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From the Great Depression to the 2008 Global Financial Crisis: Systemic Flaws in Investment Financing*

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Abstract. The 2008 global financial crisis (GFC) echoed the same systemic flaws in relation to investment financing that gave rise to the 1930s great depression (GD). Although triggering factors and regulatory concerns are qualitatively different in the two crises, the diagnosis in Islamic perspective relates to two major sources: (1) an inherently destabilising force of the interest rate as it strictly separates investment and financing decisions, (2) and an ever- widening distance between capital markets and productive sectors due to unrestrained financial engineering that feeds on short term speculative returns. The first problem is shown to invoke Fisher and Tobin's Separation Theorems in the mainstream economics as they state the theoretical appeal of investment/ financing separation in terms of capital market optimality. The second problem has a long history in modern capitalist markets as it has lately resulted in transforming traditional concepts of investment, financing and liquidity. Recent studies have provided evidence that financial derivatives in capital markets constitute 80% of global liquidity, implying that the world economy is becoming much like a big gambling casino having producers of goods and services like sellers of nuts and crisps! The paper sets out from a brief background on the GD, shedding light on the profound structural impact of the 1933 Glass-Steagall Act as it negatively affected traditional bank intermediation and encouraged money and capital market disintermediation. The present GFC has marked the apex of major intermittent events between the GD and the GFC that have contributed to radical shifts of profitability from productivity-based traditions to highly leveraged speculation. In conclusion, interest-free Islamic finance can be part of the global financial solution not only through advocacy of an equity driven economic order but also through stricter control on financial engineering that feeds purely on speculative bubbles.

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Introduction

The 1930s Great Depression (GD) brought cyclical movements to the attention of economists for the first time since the eighteenth century's industrial revolution thereby giving the problem of long-term stability due emphasis in macroeconomic policy. Nonetheless, Milton Friedman played down the importance of cyclical movements believing that economists seemed "...to concentrate on cyclical movements and to act and talk as if any improvement however small in control of the cycle justified any sacrifice however large in the long run efficiency or prospects of growth of the economic system …"(1948, Friedman). Thus, Milton Friedman among others led the world into believing that deep concerns with cyclical stability were unnecessarily exaggerated. To restore confidence in long-term growth prospects and alley fears about possible recurrence of the GD, rival schools of economic thought (Friedmanian monetarists, Keynesians, neo-Keynesians, neo-monetarists, rational expectationalists *etc*.) sprang during the twentieth century to grapple with the idea of how to achieve long-term growth and stability simultaneously through fiscal and monetary tools. Yet, in the meantime, fears about the possible recurrence of the GD seem to have gradually faded away. Speaking at the annual meeting of the American Economic Association in 2003, Nobel Laureate Robert Lucas went so far as to say that macroeconomics - with its focus on the stable maintenance of national economies … could safely be retired. "The central problem of depression prevention," he said, "has been solved for all practical purposes."[(1)]

The present paper questions why a six-decade academic and professional experience since the GD has fallen short of curbing the last global financial crisis (GFC) as it is still claiming unprecedented costs which keep running liberally from taxpayers' money regardless of compensatory growth prospects. Taking the initial $700 billion bailout package of the American Administration alone, this is incidentally equal to all compensations paid by insurance companies within ten years (1997-2007) against earthquakes, floods and famines in the entire world[(2)]. Apparently, the claim that growth and stability are attainable simultaneously has not stood the test of time and post-GD economists did not exaggerate the importance of stability. Worse still, the new culture of capital market deregulation ushered radical changes in the traditional concepts of investment and financing such that real economic growth is mostly a doubtful target.

(1) Lecture given at Chicago university on 10 January 2003.

(2) **Paul K. Freeman** (1999) *Infrastructure, Natural Disasters, and Poverty*, freemansolo.pdf; International Institute for Applied Systems Analysis, IIASA, Laxenburg, Austria. Laxenburg, Austria; author refers this information to Munich Re, (1999), "Climate Change and Increase in Loss Trend Persist", press release, March15.

This paper attributes the above two problems (cyclical instability and radical change in investment culture) to two systemic flaws in the credit-driven global capitalist order, namely: (1) the separation of financing and investment decisions theoretically and institutionally (2) the separation of profitability from productivity through excessive capital market speculations. The first problem invokes the role of the interest rate in separating financing and investment decisions, which is analytically represented through the mainstream Fisher and Tobin's theorems of separation. The objective of the paper is not to delve into deep technical details about these two theorems. Rather, it is to draw basic conclusions on the basis of generally accepted tools of economic analysis - considering the fact that interest is banned in Islamic finance. The second problem invokes the banning of excessive *gharar* – a term in Islamic jurisprudence which stands for speculative uncertainty deliberately structured within financial contracts in pursuit of profit. Apparently, the currently booming trade of financial engineering tools has fallen prey to the hazards of *gharar*.

Admittedly, the bourgeoning Islamic financial industry has fallen short of sustaining an equity-driven paradigmic shift as advocated by Muslim economists. Yet in all fairness, the Islamic financial industry survived the current GFC through an effective clamping down on *gharar*, keeping the industry at fair distance from temptations of newly arising financial derivatives. Interest rate volatility is the focal systemic factor that caused the present GFC, even though misguided gharar-prone financial engineering has been the immediate trigger of the current GFC. The paper starts from a brief background on the regulatory impact of Glass-Steagall Act, the impact of subsequent deregulatory movement, and how it affected changes in financing/ investment traditions. We present the 'first flaw' through a critical demonstration of Fisher and Tobin's Separation Theorems. The second flaws, is next demonstrated through the theory of *gharar* in Islamic jurisprudence and how it relates to the modern industry of financial engineering.

From Glass-Steagall Act to Basel Accords

Glass-Steagall 1933 is perhaps the banking legislation that has had the most profound impact on the evolution of the banking system from the Great Depression up to the present. Prohibiting payment of interest on demand deposits and imposing interest rate ceilings on time deposits (Regulation Q), the Act barred commercial banking from all risky investments except for safe return Government Treasury Bills. The Act emerged from the recognition that excessive competition over interest rates tempted commercial banks into risky investments in the bid to attract or at least maintain depositors' funds and, eventually, into catastrophic failures to a scale unprecedented in memorable history. Hence, to guard against the recurrence of the GD, Glass-Steagall Act

aimed at reviving the crippled intermediary financial system through an effort to restore depositors' confidence into retail banking. The placement of interest rate caps was partly a revival of the anti-usury law, which prevailed during the eighteenth and nineteenth centuries echoing the Church verdict that the interest rate became usury only at excessive rates. This ethical restraint was subsequently given up through the treatment of interest rate as any ordinary market price, following the work of Jeremy Bentham who argued fervently for the liberation of interest rates in his '*Defence of Usury, 1768*'. Yet the realisation that interest rates cannot be left to free competitive forces was the basic lesson learned from the 1930s Great Depression.

The other important lesson was the (now forgotten?) realisation that *prudent banking regulation is all about low risk assets to make up for the guarantee of liabilities.* Thus, Glass-Steagall Act has driven home the idea that liberal risk-taking was not in the nature of conventional banking. Statutory reserve requirements have traditionally maintained the stability of the banking system from serious liquidity problems that may arise due to the mismatching of short-term borrowings with long term lending. Deterrence of banks from excessive risks continued to bother regulatory authorities about capital adequacy and how it may appropriately match various risk ratings of commercial bank assets thereby culminating in a series of Basel Accords since 1988. Understandably, capital adequacy is an effective deterrent against excessive risk taking in conventional banking even though in this credit-driven environment equity capital is costly and far less attractive than debt financing. This explains why the powers of regulators are heavily constrained in setting up desirable limits of capital adequacy, which partly underlies failure of existing capital adequacy requirements in providing the needed deterrent against bank failures. The US 1908s S& L crisis was a clear case in point.

On the other hand, the current concerns with capital adequacy are all about bank regulation in the current regulatory climate with no parallel concerns with the corporate sector. Again, due to financial cost considerations, capital adequacy in big corporations is often a little more than the satisfaction of minimal legal requirements of equity capital to establish ownership rights. This reflects in high leverage ratios in the corporate sector where trading of equity in secondary markets is essentially a means for profit-maximising companies to prove high net worth values in the bid to compete for the funds of potential lenders. Yet regulators do not pay as much attention to capital adequacy of companies as they do for commercial banking. Vulnerability of depositors' money to excessive leverage is indeed the main reason for the capital adequacy concern in the regulation of commercial banks but the vulnerability of jobs due to excessive leverage in the corporate sector cannot be overstated particularly during the downturn of business cycles.

Financing and Investment: Radical Change of Traditions

Many voices have recently called for a return to traditional banking and investment against the backdrop of the present global financial crisis (GFC), including that of the British PM Gordon Brown. This was the same concern that justified interest rate caps on bank interest rates through Glass-Steagall Act 1933, and prohibited banks from risky and speculative investments. The Act behaved fairly well until the mid-1950s when interest rates continued to rise, thereby bringing bankers and advocates of economic liberalism in a strong political war against the Act until it surrendered in 1999(3).

The Glass-Steagall Act failed to restore banking traditions because it handled the symptom of the GD (excessive competition of commercial banks over interest rates) rather than the root cause of the crisis (interest rate volatility). Enforcing interest-rate caps and banning commercial banks from risky investments was tantamount to penalising traditional banking intermediation rather than stabilising financial markets as interest rates moved freely in money and capital markets. The Act simply resulted in re-re-structuring the financial market to the benefit of money markets and capital markets and the disadvantage of traditional banking intermediation. Thus, funds continued to flow more directly to money markets and capital markets in pursuit of higher returns rather than indirectly through traditional route of commercial banking intermediation. This process has come to be known as *financial disintermediation* as it effectively accounted for a noticeable long-term decline in the traditional importance of commercial banks. Nonetheless, to curb financial disintermediation from doing excessive harm to commercial banking, the Glass-Steagall Act has been repealed and interest-rate caps and investment restrictions withdrawn so that commercial banks may indulge freely in the new lucrative technology of financial investment securitisation.

However, considerations of cost-effectiveness and incentive considerations disabled commercial banks from re-gaining their leading traditional roles as sole conduits of funds from surplus to deficit agents(4). Financial disintermediation and investment securitisation are therefore here to remain. Supported by deregulation and groundbreaking advances in information technology, securitisation structures opened up new horizons of innovative financial products in money and capital markets, which proved highly attractive to corporate, institutional and individual investors' funds. These innovative developments are obvious reasons why symptoms of the 1930s GD differed

(3) **Mishkin, Fredrick** and **Eakings, G.** (2009) *Stanley, Financial Markets and Institutions*, Pearson/ PrenticeHall, p. 213.

(4) *ibid*, p. 461.

from those of the present GFC even though market interest rate volatility lies at the heart of both. The same old scenario where indices of economic activity flourished at falling interest rates and receded at rising interest rates is visible in the present GFC. Playing down the common notion that Sub-prime lending was the villain of the present GFC, Leibowitz (2008) has rightly explained the recent mortgage meltdown as an immediate result of adjustable-rate mortgages (ARM) introduced by the US during the 1980s. "Subprime loans were fine as long as the housing market continued to boom and interest rates did not rise", noted Maha Hui-Lim (2008; p. 3).

Not only has the traditional role of banking phased out over time, but also the traditional concept of investment relapsed overtly into a speculative gamble. The intermittent period between the GD and the present GCF witnessed major economic events, notably the fixed- exchange regime under the Britton Agreement 1945-1971 and the subsequent adoption of managed-flexible exchange rate regime as it has continued until today. The phenomenal rise in oil price since late 1970s and the new surge of capital market deregulation seemed to have capitalised on the post-1971 World monetary order when the US abandoned the gold/ dollar exchange rate standard. This historic landmark set in motion a new monetary environment where stability of sovereign currencies remained at stake unless alternative tools were developed to hedge currency prices against unpredictable exchange rate and interest rate movements. Concerns with monetary stability were therefore the immediate reason why central banks turned pointedly towards financial derivatives to hedge their monetary positions against adverse movements. Hence, well before making up the tools' kit of investment bankers, currency and interest rate futures, options and swaps have served as vital weapons for central banking monetary management.

However, hedgers cannot operate without active speculators to take up opposite positions at all times. Advancements in financial engineering have thus opened up new horizons for hedgers and speculators to interact freely through an environment of technically sophisticated systems and seemingly well-calculated risks. Huge surpluses from rich oil countries already nurtured Western capital markets since the oil price shock of late 1970s thereby giving strong momentum to financial market deregulation and capital market globalisation. Henceforth, liquid capital moved freely in the pursuit of speculative returns across national boundaries, heedless to financial shocks against national economies as it actually affected late 1990s South Asian Crisis. In short, this is how major economic events transformed traditional concepts of financing and investment over the intermittent period of the GD/ GFC.

How Speculative Leveraging Damaged the Real Economy

What we witnessed in few decades was not only the financing initiative shifting away from traditional banking to tradable financial securities, but also the outmoding of traditional investment in human and productive resources. Disintermediation and capital market deregulation have effectively released capital from the 'limbo' of heavily regulated financial intermediaries to the broader horizons of wild speculative gains across world financial centres. However, this has not been a unique twenty-first century concern. Even as early as the first half of the twentieth century, economists warned against the counterproductive waves of so-called modern financial investments. J. M. Keynes objected strongly to speculative trading, insisting that the term 'investment' stood categorically for real productive activity. "The funny picture of our modern investment markets makes me lean towards concluding that our contemporary ills may find a successful remedy if we make the process of purchasing an investment a life-long commitment that is not subject to liquidation, like marriage, unless revoked by death or any other grave reason", Keynes remarked(5).

The picture has now become all the funnier! Since the 1980s, global innovations have transformed traditional concepts of financing and investment before bringing the world economy to its knees through the present GFC. Traditionally, the concept of 'liquidity' formed a regular pyramid with M1 at the base, M2 at the middle and M3 at the apex. Even with this traditional concept, Keynes rejected the urge of 'liquidity' as a pretext for speculative investments in financial markets. "There is nothing among the principles of orthodox finance that is more alien to society than that fetish called liquidity. This theory overlooks the fact that it is impossible to have liquid investment for the entire society"(6), Keynes argued. Yet the mammoth growth of speculative activity has now outmoded the traditional concept of liquidity. Financial engineering introduced a new concept of liquidity based on securities derived from underlying assets, i.e. derivatives, to outmode traditional speculation on original stocks (stock, bond, real estate, commodity *etc*). Liquidity, according to David Roche is representable through an inverted pyramid where M1 and M2 together represent only 1% of global liquidity, followed respectively by 'broad money' (9%), securitised debt (10%) and financial derivatives (80%)(7).

(5) **Keynes, J.M.** (1970) '*The General Theory of Employment, Interest and Money'*, London: Macmillan, St. Martin's Press, p. 153.

(6) *Ibid*, p. 155.

(7) **Lim, Mah-Hui Michael**, *Old Wine in New Bottle: Subprime Mortgage Crisis – Causes and Consequences*, The Levy Economics Institute of Bard College, working paper No. 532, www.Levy.org.

The fact that 'financial derivatives' constitute 80% of global liquidity is sufficient evidence to project the world economy as a big gambling casino and world producers of goods and services as casual sellers of nuts and crisps in that casino! This transpires well through a comparison of salaries payable to financial market workers as against average worker salaries in the US. An average employers in American investment banks earned annual salary of $435 048 that is ten times the average salary of private sector employees estimated at $40 368. In particular, the CEOs of Morgan Stanley and Goldman Sachs received over 1000 times the average salary of private sector employees. The average annual salary of the top 25 hedge fund managers in 2006 was $570 million, adding up to $14 billion, which is the GDP of Jordan. These staggering figures conform well to declining trends in labour's share of GDP as against the rising share of capital in World Bank reports. An avowedly socialist country, China, which has lately engaged itself heavily with global markets, has had the share of labour in GDP falling from 53% to 41% just over seven years (1998 – 2005). The turnover in foreign exchange markets (spot, futures, swaps) stood overwhelmingly at about $5.2 trillion *per day* whereas the world total volume of trade stands at a humble $12 trillion *per year*! Global financial assets stood at $140 trillion in 2006 whereas the world total GDP was no more than $48 trillion(8).

Adding insult to injury, financial derivatives are exceptionally high-leverage investments. While speculation is severely harmful to the real economy, leveraging makes it the more harmful. At low interest rates, profitable investment involves the ability to borrow as many times the capital of investment as possible, while at high interest rates such high leverage becomes a real threat of insolvency. Low interest rates imply easy money and profitable investments while high interest rates mean hard money and less profitable investments, which is essentially the negative correlation of interest rates and business profit rates that sparks business cycles. For example in 2007, leveraged buyouts (LBOs), which are typical private equity funds investing heavily in corporate equity, paid up less than 30% of the huge capital raised from high net worth investors. Cheap credit and excess liquidity between 2003 and 2007 reflected in a total booking of leveraged buy-outs equivalent to the GDP of the US (trillion 13.3), but it quickly plummeted to 0.22 trillion in August 2008 due to rising interest rate(9).

Leveraged speculation proved particularly harmful in the experience of US Subprime Mortgages that triggered the present GFC. The problem was not

(8) *ibid*, pp: 10-11.
(9) *ibid*, pp: 5- 6.

simply negative correlation between interest rate and profit rate in the housing market, as this was also true for Prime Mortgages. It was rather the problem of lax credit standards due to the new environment where the investment quality of securitised loans depends upon external rating agencies rather than lender-borrower relation. Apparently, the risk-hedging industry assumed the ability to hedge not against interest rate and price movements but also against lax credit standards, which was obviously unaffordable.

To sum up, living with the evils of business cycles seems to remain the accepted norm in capitalist systems so long as strong negative correlations between interest and profit rates continue to govern national economies. This leaves too little margin of maneuver in conventional economic policy to alleviate the severity of business cycles beyond the current controversial inquiry on how to anchor national economies against potentially devastating business cycles The theoretical underpinning of this reality is Fisher and Tobin's separation theorems (henceforth referred to as F-theorem and T-Theorem respectively) which, taken together, give graphic explanation on how rising interest rates undermine productivity prospects and make investment riskier.

Production financing in Fisher's Separation Theorem.

Capital market theory is rightly presentable in the mainstream textbook approach through two-period model of inter-temporal choice of consumption, involving inter-temporal exchange of savings. This is the essence of Fisher's theory of interest, which assumes no specific meaning for 'money' or 'capital' apart from one single good X that is both consumable and investable. The stock of capital is therefore whatever is saved of commodity X after meeting current consumption. Since future consumption is only possible through engagement in current production, all parties are producers as well as consumers of good X. As regards production, this comes from a two-period production possibility curve PPC, which is fundamentally a growth curve defining the future output of good X as a function of the amount of the current capital saved from good X and invested in production. The concavity of the single-commodity PPC reflects diminishing marginal productivity of capital (MPC) in the production of commodity X while it is also the capital good. Note that the maximum possible output producible through successive utilisation of additional capital good units of X (i.e. the maximum future consumption) is where MPC becomes zero. Thus the full capacity output is attainable at one point on the growth curve where MPC =0 while any additional unit of capital yields negative returns (i.e. MPC < 0) due to diminishing MPC. This is shown in figures (1, a, b) and (2, a, b) below.

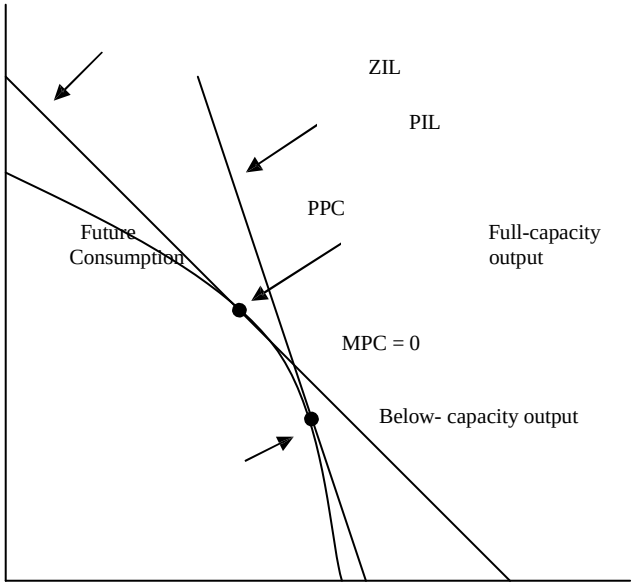

Figure (1, a)

As regards positive interest rate lines, these are simply downwards sloping lines tangential to the PPC at different levels of output(10). In particular, the zero interest line (Zil) is tangential to the PPC at the full-capacity level where MPC = 0. Thus, all points to the left of Zil reflect declining output where MPC < 0, while all points to the right of the Zil reflect growing output where MPC > 0. On the other hand, any line of positive interest rate (Pil) is steeper than Zil, thereby resulting in lower capacity output levels. Steeper Pil lines result in still lower capacity output levels, which is graphic evidence of the fact that any positive interest rate is a depressant of productivity. Higher interest rates therefore correspond to lower capacity output levels. Given that profitability and productivity are strictly positive correlates, it is just one-step to establish the negative correlation between interest rate and profitability as it underlies sharp business cycles.

Fisher's separation theorem is simply the idea that 'capital market' separates optimally the financing and production decisions – note that CML in figure (1, b) below s the same as Pil in figure (1, a). The claimed theoretical optimality arises from the fact the Capital Market Line (CML) improves the welfare for both parties A and B as represented in figure (1, b) through individual

(10) The interest rate **r** relates to the straight line **Y=c+mx** through the slope m=–**(1+ r)**. Thus, at **r=0**, the slope of the line becomes **m= -1** that is unity in absolute value . This argument is clearly demonstrated in Tag el-Din, 2013 forthcoming.

indifference curves. Both parties are now producing the same equilibrium level of output where marginal productivity of capital equals interest rate (MPC = r). Accordingly, production is a profit-maximising decision, unaffected by differences between subjective time preference rates of consumers, whereas financing is a separate utility maximising decision that depends strictly on subjective time preference rates of consumers. For example, A is now better off as lender while B is better off as borrower along the CML.

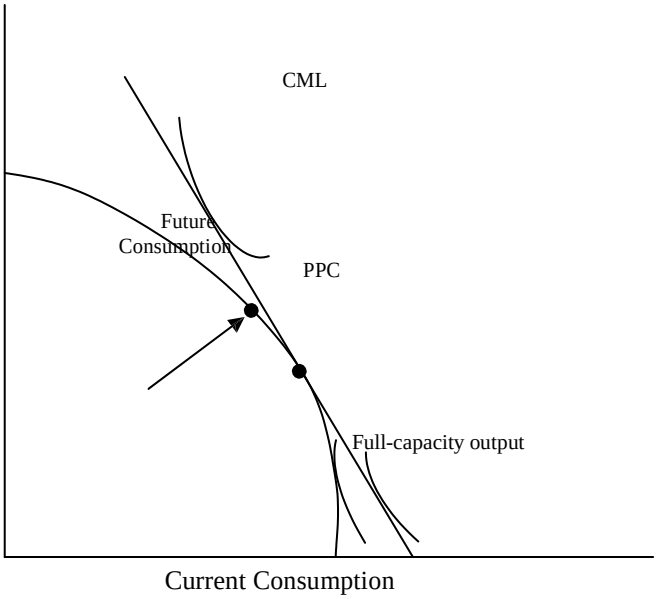

Figure (1, c)
Fisher's Separation Theory
Positive interest rate concomitant with below capacity output

Interestingly, Fisher never considered the option of zero interest rate (Zil) as shown in Figure (1, a) for the obvious reason that it is practically irrelevant to capital market practices. Yet it has emerged, at least theoretically, that the Zil yields far better optimality results than the positive interest line (Pil). On one hand, it makes B better off without making A worse off, which the essence of Pareto optimality. On the other hand, Zil conforms to full capacity output level that, otherwise, is depressed through the Pil; see figure (1,c) below. It should be emphasised, however, that Zil is not representative of Islamic banking practices because Islamic banks are non-charitable profit-making institutions. Rather, Zil represents an important ethical pillar that is called *qard hasan* in Islamic economics, due to the work incentive it places on the borrower to pay back the loan, whereas unilateral charity puts no such obligation on the borrower. This, among other things, reveals the value that Islam assigns to productive work.

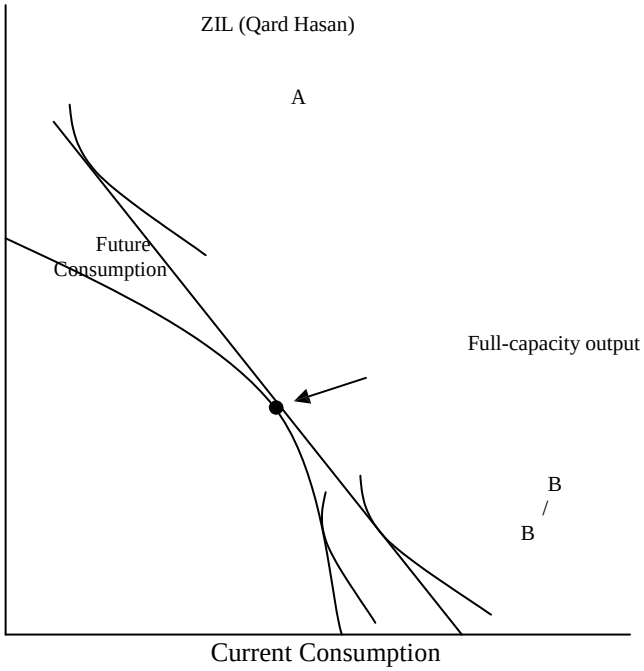

Figure (1, b)
Interest-free lending (Qard hasan)
as concomitant to full-capacity output.

The ability of Fisher's theory to transcend complex institutional realities in the modern world and reduce the whole exercise of capital markets to lifecycle consumption planning makes it profoundly revealing on how capitalism may easily disengage from 'unnecessary' involvement with productive activity. After all, profit maximisation through production is no more than a means to achieve an overall objective of utility maximisation in consumption over life cycles. Hence, there is no reason why the same objective cannot come through non-productive means; namely, speculative trading on profitable derivatives! Fisher's theory did justice to traditional capital market financing as it related to traditional production but we need a new interest rate theory that relates modern capital market primarily to trading in secondary market financial derivatives.

Investment Financing in Tobin's Separation Theorem

Tobin's theorem does not purport to offer a theory of interest rate as Fisher's theorem did, though it is a way of extending the latter to tradable securities in modern financial markets. Similar to Fisher's separation theorem that defined capital market as a means to separate production and financing

decisions, Tobin's separation theorem defined the capital market as a means to separate financing and investments decisions.

Risk return analysis in modern investment portfolio theory dates back to 1952 when Harry Markowitz introduced the concept of mean-variance efficient frontier for a large set of investment securities. The theory acquired its computational convenience mainly through the 'single index model', introduced in 1963 by William Sharpe. Subsequent theoretical refinements and practical developments led to the formulation of the Capital Assets Pricing Model (CAPM) by Sharpe, Lintner, and Mossin?. Briefly, the CAPM rests on an 'efficient mean- variance investment portfolio' defined as a single combination of risky securities (called market portfolio of risky assets), and augmented by borrowing and lending along the Capital Market Line. The bullet shaped set of risky securities includes an efficient frontier (EF) of portfolios of risky securities from which investors can choose; see figure (2, a) below. Similar to Fisher's theory without capital market, here again the choice of risky investment portfolios depends solely on subjective altitudinal differences between investors. Rather than subjective time preference rates in Fisher's model, it is now *attitude towards risk* that distinguishes the behaviour of various investors. Risk/return indifferences curves are the means to represent various portfolio choices of investors depending on relative steepness/flatness properties of the curves.

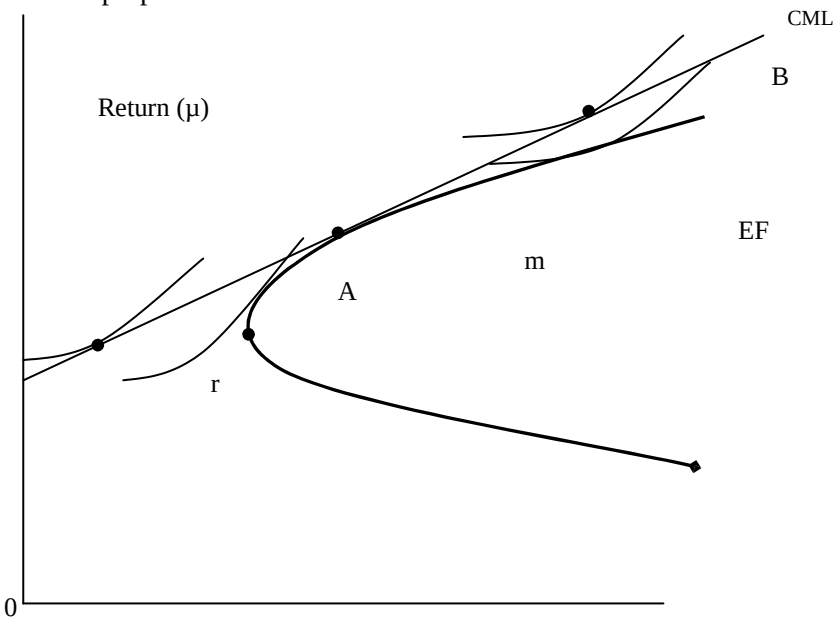

Figure (2, a)
CML as welfare promoting for all parties

The introduction of the CML at the risk-free **r** (usually approximated by safe return government Treasury Bills) overrules the impact of attitudinal differences so that all investors would now choose the same investment portfolio of risk assets (the market portfolio **m)** regardless of their various attitudes towards risk; see figure (2,a) above. Both investors, A and B in figure (2, a) would now choose the same market portfolio with expected return **m**. Yet financing decisions are now governed separately by attitudinal differences among investors such that the more risk- averse opt for lending while the less risk-averse opt for borrowing. The claimed theoretical optimality arises from the fact the Capital Market Line (CML) improves the welfare for both parties A and B as represented in figure (2, b) through upward shifts in their indifference curves. A is now better off as lender while B is better as borrower. The latter borrows at interest rate **r** to invest in the market portfolio of risk assets **m**, while the former combines lending – in the sense of buying Treasury Bills – with investing in the market portfolio of risky assets. This neoclassical static-state optimality claim, however, overlooks the adverse dynamics of interest rate volatility that lie at the heart of business cycles.

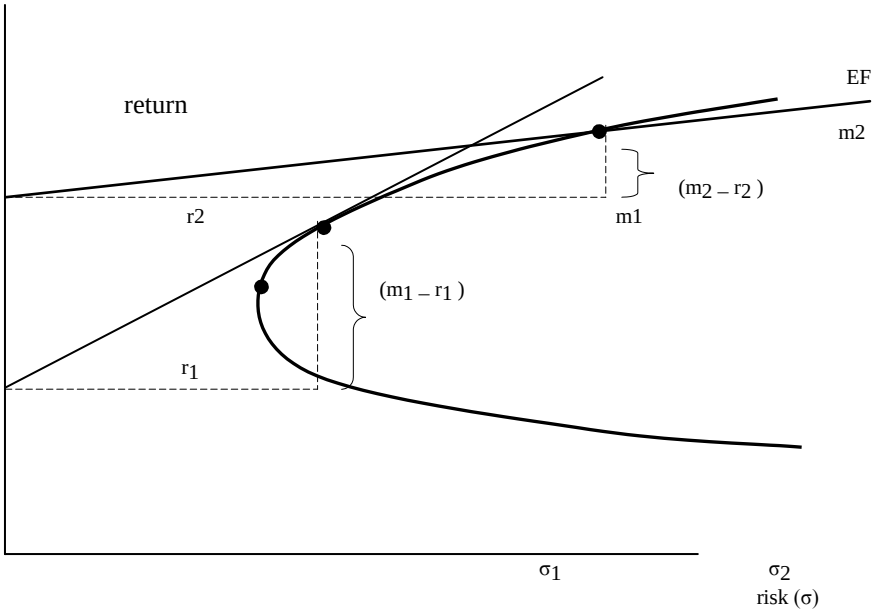

Figure (2, b)

Profit margins become thinner and riskier at higher interest rates

Negative correlations between interest rates and of profit rates are graphically revealed through the impact of interest rise on the spread of **m** (the expected return of the market investment portfolio) over the interest rate(11). It is clear from figure (2, b) that as interest rate rises from $\mathbf{r_1}$ to $\mathbf{r_2}$ results, not only does the spread of return become thinner (from $\mathbf{m_1}$ to $\mathbf{m_2}$), but also riskier. As profits become thinner and riskier, business enterprises reduce output and lay off workers. This is precisely how profitability is adversely affected by interest rates rises over business cycles. As rightly noted, "Subprime loans were fine as long as the housing market continued to boom and interest rates did not rise" (Maha Hui-Lim (2008; p. 3). Leibowitz (2008) has rightly explained the mortgage meltdown as an immediate result of adjustable-rate mortgages (ARM) introduced by the US during the 1980 rather than simply lax credit standards in Subprime lending(12).

Islamic Finance as part of the Solution

Perhaps, the only point that Islamic finance has in common with Friedmanian monetarism is reliance on 'fixed rules' rather than discretionary policy that frequently falls back upon tax rate and interest rate adjustments. Advocating fixed rules to safeguard the market economy from unpredictable interferences, monetarists have rightly criticised discretionary policy for contributing significantly to an unstable business environment. However, the key question is which fixed rules would stabilise the economy and maintain long-term growth. In Islamic finance, these are interest rate abolition and *ghara*r reduction. Abolition of interest signifies a paradigmic shift to an equity-driven order where financing and investment are indistinguishable decisions, thereby abandoning negative correlations between financing price and profit rate. In this case financing price is itself return on equity. In other words, no room for 'separation theorem' exists since return on equity is simply a share in production or profit, which is part and parcel of the PPC or the EF of the above theorems.

Admittedly, this is not the case of the bourgeoning Islamic financial industry as remains part of the credit-driven world order though under Shariah scrutiny. Nor do we conjecture a pure equity-based world where debt plays absolutely no role. Using similar optimality criteria of risk-return analysis, debt and equity are bound to co-exist in information efficient markets; see Tag el-

(11) The equation of the CML is $r_j = r + [\sigma_j / \sigma_m] [m - r]$, where m is the expected return on market portfolio

(12) **Leibowitz, Stan J.** (2008) *Anatomy of a Train Wreck Causes of the Mortgage Meltdown*, Independent Policy Report, The Independent Institute; www.independant.org; April,.

Din (2008). Hence, even in theory, it is inconceivable that Islamic finance shall fall squarely upon equity-driven mudarabah and musharakah financing as it used to the wishful thought for many Islamic economists. More appropriately, Islamic finance tends to re-position the inverted debt/ equity pyramid, where little equity supports massive debt, to a regular shape where massive equity supports little debt. In all fairness to Sharia-audited financial products, prohibition of *gharar* (structured uncertainty within financial contracts) protected the Islamic financial industry from irresistible temptations of modern liquidity – financial derivatives.

However, there is more to Islamic finance than mastering the technicality of removing interest rate and gharar from financial transactions. It is one thing to remove interest rate and gharar from financial transactions. It is yet a different thing to bring forth their ethical underpinnings. The Islamic financial industry is now under increasing pressure to heed ethical calls because objectives of Shariah are only attainable when legal form goes in tandem with their ethical embeddings. The ethical foundation of *riba* prediction is projected unequivocally in the verses the Quran:

> "God prohibits usury and permits trade".
>
> "God degrades *riba* and upgrades charity" (al-Baqara, 276).
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> "Whatever *riba* you give to grow in people's wealth will not grow with God, and whatever *Zakah* (charity) you give for seeking God's pleasure, these are the winners of multiple reward"(al-Rum, 29).

The first verse above embeds the current thrust of converting *riba* into profit-driven sale transactions as in the prevailing practice of Islamic finance. Yet the second and third verses bring forth the ethical and institutional rationale for *riba* prohibition, which is to open up an alternative stream for funds to flow towards non-market but socially rewarding projects. The term 'charity' in the Quranic verses stands for all forms of non-profit-driven spending to satisfy viable social objectives (e.g. health, education, housing, poverty elimination schemes *etc*) rather than naïve pity to high street beggary. If funds keep on flowing endlessly in pursuit of trade profit, the mere conversion of interest financing into Shariah-based modes of financing would not result in any significant social welfare improvements – apart from, other things equal, avoidance of severe cyclical instability. There will be no limit to where the profit-derive may lead the economy if profit making remains the primary motive for the flow of funds. *Riba* elimination in the Quran is therefore a means to open up sustainable avenues for funds to find their way towards socially rewarding projects. It is often argued that non-market spending for social

welfare goals is government responsibility, but failures to shoulder the social welfare burden is precisely the reason why governments are increasingly admitting the importance of *third sector* and surrendering tax benefits to taxpayers who contribute to the revival of this sector. For example, the British Government established the Office of Third Sector (OTS) in year 2006 to "work across governments to support the environment for a thriving third sector, enabling the sector to campaign for change, deliver public services, promote social enterprise and strengthen communities"(13).

The experience of *waqf* in Islamic economics is an ideal example of how public moral commitment can be mobilised through suitable institutional arrangements to yield desired economic outcomes. Waqf played a vital historic role in mobilising people's voluntary contributions and involving them directly in the moral commitment of welfare realisation and poverty alleviation. The long term historical presence of the *waqf* institution has been maintained by the definition of *waqf* as a perpetual entity, enjoying the jurist right of being God's own property. Thus, at least in principle, a strategic third sector vehicle was protected from governments' encroachment for hundreds of years. Channeling voluntary donations from the well-to-do, the *waqf* foundations catered for all social services for many centuries, such as health, education and municipal activities, *etc*., which are currently achieved through the coercive tax system.

Hausman and McPherson (2000) have rightly the idea that "the moral commitment depends on the institutions and is not just a given'(14). In other words, the institutional infrastructure motivates people to spend benevolently on social causes, not simply their innate attitude towards benevolence. To demonstrate this point, the authors referred to *The Gifts Relationships*, by Titmus, 1971, which compared the USA market-oriented institution for blood supply, where both donation and selling are permitted, with the British pure donation institution, in terms of the efficiency to meet on-going demand for blood by surgical operations. Interestingly, the statistical data revealed that blood shortages are more severe in the USA than in UK and that the incidence of hepatitis and other blood- borne diseases were higher. Coupled with the fact that the USA blood is more costly than in Britain, Blood supply in the USA system proved less efficient than the British system. Commercial systems, unlike pure donation systems, create an income incentive through the concealing of illness such as hepatitis; hence, it was not only quantity that

(13) 'Office of the Third Sector', quoted from Choudhury, Abdel Hameed, British Muslims and The Development of The *Waqf* Sector for Socio-Economic Regeneration', unpublished MA Dissertation, MIHE, UK, 2008; p. 44.

(14) **Hausman** and **McPherson** (1996) 'Economic Analysis and Moral Philosophy', p.216.

dropped but also the health quality of blood. The same author established a similar finding by reference to the Japanese experience where the pre-World War II blood supply system followed the British pure donations systems experience, as against the post- World War II hybrid American system. Again, the study revealed that blood supply dropped precipitously in the post-war period.

Based on the above evidence, Titmus drew the conclusion that loss of efficiency in blood supply is *due* to the institution of market. The typical impression of a mainstream economist is to view the above finding as sharply paradoxical. Why should the possibility of selling blood *decrease* rather *increase* its supply, particularly when the option to donate blood still exists? Why should the supply of blood be different from the supply of any other economic good? How to make sense of Titmus' statement that markets "deprive men of their freedom to give or not to give"? These are the basic misgivings, which have invoked the criticisms of Arrow and Samuelson(15). Titmus' approach relied, not only on statistical evidence but on open-ended questions to people on why they donate blood. People's response was mostly that they were giving the priceless "gift of life". People seemed to take great pride in being benevolent and decent. Thus, when blood assumed a market price, like $50 per pint, they would be less willing to donate blood, not for the sake of shifting to the commercial alternative, but for the simple belief that blood supply is now offered by others at price. The priceless 'gift of life' has now been reduced to a gift worth $50.

In general, the more distanced is the social value system from strict market calculations, the more puzzling to market economists is people's disposal of private property. A close analogy can be drawn between the above example of blood donation and the moral policy of benevolent lending (*Qard hasan*) in financial support of socially viable causes. It raises the question: is mobilisation of benevolent lending more effective when social values do not recognise a market price for money (the interest rate) or when such a price is recognised.? Again, we have a pure donations system (zero price of money) against a hybrid system.

(15) **Samuelson, P.** (1973) 'Readings in economics', McGraw-Hill, p. 39.

من الكساد الكبير إلى الأزمة المالية العالمية لعام ٢٠٠٨م
التدفق المنتظم لتمويل الاستثمار

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المستخلص. الأزمة المالية المعاصرة ٢٠٠٨م ارجعت صدى العيوب الهيكلية التي تسببت في الكساد الكبير خلال الثلاثينات من القرن الماضي. ورغم أن العوامل المحركة والاهتمامات التنظيمية كانت مختلفة نوعياً في كلا الأزمتين، لكن التشخيص من الوجهة الإسلامية واحد ويرتبط بمصدرين أساسيين: (١) طبيعة القوة الكامنة والمزعزعة للاستقرار في سعر الفائدة من خلال الفصل الصارم بين قراري الاستثمار والتمويل (٢) تزايد اتسع الهوة بين أسواق رأس المال والقطاعات الانتاجية بسبب حركة الهندسة المالية التي تتغذى بالمجازفات. المشكلة الأولى تثير نظرية الانفصال المعهودة في النظرية الاقتصادية السائدة كما تنسب لكل من فيشر وتوبين. أما المشكلة الثانية فلها تاريخها الراسخ في الأسواق الرأسمالية الحديثة حيث نتج عنها أخيراً تغير جذري في مفاهيم الاستثمار والتمويل والسيولة. فقد اثبتت بعض الدراسات الحديثة أن المشتقات في أسواق رأس المال أصبحت تمثل حوالي (٨٠٪) من مجمل السيولة العالمية، ما يعني أن الاقتصاد العالمي صار أشبه بكازينو كبير للقمار والقطاعات الانتاجية فيه ليس لها دور أكبر من بائعي المكسرات والتسالي. تبدأ الورقة بخلفية موجزة للكساد الكبير مع تسليط الضوء على الأثر الهيكلي النافذ الذي أحدثه قانون جلاس/ستيجال ١٩٣٣م من حيث تأثيره السالب على الوساطة المصرفية وتحفيز ظاهرة الغاء الوساطة في أسواق النقد ورأس المال. أما الأزمة المالية المعاصرة فقد مثلت الذروة لسلسلة الأحداث الكبرى بين الأزمتين وما اكتنفها من تحولات جذرية لمفهوم الربحية بعيدًا عن مفاهيم الانتاج التقليدية إلى مفاهيم المجازفات المرفوعة بالتمويل. وتخلص الورقة إلى أن التمويل المحرر من الفائدة الربوية يمكن أن يكون جزءًا من الحل– ليس فقط من خلال الدعوة إلى نظام اقتصادي مبني على حقوق الملكية وإنما كذلك من خلال الحد من ظاهرة الابتكارات المالية المحفزة للمجازفات المالية.