

The Major New Paradigm

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Abstract, Paper & CV

**The Major New Paradigm
of the 4th Industrial Revolution**

Rodney Shakespeare

Formerly Visiting Professor of Binary Economics
Trisakti University,
Jakarta,
Indonesia

Email: rodney.shakespeare1@btopenworld.com

11. Charman House,
Hemans Estate,
London, SW8 4SP
United Kingdom
Tel: (UK) (0)20 7771 1107

Website

www.binaryeconomics.net

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Abstract

There is minor, medium and major paradigm and a change in the latter has widespread scientific **and** social and political consequences.

Research has shown that in the move to, and creation of, a major new paradigm three factors are involved:-

- deep, widespread knowledge of the main subject
- tension between academics in the centre of the subject on the one hand and progressive thinkers *on the edge* of the subject on the other
- some force or opposition *coming from outside* which *interacts* with the progressive thinkers *on the edge* to create the major new paradigm.

Using paradigm analysis and unity-of-knowledge methodology it is found that, today, deep knowledge exists; progressive thinking exists; and Islam (with its opposition to financial interest) is the force coming from outside.

Thus the three factors exist today and so the way is open for the creation of the *Major New Paradigm*. This involves a new understanding of physical, economic, moral and political reality and a new way of addressing the effects of automation with the practical consequence of unlocking wealth creation and true income for everybody.

In particular, it opens the way to the large-scale creation of interest-free money lent for the purpose of spreading the real economy and environmental benefit to every person in society.

The *Major New Paradigm* will be opposed by Western financial, political and social structures even although its implementation is positive and gentle. However, its time has come and the period of implementation can be short because:-

- the situation is ripe for change
- computers and internet technology exist
- international transport is swift
- Asian universities are knowledgeable
- Islam is the major force in the world for impelling positive change.

This paper should be read in conjunction with the papers:-

- *Implementing the Major New Paradigm of the 4th Industrial Revolution* by Dr. Talib Warsi & Rodney Shakespeare.
- *Multidimensional Properties of Money, Real Economy and New Technology* by David Pidcock.

Both papers are presented at this Conference.

1. Introduction

A 'paradigm' (pronounced 'para-dime') is the basic mental framework which organizes experience and information. It is a *mindset* with underlying assumptions and underpinnings. It is a set of connections and a view of reality. It is a perspective, a way of looking at things. It contains interlinked dogmas, concepts and values which, in effect, are axioms or self-evident truths.

Paradigms decide what is, or is not, noticed; what is, or is not, important; and what does, or does not, happen. Nobody is free from paradigms because they are integral to human psychology and comprehension of life on our planet.¹

a) Minor change of paradigm and normal science

In everyday science, attempt is made to solve puzzles and, using traditional methods, there is bit-by-bit progress in a straight line. If data shows an outlier, the data is re-checked and, if the outlier remains, endeavour will be made to marginally alter the existing theory (but not fundamentally change it). This is *normal science*.

Thus any new development in the science can still be claimed to be based upon the existing paradigm. At most, there is only minor paradigmatic change and it cannot be fairly said that the science itself has changed.

i) Resistance to accepting new developments and new thinking

Also inherent in normal science is resistance to accepting a new development. This is because, due to the need for logic and internal coherence, the assumptions and underpinnings underlying the science are all connected with one another with the consequence that the new development contradicts some aspect of the existing paradigm. The new development therefore meets resistance, or is ignored, or is viewed as surprising, or anomalous,² or illogical, or disruptive or even damned as being untrue. In short, there is an upholding of the status quo.

Indeed, any analysis or proposal for doing something differently will always meet with some resistance. Moreover, any detection (by a progressive analyst) of a false assumption or underpinning of the existing paradigm will be condemned as invalid because *ALL* the assumptions and underpinnings *are connected with one another*.³

b) Medium change of paradigm and paradigm shift

But when there arise new assumptions and underpinnings which clearly provide a very different (and more accurate) way of comprehending reality, or when there is an

1 See Thomas Kuhn, *The Structure of Scientific Revolutions* (1962). Rodney Shakespeare, *The Modern Universal Paradigm*, (2007).

2 Therefore, when observing the strange jittering Brownian motion of pollen grains on the surface of still water, the (then) normal science chose to view it as just a strange anomaly rather than accept that the (then) existing scientific theory was inadequate and a new solution was needed.

3 An assumption, no matter how false, is not easily overthrown because of its connections with the other false assumptions. Mainstream economics is based upon *fifty nine* false assumptions but, as a study, it is still able to be upheld because its false assumptions are interconnected. See Appendix One and www.binaryeconomics.net

obvious need to accommodate anomalous results, there comes a *paradigm shift*. This is the change from one paradigm to a completely different one with big consequences.

i) Tension between those in the centre and those on the edge

At first the shift manifests itself in disagreement between conservative upholders in the centre of the traditional science on the one hand, and progressive proponents of new assumptions and anomalous observations *on the edge* of the science on the other. In short, there is tension between those in the centre and those on the edge.

If the analysis is trenchant and the anomalies are serious, crisis develops. At that point, open-minded and honest scientists realise that there is a need for a paradigm shift which will give a newer and better way of understanding phenomena and so of making progress.

The shift, of course, meets with huge resistance but when it does occur, a new paradigm replaces the old one. After the replacement, things can never be the same.

c) Major change of paradigm with scientific, social and political revolution

But when the shift is large-scale, the change is momentous⁴ because this is NOT a case of science progressing in a straight line or even taking a new direction. Rather it is a case of a massive transformation in which *a complete set of newer, truer, more accurate and more efficacious assumptions and underpinnings replaces the old, untrue, inaccurate, inefficacious ones*. Indeed, Thomas Kuhn defined a major change of paradigm as:-

*“a non-cumulative developmental episode in which an older paradigm is replaced in whole or in part by an incompatible new one.”*⁵

Please note the word ‘incompatible’. The new paradigm *cannot* be fitted into the old one. This is an *overthrow* of science and so there is a *scientific revolution* best comprehended by thinking of something which *cannot* be understood through the language and analysis of the old paradigm. Readers of this paper might try thinking of a new landscape on some far-off planet with strange new animals and plants.... – even the soil is different....

A good example is the Copernican Revolution⁶ which is the basis of much modern science and technology and was to have *revolutionary social and political consequences*. Clearly what occurred was the emergence of an absolutely fresh, creative worldview not only in science but in social and political thought as well.

This paper contains a major new paradigm and thus the impossible becomes possible and the intractable becomes tractable.⁷

4 E.g., Newton, Lavoisier (oxygen) and Einstein.

5 Kuhn, op. cit. Robert Ashford & Rodney Shakespeare, *Binary Economics – the new paradigm*, (1999).

6 The Copernican Revolution states that, rather than the sun going round the earth, *the earth goes round the sun* i.e., the geocentric understanding was replaced by a heliocentric one.

7 Indeed, let us risk a little of the spirit of the poet William Wordsworth who, reflecting on the situation after the French revolution, wrote:- *Bliss was it in that dawn to be alive,
But to be young was very heaven!*

d) Scientific (and social and political) revolution can be quick

Oh dear! Somebody has pointed out that the period of paradigm shift from Copernicus to Newton was 140 years!

Yes, but a long period for shift is not necessary today because of the speed of international communication and the extraordinary progress of computer technology.

Moreover, there is widespread understanding of the tremendous fact that *inherent in today's ever-improving computers and new technology, is the physical possibility of ensuring that every individual in the world has equitable access to water, sanitation, health services, education and a reasonable standard of living.*

Furthermore, this understanding is sharply increasing particularly in the burgeoning Asian 4th Industrial Revolution universities of which the University of Science and Technology, Chittagong, is an excellent example.

2. Unity-of-knowledge methodology

Paradigm analysis is the process of identifying, comprehending and criticising paradigm. Such analysis is best done using **unity-of-knowledge methodology** which identifies the overall mindset with its underlying assumptions and underpinnings all of which are interconnected. Moreover, unity-of-knowledge methodology identifies falsity in assumptions and underpinnings.

a) Unity-of-knowledge methodology rejects Western reductionism

Unity-of-knowledge methodology starts by observing that Allah (God) created the world and so *all things are part of His Creation and connected*.⁸ It is thus both a world-view and an analysis of present reality.

Crucially, the methodology rejects Western reductionism which separates academic subjects. That does not mean, of course, that the methodology denies the value of specialisation – after all, each subject contains a vast amount of information and there is a limit to what one human being can absorb and understand.⁹

However, it *does* mean that an academic subject has no excuse for continually ignoring major matters elsewhere in Allah's (God's) creation with which it is logically, practically and morally connected. **Specialisation can never be an excuse for gross negligence**. An example is the false assumption of mainstream economics that all its outcomes are efficient and just (which blatantly contradicts the facts).¹⁰

To which unity-of-knowledge methodology replies that the false assumption contradicts Allah's purpose of integrity and fairness.¹¹ Believe it or not, mainstream economics even thinks that:-

- a woman doing caring 24/7 does no work for the human race

⁸ Masudul Alam Choudhury, *The Universal Paradigm and the Islamic World-System*, (2007).

⁹ Very few people today are like the polymaths of the past whose knowledge spanned several subjects.

¹⁰ There are another fifty eight false assumptions in mainstream economics; and unity-of-knowledge methodology identifies and castigates them as failing to implement Allah's will. See www.binaryeconomics.net and Appendix One.

¹¹ Economics without ethics can only be destructive. Masudul Alam Choudhury, *Money in Islam*, (1997).

- the build-up of plastic detritus in the oceans (and – alas! – in our bodies) is never the concern of economists
- preposterous accumulations of wealth solve themselves because the wealth ‘trickles down’.

But the woman works hard; the plastic builds up; and it is impossible for the very rich to ‘trickle down’ all their money, even if they wanted to (which they do not).¹²

Unity-of-knowledge methodology, therefore, is that methodology which, as far as possible, always takes into account as much as it can take into account. It goes as wide as possible rather than as narrow as possible. This essentially means remembering that we must never ignore our moral obligations to each other, to flora and fauna, and to the world in general. In short, we must always have a sense of Allah’s Creation and His Purposes rather than the short-sighted purposes of some human beings (and, for that matter, of mainstream economics).

b) Trans-disciplinary analysis and foundation

The result of unity-of-knowledge methodology is **a trans-disciplinary analysis and foundation** for the study of science, finance, society, and economics which finds connections, gives them new meaning and, in particular, opens the way for major, new, world-renovating policy.

Indeed, unity-of-knowledge methodology and trans-disciplinary analysis coincide in identifying interconnected assumptions and, crucially, in identifying what can create the scientific and social revolution for solving world problems. They both exhort us to:-

- find the connections between things
- take into account other things and our obligations to them
- ask what Allah would require us to take into account
- have a concept of ‘*everything*’ being the world-system extending between the heavens and Earth.¹³

3. On the creation of big new ideas

A while ago, at the behest of the American government, researchers under Professor Rodgers Hollingsworth worked to discover the factors which contribute to the creation of big new ideas i.e., a major new paradigm. The purpose of the research was to define the circumstances of the creation thereby providing hope that they can be replicated with consequent benefit for humankind.

a) The three factors

The researchers found that **three** factors contribute to the creation of big, new, paradigm-changing ideas:-

i) *Deep, widespread knowledge of the main subject (astronomy, biology or economics, for example) and its underlying assumptions. Such knowledge is conservative.*

¹² It is for this reason that, when there is extreme rich-poor division as happens today, there can never be a true balance of supply and demand as required by Say’s Theorem (‘Law’).

¹³ Masudul Alam Choudhury, *The Islamic World-System*, (2004).

This is obvious. It is about a large body of widely-held, conservative information.

ii) *Tension between conservative, centrist scholars of the main subject and progressive thinkers on the edge of the subject seeking to develop and improve the subject (schools of 'alternative' economic thought, for example).*

Again, this is obvious and very reasonable. Of course there is tension between conservative scholars in the centre and progressive thinkers on the edge!

So what is the third factor?

The third factor came as a surprise to the researchers. Furthermore, it was not only a surprise but the researchers said it could be difficult to find or difficult to describe. Yet, all the time, it seemed to be there and could be summarised as:-

iii) *Some form of major force or opposition, powerfully present, coming from the outside. It interacts with the progressive thinkers on the edge of the subject to create a paradigm shift.¹⁴*

Now that is not obvious and, at first sight, does not make sense. What force? What opposition? And how can anything come 'from the outside'? Ideas are generated inside people's heads!

Furthermore, what is meant by '*It interacts with the progressive thinkers on the edge of the subject to create a paradigm shift*'? Is there a clear example?

4. The change from geocentric to heliocentric paradigm

Yes – a clear example is the Copernican Revolution whose story begins with the old Ptolemaic paradigmatic assumption that our planet is at the centre of the universe and therefore must have been placed there by Allah.

a) The first factor

Now this assumption was very reasonable because there was clear scientific evidence for it – every day not only astronomers but ordinary people could see the sun going round the earth and every night there was a background of stars. Indeed, the assumption was not only reasonable but practical – sailors could use it to navigate around the world!¹⁵

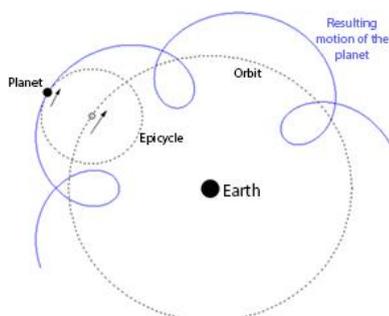
Moreover, it had big social and political consequences. Since Allah had placed the earth at the centre of the universe it followed that His rulers on earth (e.g., kings, tsars, churchmen etc.) were backed by divine authority! Therefore, any challenge to a ruler could be immediately construed as a challenge not only to the kings and churchmen but also to the divine originator of the universe and so trouble-makers, particularly democrats, had best beware! Thus the **first factor** (deep, widespread knowledge of the main subject) was very much in existence.

14 This research is not widely known and, conceivably, despite costing millions of dollars, may have been suppressed because the third factor implies that, over time, American society, for example, just as much as any other society, is liable to overthrow because of its internal contradictions and weaknesses. In short, Fukuyama's *End of History* is not the end of history.

15 *Polaris*, the *North Star*, can be used to find north, and the *Southern Cross* to find south.

b) The second factor

Then the situation began to change. Newer information was coming from better telescopes, more determined analysis and observation which showed that some of the stars (today known as planets) had to-and-fro movements and light-dark changes. *Surely something was wrong* because the movements and changes were *inconsistent* with the existing geocentric assumption that there was a background of stars with the earth being at the centre of the universe.



This set the scene for tension between the conservative, centrist upholders of geocentric theory and progressive thinkers *on the edge* of the subject who knew from their planetary observations that something was not quite right in existing theory, even completely wrong. This tension is the **second factor** identified by the researchers.

But just because something is not right, or even completely wrong, does *not* mean that there will be a change, let alone a revolution, in thinking. Indeed, the basic idea *continued to be the same* — conventional wisdom, combined with many vested interests, ‘solved’ the problem of the to-and-fro movements and light-dark changes by announcing that the planets moved in ‘**epicycles**’ or little circles whilst also going around the earth!

Therefore, the forces of suppression had won because *the old Ptolemaic paradigm of a geocentric universe was not overturned*. Rather, the ‘epicycle’ theory (which was totally untrue) meant that *geocentric theory* (and the consequent political and social vested interests) *could be maintained*. The ‘epicycle’ theory kept the earth at the centre of the universe!

In short, the old, outdated, untrue, geocentric (earth-centred) idea had prevailed as had the old social and political structures in some way connected to, or based on, it.¹⁶

c) The third factor

So what was the third factor in the eventual revolutionary change from geocentric (earth-centred) to heliocentric (sun-centred) paradigm? What was the ‘*force or opposition, powerfully present, coming from the outside*’ which interacts with the progressive thinkers to create the new paradigm?

The answer starts from understanding that, at the time, *all the institutions and practices in society* were in some way linked to the local rulers and their divine authority. Furthermore, the interests, associations and connections of ordinary people were similarly linked.

Therefore any re-thinking of geocentric theory *was certain to be of revolutionary consequence* — not least, querying the legal and moral authority of the rulers — and anybody doing that thinking *would be killed*. Copernicus and, later on, Galileo were putting their lives at risk.

¹⁶ Major new thinking is nearly always attacked in the endeavour to suppress. Examples are:- Louis Pasteur (unseen germs), Charles Darwin (evolution), Barbara McClintock (‘jumping genes’), Charles Parsons (steam turbine), Alfred Wegener (tectonic plates) and James Maxwell (physics equations).

Thus the 'force or opposition, powerfully present, coming from the outside', can only be ***a deep-seated, radical willingness to challenge everything about a society at its root even though death would be the penalty.*** Copernicus and Galileo were only too aware of what they were doing. They ***knew*** they could be killed. However, when Copernicus received the printer's proofs of *On the Revolutions of the Celestial Spheres*, (1543) he was on his death bed and so would not be killed. Galileo would have been killed but, after the intervention of the Pope (who probably knew the truth), he was not killed but, instead, was sentenced for life to house imprisonment.¹⁷

So it was a combination of **radical cast of mind, bravery and huge intellectual courage** which was the third factor leading to the paradigm shift of the Copernican Revolution causing scientific advance and furthering democracy. The radicalism and courage are fairly described as 'opposition coming from the outside' because they were certain to change, over time, in some revolutionary way, almost every aspect of the society. ***They came from outside and interacted with progressive thinking on the edge of the subject to create the major new – and revolutionary – paradigm.***

5. The situation today

So what is the situation today? The first factor exists — it is the existing knowledge and practices which are deeply and conservatively embodied in the political, social, academic and economic power structures and vested interests of society.

The second factor exists — it is new knowledge, information and analysis (in progressive schools of 'alternative' thought ***on the edge*** of the subject) which identify extensive error ***but which are suppressed*** by conservative power structures and vested interests using propaganda and lies.

But what about the third factor? Does it exist? What might be '***some form of major force or opposition, powerfully present, coming from the outside***' which then ***interacts with progressive thinking on the edge of the subject to create the paradigm shift?***

6. Could Islam be the third factor?

The question has to be asked — Could Islam, in some way hard to explain yet, at the same time, powerfully present, be the ***third*** factor, the great impulse for major new paradigm, as identified by the Hollingsworth research?

And if Islam is the third factor, does it have huge potential for challenge nestling within? And if it does have challenge potential, exactly what might that be?

Indeed, what is the key component in Islam which is capable of changing things, indeed, revolutionising things, in a totally beneficial way?

7. The fifty nine false assumptions of mainstream economics

¹⁷ Galileo was investigated by the Roman Inquisition in 1615, which concluded that heliocentrism was "foolish and absurd in philosophy, and formally heretical since it explicitly contradicts in many places the sense of Holy Scripture". In 1632 he published *Dialogue Concerning the Two Chief World Systems*. In 1633 he was tried by the Inquisition, found guilty of heresy, and forced to recant.

Well, it can be said now that Islam *is* the third factor but, in order to understand why, it is first necessary to identify the Western and Islamic progressive thinking *on-the-edge* which particularly concerns itself with the false assumptions underpinning mainstream economics. **An astonishing fifty nine false assumptions** have been identified so far¹⁸ and if only one assumption is false or, at most, two or three are false, **then the whole of mainstream economics is invalidated** (not least because the assumptions are interlinked).

8. The false assumptions are interlinked and hidden

What is the main false assumption? It would be invidious to say that one particular false assumption is the main one because *they are all interlinked*.

Moreover, there is the difficulty that the false assumptions are generally disguised or hidden. For example, many standard textbooks contain what is essentially a lie and, as a result, the public is deceived.

And there is the further difficulty that it cannot be always said that the main false assumption is hidden. Indeed, as will be seen, it can be openly admitted!

However, even if admitted, the implications of the falsity are never spelt out and the public in general is continually deceived.

9. The main false assumption of mainstream economics – that banks lend existing (and not newly-created) money

With those things in mind, we now say that the main false assumption of mainstream economics is that **banks lend existing (and not newly-created) money**.

However, they do not. They do NOT lend existing money. Although people find it hard to believe, nowadays, money lent by the banks is *created out of nothing*.

Yes, nothing! Money is not silver. Not gold. Quite simply, the banks press computer buttons so as to create, for example, \$100 or \$100,000.

It is as simple as that. *Nobody's private money – not yours, not mine, not even the bank's – is being lent. New money is created.*¹⁹

The process of creating the new money takes place primarily *in banks* and this is admitted at high levels. For example, the Bank of England says:-

*'In the modern economy, most money takes the form of bank deposits. But how those bank deposits are created is often misunderstood: **the principal way is through commercial banks making loans. Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower's bank account, thereby creating new money. The reality of how money is created today differs from the description found in some economics textbooks –***

18 The fifty nine false assumptions underlying mainstream economics can be found in Appendix One of this paper and at <https://www.binaryeconomics.net/wordpress/> More false assumptions certainly exist and readers are invited to try to identify them.

19 The banks 'print' interest-bearing money albeit in electronic form which, if desired, is convertible into paper money and coins.

*Rather than banks receiving deposits when households save and then lending them out, bank lending creates deposits.*²⁰

Nothing could be clearer — by pressing computer buttons the banks create the money that they lend and the economics textbooks tell untruths.

The Federal Reserve Bank of Chicago also states:-

*'The actual process of money creation takes place primarily in banks.'*²¹

In the UK, for example, 95% or more of new money is created out of nothing by the banking system which does it very simply — by pressing computer buttons.²²

Indeed, all around the world today, *money is created out of nothing by the banking system* which creates most of the money as loans to which a demand for financial interest (*beyond* justifiable administration cost) is attached.

The famous American economist J.K. Galbraith said:-

*'The process by which banks create money is so simple that the mind is repelled.... It is, moreover, one that is almost breathtaking in its audacity.'*²³

This quotation is highly significant because J.K. Galbraith, one of the world's greatest economists, was never awarded a Nobel Prize. The reason is simple — he blazoned out the truth ('...so simple that the mind is repelled...breathtaking in its audacity') and so the Western power structures would never, ever forgive him.

The truth is that the banking system is usurping society's right (the right to create money) to create money for itself (the banking system). It is no wonder Galbraith did not get the Nobel Prize!

a) Getting away with counterfeiting

So how is it that the banking system is able to get away with what is essentially counterfeiting, usually punishable by long prison sentences?

The answer, firstly, is simply that *people are not generally aware that the banking system creates lent money out of nothing*. Other people's deposits are *not* used for the lending but the public usually believes that they are and, all the time, various sorts of subtle propaganda are used to maintain this belief.

b) But the bank money is NOT directed at the real economy

Mainstream economics, secondly, claims that the purposes of the economy are being properly served because (it *claims*) the (created-out-of-nothing) lent money is being directed at productive capacity in an efficient and just way which creates growth from which all fairly benefit. That is the claim. Therefore, according to mainstream economists, bank money (which is created out of nothing *and has interest added* — all for the benefit of its creator) is the magic element in the (claimed) successful operation

20 McLeay, M., Radia, A., & Thomas, R., *Money Creation in the Modern Economy*, Bank of England, Quarterly Bulletin, 2014, Q.1.

21 Federal Reserve Bank of Chicago (1992), *Modern Money Mechanics – a Workbook on Bank Reserves and Deposit Expansion*.

<http://www.freedomcommittee.com/5534/freedom/books/mmm/mmm2.html>

22 The other 5% or less is created by the government.

23 J.K. Galbraith (1975), *Money: Whence it came, where it went*.

of the 'free market' because the new money is directed at, and serving, the needs of the real economy and so of society.

However, bank-created loan money is *not* serving the needs of the real economy, nor of society. There are three main aspects to this:-

i) The claim of efficiently allocating resources, particularly for productive capacity, is a complete lie. Nowadays, the banking system does *not* allocate money to new productive capacity (and its spreading) and, instead, allocates it to:-

- the gargantuan upside-down pyramid of derivatives²⁴
- the bidding up of existing asset prices (such as stocks, shares, house prices)
- consumer credit
- putting individuals, companies and whole societies into debt which, increasingly, can never be repaid
- anything **except** the real, productive economy *and the spreading of the real economy to every individual*.²⁵ Without the spreading there can never be a true balance of supply and demand as required by Say's Theorem ('Law').

ii) Moreover, very significantly, the speculative trading of currencies now swamps the world's money exchanges and the capital development of a country becomes an irrelevance to the activities of a casino.²⁶ The bulk of the speculative trading is done by the currency trading departments of the banks.²⁷ Greed has overtaken common sense and the situation is madness.

iii) Mainstream economics then makes the even more outrageous claim that money coming from *outside* a country is healthy *even though it bears financial interest!*²⁸ That is a preposterous lie.

Therefore the claimed justification for bank-created (so-called 'endogenous') money — that it is directed at, and serves the needs of, the real economy and so society with equitable outcomes — is false.

As regards equitable outcomes, the rich get richer and the rich-poor gap increases.²⁹

24 The USA Congress deregulated the derivatives markets by passing the Commodity Futures Modernization Act. The trillions of dollars involved in today's derivatives dealing have created an upside-down, unstable, pyramid which will one day topple the global financial system.

25 Today, only a tiny percentage (less than 2%) of the money supply goes into new productive capacity. Bernard Lietaer (2001), *The Future of Money*. David Korten (2001), *When Corporations Rule the World*.

26 Kameel Mydin Meera & Moussa Larbini, *Seignorage of Fiat Money and the Maqasid al-Shariah: the Compatibility of the Gold Dinar with the Maqasid*, in "Harmonising Development and Financial Instruments by Shariah Rules for Ummatic Integration", International Islamic University, Chittagong, Bangladesh, (2004).

27 Bernard Lietaer, op. cit.

28 If the foreign money is linked to, say, imported technology, that is one thing but, in general, just borrowing foreign money (e.g., US dollars at high rates of financial interest) is outrageous.

29 The 2018 *Oxfam Report* says that, last year, billionaires increased their wealth by \$2.5 billion per day. While the poorest half of humanity saw its wealth decline by 11%, billionaires' wealth increased by 12%. In 2017 the top 26 wealthiest people owned as much as the 3.8 billion poorest. In 2016 the number of top wealthiest was 43 so there has been a massive shift to a tiny number of megalomaniac rich people. Generally, half of the world's population lives on under \$3 per day.

10. The second false assumption – financial interest is necessary

To the money which is created out of nothing, financial interest is added. This includes the cost of administration (which is relatively small). Mainstream economists (and all of the political and social systems) **assume that the imposition of financial interest is necessary and inevitable and this is the second main false assumption.**

This assumption is contained within the wider false assumption that, when the banking system creates money out of nothing and then lends it, the result is a furtherance of both efficiency and justice. All the time mainstream propaganda³⁰ upholds the importance of there being financial interest, often distinguishing, for example, between ‘fair’ financial interest and ‘usurious’ (or excessive) financial interest.³¹

a) **ALL financial interest is usurious: it gives an ever-increasing benefit to the lender and diminishes ability to repay**

Yet the truth is that **all** financial interest (and not just excessive financial interest) is usurious.³² Of course, the usury is cunningly disguised in various ways (one way is by lumping in the financial interest with the administration cost which is tiny).³³

However, no matter how disguised, financial interest, in reality, is merely a continuing charge (or ‘tax’) **in addition to** administration cost and the need to repay the principal of the original loan. A fair charge for doing genuine administration work is necessary³⁴ but, in contrast, financial interest is *not* necessary because it attaches itself to debt and creates recurring charges (and compounds) in a way which is completely distinct from administration cost. Thus the true purpose of financial interest is obvious – to give a financial benefit, an ever-increasing, compounding one, to the lender.

Moreover, the requirement to pay financial interest greatly diminishes the capacity of borrowers to repay **and diminishes their capacity to consume.** In short, borrowers have to repay more than they have borrowed and consume less than the value of the borrowed sum.

So, by some perversion of the mind, the banking system is claiming that there is some extra special virtue in lent money that *costs several times more than it needs to*

30 For example, young people and university students are taught that the imposition of financial interest on their student loans is necessary. It is not. Only the tiny cost of administration is necessary.

31 The Time Value of Money doctrine (and the associated doctrine that the lender is ‘waiting’ i.e., giving up something) are preposterous falsities because today’s money is created out of nothing by the pressing of computer buttons.

32 The West defines usury only as “excessive, unreasonable, unfair financial interest”. But any level of financial interest, which is compounded, still allows inordinate transfers of wealth to the lender for no reason other than that the lender has the whip hand and can decide the terms of the lending.

33 Fair administration cost is payment for work done. But, whereas an administration charge is only fairly imposed when administration work is done, financial interest is imposed *whether or not* administration work has been done and *whether or not* a charge for possible loss of the principal is being made.

34 The fair costs of administration can include an element of ‘standing charge’ for maintaining an account and having somebody available to administer it when necessary. However, there is no justification for high financial interest when, in many cases, the fair administration charge is under 1%.

cost.³⁵ It is therefore perverse to claim that financial interest advances the efficient allocation of resources because charging interest simply takes resources away from the borrower and gives them to the lender.

b) Cost of capital projects doubled or trebled

The cost of capital projects (e.g., clean water, sewage, clean electricity generation) is *doubled, tripled or more* by financial interest because, particularly when compounded, it hugely adds to the cost of a project so that, in practice, such projects cannot be built or, if they are built, the cost is inordinate. This is always the case when the project takes a long time to be built. A typical example is the construction of the (UK) **Humber Bridge**. Starting at £28,000,000 (with some price rises), compound interest took the cost to £439,000,000 (*fifteen times* higher!) whereupon the government intervened to put the cost onto the National Debt for ever (rather than on the people of Humberside).

Even more startling is the simple fact that *every year since the bridge was opened in 1981 the bridge has made an operating profit* i.e., *its running costs* — basically, repair, maintenance and staff salaries — *are exceeded by the fees the bridge receives* from travellers crossing the River Humber. In short, the bridge makes money but, in practice, because of compound interest, it is an ever-increasing charge on the National Debt.

Compound interest-bearing debt is also the basic mechanism which causes the **National Debt** of most countries to rise to astronomical levels. A nation's interest-bearing Debt is a continual, grossly enervating, burden for which there is no need and it massively defeats the purpose of the efficient allocation of resources.

c) International financial interest compounds odious debt

Internationally, the effects of compound interest are such that whole societies are trapped into an ever-increasing debt which they can never repay, and the attempt to repay in practice results in their economic resources being ripped off to outsiders. This is **odious debt** — by a process of bamboozlement and deceit the poor countries of the world are told a complete lie, namely, that they can *only* borrow from abroad and that the borrowing must be at financial interest, which is compounded.

Unfortunately, even highly intelligent people can be gullible and believe that there is no alternative to the present system. By the year 2000, Nigeria's debt to international creditors had gone from \$5 billion to \$28 billion even though \$16 billion (i.e., over three times the original loan) had already been repaid i.e., \$5 billion had become \$44 billion in total and even more in the future. President Obasanjo said:-

'That \$28 billion came about because of the injustice in the foreign creditors' interest rates. If you ask me what is the worst thing in the world, I will say it is compound interest.'

³⁵ Of course, if the banks were actually lending *their own* money then they can, in practice, charge financial interest saying, "If you want a loan from me, you have to pay interest." But they are creating the money — which is a totally different thing — and so unfairly benefiting themselves. Put simply, they are usurping *society's* right (the right to create money) to create money for themselves.

The bad situation is then compounded – quite literally – by the **corrupt elites** which finagle the borrowed money into a Swiss bank accounts but succeed in making the repayment of financial interest and principal the responsibility of their own oppressed, impoverished populations.

Yet corrupt borrowing elites are only part of the problem – the other part is the **corruption of lenders**. In *Confessions of an Economic Hit Man* (2004), John Perkins rips aside the veils of hypocrisy as he reveals the way Indonesia was given exaggerated technical forecasts, over-priced contracts, work contracted out abroad rather than locally, and enervating financial interest rates on foreign-created money.

This is predatory lending at its worst and yet it goes ahead even though the lenders *know* that it is immoral. However, it always happens because the lenders have the mouth-watering prospect of financial interest *continuing forever*.

To cap it all, the lenders hide their corruption and greed under the hypocritical claim that what they are doing is a virtuous part of the ‘free market’ and that, in some magic way, efficiency and justice result from their lending. The corruption of the lenders is the greatest corruption of all. The overall result is A.I.D.S.³⁶

d) Financial interest transfers resources from poor to rich

Financial interest is a giant sucking mechanism which draws up wealth from the poor and transfers it to the rich. Generally, the cost of financial interest causes 80% of the people to pay out much more than they receive; 10% are in balance; and the last 10% receive very much more than they pay out.³⁷

In the town of Aachen in Germany, for example, financial interest on capital is 12% of the cost of rubbish collection; 38% of the cost of drinking water; 47% of the cost of sewage; and up to 77% of the cost of public housing. Moreover, between 1950 and 1989 German Gross Domestic Product increased *twenty two* times, but financial interest paid on the German National Debt increased ***seventy five*** times!

Furthermore, it has been estimated that a horrific 50% of the price of *all* goods and services relates to borrowing costs (principal and financial interest).³⁸

e) Deleterious social consequences of *riba*/interest

The social consequences of financial interest can be horrific. In India, 200,000 farmers committed suicide over the period 1997 - 2010.³⁹ That's 15,000 each year or 40 every day. The major factor in this disaster is debt at excessively high interest rates

³⁶ A.I.D.S. - Accumulated International Debt Syndrome (in all developing countries). Muhammad Iqbal Anjum, (2004), *Some Reflections on the Fundamental Errors in Development Economics – an Islamic Critique* (Annual Journal of International Islamic University, Islamabad).

Moreover, the creditor countries today do not give some form of debt relief with the object of eliminating interest-bearing loans. Rather they give the relief (often on tortuous conditions so that, in practice, the relief is minimal) *to ensure that heavily indebted countries, although on their knees, are still able to continue paying the interest on debt*. The relief is to ensure that the indebted countries do not suffer complete economic collapse and so not be able to pay anything at all. International debt relief is cynical behaviour of the worst sort particularly when, as a condition for relief, the indebted countries are forced to sell off their capital assets to foreigners.

³⁷ Margrit Kennedy, (1995), *Interest and Inflation-Free Money*.

³⁸ Margrit Kennedy, op. cit.

³⁹ *Rupee News*, 14th May, 2010.

and, unlike American farmers, Indian farmers do not receive large subsidies or forms of income support.

Many farmers who do not kill themselves have no choice but to sell a kidney.

f) Financial interest puts the world into ever-increasing debt

Banks create out of nothing the money they lend and the creation is sufficient to allow for the repayment of the principal. *However, banks do not create enough money to repay the financial interest.*⁴⁰ The system as a whole therefore requires that **overall debt should continually increase** and that, of course, means that the level of debt has to increase to a level where it cannot be repaid. At which point debt is repudiated, confidence collapses, and 'bust' replaces 'boom'.

On top of which, the global system of financial interest puts individuals, corporations, towns and cities into ever-deepening debt because mainstream economists claim the debt is necessary if there is to be prosperity. Unfortunately, the prosperity is only for some, and never for all.⁴¹

g) Financial interest creates inflation

At present, **two lots of financing** are required to keep the system going — one for production and one for consumption.⁴² Mainstream double financing, using interest-bearing money, requires more and more money to be created and thus is the main factor causing the insidious creep-creep of inflation.

Furthermore, the present global financial system creates sufficient money for the principal of interest-bearing loans to be repaid but does **not** create sufficient money with which to repay the interest. Thus more money must be created.

h) Financial interest prevents clean water and green electricity and causes environmental depredation

Every day in the world, thousands of people die from the effects of dirty water. Yet clean water supplies and effective sewage systems use well-established technology and common materials. Such supplies and systems, however, are not in place because their cost, using compound interest-bearing loans, is at least twice and often three or four times the cost of a interest-free (repayable and cancellable) loan.

And it is the same with clean electricity generation. In the UK one existing technology alone — tidal lagoons and underwater turbines — could generate most of the UK's electricity needs. Yet if interest-bearing (rather than interest-free) loan money is used, the technology is not financially viable.⁴³

40 Tarek el-Diwany (2003), *The Problem with Interest*.

41 NB. When debt gets too high, banks stop lending (for fear of losing the loans) and the money supply begins to contract. Soon, unemployment begins to rise.....

42 In the new paradigm of binary economics **only one lot of financing is necessary. It finances both production and consumption at the same time.** This is called *simul-financing*.

See <https://www.binaryeconomics.net/wordpress/>

43 In 2010, citing the need for 'austerity', the UK government cancelled the project. Society has gone made when, with a financial solution easily available, it denies itself the benefits of green energy.

In the present system more and more interest-bearing money has to be created with consequent inflation, indebtedness, greed and endless frenetic activity in the endeavour to try to make repayment.⁴⁴ Worse, the system favours the short term destruction of natural wealth rather than its long term maintenance.⁴⁵

Moreover, at present, virtually everyone has either had a scarring experience of poverty or has a fear of falling into poverty. In short, people feel insecure and that is a big factor in explaining greed. Thus, unless the role of financial interest in the global system is substantially diminished, environmental depredation is inevitable.

11. The creation of the *Major New Paradigm*

The third factor in the creation of big, new ideas, as identified by the researchers, is:-

Some form of major force or opposition, powerfully present, coming from the outside. It interacts with the progressive thinking on the edge of the subject to create the new paradigm.

The third factor divides into three parts:-

- A. Major force or opposition, powerfully present, coming from the outside
- B. Progressive thinking
- C. Interaction between the force coming from outside and the progressive thinking

A. Major force or opposition, powerfully present, coming from the outside

Islam is the major force or opposition. It is a distinctive culture,⁴⁶ powerfully present and 'comes from the outside'.

Moreover, Islam has three distinctive concepts which embody the sort of intellectual bravery and exertion found in Copernicus and Galileo:-

i) *Jihad*

In a religious sense, as described by the Qur'an and the Prophet's (PBUH) teachings, *Jihad* means striving for community benefit or the restraint of personal sins. The words 'striving for community benefit' are significant⁴⁷ and contrast with Western arrogance whose basic political and economic doctrine is that the West is History Perfected, justice is everywhere and nothing better can be found or even conceived.

ii) *Ijtihad*

Ijtihad is effort, physical or mental, expended in a particular activity. In its general sense it means intellectual bravery and exertion, again as exemplified by Copernicus and Galileo.⁴⁸

iii) Spirit of *Zakah/Khums*

44 Tarek el-Diwany (2003) op. cit.

45 Tarek el-Diwany (2003) op. cit.

46 If paradigmatic change is to be successful, the world view must be distinctive because, without distinctiveness, the *ummah* will never free itself from control by others. See Masudul Alam Choudhury (1997), *Money in Islam*.

47 Mainstream economics is based on the selfish doctrine of *homo economicus*. *New Paradigm* economics is based on *homo reciprocans* and *homo co-operans*.

48 In its technical sense, *Ijtihad* can be defined as a process of legal reasoning through which the jurist derives or rationalizes law on the basis of the Qur'an and the Sunna.

Zakah/Khums is one of the five pillars of Islam. However, it is only a charitable, rather than a structural, solution to poverty. That said, the spirit of *Zakah/Khums* (i.e., the desire to solve poverty) is very strong.

iv) The most distinctive part of Islam

But perhaps the most distinctive part of a distinctive Islam is the Prophet's (PBUH) injunction against Riba (financial interest):-

'O believers, fear you Allah; and give up the Riba⁴⁹ that is outstanding, if you are believers. But if you do not, then take notice that Allah will war with you, and His Messenger; yet if you repent, you shall have your principal, unwronging and unwronged.' (Qu'ran 278-9)

'O you who believe! Devour not Riba, doubled and multiplied; but fear Allah; that you may prosper.' (Qur'an: 3:130).

The iniquities of financial interest (as distinct from genuine administration cost) have been set out previously and no more needs to be said. All in all, Islam fits the description of 'coming from the outside' as identified by the researchers.

B. Progressive thinking

The progressive thinking (on the edge) described by researchers is Western and Islamic progressive thinking which identifies fifty nine false assumptions of mainstream economics. The thinking particularly points out two key matters:-

i) today's money is created out of nothing.

Any claim to the contrary is a monstrous falsity.

ii) financial interest is added but it is not necessary.

A reasonable administration charge is necessary but financial interest is not. Again, any claim to the contrary is a monstrous falsity.

C. Interaction between the force coming from the outside and the progressive thinking on the edge of the subject

Therefore the key interaction between the force coming from outside (i.e., Islam and its injunction against financial interest) and the progressive thinking (i.e., insight that today's money is created out of nothing and financial interest unnecessarily added) can be summarised in the statement ***One plus one equals a much bigger One.***

Or (in a type of new mathematics!)

1 (Islam) + 1 (progressive thinking) = 1 (major new paradigm)

In this way there is created the *Major New Paradigm* upon which a new world can be created. In practice this means that society's money supply, if administered (by the banking system) on market principles to spread the real economy to everybody in

49 In English translations the word 'usury' is often used. But this is a Western deceit. Islamic commentators view the Holy Prophet's injunction against *Riba* as against any financial interest rather than as in the use of the word 'usury' which in Western legal jurisdictions means 'excessive interest' (as distinct from **all** interest).

society, can be *free of financial interest* thereby ensuring rapid implementation and rapid repayment in a way which is inconceivable at present.

Thus the path is now open for the large-scale creation (by the national bank) of interest-free loan money for the purpose of spreading the real economy to every person in society on true market principles.

In sum, the force and energy of Islam combines with the Western and Islamic progressive thinking to create the *Major New Paradigm* for a modern economics and a new world.

NB:-

i) The widespread use of society's money can only be non-inflationary as it is put into productive assets and their spreading ***with the repaid money being cancelled*** leaving behind in existence the productive assets.

ii) At the same time there would be a need to stop the banks creating money by a rise to 100% banking reserves.⁵⁰

The result is that society's money supply can be used to spread, over time, the real economy to every person in society.

iii) The banks would still be able to lend *their own* money (and, with permission, that of depositors) on such terms as they wish, including interest. The banking practice of Islamic Finance, for example, would continue.

50 The use would require restraining the banks' ability to create money (which is done by a **rise to 100% banking reserves**). However, **there would still be financial interest in the economy** because the banks would be lending *their own* money and, with permission, that of depositors.

There is nothing new in 100% banking reserves. It was proposed by Simons and Fisher in the 1930s and supported by Milton Friedman. Today, the (former) Governor of the Bank of England and the Austrian school of economics are of a similar view. However, none of them proposes the use of the national bank-issued interest-free loan supply for the development and spreading of productive (and associated purchasing) capacity to *every* individual in society.

Appendix One

Fifty Nine False Assumptions Underlying Mainstream Economics

Below are listed fifty nine assumptions which underlie mainstream economics. These assumptions are things believed to be true or taken for granted as inevitable or sensible but *which, in fact, are false*.

This is a matter of considerable importance because if only **one** assumption is false (or, at the most, two or three assumptions are false) then *the whole structure of mainstream economics becomes invalid*.

However, the Major New Paradigm becomes easily understood if the fifty nine false assumptions are one by one, and simply, *reversed* (as briefly seen in the *italicised* text).

Indeed, after only two or three reversals a whole new world begins to come into view.

NB. Many people say that they “do not understand economics”. This is **NOT** because they are stupid. It is because mainstream economics is full of contradictions and obvious falsities **which** make comprehension impossible.

The false assumptions and obvious falsities of mainstream economics are:-

1. Scarcity is an inevitable part of the human condition. (*It is not inevitable.*)
2. High taxation is necessary. (*That is false.*)
3. Labour physically creates all, or a large part, of the wealth. (*That is false – it creates part. Of all the false assumptions this is among the most pernicious.*)
4. The ‘free market’ is free. (*It is unfree.*)
5. The ‘free market’ is efficient and allocates resources efficiently. (*It is inefficient.*)
6. The outcomes of the ‘free market’ are always just. (*They are unjust.*)
7. *Homo economicus* is an accurate description of human psychology. (*Homo reciprocans and homo co-operans are better.*)
8. Conventional economics is an all-encompassing science of objective process and universal value and further improvement to economics is impossible. (*That is false – further improvement is possible.*)
9. It is a matter of small importance that the banking system creates money out of nothing sufficient for the repayment of the principal of a loan but not of the interest. (*It is of huge importance and the implications must be addressed.*)
10. The ‘free market’ consists of states of equilibrium: when there is disequilibrium there will always be a return to equilibrium. (*That is plainly false.*)
- 11 There Is No Such Thing As a Free Lunch (any improvement for the poor inevitably involves a detriment to the rich). (*That is false — true Islamic economics is not a zero sum game.*)
12. The ‘free market’ upholds private property for all. (*It does not.*)

13. It does not matter who owns the capital, particularly productive capital. *(It matters hugely.)*
14. The 'free market' implements Say's market Theorem ('Law') that producers and consumers should be the same people. *(It does not implement the Theorem.)*
15. Somebody who voluntarily looks after a sick child or adult does no work in the economic sense. *(Try doing it!! ...)*
16. Financial interest is inevitable and always necessary. *(Reasonable administration cost is inevitable and necessary: financial interest is not.)*
17. Ethics/morality is not part of economics. *(This is madness!)*
18. The poor are poor because of lack of effort and lack of skill. *(Have a think about this and then you will realise its great untruth. The poor are poor because of lack of productive capital, lack of access to capital credit and suffering the burden of riba/interest.)*
19. Inflation is not caused by the banking system. *(Oh yes it is!)*
20. Financial savings are necessary before there can be investment. *(They are not necessary because, today, money is created out of nothing by pressing computer buttons.)*
21. Physical savings are necessary before there can be investment. *(This is generally untrue because materials are available. Prices for things can rise but that only increases cost. Also substitutes are often available.)*
22. Labour and welfare payment will always suffice. *(They most certainly do not suffice....)*
23. It is not necessary for every person to have an independent income. *(This is completely untrue.)*
24. The level of interest rates is all that is necessary to manage an economy properly. *(What matters is who or what creates the wealth and who gets the benefit of the creation.)*
25. Wide ownership is not necessary. *(It is absolutely necessary to spread productive capacity.)*
26. Student loans should bear financial interest. *(Why should such loans bear interest?)*
27. Public capital projects should be funded by borrowing interest-bearing money. *(Interest free (repayable and cancellable) loans halve, even quarter, the cost.)*
28. Micro-credit lending should bear financial interest. *(Why? Collateral and repayment are required, but why interest?)*
29. Environmental capital projects should bear financial interest. *(Certainly not!)*
30. An economy requires **two** lots of financing – one for production and one for consumption. *(NB. Only one lot of financing is necessary if it is simulfinancing as in Binary Economics.)*
31. There is no such thing as society. *(Oh please! Why don't mainstream economists grow up?)*
32. Personal debt is healthy for an economy; as also national debt. *(This is nonsense! Because of the need to repay financial interest, people in debt have less consuming power than those without debt.)*

33. There is no power imbalance between actors (participants, including individuals) in an economy. *(Whoever first thought of this has never lived an ordinary life!)*
34. Social and economic justice on the one hand and efficiency on the other are incompatible. *(Wrong! In true Islamic Economics the justice and efficiency are compatible and intertwined.)*
35. Economic history is irrelevant. *(Really? The trouble with mainstream economists is that they never learn anything.)*
36. Outdated economic theory (Adam Smith, 1776, basically conceived **before** the Industrial Revolution had got under way), suffices to guide modern economic theory and practice. *(The modern analysis of Binary Economics is badly needed.)*
37. The important things in economics are anything **except** the development and spreading of productive capacity so as to make producers and consumers the same people thereby enabling a Say's Theorem ('Law') balance of supply and demand and also enabling the forwarding of social and economic justice. *(This is the biggest lie of al.)*
38. Banks should be able to offer interest-bearing mortgages (as distinct from administering national bank mortgages). *(The whole subject of housing needs to be reviewed and new policy considered.)*
39. Economic inequality is desirable; the greater the ratio between top earnings and bottom earnings, the better. *(Another lie not least because the rich do not (and cannot) spend all their earnings.)*
40. 'Trickle down' economics works. *(It does not! The rich are incapable of spending all their wealth so they accumulate it.)*
41. Rising house and stock market prices are necessarily a sign of genuinely increased wealth. *(That is not so — they usually only reflect newly-created money being put into anything except the spreading of the productive economy.)*
42. Economic cycles are inevitable. *(They are not inevitable.)*
43. Individual greed is good and institutionalised greed is even better. *(This is homo economicus at work. Let us have homo reciprocans.)*
44. Countries should raise money at *riba*/interest on the international markets. *(No.)*
45. Countries should not be autonomous; they should be controlled by others. *(They should be independent.)*
46. A country's assets should be owned by outsiders. *(This lie stops a nation's people owning their own assets and getting the benefits thereof.)*
47. A country's money supply should originate in the banking system rather than the national bank. *(When it originates in the banking system it is not put to proper purpose and financial interest is added.)*
48. Employee shareholdings and involvement do not improve efficiency. *(Oh yes they do!)*
49. Political democracy does not require economic democracy. *(All the talk about 'democracy' amounts to a lie unless the economic aspect is also considered.)*
50. Even though today's banking system money is created out of nothing there is a Time Value to borrowed money. *(If the money is created out of nothing, it has no time value.)*

51. Environmental matters are extraneous and impose extraneous cost. (*Good heavens! These madmen (they are usually men) are destroying the world and they don't care!*)
52. Not only ethics but belief in Allah/God should be eschewed. (*Ethics is certainly essential if we are to hold up our heads as human beings.*)
53. Economics is essentially a separate subject which does not have to take account of other subjects. (*Oh yes it does! And true Islamic Economics takes account of physics, ethics, biology, history, psychology and many other subjects.*)
54. The creation of money out of nothing and the addition of financial interest does not require even more creation and even more debt. (*Oh yes it does!*)
55. Population growth is inevitable. (*It is not inevitable. Moreover, smaller populations do NOT necessarily have a diminished ability to create wealth.*)
56. An understanding of technology is irrelevant to economics. (*It is highly relevant.*)
57. Jobs can be exported. (*If they are exported, the spending power of the jobs is removed from the domestic economy.*)
58. Domestic manufacturing does not matter. (*It matters very much.*)
59. Education and training suffice for economic needs. (*They do not suffice — wide capital ownership is also necessary.*)

The revelation of *Major New Paradigm* economics and the true Islamic landscape

Major New Paradigm Economics is easily revealed if the fifty nine false assumptions of prevailing economics are one by one, and simply, *reversed* (see the *italicised* reversals above).

Quite soon, it becomes apparent that a different picture is emerging and then, long before all the false assumptions have been reversed, it is brightly clear that a totally new landscape — *the true Islamic landscape* — has emerged.

About the Author

Rodney Shakespeare taught in UK schools and colleges for thirteen years. For ten years he was Visiting Professor of Binary Economics (holding the only academic post in the subject in the world) at Trisakti University, Jakarta (second university in prestige in Indonesia) where he taught on the International Postgraduate Islamic Economics and Finance program.

Binary Economics is a new paradigm economics which, among other things, addresses the technological shift now smashing out traditional well-paid jobs (and substituting insecure, low-paid ones) and upholds democratic economic rights as well as the usual political ones. As a completely new, major paradigm, Binary Economics could not be understood (and thus taught) in the UK.

Rodney is a Cambridge MA, a qualified UK Barrister, and a well-known paper presenter and lecturer particularly at conferences dealing with money, the real economy, and social and economic justice.

Co-founder of the Global Justice Movement www.globaljusticemovement.net he is the author of <http://www.binaryeconomics.net>.

In 2000 he received the (Martin Luther) King-Kelso Award. He broadcasts with various TV stations including Press TV.

Rodney's first co-authored book on Binary Economics — *The Two-factor Nation* — was published in 1976. He is co-author (with Robert Ashford) of the standard textbook on Binary Economics — *Binary Economics - the new paradigm* (1999).

He is co-author (with Peter Challen) of the subsequent text *Seven Steps to Justice* (2002) which further develops Binary Economics, and author of *The Modern Universal Paradigm* (July, 2007) containing later developments in particular relating to paradigmatic understanding and the appeal of Binary Economics to people of faith and of good faith. He is also author of *The Prophet Vindicated (P.B.U.H.)* (2019). A further major work is in preparation.

Rodney is a widower with two children and two grandchildren. He is a private tutor and Chair of the Committee Against Torture in Bahrain.

Due to an accident he has impaired hearing.

His present work concerns the development of the *New Paradigm* which, after an interaction between key aspects of Islam and progressive Western and Islamic thinking, evolves into a new concept with huge practical and beneficial consequences for the world.