the short term less risky (risk of risk). Bonds at inception therefore carry less risk, yet are still prone to inflationary problems as they carry interest upon them.

An obvious solution perhaps like a zero coupon bond (issued by the federal reserve bank, and other central banks) is to have a interest free bond, which of course could only work if its original issuer, issued the bond only at face value without interest attached. Of course in a sovereign society a bond may not even be required at all, since society is bonded to itself, and elects accountants to carry a balance and profit sheet or inventory of accounts. Arguments against this, point out that Japan in 1999 -2001 began such a process, but its economy (as defined by Gross Domestic Product, or Gross National Product) went into decline, or into a liquidity trap (Pigou, Arthur Cecil 1951).

Although there were no reports in Japan at this time, of starvation or people generally feeling unhappy as measured by GNI indicators. Why does the liquidity trap occur at all, especially when we have today, A) A CREDIT CRUNCH & B) OUANTATIVE EASING (CREDIT GLUT)?

Japans economy recovered after its bubble crash, it then experienced deflation but not a deflationary spiral, prices lowered as a result and interest free loans were introduced to produce increased spending in the economy, and increase

inflation. Yes banks suffered during this time of deflation, *a liquidity trap*, but society or those who are landless, without assets, unemployed or employed did not suffer as much as when Japans economy went bust, or before it went bust. Japans bubble was brought about by strong GDP "overheating" or unsustainable growth rates. This speculative bubble was burst when prices (land especially) went through the roof, fuelled by low interest rates as cheap credit. Japans central bank raised interest rates very quickly in response, causing the bubble to burst in dramatic fashion. This is a familiar story repeated worldwide growth= overheating = bubble= crash. Yet Japans solution was to offer even lower interest rates (zero) after this crash (as we are seeing today 2008 – 2011)

This "see saw" of raising and lowering interest rates and Japans "lost decades" are a continuing contradiction to the point of absurdity.

"Indeed it was only when Japan had stopped bailing out its economy and let it crash that recovery began moving away from 'Zombie corporations' to sustainable growth which better suited them with interest rates at 0%". **Koo, Richard** (2009)²⁶

In other words a liquidity trap may well be the best result in our economy, moving slowly to a sustainable growth rate.

Of course "growth" can be induced and measured in many different ways. Yet we have to be wiser and wider in our view as Joseph Stiglitz explains,

"If we have poor measures, what we strive to do (say, increase GDP) may actually contribute to a worsening of living standards. We may also be confronted with false choices, seeing trade-offs between output and environmental protection that don't exist. By contrast, a better measure of economic performance might show that steps taken to improve the environment are good for the economy" ²⁷ **Stiglitz, Joseph E. 7 Sep 2009**

This mystery is all the more puzzling as commercial banks and even the world bank give interest free credit away constantly. (see appendix 1)

Bonds are repaid from taxes, and when tax receipts are reduced government spending is made up by borrowing more bonds (at interest) to only repay the old bonds again. The Federal reserve buys government bonds (from the government) who simply print them (jn the Federal Reserve Bank) Maynooth Finance lectures 2010 - 2011

(Contd at 5.4)

5.0 Research Methodology

1. A summary of the literature of the various economic reasoning for and against the thesis. Political and philosophical (theoretical) arguments will be examined to give a historical perspective.

2. A further step will be to collect data from the financial institutions.

This approach is quantitative, (when it possible to compare quantitative data relating to the question) qualitative, and theoretical and action based (Mixed methodology). (Rudestam, K.E. & Newton, R.R, were employed in my previous degree dissertation as an aid to making a thesis and again in this thesis in 2010 - 2011).

5.1 Outline of Chapter

This chapter describes what is the best method of data collection by the author to meet the aims and objectives.

Also described are the justifications for taking a particular decision in collecting data which is both quantitative and qualitative, using both interview and survey techniques.

5.2 Aim's and Objective's.

To discover the main thesis question namely;

"Interest rates, (raising or lowering) does it control inflation or cause inflation?"

Objectives

The aim above will be achieved by comparing the historical cases for against the idea of how or what money should do and what it actually is. This will be then compared to what the financial industry itself thinks on the subject now.

5.3 Data type.

Mainly qualitative, as data on this comparison is traditionally qualitative by its nature. Quantitative data exists only around the question and not directly assigned to the question. It is largely theoretical based.

5.4 Research approach & methodology

I will bring my research into this section as follows;

In March 1980 interest rates in the Federal Reserve Bank of America, reached 14.8%. Adult discount bonds or zero coupon (i.e. without interest attached in repayments by the issuer of the bond) were Introduced to counteract the rising inflation.

Although classed as zero interest bonds, they were merely issued as a bond including the base rate of the Federal Reserve (i.e. with interest of first instance) but created by separating the interest and principal payments of a bond and selling them at a discount. In other words a discount bond is sold as debt (as all bonds are).

Usually bonds are issued, and holders of the bond are obliged to pay interest (the coupon) and/or to repay the principal at a later date, termed maturity.

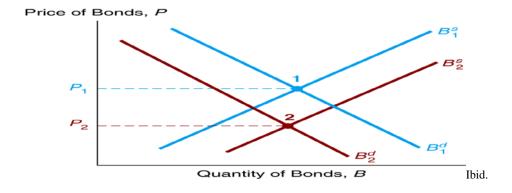
Without a coupon of interest dividend every 3, 6 or 12 months (compound interest rates on Treasury bonds have a day count convention for compounding interest) were a disincentive to speculators, and were likely to appeal more to social or small investment concerns, as at maturity both principle and interest are already paid.

However they actually outperformed many other types of bonds since interest rates were lowered in 2008, picking up towards 2009 and into 2010 according to the Myrill Lynch index for tracking bonds.²⁸ http://www.mlindex.ml.com/gispublic/bin/MLIndex.asp

Whilst they are a control on inflation, inflation still occurs upon issuing these bonds, which are considered to be the simplest bond of all. (with simple interest, not compounded interest)

"When expected inflation increases, the real return on bonds falls, so the demand for bonds falls (demand curve shifts in to the left. The real cost of borrowing falls so the supply curve shifts out to the right. Equilibrium moves from point 1 to Point 2. There is a lower equilibrium price and higher interest rate.

Depending on the size of the shifts of the supply and demand curves, the equilibrium quantity could increase, decrease, or remain unchanged. **When expected inflation rises, interest rates will rise" ²⁹ **Mishkin, Frederic. S. 2010**



Yet the graph (above) which explains that when inflation rises, interest rates will rise, could also state that when inflation is added to a bond, inflation follows.

"Usually we think that low interest rates are a good thing, because they make it cheap to borrow. But the Japanese example shows that just as there is a fallacy in the adage 'you can never be too rich or too thin' (maybe you can't be too rich but you can certainly be too thin and do damage too your health), there is a fallacy in always thinking that lower interest rates are better. In Japan, the low and even negative interest rates were a sign that the Japanese economy was in real trouble with falling prices and a contracting economy" 10 Ibid page 107.

Interest rates may be a tape worm in Mishkins analogy above.

However this circular argument just assumes interest as a given ? and just as it is confusing for example Keynes liquidity preference framework as to whether the interest rate determines the supply of money, or the supply of money determines the interest rate, we are not really given any theory of interest.

Irving Fisher gave us a basic theory of interest as follows;

Irving Fisher r = real interest rate, i = nominal interest rate, $\pi = inflation$ $i = r + \pi$, $r = i - \pi$, (with compounded future interest) = $i = r + \pi^e$ Fisher, Irving(1930)

Clearly the equation as to whether interest rates cause inflation or inflation gives rise too interest rate rises is circular. The Monetary base consists of MB = C + R (C = C), yet it is borrowed to the world in world wide open market operations on the basis of Time Value of Money (TVM). If you had an inflation rate of 1% and interest rates of 7%. There is a very high real interest rates (e.g.7-1 = 6%)

Therefore, this would encourage saving and discourage borrowing and spending. This is likely to cause a recession so Central Banks would avoid it. TVM **Time Value Of Money**

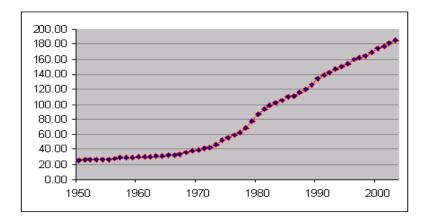
Lenders know that inflation will erode the value of their money over the term of the loan so they increase the interest rate to compensate for that loss. Therefore prices are always rising, despite the TVM adjustments and increased interest rates to curb spending and borrowing.

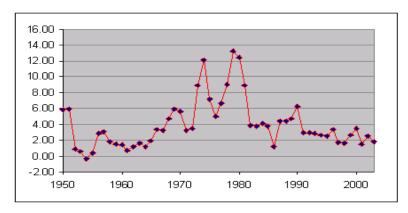
Yet if you invest one dollar (without interest) <u>today into one brick</u> and keep repeating the process in one year you will have one complete school.

Then
$$\pi^{e} = 0$$
 (no inflation)

(or of course however how much currency is inflated to raise the cost of a project or government spending)

Over a 50 year period prices and inflation have increased despite all the interest rate changes and efforts to curb the inflation tax.





 $\textbf{\textit{Top C} PI index } 1950 \text{ -} 2000 (consumer price index)$

 $\textbf{\textit{Below}}~\%~changes~in~inflation~1950-2000$

Source: US Bureau of Labor Statistics All Urban Consumers; All Items, Seasonally Adjusted 1982-1984=100

In the Japanese (lost decades) the Bond price rose and the interest rates fell, the opposite to the graph above, and as discussed, Japan actually started to stabilise after a fall in GDP, but not a fall in GNI, in much the same way Iceland has recovered today. This action by the bank of Japan followed a burst bubble of disastrous pro-portions, caused by a reliance on GDP growth rates from debt and borrowing. A significant part of the problem is that on top of the principle sum borrowed, many bonds are paid over and over again to the bondholders and the interest accrues to the national debt, which taxpayer's service.

A qualitative analysis of this Japanese liquidity trap can be inferred from Joseph Stiglitz view of GDP (in that it is harmful to the world economy, see the literature review) a recipient of the Nobel Memorial Prize in Economic Sciences (2001) and the John Bates Clark Medal (1979). He is also the former Senior Vice President and Chief Economist of the World Bank.

Can anyone state that Japan now is going to say, please do not help us as we are worried about inflation? of course not and inflation and its causes as concerns are secondary to feeding the world's poor, homeless and starving, not that it cannot be solved in any case.

Since in liquidity trap money supposedly has little demand, the Japanese example only proves monetarist's correct in that demand stops, but only because bonds (with attached interest) are bought usually by intermediaries on behalf of investors who pass on the added interest rate, (fee). The incentive is the coupon, (interest payment) and the demand for money is not increased by interest or interest does not increase the demand, only speculative gambling and money increases, which does not work or fund production efficiently in finance, if it is used for this purpose, until it is resold at added interest to a new party. Whichever way around the interest rate is theorised in a Keynesian or Monetarist model increasing the interest rate supply or money did not create demand in Japan, the demand existed without them. It is however unlikely that monetarist intervention alone could solve a zero interest rate bound problem (liquidity trap), and it would take fiscal Keynesian stimulus such as cutting taxes to households. Lewis, Kenneth A, Seidman, Laurence S (2005).

Yet cutting interest rates at source would also have the same effect by reducing debt and borrowing (many people are buying food on credit cards)

Therefore a demand for goods (or wages) increases the money supply, or indeed could just hold it constant for a considerable time preference. **Pigou, Arthur Cecil (1951).**

Yet goods themselves are so heavily advertised as to induce consumers to spend, and sometimes spend unnecessarily. Therefore whilst this demand is more accurate goods such as oil (prices) are secondary to the creation of money with attached interest.

If this seems impossible due to greed and corruption inherent in society, then private banks such as the federal reserve or private borrowers or investors cannot then hold the taxpayer to account as has happened, and as warned by the Basil 111 documents on banking reform, hence private should mean its own private money, (savings) not taxpayers or societies money. BIS Basel 3 report April 2010

A further view from Muhammad Yunus, Nobel peace prize winner, founder of the Grameen Bank, an institution that provides microcredit to poor people with no collateral, to help its clients establish creditworthiness and financial self-sufficiency, Muhammad Yunus and Grameen bank won the Nobel peace prize in 2006. Professor Yunus explained quite simply that in setting up a bank with no experience he would simply do the opposite of what a bank would do*. Consequently his loans were repaid and people built and carried on business without debt and with dignity.

Yunus, Muhammed (2007)

And also http://www.youtube.com/watch?v=JKDGDUw8RFA

Creating A World Without Poverty You tube, School of International and Public Affairs conference 27.1.2011 (*see youtube video at 16min 35 seconds and 17 minutes and 10 seconds)³²

Professor Yunus differentiates as to what is an economy, the poor and the rich.

This point however is not confined to "developing" countries, but also to 1st world economies such as Icelands economy. This is explained by Ólafur Grímsson, President of Iceland, on Radio Telefis Éireann & Prime Time (20 April 2010). Whilst the banking system collapsed the rest of the economy has actually recovered. http://www.youtube.com/watch?v=EuAkD57yI6c&feature=player_embedded#at=16³³

Joseph Stiglitz (also Nobel prize winner) says GDP is actually harming an economy.

Further Lamido Sanusi, the governor of Nigeria's Central Bank that shareholders of major banks made vast profits at the expense of depositors, creditors and taxpayers³⁴. (link) **BBC World News on Monday 28 March 2011**

Last but not least President Obama. He attained the 2009 Nobel Peace Prize was awarded to U.S. President Barack Obama for his extraordinary efforts to strengthen international diplomacy and cooperation between peoples. In an extraordinary moment for the world economy he persuaded the American government system not to bail out the banks, yet this incredible victory for democracy and economic democracy was stolen away, by vested interests who vetoed the move allowing instead the bank bailouts to proceed. The Michael Moore film "Capitalism a Love Story" showing this crucial vote which must still be a legal vote and should be implemented as democracy demands³⁵. **Moore, Michael** (2009)

Ana Carrie (now Ana Nelson, earned her Phd in Economics at Trinity college Dublin) explains that her analysis of interest free banking in Sweden produced positive results, (below) as Richard Douthwaite and John Jopling (editors) explain

"One reason is that some believe that the charging of interest sets up a growth compulsion in the economy and that, as perpetual economic growth is unsustainable, the development of a no-interest bearing banking system is a key towards building a sustainable economy" ³⁶

Douthwaite, Richard and Jopling, John (editors) 2004.

The bank in question the Medlemsbank (members bank) charges a fee for arranging a loan which works out at around 3%, however not all monies circulate with a 3% fee, and therefore this lending compulsion as growth compulsion is taken away and inflation is controlled. In effect like a discount bond (zero coupon bond) with the principal amount and fee (interest) built into the loan. (which as a further analogy could be set at a low rate of 0.005 % as the liquidity volume increases, so to the fee volume)

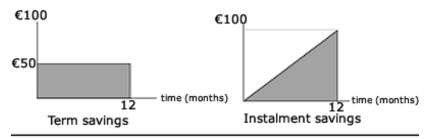
"All of the bank's activities occur outside of the capital market as its loans are financed solely by member savings. As of 2008 members saved 97 million Euros, of which 86 million are given as loans to members. Administrative and developmental costs are paid for by membership and loan fees.

JAK banking is made possible by saving points system: members accumulate saving points during saving periods, they use saving points asking for a loan. The main idea is that one is allowed to take a loan for himself in the same measure he allows other people to have loans, saving into his account. For this reason (asking for a loan), earned saving points must be equal to spent saving points to ensure sustainability. If a member is borrowing more saving points than he has, he is obliged to continue accumulating so-called "aftersavings" during repayment period. "Aftersavings" are a fixed quota of money that one must save after his loan was given, so they can continue earning saving points. This way, at the end of the repayment period, earned saving points will be equal to spent saving points, and at that time he will be able to have back all his aftersavings"

Ana Carrie explains as follows;

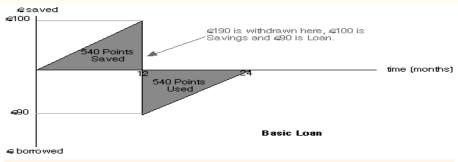
"For a new JAK member, the first step towards an interest-free loan is to save and thereby earn Savings Points. These are calculated as the amount saved, multiplied by the number of months for which it is saved, multiplied by a Savings Factor. This factor varies according to the type of savings account the member has selected and is lower (about 0.7) for a demand account from which savings can be withdrawn at any time. For example, assuming a Savings Factor of 0.9, we have ¹: €100 1 Month 0.9 = 90 Savings Points

The Savings Factor varies with the type of deposit account and is lowest for demand accounts where savings can be withdrawn at any time (about 0.7)

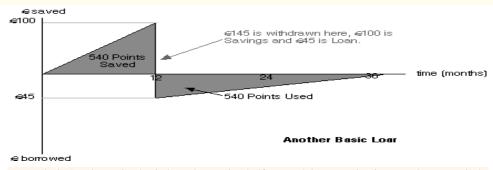


Example 1: Either of these scenarios would earn identical Savings Points.

After saving for a minimum of six months, a member may apply for a loan. In order to borrow \blacksquare for one month, one Savings Point must be redeemed. The amount borrowed and the time taken to repay are entirely up to the member, provided that the appropriate Savings Points are available. For example, borrowing $\boxdot 0$ (or $\boxdot 0.000$) over 1 year uses as many savings points as borrowing $\lnot 0.000$ over 1 year uses as many savings points as borrowing $\lnot 0.000$ over 1 year uses as many savings points as borrowing $\lnot 0.000$ over 1 year uses as



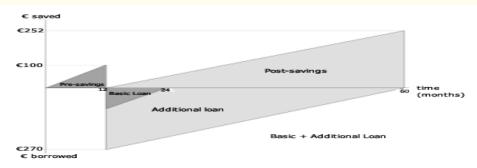
Example 2: A Basic Loan.



Example 3: An alternative basic loan, borrowing half as much but repaying it over a longer period.

In addition to a Basic Loan that uses Savings Points already earned, members may apply for an Additional Loan using Savings Points that will be earned in the future. An "Allocation Factor" (currently 14) is multiplied by the member's current Savings Points to determine the number of points available for an Additional Loan.

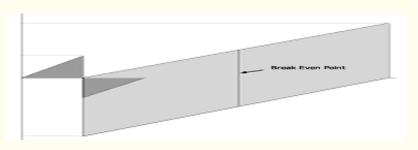
Each loan repayment includes a savings instalment, and the payments are structured so that when the loan is fully repaid, all necessary Savings Points have been earned. A consequence of this is that upon full repayment of an Additional Loan, the member has built up significant savings. Savings made during the course of repaying a loan are known as Post-Savings, while those that precede the loan are Pre-Savings. Once the loan has been repaid, the balance of the post-savings is available to the member to be withdrawn or, as frequently happens, to be used as the start of saving for a new loan.



Example 4: A Basic Loan with an Additional Loan.

There is no interest charged on a loan, of course, but members must place 6% of the value of the loan on deposit for the duration of the loan, and additionally pay a loan fee to cover administration costs. Members also pay 200 SEK (about €22) when they first join JAK and 200 SEK per year as a membership fee.

In general, people who can save regularly are good performers when it comes to loan repayments. The JAK system where saving must precede borrowing is therefore ideally suited to attracting these regular savers. In addition, around half-way through repayment of a loan there is a break-even point where the Post Savings on deposit are equal to the balance outstanding on the loan, and from this point forward the loan is fully secured by the member's savings.



Very few JAK loans end in default. Borrowers are decidedly involved "members" as opposed to disinterested "customers". Many feel quite strongly about the idea of interest-free banking and this common bond goes a long way towards encouraging good behaviour. Personal guarantors rarely need to be asked to make good on their guarantee.

Conclusions for JAK

The JAK Members' Bank is unique in the commitment it inspires from its volunteers and staff. It provides affordable and responsible finance, and enables its members to have a say in where their money is invested. I have no doubt it will continue to be true to its purpose and values while exploring new frontiers in ethical finance" ³⁷

Douthwaite, Richard and Jopling, John (editors) 2004.

& Ana Carrie (cached pdf as above)

http://webcache.googleusercontent.com/search?q=cache:http://www.feasta.org/documents/review2/carrie2.htm³⁸

"Interest transfers money the wrong way" Jak Bank report 2007

http://www.youtube.com/watch?v=aW2pj109Cr8³⁹

also http://www.anielski.com/Documents/The%20JAK%20Bank%20Report.pdf ⁴⁰ Anielski, Mark (2007) The JAK Members Bank, Sweden An Assessment of Sweden's No-Interest Bank

Conclusive evidence of an alternative banking system which separates both functions of banking, saving and lending, a model at macro level to help keep it out of the capital market and perhaps underpin the growing need to separate sovereign debt and bank debt in every country. The Glass–Steagall (second) Act (the Banking Act of 1933) allows for such a separation and was introduced in 1933 by Democrats in the United States at the height of the recession, and repealed by Republicans in 1999.

Just as Irving Fisher also framed his theory of interest, he also invented his stamp scrip.

"The two points about Stamp Scrip are: First: It is like money, because it can be banked OR invested OR spent. Second: It is unlike money, because IT CANNOT BE HOARDED. At the end of the 52 weeks of the allotted year, when a dollar of scrip returns to the city treasury for redemption, it finds there the \$1.04 which paid for the 52 stamps now carried on the back of the certificate. In short, when the 1000 dollar issue of scrip thus comes in, it finds \$1040 there ahead of it; and the extra \$40 defray the expense of printing the stamps and of administering the plan. Thus the scrip is self-liquidating".

Fisher, Irving 1933 & http://userpage.fu-berlin.de/~roehrigw/fisher/

Stock exchanges can increase liquidity of trading by reducing the cost of a transaction down to a few dollars, when the bid – ask spread is narrow. Users can now interface directly with the market through the internet, and the cost could in theory be reduced still further to % of cents per transaction to increase liquidity, and in a central bank the same logic should apply.

Ceteris Paribus cannot apply to monetarism and the inflation question as all things are not equal since the growth compulsion is fuelled by a compulsion to invest against expected return against other investments one could have made. This is assumed from a bonds inception, and discounted accordingly. It is hoped that the bond will outperform expectations. Since this is unknowable it cannot have all things equal and derivatives and hedging instruments are often employed to stabilize a bonds instability.(or the unequal economy)

Therefore monies issued as a bond, becomes an addition to a portfolio of many possible investments, rather than being issued as a benefit to aid society, even when issued to our national governments. The whole of society simply becomes a receptacle for its activities, and is forced into unsustainable growth rates. Often society cannot keep up, and Calvinistic overtones of making people feel guilty as they have not employed the 'good work ethic' are out of place

with real rates of work. Whilst profits are squeezed more easily in the short term in this model, (modernized production) wages and consumer value decreases due to the excess debt capital intensive production requires.

Traditional models on the other hand even if very inefficient, may have a high wage to operation cost, (subjective opinion) but overall with no debt and no inbuilt cyclical bust (and boom) it is, in the long run more efficient for individual workers and society.

With attached interest a retrospective is placed upon the bond to be issued at less than face value, in the hope its maturity value (original issued amount) reaches at least breakeven value or instead make a profit, an expected return, expressed as follows.

$$E(R_p) = \sum_i w_i E(R_i)$$

However the expected return is not the actual return and this is where the gambling or casino begins, society is placed into a race, a growth compulsion of speculation and uncertainty. Investments are placed upon taxpayers yet (T-bill federal reserve bonds) are classed as risk free to the bond bearer and holder, but not to society as a whole. (bailouts) A bond is calculated to hopefully offset losses it may have earned somewhere else, hence negative yield bonds are actually considered more attractive in a bust. It cannot apply to interest free banking as a loan from inception must be considered in itself first and foremost. This growth compulsion leads to the ever increasing search for profit leading to the law of diminishing returns (Monetarism) and the tendency for profits to decline over time (TRPF Marx) both leading to monopoly and ironically a lack of competition and of course no free trade of which Adam Smith was actually an advocate.

Marx when inspired by the workers co-operatives preceding him could not have imagined debt levels, personal, national sovereign debt and bank debt eroding real value of labour and money as it does today. Money flows uphill, like Archimedes screw which powered water uphill, it in effect places the cart before the horse, and leads every business, and social concern into a quagmire of searching for a profit induced motion which does not need to exist. Non-profit incidentally does not mean low wages for every worker, rather it must mean increased wages as it is spread across each contributing person. Therefore a corporation reporting a profit of 10 Billion must divide that profit before its 6000 workers equally, hence it is non-profit.

Interest free banking therefore would seem to smooth out this kink in the growth compulsion, yet examples such as the

Japanese central bank move to make interest free credit led to a "liquidity trap" (inability to issue credit) of non-existent GDP growth. Yet this negative view of its decision fails to account for the fact that the "interest free money" was issued as a bond in any case, with interest at base rate levels, in effect acting as a bank of second instance (high street banks) who have cut their level back to the central bank base rate. This still leads to a profit for the central bank, but lessens the "growth compulsion" to a steadier state. Naturally loans recovered but not at levels to induce GDP growth

Bonds are constantly re-issued as over decades, taxes cannot pay off the national debt, (known as the interest on the national debt) and borrowing ability is reduced, so more bonds are reissued too pay the interest on previous bonds or pay off the principle amounts, it's never ending and the Irish government are aware of this, as is every government on earth. People who pay off one credit card with another are in effect qualified to run any department of finance in any national government.

Just as a house valuation (price) is determined by how much you can borrow to purchase it (sometimes up to ten times a wage), rather than its true value, or how much you can afford, its value is inflated to allow for more money creation. Houses are no more scarce than 3-4 years ago, but the money to purchase a house is scarce (no liquidity), hence its value drops into negative equity.

Of course with interest a buyer pays 3 times the inflated value over 25 years in any case, on a house which possibly cost a quarter of its sales price.

Land is not scarce, its supply is 41 Cahill Kevin (2001) & (2010)

Savers who like high interest would actually save hundreds of thousands over 25 years, and of course they can place savings in banks which are not supported (bailed out) by taxpayers i.e. complete private banks.

5.5 Analysis Evidence for lack of liquidity trap with interest free credit.

- (A) In 2005 information collated from 428 construction companies asked them if they would like to receive interest free credit (428 sent, 155 returned, some questions were left blank in part)
- Q5 Would you like to receive interest free credit from the

Government or the lending institutions? YES 125, NO 21, making a positive response rate of 80.6%.

- (B) Further in 2005 Numerical results of the questionnaire survey sent to major Banks and Finance houses at a glance (350 sent, 105 returned, some questions were left blank in part), it yielded the following results;
- Q1 Have you ever offered interest free credit, for and towards traditional or PPP/PFI procurement model projects? YES 11, NO 86. (making 50 (32.25 %) of Companies felt they would take the time to consult the Government on this issue. The difference between wanting and achieving the idea being 125 (see question 3) 50 = 48.38%.
- Q2 Have you ever offered interest free credit (for the entire length of the loan) for any use.

 (or any construction project)? YES 2, NO 104. Similar to question 1 the results show that the idea is not pursued to any type of construction project across the board.
- Q3 Would you like to offer interest free credit for construction/procurement purposes? YES 2 NO 104 The idea itself is no change from questions 1 & 2, and clearly it is not a popular idea within banking, this contrasts sharply with the 80.6% of construction companies and property developers who admire the idea.
- Q4 Do you feel interest free credit would benefit business and the economy? YES 21, NO 85. 42

Contrasting with questions 3, in which the idea of interest free credit is clearly not popular with the banks and finance house's, although 1.8% of them said they would offer the service if they could, 19.1% of banks and finance house's said that such an idea would benefit business and the economy?⁴³ Clearly it would, by the same logic also benefit the construction industry.

The evidence here is that industry (the construction industry) in this case showed a desire for interest free credit (80.6%). Further interest free credit had indeed been offered previously but banks and finances felt constrained from

issuing interest free credit despite wanting too and feeling it would benefit the industry and construction companies (as did construction companies).

Therefore the "liquidity trap" is not an issue of demand but clearly of supply causing the liquidity trap.

A solution would therefore be to issue non-bonds, interest free, as money only, and back it without supporting legislation and government intervention, not just nationalisation but regulated –de-regulation of the supply of credit to society from private banks.

Kelly (2005)

Many sceptics say this is impossible and yet statistics from the Bank of England show that the money supply already issues interest free credit.(as follows).

'Without calculating the money multiplier effect, (the ratio of MO/M4), in 1997, the total amount of MO (debt free cash) was 3.6% of money supply, compared to 19% in 1967. **Rowbotham.** (1998)

Statistics since 1963 up to 2004 show the same pattern in monetary policy (see below) and a explanation of how and why this policy operates.M4 part 1 and 2, are one in the same as all money is borrowed into existence it does not preexist a loan agreement.

All of these types of money originate in the same printing press, the same point of origin, yet the MO is produced debt free (in the form of cash and notes) to the tune of Billions, it could easily be (also) created as all credit in the money supply (MCR) in open market operations, in any form of issue.

Year	Total of Coins & notes (M0) £ billion	Total debt (M4 Lending Counterpart) £ billion	Money Stock (M4) £ billion	Percentage of Money issued Debt-free (M0/M4)
1963	3.0	9.0	14.1	21%
1965	3.3	11.6	16.0	20%
1967	3.7	13.0	18.8	19%
1969	3.8	15.8	23	17%
1971	4.3	19.2	27	16%
1973	5.1	32	39	13%
1975	6.5	43	53	12%
1977	8.1	52	65	12%
1979	10.5	72	87	12%
1981	12.1	101	116	10.5%
1983	12.8	151	161	7.9%
1985	14.1	209	205	6.8%
1987	15.5	291	269	5.8%
1989	17.2	438	372	4.6%
1991	18.6	586	485	3.8%
1993	20.0	625	525	3.8%
1995	22.4	679	585	3.8%
1997	25.0	780	680	3.6%

Rowbotham 1998 (figures in Billions)

Bank Reform 2 New NGO Children and Disabled Charity Bank Proposal Bsc Hons

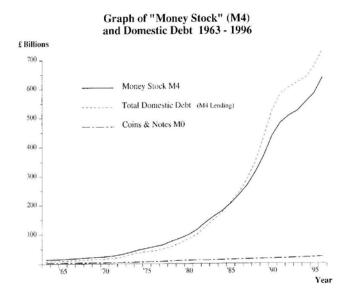
	37.3	1160.0	924.4	4.0%
2001				
2002	39.5	1260.2	1008.7	3.9%
2003	42.3	1369.7	1081.1	3.9%
2004	44.5	1518.7	1175.5 3.78%	

These last figures supplied by the Office of National Statistics 2005.

Figures from 1998 to 2000 are missing. However there is every reason to suppose that the missing years have continued to rise, as the figures for 2001 - 2004 also indicate.

From 1963 to 1997 the percentage of M4, money/credit has increased from £14.1 billion to £680 billion all of it borrowed into existence instantly becoming a debt, charged to the government and/or lending counterparts (the banks) at interest.(i.e. us)

Over the same period the MO, debt free money by the government circulated debt free into the economy, has significantly decreased. Whilst there is a cost of minting and printing coins and notes, any increase in credit interest free, simply marked as deposits into a contractors or supervising body's bank account, (i.e. the new procurement models account known a "C", currently theoretical but see 4.3 TO 4.5 & Appendix C) is of course only the same as producing a loan by computer banking for interest bearing loans. Therefore the debt free government money (MO) is steady at 3 – 4 % over the last 8 to 10 years and already exists as a source of debt free money.



Rowbotham 1998

In 2004 MO (coins and notes) amounted to £44.5 billion, which is itself enough to build many hospitals and schools debt free. The total money stock in 2004 was £1175.5 billion, yet the total debt is £1518.6, which means effectively the country is insolvent, and has been since 1985. If the MO was substantially increased, (i.e. a source of debt free money already in existence) many firms may well face less of a strain, with simply having no interest to repay as it could be lent as credit without having to charge interest.'

Kelly (2005)

Further a case study from Jersey took this idea and turned it into a school, and applied it to other projects, in other words tangible financing. Jersey had its own currency.

'e.g.: Jersey loan sanction finance

School Project £25m; 3 year loan sanction; £50m annual capital budget:

School Project £25m; 3 year loan sanction; £50m annual capital budget:

Capital Budget	Year 1 Y	ear 2 Yea	ar 3
School - Loan Sanction	£8m	£8m	£9m
Other Capital Works	£42m	£42m	£41m
Total Capital Budget	£50m	£50m	£50m
Cash - Capital Fund			
Opening Balance (say)	£100m	£83m	£91m
Allocation from revenues (say)	£50m	£50m	£50m
Allocation to Capital Budget	(£50m)(£50m) (£		(£50m)
Loan Sanction Adjustment	(£17m)	£8m	£9m
Closing Balance	£83m	£91m	£100m

As you can see from the above example, this form of internal borrowing can only be applied if sufficient funding is available in the Capital Fund. In recent years, the Capital Fund balance has reduced and the current Finance and Economics Committee will not approve new loan sanctions. The use of loan sanctions has the effect of increasing (and then reducing) the workflow to the local construction industry and, as such, impacts on local inflation and employment."

Ray Foster Head of Corporate Capital Jersey States Treasury 16.2.2005, showing taxes levied against capital required over three years.

Kelly (2005).44

Whilst this did not improve GDP growth figures on the Island it certainly improved the quality of life. It is then only one step removed from not having to collect taxes at all and charge the £100 million to the national debt, and as it is not borrowed but funded by its own internal sovereign currency, it owes its debt to itself. Yet against this debt it has an asset which collectively everyone also owns.

Therefore the closing balance is £100 million liability and £100 million asset = closing balance of Zero.

With added attached interest payments the school may never have existed or would have become a huge burden to build to the community.

"One reason is that some believe that the charging of interest sets up a growth compulsion in the economy and that, as perpetual economic growth is unsustainable, the development of a no-interest bearing banking system is a key towards building a sustainable economy" ⁴⁵

Douthwaite, Richard and Jopling, John (editors) 2004.

Other qualitative evidence suggests GDP growth leads to instability in an economy is cited by Eric Zencey for the center for the advancement of the steady economy in his article for (casse) he raises the possibility that although GDP levels in Egypt and Libya have risen in 2010 (the past decade) poverty levels with fluctuating GDP has artificially created an economy of extreme poverty. Criticizing the Cantril Self-Anchoring Striving Scale, developed by a researcher named Hadley Cantril, scale of GDP measurement he gives the following insight;

"In Egypt, between 2005 and 2010 per capita GDP rose from \$4,762 per year to \$6,367. In Tunisia it rose from \$7,182 to \$9,489. But both countries saw a significant decline in the percentage of the population that is classified as thriving according to a standard, well established measure"

Eric Zencey is a visiting associate professor of historical and political studies at Empire State College of the State

University of New York, and an affiliate of the Gund Institute of Ecological Economics at the University of Vermont.

He raises the possibility that growing inequality from not sharing any GDP benefits charges social revolution". 46

Casse (Centre for Steady State Economy) (2011) Growth of GDP and Discontent in Egypt and Tunisia article by Eric Zencey http://steadystate.org/growth-of-gdp-and-discontent-in-egypt-and-tunisia/

"Because of that basic flaw, a rising GDP did not mean a rising standard of living. And even if GDP were a more accurate measure of material well-being, it would still be mathematically possible for a very large number of people to become worse off economically as per capita GDP rises. This situation could occur if there is growing income inequality (i.e., the benefits of increasing GDP aren't widely shared). In Egypt and Tunisia, that mathematical possibility became an economic fact—and a politically charged social condition"⁴⁷ Ibid

This theme is taken further by the Zeitgeist movement, which suggests that criticism of established economics was deemed not just as uneducated or naive but also as ungodly or irreligious. Beginning with Calvin and Calvinism, and the Tulip shortselling of Tulips of Amsterdam of the late 15th century and early 16th leading to speculative bubbles. Creating a new paradigm across the continent the method was completed with preaching the gospel of damnation. The double predestination and damnation to hell school of theology with T.U.L.I.P. as its anchor meant you could lose your money and your soul, and derivatives and hedging provided little atoning penance when the bubble burst. John Lockes treatise on government meant people were landless and could only sell their labour, and Adam Smith further entrenched the view that private property was a blessing from God. (the hidden hand).

From this new enlightenment money was and is a commodity, where today GDP provides us with evidence that the more sick and dying people there are, the better the GDP statistics are, and if growth is to continue then the system will need more sick people who are not measured to the alternative GNI happiness indicators. Therefore war is a benefit to GDP growth but not to the planet.

Whilst this seems absurd, growth requires cyclical consumption, employee (sells labour), employer sells production to consumer, consumer works to earn money for consumption, but that consumption requires production with inbuilt planned obselence, making a short self life, in order to keep demand for goods constant, fueled by borrowing which is driven by repayments with attached interest which can never be met, as there is not enough money in the economy to pay the interest payments, fueling in turn cost efficiency in production, lower wages or unemployment and to monopoly corporations. In this model it assumes that the interests of the employee and employer are the same, and whilst many do not accept the Labour theory of Value (like Marx and Aristotle) it is not in doubt that both employee and employer have decreased incomes if in debt. Debt of course can be self inflicted, but it is also a systematic certainty under our current system.

All of the above degenerates into obsolete people and lives, driven by the money sequence of value, instead of the people sequence of value. From this initial growth compulsion by creating money at source with interest as a loan or bond we have a market system and a stockmarket system which has left the people of the planet behind (except when it

crashes then they can bail it out). Therefore the misnomer that the economy is "cyclical" is entirely incorrect, as it is designed and planned to fail as part of the system. 48

Zeitgeist Films (2011) "Moving Forward" http://www.zeitgeistmovingforward.com/

In our current system as the bailouts have shown, much of the bailouts were to pay for loans from one bank to another.

This generated millions in fees at (1%) even if the loan or borrowing was not required.

These fees are a different fee for handling money than say the Medlemsbank (member's bank) which charges a fee for arranging a loan which works out at around 3%. Since one loan on Wall street could generate a fee more than the combined assets of Medlemsbank (members bank). Further if these loans fail then as a riskless bond or T-Bill the taxpayer must foot the bill. Which is of course not free trade or private entrepreneurship? Fees could be reduced to (example) 0.001 % as increased liquidity (issuing increased credit) means increased fees. As we have read we have already seen that Irving Fishers stamp scrip, had no fee attached but a moderate return. Even without this return the system (stamp scrip) would have still have functioned.

Zeitgeist mentions that 1% of the worlds population own 40% of the worlds wealth it is time that society (not bonded) rather than a bond be considered a riskless asset to itself, it expressly blames the federal reserve system, compound interest and the infinite growth paradigm (Ponsi scheme)

America today is in the grip of a recession and poor GDP figures, yet when the GDP figures improve only the banks and corporations seem to have improved, amidst widespread poverty. This is a similar situation to the "panic of 1837" around the removal of the (new central bank) second bank of America by President Jackson. Jackson was blamed for the panic. The banks charter expired in 1836, and its renewal was brought forward to 1832 by congress, but Jackson vetoed the bill. Jackson next moved all deposits from the bank in 1833. Nicholas Biddle the central bank chairman then threatened to make money scarce (money contraction) to scare the population and congress, by calling in old loans making a run on the banks nationally. This resulted a severe depression and unemployment (as today), and congress censored Jackson blaming him for the recession, when he removed the governments federal (nations) funds from the bank yet in 1834 the banks charter was not renewed.

The resultant investigation allowed the national debt to be paid off completely in 1835, and he issued a new currency without the backing of gold or silver, and America eventually recovered from depression and without debt. Strength in this recovery was the ability to regulate the money supply without attached interest ensuring a smooth non-inflationary

financial system. Twenty years later America prospered as never before and this period was termed the "wildcat economy" (as a derogatory term) Jackson did not remove Fractional reserve banking with its money sequence of value, this was left to President Lincoln, who issued a new currency known as the "greenback" as full legal tender without interest to the federal government. Lincoln economically appreciated President Jacksons views on economics (pre Darwin), but opposed his views on slavery, whilst Native Americans of course still suffered under both. This was \$450 million dollars, a 100% money supply without interest or debt. In effect Lincoln created a bond, which would not act like a bond we know today. Not based on Gold (which could be monopolised, as it is scarce, unlike silver which is harder to monopolise), but on faith of the nation. Greenbacks were commended by President Kennedy and existed still in circulation up until 1994.

Rorabaugh, W.J. Critchlow, D.T. Baker, P.C. (2004)⁴⁹

A national currency without interest is a social hidden hand which ironically seems to be criticised by some religious considerations and also by Karl Marx.

As control of a nations money supply is not in a nations control, and if that nation cannot control its own fiscal policy (particularly zero interest rates), then it cannot be free to be a nation. Given that some researchers have stated that a nation under this growth compulsion can only bear a GDP increase between 1.5%. to 3% per year. Making growth "green growth" instead is an alternative.⁵⁰

Richards, Howard (2004)

Fiscal projects any nation requires has proven that even this figure is optimistic. Since many nations are over 100% of GDP in debt, "democracy" is non-existent since local and national representatives cannot make policy due to the borrowing requirements working within 1.5%. to 3% per year requires. This understatement is due to the incredible debt levels the world is in, it is beyond subjective economic evaluation, and as such can only first be answered qualitatively.

With diminished returns or with the tendency of the rate of profit to fall, (TRPF), it is possible that all economies will reach the steady state of zero growth, identifying why economies reach the steady state point, is helped by analyzing why inflation (or deflation) occurs. Interest on money (money as a commodity) occurs at contractual level before it is spent or required, and therefore cannot be a controller of inflation, as an increase in interest rates to control inflation is a second increased attached interest rate onto the money supply. Since the world does not barter but engages in

exchange by printed currency or computerized equivalents of monetary value, adding interest at source automatically causes inflation as people have a compulsion to activity, i.e. food, housing and work, and this human right is consumed (to the tune of trillions) by an impossible requirement to meet a price by inflating the economy to pay for the interest added to money at source.

This certainty of a required money supply, **Solow**, **Robert M**, (2000) is then checked by raising interest rates to avoid inflation further burdening society. This is a second interest rate instrument caused by the first instrument of adding interest at source.

Expected return?

$$E(R_p) = \sum_i w_i E(R_i)$$

Could therefore be replaced by steady state growth (being that r0 = consumption rate, exp is the base of natural logarithms, t = time, and k is the growth fraction per year, but even this growth rate without interest.

$$C = r_0 \int_0^T \exp(kt) dt = \frac{r_0}{k} \left(\exp(kT) - 1 \right)$$

Interest rates can then be made zero and a liquidity trap avoided. Most importantly this leaves people and not money to grow exponentially, and as many millions of people own millions of acres of land, land is not scarce only trees on the land are scarce, mainly by increased poverty levels due to unsustainable growth and a lack of replanting.

Economist Dr Herman Daly shows that it was not a liquidity trap which lies at the root of a depression but the opposite.

Daly, Herman F, Farley, J (2004)

It is explained in qualitative terms by Dr Daly as follows;

"The turmoil affecting the world economy unleashed by the US sub-prime debt crisis isn't really a crisis of "liquidity" as it is often called. A liquidity crisis would imply that the economy was in trouble because businesses could no longer obtain credit and loans to finance their investments. In fact, the crisis is the result of the overgrowth of financial assets relative to growth of real wealth— basically the opposite of too little liquidity. We need to take a step back and explore some of the fundamentals that growth-obsessed economists and commentators tend to neglect.

After winning the Nobel Prize for chemistry, Frederick Soddy decided he could do greater good for humanity by turning his talents to economics; a field he felt lacked a connection to biophysical reality. In his 1926 book *Wealth*, *Virtual Wealth and Debt: The Solution of the Economic Paradox*, (a book that presaged the market crash of 1929), Soddy pointed out the fundamental difference between real wealth – buildings, machinery, oil, pigs – and virtual wealth, in the form of money and debt.

Soddy wrote that real wealth was subject to the inescapable entropy law of thermodynamics and would rot, rust, or wear out with age, while money and debt – as accounting devices invented by humans – were subject only to the laws of mathematics"

Adbusters online magazine (19.11.2008) *Herman Daly, Tom Green. The Crisis* Published by Adbusters media foundation. ⁵¹ http://www.adbusters.org/magazine/81/the_crisis.html

Aside from the obvious distaste directed at Wall Street, Dr Daly has pointed out that GDP growth is disguising the accompanying debt bubble it inflates. This in turn is disguising the catastrophe called the financial system, which is rebranded as technical innovation.

Yet this banter back and forth does not help the world coming to terms with growing poverty levels and reports from charities worldwide, who state that charities are running out of funds amidst huge bailouts, (showing money is not scarce) charity donators are skeptical asking why it is that charities exist in the first place? as they have bailed out the banking system. Taxpayers cannot donate to charities through a lack of income (charity is credit crunched, both from the public and from borrowing, and charities are resorting to borrowing, which of course makes a charity a business?).

Taking just three examples from a thesis in 2005, we can see banks and business realize a social need for interest free banking, and a liquidity waterfall towards those social needs. Since this date and the bubble burst of 2008 many banks are offering interest free credit, but not at Zero (above base rate, or at base rate)

1. Mr Phillip Martin Joint General Manager of Sumitomo Mitsui Bank.

"Interest free credit is not something commercial banks grant- only the Government – using tax payer's money does that"

"We are a wholesale bank who get our money to lend from other major banks and insurance companies, and major companies who all expect to receive interest."

The distinction between the Government and banks is made by Mr Martin, which raises the possibility in theory that the Government could carry out this enterprise, and as the literature review shows they have issued such units of exchange in the past. And as we have seen taxpayers do 'do that' especially when having to bail out the banks. ⁵²

2. Mr David Webster Chief executive of Hanley Economic building society

feels that the view or idea expressed above should take the form of "social desirability" basis for certain projects. This is indeed the philosophy a new procurement should take; how far the social desirability extends is of course up to the public, (as it is their money). ⁵³

3. Stroud & Swindon Building Society.

A member of the building society states in the questionnaire "Interest is the cost of capital", (yet the Government produces over £44 billion in capital already without interest attached, known as the "MO").

She or he continues with "I have no theoretical objection to innovative ways of paying that cost"

These are just three views of banks and building societies who wished to give interest free credit and construction companies who needed to receive it. The evidence here is that industry (the construction industry, and banking industry) in this case showed a desire for interest free credit (80.6%).

It only takes one bank to offer this service, qualitative evidence suggests there is a demand for this as opposed to a lack of supply.⁵⁴

Inflation can be regulated as the money supply itself without interest attached, and any inflation problems corrected annually by decreasing the money, or increasing the money supply without interest, and considering the worlds starving, poor, homeless and needy inflation is not a concern (certainly to them) and always is a secondary concern.

Just as a bid-ask spread is narrow in the market, liquidity is low, (people are less confident or have less money) when it is wide, liquidity is high. If this stock/ share example analogy were a real interest rate at zero, and a corresponding bid at zero, a flow of money from a printing press eliminates the liquidity problem.

As many of the basel 111 accords on banking reform http://www.basel-iii-accord.com/ will be introduced on January 1st 2013, its main accord increasing the capital requirement has increased by (tier 1) 4% to 6%, which when borrowing billions is very little money in the actual bank, to prevent a run on the bank. Over time the bank of England reduced its capital requirement from 10% to 1% to 0.1%. Banks create money they do not hold money, so mainly the changes are administrative, but do not solve the problem in the banking system.

Further the warning by the central bankers concerning the banks they own privately, with problems they acknowledge were caused by them (as follows)

Conclusion

..... "Ultimately the public sector had to step in with unprecedented injections of liquidity, capital support and guarantees, exposing the taxpayer to large losses" 55. BIS Basel 3 report April 2010

Has not been addressed, and monies bailed out should be repaid to society.

Creating a non-bond or interest free money supply is the answer, or indeed a central bank that acts like a micro-credit free interest free credit NGO, to bring help to the disabled and children worldwide. Money does become money until or when it has interest attached they are two separate entities. Why should banks produce interest free credit? they already do and this has occurred many times in history. Further if the question arises as to why should banks (despite already having done so, and continuing to do so in a limited and selective way) give "free money" it is clear that money has to be repaid, and it is only a method of exchange accepted as legal tender by society made by its own laws.

"In 1974 I found it difficult to teach elegant theories of economics in the university classrooms, against the backdrop of a terrible famine in Bangladesh, Suddenly I felt the emptiness of those theories in the face of crushing hunger and poverty"⁵⁶

"Can conventional banks run microcredit progammes? Of course they can⁵⁷,"

"Finally new kinds of financial institutions can be created as required to cater to the financial needs of social business, social venture capital funds, social mutual funds, and of course a full fledged social stock market". (page 169)

Muhammed Yunus (2010) Creating a world without poverty

Once this correct procedure in issuing currency is corrected (and it does not need too be backed by anything, except to be regulated, but not owned or controlled by anyone except a sovereign people, and issued according to works people

need themselves), you can change the world, cancel all world debt and begin to eradicate poverty by 2015, as the aim of the United Nations Millennium Summit in 2000 and 2010 is aiming to do.⁵⁹

End Poverty 2015 http://www.endpoverty2015.org/ &

http://www.fao.org/fileadmin/templates/getinvolved/pdf/Camp_Stampa_eng_B.pdf

Marx said the workers wages are not an equitable exchange and their labour is underpaid, whilst Adam Smith promoted a real free market, not the current virtual parliaments and stock exchange capitalism we serve in the current system.

Therefore it is not a question of big government or small government but an entire population of a country as the government, with a free supply of money to itself, as the workers of the world require. Banks like this already exist, and whilst it is impossible to prevent greed or corruption in people, interest charged at the source of money (created, as all monies are) removes a flaw in society (the real economy) which does not need to exist.

In Appendix 2 my first thesis from a building construction perspective is attached.

5.5 Programme.

Letters and questionnaires will be sent in mid to late March, literature will be read and formatted over the next three months to mid to late March, by which time it is anticipated that stage 3 in the methodology outlined above would have been completed.

Completed End of April 2011 see http://www.sonas.lsaweb.net/

Appendix 1

1) The Tobin or Robin Hood Tax initiative, 2) Country by country tax reporting. 3) Direct charitable ethical financing

"A Portfolio for the Poor"

Economics over especially the last three years has brought absurdities which normal reporting of the state of the worlds economy cannot keep up with. Growing poverty levels and the widening gap between rich and poor means the absurdities are reaching beyond embarrassment into shock, and our economic system, many believe needs to be turned upside down.

What contemporary available sources of finance or funding are realistically available to charitable institutions, non-governmental organisations (NGOs) and heavily indebted poor countries (HIPCs). An examination of problems and advantages, and a comparison of three new proposals;

- 1) The Tobin or Robin Hood Tax initiative.
- 2) Country by country tax reporting.
- 3) Direct charitable ethical financing

The combined income of the 500 richest people in the world is higher than the combined income of the 416 million poorest people.1% of the world's population owns 40% of the world's wealth.

No. of people living on less than US\$ 2 a day in 2005: 2.6 billion No. of people living on less than US\$ 1.25 a day in 2005 : 1.4 billion

FIGURES RELATING TO THE DEBT FOR 2009, Damien MILLET and Eric TOUSSAINT (CADTM)

Keynes whose main thesis "The General theory of employment, interest & money",

said in 1936

"speculators may do no harm as bubbles on a steady stream of enterprise, But the position is serious when enterprise becomes the bubble on a whirlpool of speculation, When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done."

Marxist economics show that profits have a tendency to fall, which means wages always have to be reduced to keep capitalism profitable, whilst capitalist economics explains the law of diminishing returns.(they have this in common).

Capitalism claims that competition is good because, it increases efficiency, increasing profits, but this competition eventually decreases opportunity as there are too many people chasing the money people spend, which ironically leads to monopoly.

Since these laws of economics are the basis for why the rich get richer, the poor cannot escape this trap.

Interest charges are the main cause of both the Marxist theory of profits with a tendency to fall and diminishing returns.

How can the world's poor escape this poverty trap.

Karl Marx convinced (most) of the worlds economists that a workers labour is always undervalued and underpaid.

In Milton Friedman classic paper it was recognised that Monetary, Fiscal problems had contributed greatly to the economic crash of 1929, and impoverishment of the 1930s'

A Monetary and Fiscal Framework for Economic Stability

Milton Friedman

The American Economic Review, Vol. 38, No. 3. (Jun., 1948), pp. 245-264.

Yet on top of this impoverishment workers also must lose out in the speculation of the casino as Keynes understood. Within these decreasing returns servicing disasters in the casino, the world's poor also have to service external debts and internal national debts.

Further with personal debts and long term unemployment, and as profits tendency is to fall over time, within the myth of overpopulation and land shortages, the world's poor also suffer a lack of justice within the courts.

What methods can be employed to remedy the lack of justice, and social justice?

1. The Tobin & Robin Hood Tax.

"Every day, 22,000 children die from preventable causes we can prevent, like malaria, malnutrition and exposure. We believe that number should be zero, and we believe you do too". http://www.unicef.ie/Euro-For-Zero-83.aspx

In April 2010 it is estimated that \$4 Trillion is traded Globally on the foreign exchange markets annually.

James Tobin suggested the rate as "let's say 0.5%" (= \$20 billion dollars)
Tobin suggested a form of currency transaction tax. The Robin Hood tax is a type of financial transaction tax, which taxes specific types of currency transaction.

2.Country by Country Accounting (Tax Justice)

It is estimated by Christian aid and the Debt and Development Coalition that \$160 Billion dollars each year is lost as a cause of lost tax revenues.

Capital flight actually costs the world more than developing countries receive in aid.

Declaring profits in country of origin requires a new international accounting standard.

http://www.debtireland.org/index.php?option=com contact&view=contact&id=1&Itemid=21

Tax Research http://www.taxresearch.org.uk/Blog/2007/05/10/10-reasons-why-country-by-country-accounting-is-vital/

Christian Aid http://www.christianaid.org.uk/resources/policy/tax.aspx

This and other far reaching economic matters are explained by Dr Sheila Killan from the University of limerick who has produced a wonderful report "Driving the getaway car, Ireland, Tax and Development" http://www.socialjustice.ie/sites/default/files/file/Policy%20Issues/2011-03%20-%20Driving%20the%20Getaway%20Car%20-%20Ireland,%20Tax%20and%20development.pdf

3. Direct charitable ethical financing.

Central banking can produce bonds, with no interest, and without repayment, and without causing inflation.

In October 2010 a new updated report in Ireland, available from the wheel

 $\hbox{``The Wheel is Ireland's support and representative umbrella network for community, voluntary and charitable organisation" \\ \hbox{''http://www.wheel.ie/about/thewheel}$

Researched and compiled from Trinity College Dublin's centre for non-profit management http://www.cnm.tcd.ie/

It suggests Irish charities are in crisis, and need an injection of Millions at home to continue vital work, which the Government has assured would their prerogative, but this has not transpired into anything tangible.

When we realise that the BIS Basel 3 report "Consultative Document Strengthening the resilience of the banking sector" Page 2 April 2010 states,

"Ultimately the public sector had to step in with unprecedented injections of liquidity, capital support and guarantees, exposing the taxpayer to large losses".

Since the worlds bailouts have cost between 4 trillion initially in the USA, and anywhere up to 100 trillion dollars so far as it is ongoing, it should be easy for quantitative easing to produce \$200 billion for charitable purposes.(see below on existing examples)

Ultimately the taxpayer needs its money back.

In 2009/2010 and into now 2011, the Chase Manhattan bank (J.P. Morgan) has given away \$5 million dollars in lots of \$25,000 and \$50,000, helping many charities. It is non-repayable and interest free, and is not a bond.

http://www.facebook.com/ChaseCommunityGiving (facebook)

and related article http://bub.blicio.us/chase-bank-on-facebook-giving-5m-to-local-charities/

Even the world bank will pay \$900 million in interest free credit to Pakistan in the autumn of 2010. Paid as a bond it may not receive this amount, but as a lump sum it should.

- $1) \ http://www.allvoices.com/contributed-news/6542051-world-bank-pledges-to-pay-900-million-dollars-in-aid-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approved-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approx-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-approx-a-500-million-dollar-interest-free-credit-to-pakistan/image/58914316-the-world-bank-said-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dollar-interest-free-credit-thursday-it-a-500-million-dolla$
- $2) \ http://www.theaustralian.com.au/business/news/imf-world-bank-step-up-aid-for-pakistan-floods/story-e6frg90f-1225913636574.$

Below we can the expected return of a portfolio asset

And the expected return of a three asset portfolio

With the correct data, it would be possible to further refine the expected return, (obtaining the portfolio variances, if required)

Those assets are in this case

- 1) The Tobin or Robin Hood Tax initiative.
 - 2) Country by country tax reporting.
 - 3) Direct charitable ethical financing.

12 & 3 below as mentioned above can have a calculated expected return of

- 1. Robin Hood tax (0.5 % of \$4 Trillion)
- 2. Country by country tax reporting (\$160 Billion)
- 3. Interest free debit direct charitable ethical financing (unlimited, but given bank bailouts worldwide 2008 2011, a figure of \$200 billion would be easily achievable)

Expected Return

$$E(R_p) = \sum_i w_i E(R_i)$$

For a three asset portfolio, Portfolio return

$$w_A E(R_A) + w_B E(R_B) + w_C E(R_C)$$

Direct Charitable Ethical Financing, available from central banks direct to the public

$$\sigma_{p}^{2} = w_{A}^{2} \sigma_{A}^{2} + w_{B}^{2} \sigma_{B}^{2} + w_{C}^{2} \sigma_{C}^{2} + 2w_{A} w_{B} \sigma_{A} \sigma_{B} \rho_{AB} + 2w_{A} w_{C} \sigma_{A} \sigma_{C} \rho_{AC} + 2w_{B} w_{C} \sigma_{B} \sigma_{C} \rho_{BC}$$

The expected return on this three asset portfolio would amount to

1) \$20 billion x 365 2) \$16 Billion 3) \$200 Billion =

<u>\$236 Billion</u> of non-repayable interest free non- inflationary debits to charities, non-governmental organisations (NGOs) and heavily indebted poor countries (HIPCs) (annually from these three projects alone in just one day) \$20 Billion return everyday after (1)

From a social desirability standpoint this is a significant gain for society.

If 3) was increased to say 2000 Billion. This equals still only \$2 trillion dollars, which is a drop in the ocean to the 100 trillion worldwide bailout and debt the world is actually in.

The expected return in this portfolio would then be \$20 Billion + \$16billion + \$200 Billion (or \$2 trillion dollars) non-repayable interest free, non – inflationary debits to charities, non-governmental organisations (NGOs) and heavily indebted poor countries (HIPCs)

Total 1) \$236 billion, Total 2) \$2 trillion, 36 billion (approx)

The Robin Hood Tax could raise \$20 Billion every day thereafter.

6.0 Bibliography & Literature.

Akintola Akintoye, Matthias Beck & Cliff Hardcastle (Eds) (2003) Public - Private Partnerships,

Managing risk and opportunities. Blackwell science ltd.

Allen, Larry, (2005) The Global Economic System since 1945, Reaktion Books

Andreades. A. Professor (1909) History of the Bank of England P.S.King & Son.

Bakan, Joel. (2005) The Corporation. Constable

Backhouse Roger E (2002) The Penquin History of Economics Penquin Books.

BIS Basel 3 report Consultative Document Strengthening the resilience of the banking sector Page 2 April 2010.

Ben S. Bernanke, Federal Reserve Board (November 21, 2002) *Deflation: Making Sure "It" Doesn't Happen Here* Speech Before the National Economists Club, Washington, D.C. http://www.federalreserve.gov/boarddocs/speeches/2002/20021121/default.htm

Bernanke, Ben S (2010) *Economic Challenges: Past, Present and Future* Speech given on Apr. 7, 2010 to the Dallas Regional Chamber of Commerce in Dallas, Texas. http://www.federalreserve.gov/newsevents/speech/20100407a.htm

Bernanke, Ben S. (2004). *Essays on the Great Depression*. Princeton University Press. http://www.federalreserve.gov/boarddocs/speeches/2004/200403022/default.htm

Bernanke, Ben, S Blinder, Alan S. (2002). *The Federal Funds Rate and the Channels of Monetary Transmission*. American Economic Review 82 (4) 901 - 921. http://www.nber.org/papers/w3487

Bernanke, Ben S Laubach, Thomas, Posen, Adam S. (2001) *Inflation Targeting Lessons from the International Experience*. Princeton University Press.

Bernanke, Ben S., Vincent R. Reinhart, and Brian P. Sack. (2004). *A Monetary Policy Alternatives at the Zero Bound An Empirical Assessment*. @ Brookings Papers on Economic Activity 2,p 1-78.

Begg, David. Fischer, Stanley. & Dornbusch, Rudiger. 2000 Economics London McGraw Hill.

Beresford Ellis, Peter 1994 *The Druids* Published by Constable (London)

Berthoud and Hinton (1989) Credit Unions Policy Studies Institute

Cahill Kevin (2001) Who owns Britain; The hidden facts behind landownership in the uk and Ireland

Edinburgh; Canongate.

Cahill Kevin (2010) Who owns the World Hachette Book Group

CarterHill, R, Griffiths, W E, Lim, G C. Principles of Econometrics. John Wiley & Sons

Chomsky Noam (1996) Class warfare Pluto Press

Chomsky Noam (1994) Manufacturing Consent. Vintage

Chomsky Noam (1989) Necessary Illusions Pluto Press.

Chomsky, Noam (2003) Understanding Power Vintage.

Daly, Herman F, Farley, J (2004) *Ecological Economics, Principles and Applications* Island Press (Free "ebook" available at http://ebookee.org/Ecological-Economics-Principles-And-Applications_304247.html)

Del Mar (1975) Money and Civilisation Published by Omni.

De Roover, Raymond. 1948 *Money, Banking and Credit in Mediaeval Bruges*. Mass. The mediaeval academy of America Cambridge Massachusetts.

De Soto H (2001) The Mystery of Capital Black Swan

Dobbs Jeoffery (1994) The Just Tax Castle Print

Douglas C.H (1936) Dictatorship by Taxation Bloomfield Books

Douglas C.H (1974) Economic Democracy Bloomfield Books

Douglas C.H (1933) Social Credit Publisher: London: Eyre & Spottiswoode.

Douthwaite, Richard and Jopling, John (editors) 2004 Growth, *The Celtic Cancer, Why the global economy damages our health and society. & (article) How interest free banking works, The case of Jak by Ana Carrie.* Feasta Review number 2

Engdhal, William. F. 1993 A Century of war, Anglo American Oil politics. USA, Consortium.

Gonczy, Anne Marie, L, (1994) Modern, Money Mechanics. Federal Reserve Bank of Chicago.

Bank of international settlements Federal Reserve Board (July 1st 2004) Semiannual Monetary Policy

Report to the Congress (Alan Greenspan) Roundtable Introductory statement by Jean-Claude Trichet

Fisher, Irving (1935) 100% Money New York Adelphi

Fisher, Irving(1930) Theory of Interest The Macmillan Company.

Fisher, Irving (1933) Stamp Scrip Adelphi & http://userpage.fu-berlin.de/~roehrigw/fisher/

Friedman Milton & Anna Swhartz (1971) A Monetary History of the United States, 1867-1960 Princeton University Press, 1971

Freidman, Milton (1968) *A Monetary and Fiscal Framework for economic stability* The American Economic Review Vol 38 No 3 (June 1948) pages 245 -264.

Freidman, Milton (1963) A Program For Monetary Stability New York Fordham University Press.

Freidman, Milton (1968) Dollars and Deficits: Inflation, Monetary Policy and the Balance of Payments Prentice Hall

Forrest, Davis (1932) What price wall Street William Godwin

Dr Gates Brown, Tricia. (2004) Free People, A Christian response to global economics published by Xlibris Corperation

George Susan (1992) The Debt Boomerang Pub by Westview

George Susan (1999) The Lugano Report Pub by Pluto Press and Susan George.

Gesell, Silvio (1934) The natural economic order: A plan to secure an uninterrupted exchange of the products of labor, free from bureaucratic interference, usury and exploitation. Free-economy Publishing Co

Griesburger, JM & Gunter, BG.(ED)1995 *The Worlds Monetary System*. (Rethinking Bretton Woods) Pluto Press.

Hallwood, CP & MacDonald, Ronald (1994) International Money and Finance. Blackwell

Hargrave, John. (1942) Montague Norman Greystone Press.

Harman, Chris & Campbell Sally (Eds) (2005) *Imperialism,s New Facade* Published by International Socialism

Heinlein, Robert 2004 For Us, The Living: A Comedy of Customs Pocket Books.

Hill, Griffiths & Lim (2008) Principles of Econometrics. John Wiley & Sons

Hollis Christopher (1936) The two nations Longmans Green & co New York

Hobsbawn, Eric, (1999) The Age of Revolution Abacus

Hutchinson F (1998) What everybody really wants to know about Money Jon Carpenter.

Kay John (2003) The truth about Markets Penquin books.

Kelly, P (2005) Bsc Hons, Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?) Salford University Dissertation

Keynes, John Maynard (1979) D.E. Moggridge (Ed) *The Collected Writings: General Theory and After* Palgrave Macmillan.

Keynes, John Maynard (1936). The General Theory of Employment, Interest and Money. Macmillan.

Klein, Noami (2007) The Shock Doctrine Penquin Group.

Koo, Richard (2009) The Holy Grail of Macroeconomics, Lessons from Japan's Great Recession John Wiley & Sons

Levitt, Stephen D & Dubner, Stephen J, (2005) Freakonomics, Harper Collins NY

Lewis, Kenneth A, Seidman, Laurence S (2005) *Can Fiscal Stimulus Overcome the Zero Interest-Rate Bound?:* A Quantitative Assessment University of Delaware, Department of Economics in its series Working Papers with number 05-19.

MacDonald Scott &Gastman Albert (2001) A History of power and credit in the western world Transaction Publishers

Mandeville Bernard (1924) *The Fable of the Bees; or public vices turned public benefits* Oxford Clarendon Press 1924 Vol 1 & 11.

Marsh, David. (1992) The Bundesbank. Mandarin

Marx Karl (1906) Capital (Ed by Frederick Engels) New York The Modern Library New York.

Marx, Karl & Engels Frederick (1958) Karl Marx & Frederick Engels Sellected Works Vol 1 & 2 Communist Party House Moscow.

Marx Karl (1996) Wage, Labour & Capital & Wages, Price and Profit. Bookmarks.

Mason, ES & Asher RE, (1973) The World Bank since Bretton Woods. The Brookings Institution

Mayer Martin (1997) The Bankers, The next generation Penquin Group

Meadows Andrew, Shipton Kirsty (Editors) 2001 Money and its uses in the ancient Greek world. Published by Oxford Onc Press

Mishkin, Frederic. S. 2010 The Economics of Money, Banking and Financial Markets. Pearson

Monbiot G (2001) Captive State; The Corporate takeover of Britain Pan Books Ltd.

Naoum Dr S G.(2004) *Dissertation Research and Writing for construction students*. Elsevier, Butterworth-Heinemann Oxford.

OToole, Fintan. (2010) Enough is Enough Faber & Faber

Perelman, Michael, (2006) Railroading Economics. Monthly Review Press.

Pigou, Arthur Cecil (1951) Keynes's General Theory, A retrospective view. London Macmillan

Richards. I.A. (Ed & Trans) (1966) Plato; The Republic Cambridge University Press.

Richards, Howard (2004) Understanding the global economy Peace Education Books

Rorabaugh, W.J. Critchlow, D.T. Baker, P.C. (2004). *America's promise a concise history of the United States*. Rowman & Littlefield.

Rowbotham, Michael.(1998) *The Grip of Death, a study of modern money, debt slavery and destructive economics*. Oxfordshire. John Carpenter publishing.

Rudestam, E.J. & Newton, R. Rae. (2001) Surviving your dissertation. London. Sage Publications.

Smith.Adam (1977) *An Inquiry into the Nature and Causes of the Wealth of Nations*. Vols 1 & 2 University of Chicago Press.

Smith, JW. (2005) Economic Democracy, Institute for Economic Democracy Press

Soddy Frederick Professor (1961) Wealth, virtual wealth and debt a solution to the economic paradox Omni publications.

Solow, Robert M, (2000) Growth Theory, An Exposition Oxford University Press.

Strathern, Paul (2005) The Medici: Godfathers of the Renaissance Pimlico

Tomilnson J (1993) Honest money; Challenge to Banking Helix Editions ltd

Van Dillen, J. G. 1964 History of the Principal Public Banks. Frank Cass and Co.

Veblen, Thorstein (1904) The Theory of Business Enterprise Charles Scribner's Sons

Yang, Lien-sheng (1952) Money and Credit in China. A short history Pub by Harvard University Press

Yunus, Muhammed. (2007) Creating a World Without Poverty, Social Business and the Future of

Capitalism. Public Affairs

6.1 Reports

Statistical release of the Bank of England 1960 – 1997, 2002, & 2004.

6.2 Journals

6.3 Television and DVD Documentaries and News items

Sanusi, Lamido Governor of Nigeria's Central Bank BBC World News on Monday 28 March 2011

6.4 Lectures at NUIM Maynooth

Maynooth Finance lectures 2010 – 2011 (5.4.2011)

6.5 Internet websites and blogs and youtube videos.

http://www.anielski.com/Documents/The%20JAK%20Bank%20Report.pdf

JAK Bank Report Part 1/4 http://www.youtube.com/watch?v=aW2pj109Cr8

Adbusters online magazine (19.11.2008) Herman Daly, Tom Green. The Crisis Published by Adbusters media foundation

http://ebookee.org/Ecological-Economics-Principles-And-Applications_304247.html

Basel three accords, http://www.basel-iii-accord.com/

Bernacke, Ben (2008) inflation is a tax USA Congress Debates July 2008 featuring Ron Paul

End poverty 2015 http://www.endpoverty2015.org/

http://www.fao.org/fileadmin/templates/getinvolved/pdf/Camp_Stampa_eng_B.pdf

Grímsson, Ólafur President of Iceland, on Radio Telefis Éireann & Prime Time (20 April 2010). Whilst the banking system collapsed the rest of

 $the\ economy\ has\ actually\ recovered.\ http://www.youtube.com/watch?v=EuAkD57yI6c\&feature=player_embedded\#at=16$

Medlemsbank's facebook page http://www.facebook.com/pages/JAK-Medlemsbank/107930739240340?sk=info#!/pages/JAK-Medlemsbank/107930739240340.

Medlemsbank/107930739240340?sk=info#!/profile.php?id=100000917880222

Muhammed Yunus, Creating A World Without Poverty You tube, School of International and Public Affairs conference 27.1.2011

http://www.youtube.com/watch?v=JKDGDUw8RFA

Myrill Lynch index for tracking bonds. http://www.mlindex.ml.com/gispublic/bin/MLIndex.asp

Sonas http://www.sonas.lsaweb.net/ (sonas is the authors own website, sonas.lsa.web belongs to peadar oceallaigh)

Serban, Oprescu George-Laurentiu, Serban, Oprescu Anca Teo Dora (2000) The Keynsian Theory of Prices Academy of Economic Studies of Bucharest, Faculty of Economics,

Stiglitz, Joseph E. 7 Sep 2009 GDP Fethism Published by Project Syndicate http://www.project-syndicate.org/commentary/stiglitz116/English

Sunderland, Ruth (24 Aug 2010) Bank of England policymaker turns gloom merchant Guardian.co.uk http://www.guardian.co.uk/business/2010/aug/24/bankofenglandgovernor-interest-rates

Sweden Members bank http://jak.se/

Other sources such as the Economist magazine, the office of national statistics, and the Bank of International settlements

Zencey, Eric, Center for the advancement of the steady state economy (CASSE) March 2010 "Growth of GDP and Discontent in Egypt and Tunisia" The Daily News (CASSE).http://steadystate.org/growth-of-gdp-and-discontent-in-egypt-and-tunisia/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+DalyNews+%28The+Daly+News%29&utm_content=FaceBook

6.6 Documentaries

Zeitgeist Films (January 2011) "Moving Forward" http://www.zeitgeistmovingforward.com/

6.7 Cinema Films Moore, Michael (2009) "Capitalism a Love Story" http://www.michaelmoore.com/books-films/capitalism-love-story

7.0 References (Notes)

Hill, Griffiths & Lim (2008) *Principles of Econometrics*. John Wiley & Sons Page 3

² Soddy Frederick Professor (1961)Wealth, virtual wealth and debt a solution to the economic paradox Omni publications. (page 29/30)

³ Freidman, Milton (1968) A Monetary and Fiscal Framework for economic stability The American Economic Review Vol 38 No 3 (June 1948) pages 245 -264.

⁴ Lewis, Kenneth A, Seidman, Laurence S (2005) Can Fiscal Stimulus Overcome the Zero Interest-Rate Bound?: A Quantitative Assessment University of Delaware, Department of Economics in its series Working Papers with number 05-19 (pages 10 -11) ⁵ Soddy Frederick Professor (1961)Wealth, virtual wealth and debt a solution to the economic paradox Omni publications. (page 13)

⁶ Soddy Frederick Professor (1961)Wealth, virtual wealth and debt a solution to the economic paradox Omni publications. (page 16 & 30)

⁷ BIS Basel 3 report "Consultative Document Strengthening the resilience of the banking sector" Page 2 April 2010

⁸ Douthwaite, Richard and Jopling, John (editors) 2004 Growth, The Celtic Cancer, Why the global economy damages our health and society. & (article) How interest free banking works, The case of Jak by Ana Carrie. Feasta Review number 2 (Page 153)

⁹ Kelly, P (2005) Bsc Hons, Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?) Salford University Dissertation pages (13 - 38)

¹⁰ Bernanke, Ben S. (2004). Essays on the Great Depression. Princeton University Press The Federal Reserve Board papers http://www.federalreserve.gov/boarddocs/speeches/2004/200403022/default.htm Remarks by Governor Ben S. Bernanke At the H. Parker Willis Lecture in Economic Policy, Washington and Lee University, Lexington, Virginia March 2, 2004 Money, Gold, and the Great Depression

¹¹ Bernanke, Ben S (2010) *Economic Challenges: Past, Present and Future* Speech given on Apr. 7, 2010 to the Dallas Regional Chamber of Commerce in Dallas, Texas. (pages 13 – 14) http://www.federalreserve.gov/newsevents/speech/20100407a.htm

¹² Ibid

¹³ Yunus, Muhammed. (2007) Creating a World Without Poverty, Social Business and the Future of Capitalism. Public Affairs (page 74)

¹⁴ Keynes, John Maynard (1936). The General Theory of Employment, Interest and Money. Macmillan

Greenspan http://www.federalreserve.gov/boarddocs/hh/2004/july/testimony.htm (5th paragraph)

Creating A World Without Poverty You tube, School of International and Public Affairs conference 27.1.2011 (*see youtube

video at 16min 35 seconds and 17 minutes and 10 seconds)

¹⁵ Serban, Oprescu George-Laurentiu, Serban, Oprescu Anca Teo Dora (2000) The Keynsian Theory of Prices Academy of Economic Studies of Bucharest, Faculty of Economics,

¹⁶ Yunus, Muhammed. (2007) Creating a World Without Poverty, Social Business and the Future of Capitalism. Public Affairs (page 114)

¹⁷ Sunderland, Ruth (24 Aug 2010) Bank of England policymaker turns gloom merchant Guardian.co.uk http://www.guardian.co.uk/business/2010/aug/24/bankofenglandgovernor-interest-rates

¹⁸ Bank of international settlements Federal Reserve Board (July 21st 2004) Semiannual Monetary Policy Report to the Congress Alan

¹⁹ Pigou, Arthur Cecil (1951) Keynes's General Theory, A retrospective view. London Macmillan

²⁰ Gesell, Silvio (1934) *The natural economic order*: A plan to secure an uninterrupted exchange of the products of labor, free from bureaucratic interference, usury and exploitation. Free-economy Publishing Co

²¹ Soddy Frederick Professor (1961)Wealth, virtual wealth and debt a solution to the economic paradox Omni publications. (page 29) ²² Kelly, P (2005) Bsc Hons, Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?) Salford University Dissertation pages (13 - 38)

²³ Naked Capitlaism blog http://www.nakedcapitalism.com/2009/04/adam-smith-warned-against-subprime.html April 6, 2009

²⁴ Chomsky Noam (1996) Class warfare Pluto Press Page 20

²⁵ Ben S. Bernanke, Federal Reserve Board (November 21, 2002) Deflation: Making Sure "It" Doesn't Happen Here Speech Before the National Economists Club, Washington, D.C. Curing Deflation 22nd paragraph http://www.federalreserve.gov/boarddocs/speeches/2002/20021121/default.htm

²⁶ Koo, Richard (2009) The Holy Grail of Macroeconomics, Lessons from Japan's Great Recession John Wiley & Sons (page 15)

 $^{^{27}}$ Stiglitz, Joseph E. 7 Sep 2009 $\,$ $GDP\ Fethism$ Published by Project Syndicate http://www.project-syndicate.org/commentary/stiglitz116/English

²⁸ Bank of America, Merril Lynch index and research facility http://www.mlindex.ml.com/gispublic/bin/MLIndex.asp

²⁹ Mishkin, Frederic, S. 2010 The Economics of Money, Banking and Financial Markets, Pearson (page 107)

³⁰ Mishkin, Frederic. S. 2010 The Economics of Money, Banking and Financial Markets. Pearson (page 107)

³¹ Lewis, Kenneth A, Seidman, Laurence S (2005) Can Fiscal Stimulus Overcome the Zero Interest-Rate Bound?: A Quantitative Assessment University of Delaware, Department of Economics in its series Working Papers with number 05-19 (pages 10 -11)

³² And also http://www.youtube.com/watch?v=JKDGDUw8RFA

 $^{^{33}\,}http://www.youtube.com/watch?v=EuAkD57yI6c\&feature=player_embedded\#at=16$

³⁴ BBC World News on Monday 28 March 2011 (link)

³⁵ Cinema Films Moore, Michael (2009) "Capitalism a Love Story" http://www.michaelmoore.com/books-films/capitalism-love-story

- ³⁹ JAK Bank Report Part ¼ http://www.youtube.com/watch?v=aW2pj109Cr8
- ⁴⁰ Anielski, Mark (2007) *The JAK Members Bank, Sweden An Assessment of Sweden's No-Interest Bank* http://www.anielski.com/Documents/The%20JAK%20Bank%20Report.pdf

- ⁴³ Kelly, P (2005) Bsc Hons, Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?) Salford University Dissertation (page 200)
- ⁴⁴ Kelly, P (2005) Bsc Hons, Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?) Salford University Dissertation (pages 33-200)
- ⁴⁵ Douthwaite, Richard and Jopling, John (editors) 2004 Growth, The Celtic Cancer, Why the global economy damages our health and society. & (article) How interest free banking works, The case of Jak by Ana Carrie. Feasta Review number 2 (Page 153)
 ⁴⁶ Casse (Centre for Steady State Economy) (2011) Growth of GDP and Discontent in Egypt and Tunisia article by Eric Zencey http://steadystate.org/growth-of-gdp-and-discontent-in-egypt-and-tunisia/
- 47 Ibid
- ⁴⁸ Zeitgeist Films (2011) "Moving Forward" http://www.zeitgeistmovingforward.com/
- ⁴⁹ Rorabaugh, W.J. Critchlow, D.T. Baker, P.C. (2004). *America's promise a concise history of the United States*. Rowman & Littlefield. (Pages 203 208)
- ⁵⁰ Richards, Howard (2004) Understanding the global economy Peace Education Books (pages 255 256)

³⁶ BIS Basel 3 report "Consultative Document Strengthening the resilience of the banking sector" Page 2 April 2010

³⁷ Douthwaite, Richard and Jopling, John (editors) 2004 Growth, *The Celtic Cancer, Why the global economy damages our health and society.* & (article) How interest free banking works, The case of Jak by Ana Carrie. Feasta Review number 2 (pages 149 – 154)

³⁸ Ana Carrie (2001) "How interest-free banking works: The case of JAK" Feasta Review http://webcache.googleusercontent.com/search?q=cache:http://www.feasta.org/documents/review2/carrie2.htm

⁴¹ Cahill Kevin (2001) Who owns Britain; The hidden facts behind landownership in the uk and Ireland Edinburgh; Canongate & Cahill Kevin (2010) Who owns the World Hachette Book Group

⁴² Kelly, P (2005) Bsc Hons, Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?) Salford University Dissertation (pages 51-53)

⁵¹ Adbusters online magazine (19.11.2008) *Herman Daly, Tom Green. The Crisis* Published by Adbusters media foundation.

⁵² Kelly, P (2005) Bsc Hons, Would debt free loans to the construction industry, benefit the construction industry? would the construction industry prefer them? and why are they not offered? (is there an alternative method to the finance industry?) Salford University Dissertation (pages 74-81)

⁵³ Ibid

⁵⁴ Ibid

⁵⁵ Douthwaite, Richard and Jopling, John (editors) 2004 Growth, The Celtic Cancer, Why the global economy damages our health and society. & (article) How interest free banking works, The case of Jak by Ana Carrie. Feasta Review number 2 (Page 153) ⁵⁶ Yunus, Muhammed. (2007) Creating a World Without Poverty, Social Business and the Future of Capitalism. Public Affairs (page

^{239) &}lt;sup>57</sup> Ibid (page 74)

⁵⁸ Ibid (page169)

⁵⁹ http://www.endpoverty2015.org/ & http://www.fao.org/fileadmin/templates/getinvolved/pdf/Camp_Stampa_eng_B.pdf