Keynes, the Pope and the IMF

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Abstract: This paper discusses Keynes's surprisingly positive views on the medieval scholastic teaching on usury and draws upon his work to argue that the traditional view of usury (understood as the charging of rent for the use of money) as anti-social is well-founded. Keynes's understanding of the nature of probability allows a clear distinction to be made between debt and equity finance which most economists dismiss. Rather than meriting remuneration, the demand for the security provided by money against an uncertain future imposes a social cost in one form or another. This proposition is illustrated with reference to the problems of the modern international financial and monetary system, specifically the role of deposit insurance and the obstacles to a renewed system of managed exchange rates, without which many regions appear doomed to enduring long-term austerity.

Keywords: Interest, monetary system, commodity standard, deposit insurance

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During the 17th century the consensus among Western Christians, both in communion with Rome and otherwise, on the subject of the ancient doctrine of usury shifted dramatically. This took place alongside, and perhaps because of, the rapid changes in society known by many economic historians as the Financial Revolution. The pastoral practice of the Catholic Church appeared to recognise the politics and practices of the secular world when in 1830 Pius VIII advised the Bishop of Rennes that the faithful were not to be troubled about this matter pending any future statement by the Holy See. Perhaps also the emergence of economics as a distinct discipline played its role in changing attitudes. Nevertheless the formal teaching of the Church has remained unchanged since its last exposition in the papal encyclical *Vix Pervenit* of Benedict XIV in 1745.¹

By 'usury' Benedict XIV meant the imposition of any rental charge for the use of money under a debt contract. The term 'interest' was originally reserved for the charges that might legitimately be claimed – the difference or *quod interest* to reinstate the lender's position – by way of penalty for late payment (*poena detentori* or *mora*) or for consequential loss (*damnum emergens*). These were referred to as the extrinsic titles to interest. In both cases, the charge could be applied only after the event and in the latter case, damages might have to be proven in court. A third title (*lucrum cessans*, compensation for loss of profits or opportunity cost) appears, consistently with the above, not to have been generally accepted by theologians and canon lawyers if it was fixed in advance (Munro, 2011). In this paper, 'interest' is used in its modern sense as the rental charge for the use of money without reference to the extrinsic titles; so lending at interest here means usury in the earlier sense.

The purpose of this paper is neither to examine millenia of debate over the legitimacy of interest (as here defined) nor to make any judgements as to the Church's reasons for not condemning the practice of borrowing and lending at interest while the ban remains 'on the statute book'. Rather the intention is to draw upon what may seem an unlikely source for

¹ *Vix Pervenit* was promulgated on 1 November 1745. Although originally addressed to Italian bishops, the Holy Office declared on 29 July 1836 that it applies to the whole Church. Pius VIII's response on 18 August 1830 to the bishop's letter is recorded in Denzinger (2012, 2722–2724.). Canon 1543 of the 1917 Code of Canon Law repeats the basic prohibition yet permits an investment agreement for modest lawful profit, and for a higher profit to the extent warranted by a just and proportionate claim. This has been taken as assent to the practice of lending at interest, leaving it to experts to determine whether the conditions are met in particular cases (Noonan, 1957, p. 391). The 1983 Code mentions only the payment of interest by church bodies and again refers simply to the investment of money without placing any limits on the form of investment (1284, 2). The 1992 Catechism mentions the prohibition of interest but only as a matter of charity (Fidei Depositum, 1994, s. 2449).

Catholic Social Thought, the work of the economist John Maynard Keynes. Just as economists seem to have played a major part in the acceptance of the argument that the payment of interest could be fair and just, Keynes's critique of what he referred to as Classical political economy includes the insight that there is indeed a difference between 'the loan of a horse and the loan of the purchase price of a horse' (Marshall, 1920, p. 486). Keynes's understanding of the distinction sheds new light on the concept of usury and on several aspects of modern economies, suggesting that the ancient teaching on usury contains wisdom of continuing relevance to present problems. Two particular examples are considered: the role of deposit insurance and the reform of the international monetary system.

Keynes on interest and liquidity

In *The General Theory of Employment, Interest and Money* (Keynes, 1936), Keynes draws a clear analytical distinction between interest on debts and the financial yield on physical capital assets. This is a distinction held by the Classical economists, such as Keynes's mentor, Alfred Marshall, to be meaningless and most modern economists take a similar view. For Keynes, interest is indeed the rent-charge for parting with money for a specified period and provides the inducement to overcome liquidity preference, or more colourfully, the propensity to hoard. His analytical device for comparing the rate of interest with the financial return on physical assets is the schedule of the marginal efficiency of capital.

Whereas Classical economists often spoke of the physical productivity of capital, by analogy with the fertility of land, Keynes notes that in a market economy with many different types of capital asset, productivity is neither measurable nor relevant. The investor is concerned with the efficiency of a capital asset in converting a money outlay into a stream of money receipts over time. Furthermore there is not at any time, outside a hypothetical stationary or steady state, a unique rate of return on physical capital assets which we might call 'the' rate of interest, since this varies with the type of asset and the date of production. What matters as an inducement to invest is the expected financial return on the marginal capital asset, the last asset worth producing today, given the rate of interest. This expected return Keynes defines as the marginal efficiency of capital and the schedule, as it were, ranks the capital assets that can be produced in descending order of marginal efficiency. New capital assets will be produced, i.e. gross investment will take place, at the level corresponding to the point on the schedule where the marginal efficiency equals the rate of interest. A raising of the schedule, representing an improvement in the expected return on investment, leads to a rise in the level of investment, given the rate of interest.

Keynes writes:

I was brought up to believe that the attitude of the Medieval Church to the rate of interest was inherently absurd, and that the subtle discussions aimed at distinguishing the return on money-loans from the return to active investment were merely jesuitical attempts to find a practical escape from a foolish theory. But I now read these discussions as an honest intellectual effort to keep separate what the classical theory has inextricably confused together, namely, the rate of interest and the marginal efficiency of capital. For it now seems clear that the disquisitions of the schoolmen were directed towards the elucidation of a formula which should allow the schedule of the marginal efficiency of capital to be high, whilst using rule and custom and the moral law to keep down the rate of interest. (Keynes, 1936, pp. 351–352)

In *The General Theory* and in all post-Keynesian economic theory, the level of employment and income in a market economy is determined by effective demand, of which the primary motor is the level of gross investment in the economists' sense, of the production of new physical capital assets. In Classical theory (which, during the 'counter-reformation' in economics of the 1980s, re-captured the ground taken by the Keynesians), the natural state of the economy is full employment and any unemployment is a matter of the deficiencies of workers or of imperfections in the labour market. In Keynesian theory there is no natural tendency to full employment and unemployment is, in part at least, a symptom of failure at the level of the system as a whole. It is the possibility of such failure within Keynes's theoretical framework, a possibility absent from the Classical theory, that leads Keynes to write:

Provisions against usury are amongst the most ancient economic practices of which we have record. The destruction of the inducement to invest by an excessive liquidity-preference was the outstanding evil, the prime impediment to the growth of wealth, in the ancient and medieval worlds. And naturally so, since certain of the risks and hazards of economic life diminish the marginal efficiency of capital whilst others serve to increase the preference for liquidity. In a world, therefore, which no one reckoned to be safe, it was almost inevitable that the rate of interest, unless it was curbed by every instrument at the disposal of society, would rise too high to permit of an adequate inducement to invest. (Keynes, 1936, p. 351)

As a utilitarian, Keynes's concern here is neither with charity to the poor nor with contractual justice but with the practical consequences of liquidity preference for the general level of

activity and prosperity. Although Keynes's basic proposition about effective demand changed economic theory and policy for a period of some 40 years until the 'counter-reformation', his concept of liquidity preference was never really accepted nor, it must be said, fully understood. Nicholas Kaldor recognised at an early stage that by liquidity Keynes meant something more subtle than simple marketability or convertibility:

Mr Keynes, in certain parts of The General Theory appears to use the term 'liquidity' in a sense which comes very close to our concept of 'perfect marketability'; ie goods which can be sold at any time for the same price, or nearly the same price, at which they can be bought. Yet it is obvious that this attribute of goods is not the same thing as what Mr Keynes really wants to mean by 'liquidity'. Certain gilt-edged securities can be bought on the Stock Exchange at a price which is only a small fraction higher than the price at which they can be sold; on this definition therefore they would have to be regarded as highly liquid assets. In fact it is very difficult to find satisfactory definition of what constitutes 'liquidity' – a difficulty, I think, which is inherent in the concept itself. (Kaldor, 1939, p. 4, n5)

Even a leading post-Keynesian defender of the concept of liquidity preference and of the authentic Keynes, Paul Davidson, defines liquidity in the following terms:

In money-using, market-oriented entrepreneurial systems, liquidity is defined as being able to meet contractual obligations as they fall due. (Davidson, 2011, p. 18)

By definition, liquid assets are assets that are traded on well-organized, orderly markets where the market maker assures the public that the next price will not be very different from the last transaction price, i.e. the price over time can change but it will move in an orderly manner. (Davidson, 2011, p. 119)

The principal difficulty with Davidson's interpretation² is that on this definition liquidity is not a property possessed mainly, if not exclusively, by money. Indeed to speak of the liquidity of money becomes tautological if liquidity is a matter of convertibility into money. Davidson does indeed refer to the stability of prices and to the settlement of contractual liabilities and this is important. Yet the paradox of *The General Theory* is that Keynes so emphasises the liquidity of money within a competitive theoretical framework in which *all* assets are equally marketable or convertible. This competitive assumption explains the

² Davidson is by no means alone among the post-Keynesians. Both Kalecki (1971) and Minsky (1975) also rejected Keynes's notion of liquidity, so that the view presented here is a minority (unique?) position among post-Keynesian economists.

absence of financial and industrial structure in *The General Theory* and the treatment of capital assets as though they were all individually traded on the stock exchange.

Keynes makes the startling suggestion that in certain historic environments *land* has been the dominant liquid asset. Land can never have been preferred for its convertibility, let alone as the means of payment. Keynes claims that historically it has possessed high liquidity, despite its low convertibility. Conversely, in his discussion of organised investment markets, which come closest in practice to the ideal of perfect competition in terms of transaction costs and uniformity of price, he treats their 'liquidity' (note the inverted commas) as an illusion and something distinct from true liquidity. Listed equity securities have high convertibility, but low liquidity.

The standard view of liquidity as convertibility is also unable to explain something central to the logical coherence of Keynes's theory: the hierarchy of liquidity described in explicit terms in his 1937 summary article. Stage 1: 'The rate of interest is the factor which adjusts at the margin the demand for hoards to the supply of hoards'. Stage 2: 'The owner of wealth, who has been induced not to hold his wealth in the shape of hoarded money, still has two alternatives between which to choose. He can lend his money at the current rate of money interest or he can purchase some kind of capital asset ... This is brought about by shifts in the money prices of capital assets relative to the prices of money loans': so bonds (money loans) dominate capital assets. Stage 3: 'If the level of the rate of interest taken in conjunction with opinions about their prospective yield raise the prices of capital assets, the volume of current investment ... will be increased': thus the output and supply price of new capital assets rises to meet the demand price. Stage 4: 'The amount of consumption goods it will pay entrepreneurs to produce depends on the amount of investment goods which they are producing': investment determines total employment and consumption through the multiplier relation. 'This that I offer is, therefore, a theory of ... employment because it explains why, in any given circumstances, employment is what it is' (C.W. XIV pp. 112–122).

In *The General Theory*, individuals do not choose between (say) consumption-goods on the one hand and bonds or capital-assets on the other (Fisher and Hicks); nor between money and consumption-goods (Pigou and Friedman), or even money and capital-assets (Minsky). As Davidson emphasises in his work, Keynes does not accept the Classical axiom of gross substitution, but insists upon a causal sequence: first, liquidity-preference must be satisfied and the prices of bonds adjust in response; secondly, the prices of capital assets must adjust to the prices of bonds. Finally aggregate income, employment and consumption adjust to the

rate of investment in new capital assets. Without a clear understanding of liquidity, Keynes's one-way causal sequence appears arbitrary and inferior to a treatment in which direct tradeoffs exist between all classes of goods and factor services. Such has been the verdict of the economics profession, both mainstream and post-Keynesian.

So what is liquidity for Keynes and can it sustain the distinction between lending at interest and other forms of investment? This question cannot be answered without reference to his unique understanding of probability and expectation, which has its roots in his early work, *A Treatise on Probability* (C.W. 8). From the current perspective, Keynes's work on probability is of particular interest as its underlying motivation was to provide a guide to ethical conduct independent of Christian faith and morals.

At the heart of his analysis is a recognition of the nature of time as a one-way, irreversible sequence of historical events, and that decisions are always made in the present, based on the unchangeable past and the unknown future. In *A Treatise on Probability*, Keynes treats Classical frequentist probability theory as a special case within a branch of philosophical logic that deals with arguments that are doubtful, but neither demonstrably certain nor logically impossible. He understands probability as an argument or logical relation between one set of propositions (the conclusions) and another set (the evidence). Mathematics deals with analytic relations between propositions that must be either true or false. In matters of metaphysics, science and conduct, an argument is considered 'probable' to the extent that it warrants a degree of rational belief. Such a probability relation is objective, in the sense that any rational judge would reach the same conclusion upon the same evidence. Probability is not in general numerical, as in frequentist theory, but arguments can be, and often are, compared. An archetypal case is the verdict reached in a court of law.

The expected value of Classical probability theory is known (i.e. certain) as soon as the population frequency distribution is known, while an expectation in terms of Keynesian probability reflects the balance of available evidence yet remains uncertain. The confidence with which an expectation is held depends on the weight of the evidence compared with the conclusive evidence of hindsight (or perfect foresight). Keynes illustrates this in his 1937 article:

"By uncertain knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject in this sense to uncertainty...Or, again, the expectation of life is only slightly uncertain. Even the weather is only moderately uncertain. The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest 20 years hence, or the obsolescence of a new invention, or the position of private wealth owners in the social system in 1970. About these matters there is no scientific basis on which to form any calculable probability whatever. We simply do not know." (CWXIV: 113-114)

Classical economists have tended to regard this statement as either a counsel of despair or a mandate for behavioural economics, yet Keynes himself is more measured:

We should not conclude that everything depends on waves of irrational psychology. On the contrary, the state of long-term expectation is often steady. Thus after giving full weight to the importance of the influence of short-period changes in the state of long-term expectation as distinct from changes in the rate of interest, we are still entitled to return to the latter as exercising, at any rate, in normal circumstances, a great, though not a decisive, influence on the rate of investment. (G.T. 162)

The prices of financial securities reflect not only what Keynes refers to as the 'actuarial' value, corresponding to the balance of evidence, but also the state of confidence, which is related to the weight of evidence. This distinction corresponds to 'the difference between the best estimates we can make of probabilities and the confidence with which we make them' (G.T. 240). The celebrated 'animal spirits' or spontaneous optimism relate to the state of confidence and have their counter-poise in liquidity-preference, 'the degree of our distrust of our own calculations and conventions concerning the future' (C.W. XIV, p. 116). The state of confidence is not something separate from the state of long-term expectation, but part of it. Confidence is weak when we know that our expectations are likely to change substantially, but we have no precise idea as to their future state: our present expectations already represent the best we can do on the available evidence.

For Keynes then, liquidity is the degree to which the value of an asset is independent of changes in the state of expectation. Liquidity has value only because the future is unknown, and its value increases with our fear of what may happen that we cannot prevent or insure against. Liquidity-preference and animal spirits are opposite facets of the state of confidence, which is a matter of the weight of evidence behind our forecasts of the future. The rate of interest is based on our well-founded distrust of forecasts of the long-term future and on the security offered by money, as the store of value least affected by changes in such forecasts. Thus money (including short-term debts) is more liquid than bonds (long-term debts), and

bonds are more liquid than equities or capital assets, creating the causal hierarchy of Keynes's system and the likelihood of permanent involuntary under-employment.

There is a biblical text which resonates with this understanding, although Keynes never made the connection. Jesus says:

No one can serve two masters. Either you will hate the one and love the other, or you will be devoted to the one and despise the other. You cannot serve both God and money. Therefore I tell you, do not worry about your life, what you will eat or drink; or about your body, what you will wear. Is not life more than food, and the body more than clothes? Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly Father feeds them. Are you not much more valuable than they? Can any one of you by worrying add a single hour to your life? (Matthew 6:24–27, New International Version)

The emphasis in this text is not on avarice but on anxiety. Jesus is not suggesting that we should not sow or reap or store away in barns, but that we should not worry. The text does not mean that we should not make provision for the future, or in economic terms, invest; Jesus was not a simpleton. Rather he warns against the craving for security in the face of the unknown future and explicitly that this is a matter of placing trust in God, not money. Money should be spent, either on immediate consumption or investment for the future, not hoarded. The opportunity for some to exact exploitative interest reflects the reluctance of the majority to accept the hazards of physical investment. In a wider context this represents the failure of society to devise and promote local, national and global financial institutions capable of sustaining investment at the level consistent with full employment.

From theory to practice

Although Keynes's name is widely associated with public deficit spending, his main emphasis in *The General Theory* is on what came to be known as a policy of 'cheap money'. Since liquidity preference is a matter of confidence, the rate of interest on long-term bonds the rate Keynes was concerned with—can be managed down by astute policy. In *The General Theory* he emphasised the importance of the long rate for very long-term investments, such as buildings and public utilities. Furthermore, while he did think that 'a somewhat comprehensive socialisation of investment' would be necessary to secure full employment, he clearly saw this as an exercise in institution-building which would combine private enterprise with the public interest (GT, p. 378). A specific example of this at national level was the UK's Industrial and Commercial Finance Corporation (ICFC) which was set up by the Attlee Labour Government in response to the 1931 Macmillan Report (largely drafted by Keynes). ICFC was an intermediary which provided small and medium sized enterprises with access to long-term capital markets, mainly through long-term loans. It was owned, rather reluctantly, by the major UK banks and the Bank of England and maintained its public interest ethos for 40 years, before liberalisation led to the shareholder banks moving into ICFC's markets and ICFC itself reverting to the culture of a conventional investment trust (Coopey and Clarke, 1995).

A more widely known example of Keynes's emphasis on the need for new institutions was his plan for an International Clearing Union (Keynes, 1942), which failed to secure support from the US at Bretton Woods, in favour of Harry Dexter White's International Monetary Fund. *The General Theory* is not, as commonly thought, a theory of a closed economy; consider Keynes's use of his model in his extensive discussion of mercantilism. Nevertheless *The General Theory* itself did not draw out the importance of the balance of trade in allowing surplus countries to depress global income, something Keynes explicitly addressed in the Clearing Union proposal and its adjustment requirements in particular.

How does the traditional teaching on usury shed any light on these modern problems? Keynes in *The General Theory* was concerned with the rate of interest itself and looked forward to the 'euthanasia of the rentier', the elimination of interest on long-term debts. Events have shown that it is indeed within the power of central banks to follow a 'cheap money' policy and through quantitative easing they have been pursuing this strenuously in recent years. The real returns on UK index-linked bonds are currently negative for all but very long maturities. However the losses suffered by taxpayers through explicit or implicit deposit insurance—not to mention the ever-increasing scale of bank crises since the end of Bretton Woods in 1971, let alone the Eurozone crisis—suggest something is badly wrong with the design of our financial system.

I suggest that the traditional teaching is telling us that the security and power offered by money should come at a price to the holder of money and not be used to exact a price from others. History shows that the cost of this security, or even of the craving for it, will be levied one way or another in an interest-based financial system, in an unjust and arbitrary fashion, through tax-payer bailout, insolvency and unemployment, or inflation. Liquidity is a genuine need – as is security of the payments system – the problem is extracting a price for it, when

the provision of security actually imposes a social cost. The next two sections consider two applications of this principle, to the national and international contexts respectively.

A first example: deposit insurance as a step too far

The usury doctrine does not prohibit investment of money for profit, provided that there is an acceptance of the risk of loss. In other words, financial investment should be a form of partnership or *societas*. Such equity investment involves not only risk of loss but also a relationship involving some degree of ownership and control.

The change in attitudes between the 15th and 17th centuries was mainly driven from the demand side, by the needs of commercial borrowers. As the Catechism currently notes, the emphasis of the ancient teaching was on consumption loans and the exploitation of the poor by the rich. The changes permitting commercial banking and later, bankruptcy and limited liability, were pushed by wealthy business and financial interests. Such borrowers usually prefer to take loans at interest, if they can get them, rather than accept profit-sharing partners or shareholders. This preference became still stronger with the introduction of corporate limited liability. The reluctance to share control and accept accountability may be the most important ethical shortcoming of modern usury. This observation is in line with the insistence in *Vix Pervenit* that usury cannot be condoned, even on the grounds that the borrower is rich or uses the proceeds for productive purposes.

In the context of the finance of productive investment, the payment of interest can be seen as an information-saving device (Mills, 1989). Traditional lenders (and simple trade creditors), before financial liberalisation, took trouble to ascertain credit-worthiness, including some direct knowledge and understanding of the business and its management. Nevertheless the interest charge removes the obligation to account for profits and avoids the agency costs of ensuring the accountability of management to owners. One consequence of the advances in information technology has been the advent of credit rating based purely on financial data, so that a credit score has become a substitute for a genuine relationship. Traditional bank branch managers, who knew their local customers, disappeared from the UK during the 1980s.

The standard assumption of the corporate finance literature is that a 'risky debt' contract is optimal (Gale and Hellwig, 1985) under asymmetric information with limited liability. The fact that borrowers know more about their business than lenders leads to two pathologies, moral hazard and adverse selection. Moral hazard means borrowers undertake higher risk projects with borrowed funds than they would with their own money, since the lender bears

part of the cost of failure through limited liability. Adverse selection means that lenders are unable to discriminate between borrowers in terms of the riskiness of their projects. Both tendencies lead to credit rationing (and therefore a departure from the theoretical first-best optimum) but the literature argues that the second-best financial contract is a 'risky debt' contract incorporating a premium to compensate for the risk of default.

Noonan records that such a risk premium was rejected by the scholastics as an extrinsic title to interest (1957, pp. 128–131). Bohren (1998) has observed that there is something deeply unsatisfactory about an economic theory that depends on breach of fiduciary duty to explain widespread phenomena, if only because such behaviour (to the extent that it is carried out in practice rather than merely assumed by theory) ultimately leads to market failure. From an ethical perspective, it is disturbing that interest-based finance positively encourages opportunistic behaviour—cheating—and the use of limited liability as a calculated strategy, rather than as a protection from unforeseeable events beyond the control of the borrower.

Nevertheless the concept of risky debt is at the heart of the explosion of credit associated with securitisation. The direct relationship between investor and user of the funds is eliminated by the move from 'originate and hold' to 'originate and distribute'. The concept of the CDS (credit default swap) and the conversion of sub-prime lending into secure investment grade securities by the alchemy of the CDO (collateralised debt obligation) depends on the treatment of loans as simple transferable claims on future cashflow with well-behaved probability distributions of default. Beyond the Keynesian critique of confusing uncertainty with risk, the deeper issue for our purposes is that this system is only possible through lending at interest on a completely impersonal basis. The dishonesty of mortgage brokers and investment bankers merely compounded the immorality assumed by the underlying financial model.

Ironically, the change in the banking model associated with risky debt was accompanied by the introduction in the UK and EU of deposit insurance along the lines of the US model. Financial liberalisation encouraged the development of universal banking, in which a single entity raised finance in many different forms other than traditional deposits, and undertook many different kinds of financial activity. This change corresponded to a shift in the regulatory regime from one of structural regulation, in which each type of financial institution specialised in a particular type of finance, to prudential regulation, under which financial institutions became free to pursue any type of activity provided they maintain the appropriate level of capital to protect creditors . Deposit insurance was introduced in the mistaken belief

that prudential regulation made the banking system more secure and reduced risk. Government deliberately stood back from directing the allocation of capital and credit, leaving it to the wisdom or otherwise of the market.

Underpinning prudential regulation and the securitised model are measures of capital adequacy based on the Classical model of probability. The model of structural regulation was based on a combination of relationships with customers, collateral against loss and lending decisions by experienced managers with specialised knowledge of their particular sector. These traditional banking methods do not make clever assumptions about probability distributions and are more robust against Keynesian uncertainty. Structural regulation is a much *more* secure basis for deposit insurance.

The change in the banking and regulatory model and the introduction of deposit insurance led to substantial growth in the scale of financial institutions. The line between retail and commercial banking on the one hand, and investment banking on the other, was blurred, then erased altogether. The growth in scale and consolidation of the financial sector meant that bank failures came to pose systemic risk to the monetary system. It became axiomatic that depositors must be protected and insured by the State, whether explicitly as in the case of retail deposits, or implicitly as in the case of Ireland and other Eurozone bailouts. When the crash came in 2008, a high proportion of the losses were passed to the state, with far-reaching consequences that we are still experiencing.

A number of proposals have been made since 2008 to re-introduce a degree of structural regulation and separate 'utility' from 'casino' banking. However the protection of depositors, with its implications for the capitalisation of banks, has remained a central concern and the more radical proposals, involving formal separation and the break-up of banks 'too big to fail' have foundered. The UK Vickers Commission envisages the introduction of internal firewalls within the existing institutional structures. Past experience suggests these will not operate as a material constraint and that the banks will always outwit the regulators. Even a critical commentator such as Kane (2010) considers the reintroduction of Glass-Steagall provisions impractical. The tacit assumption shared by all commentators is that deposit protection for all banks is essential.

The above argument suggests that state deposit insurance should be limited to state banks and specialised business banks lending against collateral in old-fashioned relationships based on specialised knowledge. Such banking operations should be limited to strictly short-term and

low-risk credit facilities, funding the timing differences involved in payments and in the working capital needs of production and trade. Utility banks should certainly not be involved in long-term property lending, which has been their downfall on so many occasions, or the finance of investments.

This proposal would not prevent the existence of banks with uninsured deposits, offering higher interest rates to depositors. Indeed the insured banks would probably not be able to offer any interest at all and would have to charge for their payment services. So uninsured banks might offer deposits bearing interest but also the risk of default – *caveat emptor* would apply. Such banks might be seen as an imperfect form of equity finance. Nevertheless there are plenty of business finance models available that would be considered if the alternative of borrowing at interest were ruled out. Indeed the current example of Islamic banking, despite some imperfections, demonstrates this.

An important alternative model of finance is the co-operative society. The members of a UK society are not usually depositors but shareholders and their entitlement to compensation for the use of their capital in the form of 'share interest' can be paid only from profits, making this a form of risk-sharing partnership. As shareholders they own and control the society but unlike a company there is a commitment to democratic voting and to the recognition of the society as a human association. Historically lending societies have been formed to meet unmet credit needs for housing, trade or consumer finance and based on a common bond of solidarity. However as they grew in scale and became perceived as safe investments, investors were encouraged to think of their shares as deposits. The effect of deposit insurance is to complete the transformation and disempower membership. The responsibility of governance is transferred from the 'amateur' owners to the regulators and de facto, to 'professional' management. Once insurance is in place, there is little incentive for members to devote time to participation in corporate governance, since there is neither risk of loss nor real influence on decision-making. The lending society in practice becomes indistinguishable from a bank and demutualisation easily follows.

The removal of deposit insurance might also permit the possibility of a local currency clearing house, structured as a co-operative society as proposed by Amato and Fantacci (2014). While this would require some careful design to deal with the problem of default, the removal of the €5m minimum capital requirement, required under the current EU Capital Requirements Directive and partly related to the need for deposit insurance, is probably a precondition for widespread adoption of this model. The last example of such a co-operative

bank in the UK, Mercury Provident, was forced by the advent of regulation to merge with Triodos Bank in 1995.

It is clear that the removal of universal deposit insurance would have major implications. Depositors in insured banks could not expect interest and would almost certainly face charges for transactions and account maintenance. Large-scale retail banks would almost certainly have to be broken up, both to separate their utility and investment operations and, to the extent that they continued to attract uninsured deposits, to restore them to a model based on relationships between borrower and lender. This move would remain consistent with financial liberalisation (indeed, a greater liberalisation than most depositors would wish) but would make cross-border deposits much less attractive, relative to insured deposits and equity investments. The implications for the UK as a financial centre would be profound, although there is nothing here that fundamentally undermines the equity finance of business enterprise.

A second example: international money

As mentioned earlier, Keynes did not draw out explicitly the importance of trade surpluses as a form of excess saving until after *The General Theory*, in his proposals for an International Clearing Union (ICU) (Keynes, 1943). His underlying concern was with the tendency of an advanced economy to run financial surpluses, internal and external, representing lost output that is neither consumed nor invested in physical provision for the future. In *The General Theory* the primary focus was on internal surpluses and the need for a 'cheap money' policy and the creation of long-term investment institutions like ICFC. In his later work, informed and driven partly by the imperatives of war finance and post-war reconstruction, Keynes recognised the need for mechanisms that would promote global full employment with balanced growth in international trade in goods and services. This would include the translation of any long-term trade surpluses into foreign lending to deficit countries, so as to ensure equilibrium in the balance of payments, taking both the current and capital accounts together. The mercantilist desire to accumulate foreign exchange reserves including gold— a policy entirely unavailable to the world as a whole—is the international equivalent of the domestic propensity to hoard.

The economic case for a reform of the international monetary system along the lines of the ICU has been made by several authors over many years (e.g. Hart, Kaldor and Tinbergen, 1964; Davidson, 2011). Suffice it to say that post-Keynesian economists consider a managed system far superior in principle, in terms of full employment and global economic growth, to

the system of flexible exchange rates and financial liberalisation favoured by mainstream economists. Such a system would require as key elements the creation of an international money as the reserve asset in substitution for the dollar and other currencies, balance of payments adjustment by surplus as well as deficit countries and the reinstatement of capital controls. The political obstacles are clear, as was shown by the shortcomings of the outcome of the original Bretton Woods negotiations relative to Keynes's original proposal.

Of the many flaws in the final design of the International Monetary Fund, the most relevant to this paper is the nature of the reserve asset. Keynes had proposed the formation of a banking institution that could create credit in a unit of account (bancor) transferable only between central banks. In theory the need for international reserves can be met, not by holdings of foreign currencies or gold, but by an overdraft facility, creating reserves *ex nihilo*. However this would mean that the credit balances in the system at any time represented claims, not on gold or convertible currencies, but on member states. This was unacceptable to the US as the major creditor in 1944, so that the institution which emerged was not a bank but a fund, created by the subscription of existing national currencies and gold. It was only in 1969 that the IMF began, in a small way, to create its own reserve asset in the form of the Special Drawing Right (SDR). Despite a ten-fold increase to SDR 204bn in 2009, SDRs still form only about 3% of global reserve assets and do not play the role intended for them by Keynes.

The liquidity preference of sovereign states manifests itself in the desire for a reserve asset, like gold, whose value is considered stable in the face of fundamental uncertainty and does not depend on the economic or foreign policies of any individual state. Once again, the issue here is not simply convertibility since no-one doubts that US dollars or sterling can be exchanged for goods. Since 1971, when the US dollar became no longer convertible to gold, the world has by default been on a dollar standard, sustained only by the relative size and strength of the US economy and its financial markets, not to mention its political and military power, and the use of the dollar as the unit of account in most international trade. It is no accident that this dominance has coincided with a period of financial liberalisation and flexible exchange rates, which have favoured the dollar's use as a key or vehicle currency in foreign exchange trading and its continuing reserve status, *faut de mieux*.

The Euro was created partly in response to the post-1971 turbulence in exchange rates but no account was taken of the implications of monetary union for the balance of payments between member states. It would have been better to have re-created a version of the

European Payments Union, with the additional provision for an automatic, compulsory, adjustment of national currencies against the clearing currency, in line with domestic costs and to address structural disequilibrium. This would also have made explicit the need for private capital inflows to be justified in terms of their positive contribution to net exports over the term of the investment, as Greece, Spain and Italy have recently been harshly reminded.

However the precedents offered by the EPU and the ICU rely on an acceptance of sovereign risk. In the context of the EPU and the Eurosystem this acceptance is feasible because secession from the European Union and the repudiation of foreign debt is (almost) unthinkable. The Eurosystem appears to be surviving for political reasons, despite the weakening of democracy and the economic costs involved in reversing balance of payments deficits in order to repay foreign debt, now embodied in the Target2 balances between central banks and the ECB. However this mutual commitment does not exist for the world as a whole, in the absence of a global political authority, something the Church has argued for since John XXIII's *Pacem in terris*. If the much-needed reform of the international monetary system is to take place prior to any global pooling of sovereignty, the need for a reserve asset independent of national sovereignty will have to be addressed.

The value of a paper currency ultimately depends on the ability of the state to impose taxation. Without a global state, a global paper currency is not conceivable; the SDR is not itself a currency but, as its name suggests, the right of a central bank to draw from the IMF a determinate amount of another currency. The amount is fixed in terms of a basket of four national currencies (roughly US\$ and \notin 40% each , £ and ¥ 10% each), corresponding to the shares of each reserve currency in international trade and reserves. Thus the quantity and real value of global money remains determined by national policies and underpinned by national taxation.

The alternative basis for a reserve asset, which does not wholly depend on the sovereign power to enforce contracts and impose taxation, is some form of commodity, of which historically gold was the exemplar. As Keynes explains in Chapter 17 of *The General Theory*, gold satisfies liquidity preference because of its durability, low storage and transport costs in proportion to value and its relatively fixed quantity. Yet, as the experience of the Gold Standard shows, the primary role of gold was as collateral for debt instruments rather than as a means of payment in itself. Gold is not usually used as currency but as an anchor for the value of state money. The shortcomings of gold as an international reserve asset are well known. The main source of its liquidity, its relatively fixed quantity, is also the reason why it is unable to meet the needs of growth of international trade. Another perceived shortcoming is that gold produces no income and governments have become accustomed to receiving interest on their reserve assets. Yet this concern with income returns us to the heart of our enquiry. The present reserve system appears superior to the gold standard because it produces a yield, rather than costing money, but it imposes a social cost in terms of exchange rate volatility, regular banking crises and global underemployment. The traditional teaching on usury suggests that we cannot expect both security and a return on investment. To secure value in the face of fundamental uncertainty is costly.

It is not beyond the wit of man to design the secure reserve asset needed to anchor the international monetary system and provide a firm reference value for a system of adjustable exchange rates. In 1964 Nicholas Kaldor, supported by Hart and Tinbergen and following the earlier work by Keynes, Hayek and the two Grahams, drew up and presented to UNCTAD a blueprint for an international commodity reserve currency (Hart, Kaldor and Tinbergen, 1964). This represented a refinement of Keynes's earlier ICU proposals and proposed that the IMF issue bancor in exchange for a basket of the 30 major commodities that dominate international trade. Bancor would thereby constitute a stable and universal standard of value in real terms.

Kaldor's scheme met all of Keynes's concerns: the creation of adequate but not excessive international reserves to support growth in international trade; a system of managed exchange rates, adjustable in line with domestic costs; the equal onus on both surplus and deficit currencies to adjust their balance of payments; the stabilization of commodity prices and, just as importantly, of the incomes of primary producing countries, in order to maintain global effective demand; and the fixing of the international standard of value in real terms, but independent of gold. The basic concept has recently received support from no less than the chairman of the central bank of China (Xiaochuan, 2009).³

While some fiduciary element (i.e. loans to central banks denominated in bancor) would be desirable, the commodity basket substitutes, like gold, for the ability to impose taxation which ultimately supports national fiat currencies. Crucially, security against political risk

³ Although Kaldor remained committed to the idea of using international money to finance commodity buffer stocks, by the end of his life he had concluded that basing it on a commodity-reserve faced severe practical obstacles (Kaldor, 1987).

can be provided by distributing the physical warehousing of the commodities approximately in line with major holdings of bancor. However such a scheme comes at a price, rather than generating an income. The management and storage costs of the commodity stocks were estimated at around 3–6% per annum, although part of this is already incurred in relation to existing strategic stocks held by individual states. The recovery of these costs might be a suitable application of a Financial Transactions Tax that would overcome some of the objections to such a supra-national tax. Furthermore a system like this would substantially reduce the need for reserves, which have risen to unprecedentedly high levels through the need for developing countries to self-insure against currency crises, insurance which comes at a significant cost and represents a transfer from rich to poor nations.

The financial costs of a commodity reserve currency combine with the political obstacles to capital controls, surplus country adjustment, the loss of sovereignty over exchange rates, and the loss of seignorage by the issuers of the currency reserves held by central banks. This loss of seignorage applies not only to new issues of currency but to the need to deliver commodities in substitution for the existing balances. These obstacles to reform are formidable but the argument here is that, in the end, this is a matter of ethics. The existing system imposes economic costs through underemployment, inflation or default, invariably on the poorer members of global society who are less able to protect themselves. It is also vulnerable to a major loss of confidence in the US or Eurozone, with unpredictable but probably severe consequences for the global economy, a strong argument in itself for moving away from reliance on their currencies as the principal reserve assets (see Kenen, 2010). A more just and rational international monetary system would recognise these social costs explicitly and distribute them equitably.

In conclusion

The ancient prohibition of charging for the simple use of money embodies wisdom which remains relevant today. The doctrine fell into abeyance after the 17th century as society changed, at least partly because the new commercial classes preferred to borrow at interest rather than take in formal equity partners. Once personal bankruptcy and corporate limited liability were accepted in the 19th century, it became possible to create a financial system based on 'risky debt'. Economists have done harm by their denial of any significance in the difference between debt and equity finance and more recently in their encouragement of securitisation. The elimination of any relationship between borrower and lender has made it

impossible to justify banking as even an imperfect form of risk-sharing partnership. The charging of interest as compensation for risk was explicitly rejected by the scholastics.

Keynes was among the few economists to recognise the importance of the distinction between debt and equity. His analysis was based on a concept of liquidity which has been neglected or misunderstood from the outset, as something considerably more than convertibility. For Keynes the peculiar role of money is grounded in the nature of time and our fundamental uncertainty about the future. Our fear of the unknown prompts a craving for security, a propensity to hoard rather than to invest in physical productive assets. This liquidity preference imposes a social cost in terms of underemployment yet the lender can command a premium for forgoing liquidity, in the absence of an ethical and legal prohibition. Keynes argued that the power of interest-bearing debt needed to be countered by a policy of cheap money and by the creation of financial institutions oriented towards long-term equity investment and the promotion of full employment.

Undoubtedly there is a legitimate need for a secure store of value and means of payment. The ancient teaching is that the security offered by money comes at a price and this price should be borne by the holder of money and not by society as a whole. We have applied this principle to two very different policy areas, the insurance of deposits and the nature of foreign exchange reserves. In the first case, deposit insurance should be restricted to 'utility' banks that provide essential payment services and collateral-based finance. Their depositors would be unlikely to receive interest and rather would pay charges for safe custody. Depositors in uninsured institutions would have to recognise their risk. In the case of foreign exchange reserves, a condition of the reform of the international monetary system towards the promotion of full employment is the independence of the value of the global reserve asset from the economic and foreign policies of sovereign states. This requirement could be met by a variant of one of the well-known commodity-reserve schemes. The common element of such schemes is that they offer security at a price.

Thus the ancient teaching offers surprising new insights and suggests distinctive reforms that appear to promote the common good in the aftermath of the era of financial liberalisation. Our discussion also suggests that such reforms will not take place without a change in the ethical foundations of economics and politics, including a renewed understanding of human freedom as something beyond liberty.

References

Amato, Massimo and Fantacci, Luca (2014) *Saving the Market from Capitalism*. London: Polity.

Bohren, O. (1998) The agent's ethics in the principal-agent model, *Journal of Business Ethics*, 17 (7) 745–755.

Coopey, Richard and Clarke, Donald (1995) *Fifty Years Investing In Industry*. Oxford: Oxford University Press.

Davidson, Paul. (2011) *Post Keynesian Macroeconomic Theory* (2/e). Cheltenham: Edward Elgar.

Denzinger, Heinrich J. D. (2012) *Compendium of creeds, definitions, and declarations on matters of faith and morals.* 43/e, P. Hünermann, H. Hoping, R. L. Fastiggi, A. E Nash (eds). San Francisco : Ignatius Press.

Fidei Depositum (1994) The Catechism of the Catholic Church. London: Geoffrey Chapman.

Gale, Douglas and Hellwig, Martin (1985) Incentive-compatible debt contracts: the oneperiod problem, *Review of Economic Studies*, 52 (4) 647–663.

Hart, Albert G., Kaldor, Nicholas & Tinbergen. (1964) The Case for an International Commodity Reserve Currency, in N. Kaldor, *Essays on Economic Policy*, vol 2, 131–177, London: Duckworth.

Kaldor, Nicholas. (1939) Speculation and economic stability, *Review of Economic Studies*, 7 (1), pp. 1–27.

Kaldor, Nicholas. (1987) The role of commodity prices in economic recovery, *World Development*, 15 (5) 551–558.

Kalecki, Michal. (1971) Selected essays on the dynamics of the capitalist economy 1933-1970. Cambridge: Cambridge University Press.

Kane, Edward J. (2010) The importance of monitoring and mitigating the safety-net consequences of regulation-induced innovation, *Review of Social Economy*, 63 (2) 145–161.

Kenen, Peter. (2010) An SDR Based Reserve System, *Journal of Globalization and Development*, 1 (2) 13.

Keynes, J. Maynard. (1936) *The General Theory of Employment, Interest and Money*. London: Macmillan.

Keynes, J. Maynard. (1942) Proposals for an International Clearing Union, reprinted in *The Collected Writings of John Maynard Keynes*, 1980, vol 25, 168–195. London: Macmillan.

Marshall, Alfred (1920) Principles of Economics, 8/e, 1949 pagination. London: Macmillan.

Mills, Paul S. (1989) Interest in Interest: The Old Testament Ban on Interest and its Implications for Today, unpublished Ph.D dissertation, University of Cambridge.

Minsky, Hyman P. (1975) John Maynard Keynes. New York: Columbia University Press.

Munro, John H. (2011) Usury, Calvinism, and Credit in Protestant England: from the Sixteenth Century to the Industrial Revolution, Working Paper 439, University of Toronto: Department of Economics.

Noonan, John T. (1957) *The Scholastic Analysis of Usury*, Cambridge, MA: Harvard University Press.

Xiaochuan, Zhou. (2009) Reform of the International Monetary System, People's Bank of China.