GOVERNANCE, REGULATION AND FINANCIAL MARKET INSTABILITY: THE IMPLICATIONS FOR POLICY

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by

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Abstract
Just as the 1929 Stock Market Crash discredited Classical economic theory and policy and opened the way for Keynesianism, a consequence of the collapse of confidence in financial markets and the banking system – and the effect that this has had on the global macro economy – is currently discrediting the 'conventional wisdom' of neo-liberalism. This paper argues that at the heart of the crisis is a breakdown in governance that has its roots in the co-evolution of political and economic developments and of economic theory and policy since the 1929 Stock Market Crash and the Great Depression that followed. However, while many are looking back to the Great Depression and to the theories and policies that seemed to contribute to recovery during the first part of the twentieth century, we argue that the current context is different from the earlier one; and there are more recent events that may provide better insight into the causes and contributing factors giving rise to the present crisis and to the implications for theory and policy that follow.

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> ‘Corporate governance is concerned with holding the balance between economic and social goals and between individual and communal goals. The governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources. The aim is to align as nearly as possible the interests of individuals, corporations and society.’ (Cadbury 2000)

Introduction

The form taken by governance is important for sustainability – of organizations and of the broader socio-economic system of which they form a part. At both levels, sustainability depends upon the existence of an effective framework for establishing strategic objectives, determining the most appropriate and effective means of achieving them, and monitoring performance. It also requires appropriate and enforceable mechanisms by which individuals and groups are incentivised and monitored. These requirements are emphasised by the OECD’s Principles of Corporate Governance: ‘the presence of an effective corporate governance system, within an individual company and across an economy as a whole,’ is viewed as central to the ‘confidence that is necessary for the proper functioning of a market economy’ (OECD 2004: 11).

Recently, this confidence has been badly shaken by instability in the world’s financial markets in which the banks played a contributing role and by the resulting economic slow down, analysis of which is currently dominating economic commentary and policy making. In this context, parallels are being drawn between contemporary events and the 1929 Stock Market crash and Great Depression of the 1930s; and many are looking backward for explanations and remedies that seemed to be effective in the past. However, while there may be interesting parallels between these two periods of history, there are also important differences in the nature of markets (whether for products, labour, capital or finance) and in the effectiveness of corporate governance and instruments of policy. There is also perhaps a need to pay closer attention to more recent events in economic history, such as the high yield ‘junk’ bond episode and the Savings and Loans Crisis in the United States during the 1980s and 1990s. Both of these events should be considered early stages in the development of the currently evolving financial and economic crisis.

This paper traces the current financial market crisis to a breakdown in governance that has its roots in the co-evolution of political and economic developments and of theory and policy since the 1929 Stock Market Crash.

Section one outlines developments in economic theory and policy, and their influence on events in an increasingly global political and economic environment. Section two examines advances relating to the firm, organizations and corporate governance. Section three expands the analysis to account for increasing globalization and the resulting challenges for effective regulation and governance. Sections four and five outline the anatomy of the current financial crisis and establish its place in socio-economic history. From the still unfolding events, Section six draws conclusions and highlights the implications for corporate governance reform that follow from them.

1. Developments in theory and policy and the globalization of markets

In his book *The Affluent Society*, Galbraith, argued that the economic ideas in vogue at any point in time – the 'conventional wisdom' – are inherently conservative and give way, not to new ideas, but to 'the massive onslaught of circumstances with which they cannot contend' (Galbraith, 1999, p.17). This creates the environment in which different ideas find favour and reconstitute the conventional wisdom. One example of this process was the replacement of Neo-classical by Keynesian conventional wisdom, triggered by the mass unemployment and poverty of the inter-war years, which eventually led to the state's management of the economy. The growing inflationary crisis of the 1970s may also be regarded as a massive onslaught of circumstance. But this time the conventional wisdom reverted to pre-Keynesian notions that success in combating inflation depends on controlling the money supply whilst efficiency in the use of resources is most effectively secured by markets. As will be seen below, analogous developments can be observed in theory and policy relating to corporate governance, with the efficient market hypothesis emerging to provide the orthodox explanation for – and justification of – the role of the stock market in reorganising industry and its ownership in the Anglo/American productive system.

During the Great Depression which began in 1929, failure of the laissez faire system to deliver the economic and social benefits it was theorized to, triggered a sea-change in economic theory and policy. In this, Keynes' argument that economies settle at less than full employment because effective demand lags rising income opened the way for the state to extend its governance of the economy to counter involuntary joblessness by inducing additional expenditure. By invoking a role for the state in generating full employment, Keynes broke with the classical economists in their belief that this was best secured by market forces. Whilst not averse to the classical idea that supply and demand work through markets to determine relative prices (i.e. those of one good in terms of others), Keynes refuted the classical Quantity Theory notion of a direct transmission of the supply of money into the general price level. Rather, he argued that the money supply operates indirectly on the level of economic activity, via the rate of interest. When the economy is below full employment, lowering the rate of interest by increasing the money supply stimulates economic activity by inducing investment. This is augmented, via the employment multiplier, by an increase in the level of consumption. It is only when the economy is at or close to full employment that an increase in the money supply spills over into the general price level, by increasing effective demand above effective supply and pulling up prices.

Keynes also argued against the idea that economic agents have perfect foresight, or even that they know enough about the range of possible future outcomes to use mathematical probability as a means of predicting future prospects. Instead, he reasoned that in financial markets there is profound ignorance of the long-term trends in the real economy, and that these markets tend to operate on relatively short-term time horizons. In Keynes' view, an unknowable future creates in financial markets 'waves of irrational psychology,' that swing from wild exuberance to overwhelming gloom (Keynes 1936). In such an environment, individuals, unable to figure out what lies ahead, tend to surrender to the greater wisdom of the crowd. The tendency is for individuals and organisations trading in these markets to adopt the convention that periods of prosperity (or of dearth) will continue indefinitely. As a result, the system is 'shocked' into sharp reversals when the market trends show signs of change. Unregulated financial markets are therefore inherently unstable.

a. The inter-war years and the transformation of economic theory and policy in the US and Britain

The British Government responded to post-war economic problems by reverting to pre-war laissez faire neo-classical economic and financial orthodoxy. This dictated a reduction in government expenditure to balance the budget, repayment of huge war-time borrowings, a return to the Gold Standard at 1914 parity, and the use of dear money to defend the exchange rate. The Treasury single-mindedly pursued these policy objectives until 1939, despite continuous changes in political, social and economic circumstances.

The contradiction between the Treasury's economic strategy and the requirements of unemployment policy became apparent in the deep recession which followed the frantic re-stocking boom of 1919-20 (Howson, 1975). However, high unemployment and the balance of payment deficit were officially attributed to economic and political disturbances stemming from the Great War, which had disrupted Britain's traditional export markets and radically increased production costs. Consequently, the Treasury reasoned that the restoration of economic normality required wage reductions to restore Britain's prices to their pre-war relative levels. The understanding was that the British economy had strayed from equilibrium; and cost and price tweakings were required to guide it back.

But the problems of Britain's post-war economy were in fact deeply structural, stemming from a continuous decline in export competitiveness of Britain's staple industries - coal, cotton goods and steel – as other countries had industrialised. These trends dated back to the late 19th century and had been exacerbated by the disruptions to home production and world trade caused by the First World War; and reversing their effects required a fundamental reorganisation and reorientation of the British economy.

In a major step to re-establish its version of economic normality, the Treasury restored the Gold Standard to its 1914 parity in 1924. The resulting price deflation squeezed the profits of British firms, resulting in attempts by employers to pass the cuts on into wages. This precipitated the 1926 General Strike and a six month walk-out by the coal miners. Despite the resulting economic, social and political disruption, continued high unemployment and a persistent balance of payments deficit, the Treasury continued its restrictive economic policy. In doing so, it ignored widespread demands for credit easing and public works to reduce unemployment, in which Keynes was a leading light. Thus, whilst the US was experiencing a prolonged period of prosperity, Britain suffered what Arndt described as 'the years of semi-stagnation' (op.cit., p130) and which Sue Howson later referred to as 'the doldrums' (op.cit., p30).

The only permanent solution to Britain's economic problems lay in increasing home demand to compensate for shrinking export markets, together with process, product and organisational innovation. In this, the lead had passed to the United States, where from 1922 to 1929 the economy grew rapidly and employment remained high.[1] During this period, the driving force for US growth was rapid organisational and technical change, high levels of investment in manufacturing and construction (especially house building), and a sharp increase in consumer expenditure, especially on cars and other consumer durables. But this revolution was not confined to the way the economy was organised and the level of expenditure; it was also related to the way the economy was theorised.

In economics, there had developed a 'vigorous, diverse and distinctly American literature dealing with monetary economics and the business cycle'. (Laidler, 1999, p211). The analysis was essentially institutional and non-neoclassical; and there was little opposition amongst American economists to counter-cyclical fiscal and monetary policy, although there was considerable dispute about the effectiveness of such government intervention.[2] In general, American economists during the 1920s were optimistic about the future (op. cit., p.212).

Elements of American economic thinking during the 1920s anticipated Keynesian analysis and policy recommendations, tendencies which were reinforced by the onset of the Great Depression in 1929. (op. cit., pps 211-212). Important insights into these developments can be found in a Memorandum prepared by L.B. Currie, P.T. Ellsworth and H.D. White in January 1932.[3]

> '[This Memorandum] sketches out an explanation of the then developing Great Contraction, as well as a comprehensive and radical policy program for dealing with it … the main domestic component of that program was to be vigorously expansionary open-market operations and substantial deficit spending that, particularly in its early stage, was to be financed by money creation; its international dimension involved a return to free trade and serious efforts to resolve the problems of international indebtedness that had originated in the Great War and in the Treaty of Versailles.' (Laidler, 2002, p 516).

The downturn in the US economy began in the summer of 1929 with exhaustion of the boom in investment and consumption. It was intensified, but not caused, by the stock market crash in October. Between 1929 and 1933, money income fell 53 percent, real income fell 36 percent and unemployment rose to 25 percent of the workforce. Chaos in the banking sector culminated in a major banking crisis in 1933, accompanied by a series of bank failures. When the Roosevelt administration took office, the US was suffering 'from the most extreme prostration which any capitalist country had ever experienced in peace time' (Arndt 1944, p.34). In response, the 'New Deal' reforms of 1933 through 1937 were introduced. According to Arndt (1944), the New Deal 'was the most spectacular attempt that was made after the great depression to promote recovery by means of a deliberate expansionist policy as the chief stimulus of economic activity, and without recourse to totalitarian control of the economic system' (loc. cit.). From 1933 to the third quarter of 1937, the economy recovered. But at its highest, industrial production remained 4 percent below the level achieved in 1929, and unemployment remained 4 to 5 million above what could be regarded as an 'irreducible minimum' (op. cit., p. 61); and fears of possible inflationary effects checked New Deal expansionism, leading to a sharp recession late in 1937. Recovery followed, but it was not until the Second World War that the US economy reached anything like full employment.

The New Deal reforms embraced counter-cyclical spending by government in providing economic relief and in stimulating the economy; the gold standard was abandoned and the dollar was allowed to float on foreign exchange markets. During this period, the US federal government also assumed an active role in managing the economy and the money supply, in controlling prices, in providing a social welfare net and in supporting the interests of workers and trade unions. The Social Security Act of 1935, for example, provided the framework for the American welfare system. Under this legislation, a system of welfare benefits for poor families and handicapped people was set up as was a system of unemployment insurance and universal retirement pensions, funded by payroll taxes. In terms of banking reform, the Federal Deposit Insurance Corporation (FDIC) was created to insure deposits of up to $5,000, thereby avoiding the instability associated with a run on the banks. The Glass Steagall Act of 1933 mandated a separation of commercial and retail banking from investment banking. Commercial and retail banks accept deposits from savers and extend loans to borrowers while investment banks deal in shares, bonds and other financial instruments, which they both underwrite and issue. The Glass Steagall Act legislation was designed to protect the money in depositors' accounts in commercial and retail banks from potentially risky speculative activities undertaken by investment banks.

The stimulus for economic recovery in Britain came not from fiscal policy, but from monetary policy designed for a quite different purpose. During the early 1930s, in a continuing attempt to balance the budget, the National government cut unemployment benefits, resulting in political turmoil that exacerbated the economic crisis. The Treasury's attempt to defend sterling depleted foreign currency reserves, despite their supplementation by substantial loans from abroad. Britain was finally forced off the gold standard in 1931[4], after the Macmillan report revealed how parlous Britain's short-term debtor position was and the May report forecast a budget deficit of £120 million by April 1932 (Moggridge, 1992 pp. 511 and 522-533). Following abandonment of the gold standard, sterling depreciated 30 percent, creating the space for a reduction in interest rates to stimulate economic recovery. However, the immediate objective of the cut in the bank rate from 6 percent in September 1931 to 2 percent in June 1932 was to facilitate repayment of the 1917 War Loan by converting the cost of financing from 5 percent to 3.5 percent, generating substantial budgetary savings (Arndt 1944, p. 122). Apart from a brief period in 1939, the bank rate was maintained at 2 percent until 1951, keeping interest rates low in the money markets. As a result, cheap and plentiful money triggered a major house building boom which led the economic recovery from 1933 to 1937, after which it was sustained by re-armament.

The semi-stagnation imposed by the Treasury in the failed attempt to re-impose the Gold Standard at its pre-war parity, meant that Britain did not experience the prosperity enjoyed by the Americans during the 1920s. This was postponed to 1933 to 1937 when, as in the States, it rested on a building boom in residential property and the growth of new consumer goods industries including motor-car, electrical and rayon. The 1930's British boom can thus be attributed to an appetite for new houses and consumer goods which was converted into effective demand by the ready availability of cheap credit and an increase in real income. The latter increase was the result of both an increase in wages and profits as the British economy recovered and a fall in the prices of imported food and raw materials. It was estimated that the terms of trade had improved to the extent that a representative unit of exports purchased 20 percent more imports in 1935 than it had in 1931 (Arndt 1944, p. p131). The consumer-led boom became self-sustaining as the income of those who were newly employed – building houses and manufacturing consumer goods – was spent on new houses, consumer goods to furnish and embellish them, and economically improved living standards. By 1937 the volume of output was 50 percent higher than in 1932 (20 percent up on 1929), unemployment had fallen by more than half (although it was up on 1929), non-agricultural employment rose from 10.2 million in 1929 to 11.5 million in 1937, and there was a striking increase in productivity. However, the economic picture was not uniformly positive throughout the country. Although unemployment fell by more than half between 1932 and 1937, 10 percent of the population remained unemployed at the peak of the boom in 1937, with unemployment concentrated in the north and west where Britain's traditional industries – cotton, coal, steel and shipbuilding – were located. Apart from steel, which partially recovered, these industries remained depressed and unemployment remained high, despite some migration to the south and east in search of employment in the infant industries located there.

The British recovery continued undisturbed until 1937 when re-armament took over as the main driver of economic growth. But it was not until the Second World War that anything close to full employment returned to the depressed regions in Britain. Following World War II, widespread commitment to Keynesian full employment and the welfare state, laid the foundations for post-war economic prosperity in most industrialised economies[5]. During this period, especially 1952-1960, macroeconomic performance was characterized by full-employment, non-inflationary growth and rapidly rising living standards; and this was considered 'the golden age' of post-war economic history.

b. Globalisation and the displacement of Keynesianism by Neo-liberalism

As the long boom progressed, however, strains began to appear. International competition intensified with the re-emergence of Japan and the continental European countries as leading industrial competitors, and with manufacturing growth in developing countries. The relaxation of exchange rate controls and the growing importance of multi-national firms accelerated the process of globalisation, as firms relocated production abroad in an effort to escape the relatively higher labour and social welfare costs in industrial countries. Globalization was further encouraged by tax breaks and the cheap and docile labour offered by developing regions and countries. A consequence of this increased international mobility of capital was the onset of deindustrialisation in long established industrial regions. Globalization also marked the beginning of the end of the ability of any national government to significantly influence macro-economic outcomes. Nation states came under increasing pressure from free trade, and from the increasing concessions they were forced to make in order to induce global firms to invest domestically.

Problems of structural adjustment were aggravated by the increasing pressure of sustained economic growth on world resources. The resulting sharp increase in primary product prices, especially oil, during the early 1970s fuelled inflation and contributed to balance of payments deficits in industrial countries, triggering deflationary policy responses. As the emerging economic downturn deepened to a major world slump, economic growth slowed while inflationary pressures were boosted by a second round of oil price increases during the late 1970s. The resulting 'stagflation'[6] aggravated sectoral and regional problems in the industrial economies and led to the widespread destruction of jobs. Problems of high inflation, high unemployment and de-industrialisation were augmented by rapidly rising state expenditure to meet the growing social security costs of mass redundancies and as governments attempted to salvage failing industries.

As these problems were increasingly attributed to fallacies in Keynesian analysis and policy, there was a revival of traditional liberal economic beliefs in the monetary causes of inflation and in the efficacy of unrestricted markets in maximising economic welfare – a revival labelled 'Neo-liberalism'. The underlying assumption of Neo-liberalism, inherited from Adam Smith, is that self-regulating markets transform the inherent selfishness of individuals into general economic well-being. The market is seen as providing opportunities and incentives for individuals to fully exploit their property (labour in the case of workers), whilst preventing them from exploiting any advantages that ownership might afford by throwing them into competition with others similarly endowed. By these means, markets were assumed to provide a forum in which the values of individual contributions are collectively determined by the choices of buyers and sellers. These judgements are delivered as market prices, which serve to guide labour and other resources to their most efficient use. Competitive markets should therefore function as equilibrating mechanisms, delivering both optimal economic welfare and distributional justice. Consequently, Neo-liberals assert that man-made laws and institutions need to conform to the laws of the market if they are not to be in restraint of trade and therefore economically damaging. However, the relevance of this Adam Smithian ideology to globalised monopoly capitalism was never made clear.

c. The Rise of Monetarism

From the mid 1960s, as prices and unemployment rose together, despite counter-inflationary measures, Friedman (1977) revived pre-Keynesian monetary theory. He argued that inflation is purely a monetary phenomenon, caused by an increase in the money supply in excess of real growth at the natural level of unemployment. The imbalance is determined by state and trade union interventions which increase the cost of employing workers above the market clearing level. Overly generous welfare benefits are seen as discouraging work while the poor quality and low motivation of many of those without work is blamed for making them unemployable at the prevailing wage. It follows from this that attempts by government to raise employment beyond the natural level by increasing the money supply or by raising their own expenditure is counter productive because it is considered to be either inflationary or a cause of employment displacement elsewhere (Friedman, 1977).

Alternatively, the New Keynesians attributed stagflation directly to the degree of trade union monopoly which was hypothesised as raising wages above their market clearing rate and determining the level of unemployment at which inflation stabilised. Attempts to increase expenditure beyond this level, labelled the non-accelerating inflation rate of unemployment (NAIRU), merely add to inflation (Meade, 1982). Thus, for both Neo-liberals and New Keynesians, there is a clear choice between higher real wages or more jobs.

During the 1970s, as inflation appeared out of control, these alternative theories of inflation and unemployment supplanted Keynesianism as the conventional wisdom in macro-economics and were progressively incorporated into government thinking and policy. Attempts to control inflation by monetary means triggered deep recessions during the early 1980s and 1990s. The target for controlling inflation switched from the money supply (which proved uncontrollable), to exchange rates which ended when Britain was forced out of the European Exchange Mechanism in 1992 by speculation against sterling. At this point, the target for price control switched to inflation itself and interest rate adjustments became the primary instrument of policy. This was formalised in 1997 when the Bank of England was granted independence and assigned responsibility for setting the rate of interest, a role delegated to its Monetary Policy Committee whose primary function was controlling inflation. The use of the official interest rate as the lead anti-inflationary device subverted the Bank of England's tradition of using interest rates to control its lending to the banking sector, which in turn gave banks the unrestrained ability to increase the money supply.

Meanwhile, the role of increasing employment and competitiveness was delegated to market reforms. Markets and business were deregulated, large sections of the public sector privatised, and taxes on the rich cut to encourage enterprise. Trade unions were weakened, legal control of labour standards relaxed, out-of-work benefits reduced and subject to more onerous conditions, and wage subsidisation was introduced with the express purpose of lowering NAIRU and generating higher levels of employment. In the interest of freeing up global financial markets, exchange rate controls were removed in October 1979, encouraging banks and other financial institutions to move off-shore. As a consequence, attempts to regulate the banking and financial sector became pointless and any control over the money supply was lost.

2. The Firm, Organizations and Corporate Governance

a. Managerial capitalism

During the 20th century, the development of mass production technologies and the growth in mass markets, especially in the US, encouraged even further growth in the scale and scope of the productive activities of corporations. As this happened, the 'visible hand of management' (Chandler, 1977) replaced the 'invisible hand of the market' (Smith, 1776) in the allocation of productive resources. The dramatically increasing concentration of economic power in the form of large scale organizations, and the widening of stock ownership as shareholders diversified their risks, contributed to the development of theories of corporate governance. In this context, Berle and Means' (1932) identification of a growing separation of 'ownership' from control of large commercial organizations had an important influence on legal and economic theory, giving form to what was described as 'managerial capitalism'.

As Alan Hughes (1987) explains[7]:

> ‘As private enterprise industrial economies evolve, the proponents of the thesis of managerial capitalism argue that changes occur in the technical conditions and scale of production of corporations, in the structure of their equity and of the product markets in which they operate, and in their internal governance. The increasingly complex technological and scientific nature of industrial production requires specialist technical expertise, and management responsibility is delegated to individuals by an increasingly absentee ownership interest. The associated increase in the scale and capital intensity of production is reflected both in the growth of oligopolistic market structure and, as external funding increases, by an ever more dispersed pattern of share ownership. Thus the fusion between management and ownership is broken. Those responsible for exercising management responsibility came to constitute a skilled, inside, professional salaried group, essentially propertyless in relation to their own corporation, and hence separate in function and identity from the tens of thousands of shareholders who are its legal proprietors. These share owners, in turn, form an increasingly disparate, unorganised, and uninterested group of principals, unwilling or unable to impose their own self-interested contractual conditions of employment on their manager-agents. Managerial behaviour is therefore discretionary behaviour, very weakly constrained by share-owner interests on the one hand, or by competitive market environments on the other. As a result, corporate behaviour changes, and with it so does the nature of capitalism.’ (pp. 293-4)

The changing structure of industry and its control prompted theoretical developments in industrial economics. Outside the mainstream neo-classical tradition, Chandler (1977) identified superior managerial and production organisation and the economies of their large scale operation as explaining the emergence of large corporations; Hayek and his followers argued that market success and firm growth were the consequence of entrepreneurial ability in discovering new profit opportunities in a world of uncertainty (Kirzner 1997); and Schumpeter (1943) theorised that monopoly profits are necessary to encourage innovation. Such theories served to justify the power exercised by large firms as fostering economic advance. They also extended the disciplinary and creative role of markets for, although large size may be the reward of success, big firms can only survive by generating the operational and dynamic efficiency by which organisations keep their feet in the market driven by 'the process of creative destruction' (Schumpeter, 1943).

Inside the mainstream, the competitive ideal in neo-classical economics is a large number of firms in each industry, none large enough to influence price. The role of managers (usually the owners) of such firms is to adjust output in response to price signals transmitted by the market. With the proliferation of large managerially-controlled firms with substantial market control, conventional neo-classical wisdom evolved to argue that the success of these organizations served as evidence of the efficient working of market forces. The neo-classical case for the efficiency benefits of dominant firms was succinctly summarised by Coase in his seminal 1937 paper. He argued that 'an economist thinks of an economic system as co-ordinated by the price mechanism' and posed the question: 'Having regard to the fact that if production is regulated by price movements, production would be carried out without any organisation at all, well might we ask why is there any organisation?' The neo-classical response is that hierarchically-controlled managerial organisations evolve reactively to economise on transactions costs by frustrating attempts by trading partners to exploit bargaining power advantages derived from their monopoly position in supply or demand, control over specific assets, privileged access to information, and/or difficulties in monitoring performance (Williamson 1979, 2002). From this perspective, the boundary between the firm and the market is that point at which the organisational costs of managerial hierarchy offset the transaction costs of market activities saved by the organisation. The role of the market is thus transformed from providing individuals with opportunities to maximise economic well-being, to one of maximising economic well-being by selecting out as winners those organisations most able to minimise the transactions costs resulting from market imperfections.

An alternative explanation for the evolution of managerial capitalism is that large managerially-controlled firms were afforded legal and statutory status on liberal ideological grounds. The central idea in liberal economics is that freedom in markets gives individuals the right to seek out the best deal they can, and in doing to maximise the economic well-being of society. Consequently, defence of individual rights in the market is a primary responsibility of the state and the courts in capitalist societies. Berk (1994), in his analysis of the legal and political response to the increasing concentration of industry in the US, demonstrated how this concept of individual freedom in markets, the foundation of liberal economics, was extended to include large corporations. He showed how the proponents of what he termed 'corporate liberalism' followed orthodox liberal teaching in conceiving:

> 'property and economic development as prior to the will of collective or democratic choice. "The laws of trade" its adherents are fond of saying "are stronger than the laws of men." Thus, the modern corporation, like the liberal person, owed its existence first and foremost to private purpose. If the result of economic development rooted in such pre-social entitlement was to concentrate the market in huge monopolistic firms, this was deemed inevitable' (pp 13-14).

Berk went on to show that far from being the product of a natural economic process, the corporate form of large US businesses is a legal and political construct resting on the conversion of judges and politicians to corporate liberalism. In his study of the development of national railway systems he showed how in legal actions over bankruptcies in the railway system, courts allowed the speculator/managers – who had amalgamated individual railways into rail systems using vast amounts of borrowed money – to take them into voluntary receivership. This protected rail systems from dismemberment whilst their managers negotiated with their creditors. Success in reducing the fixed interest charges in this way allowed the railway promoters to emerge from bankruptcy with the cost of servicing their vast fixed term debts sufficiently reduced so that they could profitably renew their operations. Building from the legal cases concerning railway systems, via federal law on bankruptcy and subsequent amendments, access for managers to voluntary receivership was extended from 'railways, utilities, and banks to a full range of industrial corporations' (op. cit., p58). In this process, the corporation was defined as 'a natural entity with a personality of its own, whose life plan was best devised by management' (op. cit., p.51). This 'natural entity' of corporate liberal theory not only successfully fended off the challengers of creditors in receivership; it also rebuffed the claims of the state in regulation. Thus, rather than being a consequence of economic development in which markets are formative, the large scale of American capitalism is a product of judicial and political decision-making in which corporate liberal ideology was deployed by the representatives of corporate managers to persuade law-makers that the organisations they controlled were natural entities.

Subsequently, the hallmark of American capitalism has become the separation of control by managers from ownership by a large number of widely dispersed shareholders. An important factor encouraging external share-holding was the settlement between debtors and creditors emerging from voluntary receiverships, the origins of which are outlined above. The objective of corporate managers in avoiding bankruptcy and company dismemberment was to reduce fixed charges to the level affordable in the deepest recession. Specialists in these forms of reorganisation pioneered methods of corporate recapitalisation which improved financial viability. A leader in this respect was the merchant banker, J.P. Morgan, who popularized the exchange of fixed term bonds for liabilities, the return on which was contingent on profitability – especially equity.[8] 'By exchanging obligations fixed by law for those payable at the discretion of management, reorganizers ensured that for the foreseeable future corporate integrity would no longer be threatened by the trade cycle'. (Berk, op. cit., pps 65-67).

b. Shareholder capitalisation and the stock exchange as a market for corporate control

The preference for equities in corporate funding diluted managerial control and contributed to the growing importance of joint stock corporate governance. Although the joint stock company had been in existence since the early 17th century, it was not until the introduction of 'limited liability' for investors during the mid-19th century that the joint stock company moved from the margins to the mainstream of corporate organizational forms. The separation of risk bearing (by investors) and management (by salaried employees) was considered to be an efficient division of labour. Those with wealth could employ it productively while those who could manage were able to secure investment capital and other productive resources in the stock market. The ability to diversify investment interests reduces risk and makes investment more attractive and more efficient. In this model, shareholders collectively bear most of the risk of business failure, in exchange for which they are assigned residual income as the reward for success. Shareholder risk was reduced, however, as the separation of ownership from control impacted US law, ultimately leading to the creation of the US Securities and Exchange Commission (SEC), an institution created to legally protect the interests of the shareholders of companies whose shares were traded in the American stock market. In Britain, corporate law similarly came to prioritized shareholder interests.

By the 1960s, when the Keynesian boom was at its height, the caution produced by the 1929 Stock Market Crash was replaced by confidence and a willingness to take risks, particularly if those risks could be transferred to others. Investors began to realize the potential power of external shareholders in large family-owned companies whose shares were traded on the stock market. One such investor was James Slater, who, with Peter Walker, formed Slater Walker Securities in 1964 and launched the first hostile takeover in the UK (BBC 1999, Part 2). Slater Walker, which grew to be a major financial and industrial conglomerate by the end of the decade, was an important player in the wave of hostile takeovers in the UK during the 1960s and 1970s that served to reorganize British industry while at the same time fuelling the stock market boom. During the 1980s in the United States, a very similar movement took place with the loosening of regulations with respect to takeovers and with the development of a very active market in 'high yield' or 'junk' bonds. Some of these financial instruments were used to fund takeovers which were followed by the hollowing-out of productive infrastructures as assets were sold to repay the debts incurred; and enormous profits were made by the individuals and organizations that conducted such transactions. According to Lazonick and O'Sullivan (2000), 'these takeovers also placed managers in control of these corporations, who were predisposed towards shedding labour and selling off physical assets if that was what was needed to meet the corporation's new financial obligations and, indeed, to push up the market value of the company's stock.' (p. 18)

The mounting of takeover bids in both the US and Britain was facilitated by legal and accounting changes following the financial crisis of the 1930s and the resulting increase in transparency (Deakin and Singh, 2008). In the US, the position of managers in companies threatened by takeover was further prejudiced by enactment of the 1968 Williams Act, which weakened the defences they could put into place. During the same year, the City Code on Takeovers was introduced in London, to strengthen the relative position of shareholders. The City Code insisted that all shareholders should be given equal treatment when a company was taken over. In this, the acquirers of shares in the market were required to extend their offer to all of the target company's shareholders; and limits were placed on the defensive actions that companies could take when singled out for acquisition. Although the City Code did not have statutory backing, it was effectively enforced by the ability of the financial and legal professions and financial trade associations based in the City of London, who were instrumental in setting up the Code, to bar those in breach of the regulations from practising (Deakin and Singh, 2008).

The response of neo-classical theorists to the rapid growth in the number of hostile takeovers during this period was to declare the stock exchange to be an 'efficient market' for managerial control The stock market was theorized to resolve the principle and agent problems between shareholders (assumed to be owners[9] and hence principals) and their difficult to monitor agents, the managers. The argument goes that the dispersal of ownership amongst a multitude of shareholders impedes the effectiveness of monitoring and encourages inefficiency and/or opportunism amongst managers which reduces dividends and share prices. The stock market thus provides an opportunity to punish wayward managers by allowing alternative managers, whose greater efficiency and reliability promises higher returns, to put in a stock market bid for a company's shares that is higher than the current market valuation. The theoretical advantage of stock market monitoring of managers is that, unlike other stakeholders, the only interest shareholders have in the business is current, and expected future, residual income (i.e. the income that remains when other stakeholders have been paid off), which supposedly determines the price of ordinary shares. Therefore, hostile takeovers provide evidence that the stock market operates as an efficient market for corporate control by providing an effective mechanism for monitoring and disciplining managers, which shareholders are uniquely placed to trigger (Deakin and Slinger, 1997).

It follows from the notion that the stock market operates as an efficient market for corporate control that the prices it delivers (ie. the value of a company's shares) reflect the value of the underlying productive enterprise. From this perspective, the stock market boom was taken as evidence of overall industrial strength. In turn, the short-term increase in share prices resulting from cost cutting and massive layoffs in companies that had been taken-over served to reinforce the theory's assumptions. However, this ignored the reality that a significant proportion of the 'profits' generated by hostile takeovers were derived from asset stripping, as opposed to restructuring that had enhanced sustainable output and productivity in the organizations involved (Lazonick and O'Sullivan 2000). The hostile takeover was considered an effective and efficient means by which under-performing management teams could be replaced by more effective ones, with a predicted beneficial impact on the longer-term performance of the companies concerned (Shleifer and Vishny 1997). As a result, the stock market boom encouraged a shift in government policy in favour of hostile takeovers as the conglomerate movement gathered pace in the US and in the UK. This flew in the face of the results of careful research which showed that the long term effect of takeovers was detrimental to corporate performance.[10]

From the 1960s, the growth in the proportion of the population exposed in the stock market by virtue of their pension, retirement, insurance and savings funds invested there gave shareholder value increased credibility. At the same time, the emergence of large institutional investors managing these funds gave shareholders an increasing 'voice' in the management of firms whose shares were held in these funds were managed. During the 1980s, the rise of hostile takeovers, leveraged with borrowed money repaid by the sale of productive assets, secured enormous profit for their perpetrators. But it laid waste swathes of the productive economy at substantial cost to other stakeholders, including workers whose invested pension contributions had made them unknowing shareholders[11]. So the response of institutional investors produced a counter-reaction that strengthened the power and centrality of shareholders, particularly in America.

During the second part of the 1980s, the revelation of corruption in the American banking system led to panic and stock market collapse. During the 1990s, encouraged by the pension funds and the 'myth' of the beneficial 'disciplining' role of the hostile takeover, corporate governance again came to the fore as an issue both for public policy and management practice. The idea the shareholders were 'principles' to whom managers were 'agents' gained ground. This was manifested in the implementation of external forms of governance, including the proliferation of corporate governance codes strengthening the position of shareholders and enhancing their protection. It was supported by the widespread adoption of executive share option schemes and other forms of managerial remuneration designed to more closely align the interests, and especially the financial objectives, of shareholders and top management. During this period, industry was radically restructured through the operation of the market for corporate control (Holmstrom and Kaplan, 2001); and in the process, long established mechanisms for the exercise of voice by non-shareholder interests – above all, employee representation in its various forms – were marginalized.

Paradoxically, the growing polarization of shareholder and workforce interests was accompanied by development in both the US and the UK of innovative forms of labour-management relations designed to capture the benefits of co-operation among corporate stakeholders. The background to this was rapid technological change and intensifying competition in product markets, brought about by globalization and, particularly in the UK, privatization. Customers learned to exercise their choice more aggressively and shareholders became increasingly impatient for a quick and profitable return on their investments. In response to these pressures, firms were forced to re-examine their internal governance and organizational systems and structures in an effort to improve performance (Burchell et al, 2002). Although downsizing and business process re-engineering were part of the response, labour-management 'partnerships' were also initiated, often in the very same companies that had undergone substantial restructuring. These arrangements led to innovations in the employment relationship, including a significant degree of self-management and autonomy for employees.

Thus, as a means of enhancing the firm's competitiveness, and hence its long term prospects, the internal governance of organizations is required to foster a higher degree of co-operation between management, the workforce, customers, suppliers and, increasingly, the natural and social environment. Concurrently, stock market pressure requires, if necessary, the sacrifice of any or all of these mutually beneficial long-term interests to the short-term pecuniary benefits of shareholders.

3. Globalization and Effective Regulation

The globalization of capital, product and labour markets has served to intensify these contradictory pressures, particularly in the absence of effective regulation, much of which was abandoned in the interest of freeing up the market.

During the post war period in the United States and in the wake of the Great Depression, there was recognition in the US of the need for national-level regulations to protect the interests of workers, the environment and consumers. With expansion of the internal-American market, corporations grew to become increasingly national in scope; and their enormous political and economic strength expanded beyond the capabilities of individual states to constrain. During this period, as was shown above, the liberal response to market failure was the ‘New Deal,’ through which organized labour worked together with national government to protect the public interest in long-term economic and social welfare creation and to counter-balance the power of large corporations. This not only served to strengthen the American labour movement; it also produced national welfare provisions that raised and protected labour standards while at the same time improving access to such public goods as health care and security in retirement, many of these social benefits being provided by employers.

In Europe, the creation of the European Union (EU) was a similar response to expansion of markets and of corporate productive systems; and this led to an as yet unresolved debate about the need to synchronise economic and social standards to create the level playing field required for effective economic integration. During the 1990s, the growing internationalization of business widened the debate about the potentially destructive consequences of international trade for labour standards within the EU (Wilkinson 1994; Sengenberger and Wilkinson 1995). This debate revolved around the possibility that unregulated markets might precipitate a ‘race to the bottom,’ in which lower labour standards in the developing world would drive down standards in the developed nations of which the EU formed a part. The result was the strengthening of internationally enforceable standards within the EU, which with expansion, have been, or will be after an agreed transition period, extended to all member states.

Undoubtedly, the increasing globalization of markets for products, labour and capital has contributed to economic growth in many developing countries; and it has generated benefits for consumers in advanced economies in the form of low price goods and services. But these short-term advantages may have been gained at heavy long term costs. By lowering standards in the developed world, they effectively lower the floor that developing countries can hope to one day achieve. And whilst the availability of low price goods and services produced in the developing world has helped to reduce the daily cost of living for households in importing countries, the effect of globalization has been to undermine the position of immobile factors of production, especially labour, at risk from low cost imports. One effect of this impoverisation is an erosion of the domestic demand base. To a degree, this was offset, (or delayed, as now seems more likely) by the availability of cheap credit, lower taxes and reductions in savings used to fund current consumption which have buffered the immediate effects on vulnerable groups (Silvers 2007). But in the longer-term, credit based spending higher than that warranted by disposable income has tempted many poor households into debt-induced poverty. This is threatening living standards in a growing proportion of the population and contributing to the current 'credit crunch' as banks and other financial institutions have cut borrowing with upward revisions of standards of credit worthiness and with the reclassification of many existing borrowers as credit risks.

The absence of a governance framework for global financial regulation allowed fraudulent activities to proliferate, serving to undermine confidence in capital markets, especially the New York and London stock exchanges. The increasing globalization of equity holders means, further, that returns to equity will increasingly flow abroad, with a potentially de-stabilizing effect on the foreign exchanges. Strine (2007b: 36) concludes that 'the ability of any nation … to address these emerging circumstances in isolation is … minimal.' Just as co-operation is essential to the long-term effectiveness of the corporate 'productive system,' so it is for the broader socio-economic system of which the corporation forms a part (Wilkinson 1994; 1998). Thus, it is imperative that organizations and nations co-operate in developing a global institutional framework that extends to developing countries the corporate governance and financial market regulations that have already proven effective in protecting social and economic standards. This need has been underlined by the unfolding of the current crisis.

4. The Genesis of the Current Crisis: High Yield Risk Assessment and Securitization

Much of the blame for the current financial crisis can be laid at the door of apparently new financial innovations, such as the Collateralized Debt

Obligation (CDO), other high yield instruments and flawed models of valuation and risk assessment. However, these financial instruments – and an unreliable system of risk measurement – have a much longer history and a legacy of financial damage that goes back considerably further than the most recent 'credit crunch.'

In the United States, deteriorating economic conditions during the 1970s set into motion a series of events that would ultimately give rise to both the high yield 'junk' bond market and the first collateralised debt obligations (CDOs). In 1971, the disintegration of the Bretton Woods fixed exchange rate system and increasing inflationary pressures pushed up interest rates. By the middle of the decade, almost thirty years of interest rate stability had been reversed and short-term borrowing costs had substantially increased. A recession and two oil crises precipitated a stock market slump that reduced the market value of American corporations by almost half. Banks stopped lending to all but the highest-rated companies; and as yields in the open market rose above the interest-rate caps on bank deposits that had been set by the Fed, money flowed out of the banking system and into the money markets where higher yields could be found. Only the most financially secure borrowers were able to obtain credit and many innovative companies with high rates of return on capital and rapid rates of growth were unable to access capital. This environment produced two significant outcomes: rapid expansion of the 'high yield' bond market and the use of the CDO as a tool for enabling growth in the Savings and Loans (S&L) sector.

a. The High Yield ('Junk') bond market

Although popularly attributed to Michael Milken and Drexel Burnham Lambert (DLB) during the 1980s, the 'high yield bond' had been in existence long before. High yield bonds were used by the United States of America, soon after the country's founding in the 1780s (Yago 1991), and were extensively used after the civil war to build railways and consolidate their ownership. They were also used by companies in newly emerging industries – including General Motors, US Steel and IBM – to raise development funds during the first part of the twentieth century. Indeed, during the 1980s, a considerable proportion of the capital raised by these financial instruments was put to much the same use during what would ultimately come to be known as the 'junk bond' era (Scott 2000: 6).

There is nothing inherently dubious about a high yield bond; and the term 'junk' was to a large extent coined retrospectively to indicate a less than investment grade product. Higher levels of return are often associated with higher levels of risk; and start-up or development capital is very likely to be more risky than government debt, such as US Treasury Bonds. In the US, many new businesses in recent times, including the cable television industry, were significantly enabled by high yield bonds, adding both vigour and new jobs to these segments of the economy. It is also worth noting that the high yield bond continues to be a significant source of capital and remains a viable option for many new, developing or struggling companies. But high yield bonds were also used for more speculative purposes.

Using the high yield bond, Milken was instrumental in creating a spectacularly dynamic market for these financial products during the 1980s. Whilst a considerable proportion of the funds raised were used to finance development investments, large sums also found their way into leveraged buy outs that resulted in dismemberment and asset stripping of the target corporations, a practice exported from the UK, along with one of its greatest proponents, James Goldsmith. In the process, large segments of America's traditional manufacturing and productive industries were 'hollowed out,' with devastating effects on the employees and local communities (Lazonick and O'Sullivan 2000).

Because of the attractive returns on offer, corporate raiders who specialised in asset stripping to boost short term yields (giving the illusion of improved productivity in the process) found willing allies in pension fund managers, many of whom had a legal obligation to maximise returns for pensioners. But the negative effects of mass redundancies on employees ability to contribute to pension funds, and hence their long term viability, was ignored by pension fund managers. As a consequence, the end of the corporate raiders did not spell the end of the process they had begun. Rather, managers of pension and investment funds that already owned a majority share holding in remaining corporations learned that they could continue to generate substantial returns to short term 'shareholder value' without hostile takeovers (BBC 1999, part 3).

One of the problems inherent to high yield bonds is that their use in acquiring other financial assets multiplies the number of securities involved and complicates the interdependency of their performance. This makes the valuation of assets, and quantification of the underlying risk, much more difficult than tracking a small number of easily identifiable securities with a known track record. Consequently, costliness of using traditional methods of asset valuation and risk analysis provided strong incentives to find an alternative approach. In response, Drexel Burnham Lambert developed a formula-based approach of the kind that Keynes had held to be unworkable as a means of predicting future events, and a technique that has subsequently played a significant role in the current financial market crisis and has been much criticised for underestimating the risk in assets underpinning CDOs. The undervaluation of risk in DBL's models was one of the factors that eventually caused the bank's collapse in 1990 (Eichenwald 1990).

Not only are there the more obvious difficulties associated with formula-based valuation systems that rely on potentially dangerous generalisations and assumptions and can be impenetrable to the non specialist, sometimes including the organisation's own senior management. Higher risk assets tend to be amongst the first casualties during an economic downturn. This is especially the case when they are linked to an industry notorious for bubbles – like real estate and, particularly, housing.

b. The American Savings & Loans (S&L) crisis

The S&L crisis of the late 1980's and early 1990's had its roots in very similar conditions to those that ignited growth in the high yield bond market during the 1980s. S&Ls or 'thrifts' had been created during the 1800s as community-based institutions for savings and mortgages in the United States. Tight regulation at both the state and federal levels, included restrictions on the range of loans that could be made and ceilings on interest rates that could be offered to depositors. During the 1970s, in response to wide fluctuations in interest rates, money flowed out of S&Ls in search of higher yields, thereby starving the sector of funds to issue new mortgages and severely restricting growth.

One solution came from Drexel Burnham Lambert in the form of the collateralized debt obligation (CDO), in which loans were bundled together and sold on the securities market as investment products. The CDO allowed the issuer to remove these assets from its balance sheet while at the same time providing cash with which to make additional loans. It also resulted in a significant increase in leverage, which turned out to be particularly dangerous for three main reasons that, in the context of the current financial crisis, are eerily familiar. First, the assets were valued by mathematical formulae, with the same scope for inaccurate risk assessment and valuation as had undermined the credibility of the high yield bonds during the 1980s. Second, the model depended on a continually rising or, at the very least, stable, housing market to survive. If the market turned downward, the system of payments would be threatened, with potentially fatal effect to the underlying investment. Third, since S&Ls were also known as 'thrift' institutions, it is not hard to surmise that their CDOs might well have included a significant percentage of what would now be classified as 'sub prime' mortgages.

In response to the banking sector's difficulties, a series of legislative reforms were enacted. In 1980, the Depository Institutions Deregulation and Monetary Control Act (DIDMCA) eliminated many of the distinctions among different types of depository institutions and removed the interest rate cap on deposit accounts. At the same time, federal S&Ls were given expanded authority to make acquisition, development and construction (ADC) loans and the Federal Deposit Insurance limit on individual accounts was increased from $40,000 to $100,000. In the case of struggling S&Ls, increasing Federal Savings and Loan Insurance Corporation (FSLIC) coverage permitted managers to take greater risk in trying to work their way out of insolvency in the expectation that the government might avoid having to takeover a failed institution. During the same year, the federal Home Loan Board removed the limit on brokered deposits that an S&L was permitted to hold and reduced the net worth requirement for insured S&Ls from 5 to 4 percent of total deposits, lowering it again, to 3 percent, in 1982.

The Tax Reform Act of 1981 provided powerful tax incentives for real estate investment by individuals, spurring a boom in the real estate market and contributing to over-construction. During the early 1980s, this combined with lower interest rates and legislation under the Reagan Administration, designed to make S&Ls more competitive, spurred growth in the sector. The Garn-St. Germain Depository Institutions Act of 1982 allowed federal S&Ls to diversify their activities with the view of increasing profits, including ownership of projects that had been funded by their loans. This encouraged a massive defection from state chartered to federally chartered S&Ls.

Despite these changes, the American S&L industry experienced record losses during the 1980s. Over a thousand thrift institutions failed in what has been identified as 'the greatest collapse of US financial institutions since the Great Depression' (Curry and Shibut 2000: 33). As the total cost of these failures exceeded the Federal Savings and Loan Insurance Corporation (FSLIC)'s ability to pay insured depositors, US taxpayers and the industry were required to contribute to the insurance coverage at a total cost of approximately $153 billion (Curry and Shibut 2000: 33).

Although the S&L crisis was in many ways precipitated by international factors – and many of the factors and processes at work bear comparison to the current crisis – there is also an important difference. The limitation of the main effects of the S&L crisis to a single sector of the American banking industry, whose survival was not considered critical to confidence in, and the health of, the national or global financial system meant that it could be allowed to fail. When the S&L crisis was finally resolved, the number of federally insured S&Ls had been reduced by nearly half, from 3,234 in 1986 to 1,645 in 1995 at a cost of approximately $124 billion to the American taxpayer (Curry and Shibut 2000: 26). Along the way, Drexel Burnham Lambert had also disappeared. However, once again, like the high yield bond and the formula-based assessment of risk, the CDO survived the crisis.

In a 1996 address, delivered in Tokyo, Japan, L. William Seidman, former Chairman of the FDIC and Resolution Trust Corporation (RTC) said that during the 1980s and 1990s, the US had experienced 'a banking and S&L and credit union problem of major proportions – clearly the worst difficulties since the Great Depression.' He went on to say that 'Given the extent of the problems, we in the US are 'long' on experience and if we don't learn a lot from these experiences, we will surely repeat our problems.' (Seidman 1997, Volume II, pp. 55-56) It would appear that some of the lessons from the S&L Crisis have not yet been learned, and the problems were repeated.

5. The Anatomy of the Current Financial Market Crisis and its Location in Socio-economic History

In the *General Theory*, Keynes argued that financial markets, where money is demanded for both productive and speculative uses, operate on relatively short-term time horizons (Keynes 1936, Ch. 12). Markets for finance adjust very quickly and are prone to swings of 'spontaneous' optimism and pessimism during which individuals, unsure of their own ability to predict the future, follow the lead of others, creating a sort of 'herd' mentality. As a result, financial market instability is exaggerated by the psychological tendency to believe that periods of prosperity (or of collapse) will continue without interruption; and the system is 'shocked' when this proves not to be the case. This volatility of money markets feeds into real decision-making by its affects on the rate of interest and on business confidence.

Building on Keynes, Minsky's financial instability hypothesis suggests that during extended periods of economic prosperity, capitalist financial systems develop fragilities that expose the macro-economy to the possibility of Fisher-type debt-deflations (Minsky 1985; 1992). In this scenario, the apparent unlimited availability of credit and investment opportunities creates over-indebtedness. Eventually, a process of debt liquidation is precipitated, contributing to deflation as assets are sold off at prices lower than their purchase price, money deposits are drawn down and the velocity of circulation slows. Deflation reduces net worth of businesses and profits, causing a decline in output, trade and employment. Fear leads to hoarding and a reluctance to borrow slowing further the velocity of circulation. Together, these forces exert downward pressure on nominal or money interest rates, but an upward pressure on real or commodity rates of interest as prices fall.

Following the Minsky logic, the current global financial malaise is first and foremost a crisis of liquidity – once excessive and now insufficient. The period 1990 – 2005 has been described as the 'great moderation', characterized by low and stable global inflation, high and steady global GDP growth, declining levels of real interest rates and increasing deregulation; especially after the bursting of the so-called technological bubble at the end of 2000 when Greenspan famously saved the show by cutting interest rates. One crucial development has been the rapid growth in the world's propensity to save, caused importantly by the redistribution of world wealth and income to high savers. Determinants of this include accelerated economic growth in China, led by burgeoning foreign trade in manufactures; high saving rates in Japan and growing wealth in Saudi Arabia, Norway and other oil rich countries as oil prices have risen. By 2006, global foreign exchange reserves were growing at a 15 percent annualized rate, translating into $600 billion in central bank funds looking to invest in government bonds[12]. At the same time, increasing pension provision requirements for the ageing Western and Japanese populations hurled another wave of money against financial assets, exerting further downward pressure on returns. This process was accelerated by the desire in Europe to transition from a pay-as-you-go, tax-funded pension structure to a provisioned, privately-funded model. Company pension plans also had to seek higher yields to offset the impact of falling rates. The combined effect was an unending drive for yield and a willingness to consider both more risky investments (e.g. junk) and new and unconventional vehicles to deliver it.

During the first part of the new millennium, the US Federal Reserve's (Fed's) attempt to counter both the deflation of the technology bubble and the impact of 9/11 using a sustained monetary stimulus added to the appetite for borrowing. But lower interest rates made it increasingly difficult for investors and financial intermediaries to earn adequate yields from traditional debt investments. However, not only did banks need to search for higher returns. Mindful of the Basel Accord, they had to achieve this without increasing requirements for expensive regulatory capital. A solution was found by moving from an initiate-to-hold to an initiate-to-distribute banking model. Rather than keep assets on the balance sheet and post regulatory capital against them, banks instead packaged those assets and distributed them to other investors, booking gain-on-sale income and obviating the need to hold additional capital. This both made use of and made acceptable new financial innovations and technologies in ‘securitization’ and derivatives.

Securitization, the packaging of multiple loans into new securities which service interest and principal from the cash flows of those loans, is not in itself new. The creation of Fannie Mae as part of the New Deal promoted the securitization of residential mortgages, while credit cards, student loans and auto loans also have an extensive history of securitization in the US (see above). What differentiates the growth in securitized products over the last decade is the inclusion of securities with little performance history, such as new US mortgage markets, non-US mortgages, emerging market credit and ultimately, other securitizations. In addition, the complexity of their structure frequently made the instruments impossible to accurately value, once liquidity began to deteriorate. These products are known by a variety of names, such as collateralized debt obligations (CDOs) and collateralized loan obligations (CLOs), depending on the underlying instruments. Further explanation is provided in Appendix I.

Global investment banks sold CDOs and CLOs throughout the world, but investors often lacked an intimate knowledge of the assets that populated them. This increased the difficulty of analyzing the underlying securities, intensifying investors’ reliance on the credit rating agencies (CRAs). However, the rating agencies were not immune to the drive for yield, either. As corporations de-leveraged after 2002, the rating agencies’ were motivated to look for alternative sources of revenue. In this, new structured products offered promise not merely in terms of the volume of new issues but also because the agencies believed that the ratings for these investments could be derived from statistical models, thereby reducing the perceived need for expensive qualitative analysis.

Another factor in the exponential growth of securitized products was the development of the credit default swap (CDS) market. CDS’s are effectively insurance contracts that enable the ‘protection buyer’ to insure a certain amount of bond principal against default in return for an annual premium. The CDS market grew rapidly in response to the dual effect of the regulators’ decision to allow banks to reduce capital requirements against risk positions by ‘buying protection’ and the standardization of documentation and default procedures. As a result, the CDS could be used not only as bond insurance, but also as a stand-alone expression of credit risk. By buying a CDS, an investor could take a ‘short’ position in the underlying credit, believing that the CDS premium would increase or ‘widen’ as the credit deteriorated and enabling the buyer to sell protection to ‘cover’ his position at a profit. Conversely, a CDS seller would generate a ‘long’ position or own the risk of the underlying credit. If the credit improved, the CDS premium would decrease or ‘tighten’, enabling the seller to take profit by buying protection with a tighter spread.

Although the same effect could be achieved with bonds, the dominant factor in the price of a bond is usually the interest rate risk, making it difficult to take a ‘pure’ view on the underlying credit. Further, the ability to take ‘long’ or ‘short’ positions in a bond is limited by the availability of the bond issue, whereas CDS’s are far more liquid. It was these factors, combined with the lack of complication of the cash component of bonds that encouraged the packaging of CDS into ‘synthetic’ CDOs, in which the underlying assets were CDS contracts. This gave another huge boost to the development of the CDS market, which currently exceeds $30trn globally.

The burgeoning structured credit market caused a cycle of ever-declining credit costs. When a CDO was launched, the manager would have either to buy bonds in the open market with which to populate it (if cash) or sell protection on the underlying credits (if synthetic). The effect was to unleash a wave of demand which would cause those credits selected for the CDO to tighten – the so-called ‘structured bid’. Since credit traders could arbitrage any differences between cash and synthetic markets, tightening in one would also cause the other to tighten. The effect of the structured bid was to make traditional, single-name credits even less attractive from a yield perspective, encouraging further investment in structured products. As yields in these products also decreased, investors were driven towards either structured securities with riskier underlying assets or to increasingly esoteric structures. The overall effect of the proliferation of these new financial instruments was not merely to drive down credit costs but to reduce the price differential between high-grade and riskier credit.

Developments in structured debt markets underlie much of the current ‘credit crunch.’ For example, the growth in sub prime mortgages and ‘self-certification mortgages’ would have been unthinkable without the vast network of structured products that could rapidly repackage the risk in apparently sanitized, collateralized form. Much of this risk could then be exported far away from the banks and brokers who originated it, to investors who could not examine the underlying loans but instead relied on the rating agencies. Any misgivings were overcome by the promise of yield; but this was a market where the payment for credit risk was being consistently eroded.

The boom in the structured credit market also fostered the leveraged buyout (LBO) boom of 2005-2006. In this, the loans made by banks to facilitate LBOs could be included in CLOs because the structured credit investors were so hungry for yield. Again, globalized investment banking ensured that CLOs were sold to investors far removed both geographically and in understanding from the companies to which the underlying loans were made. Since LBO debt financing was cheap, it was relatively easy to construct deals exceeding internal rates of return of 15 percent; and as a corollary, easy liquidity conditions ensured that the LBO funds that provided the equity stubs were themselves flush with cash.

So plentiful were the financing opportunities provided by the structured credit market that the companies subject to LBO were far from the traditional slackly managed, asset-rich, under-leveraged, under-performing mature company that generated ample cash flows. In April 2007, for example, buyout firm J. C. Flowers, in concert with Bank of America and J.P. Morgan attempted a leveraged buyout of student loan finance company, SLM Corp. Between September 2000 and April 2007 SLM's stock had outperformed the S&P by 242 percent and the S&P 500 Financials by 152 percent[13]. Moreover, as a finance company, SLM was already highly leveraged, with equity equal to approximately 3 percent of managed assets.

However, just as the structured credit market exerted a multiplier effect when liquidity was plentiful, when some of the weaker assets began to default – a process that began in the US sub prime mortgage market in early 2007 – it exerted a similar but negative effect. Structured credit had spread risk across a broader base of investors; but these new investors proved far more jittery and fickle than traditional investors when things went sour. With an increase in defaults on the underlying assets of structured credit products, the rating agencies began to downgrade structured securities. This triggered panic among investors who had to unwind the structures. As a result, spreads widened dramatically and liquidity dried up. In the mortgage market, this dampened the desire of banks to refinance sub prime mortgages or option adjustable-rate mortgages that were coming up to an interest rate reset. And as demand evaporated, they began to book significant mark-to-market losses on the securitizations that were 'held for sale' on their balance sheets.

LBOs also came to a halt as US banks were left in the third quarter of 2007 with $350bn of LBO loans/lending commitments that they unable to unload as the CLO market seized up. The attempted LBO of SLM was one of the victims. In this case, when equity investors realized that increased debt costs would prevent them from reaching internal rate of return hurdles on the transaction, they used minor legislative changes in student loan subsidies to call a ‘Material Adverse Event’ and withdraw. A subsequent share price offer of $50 rather than $60 was rejected and the deal fell apart.

The de-leveraging that began in 2007 has increased in pace and, partly as a result of the global nature of investment, its impact has been exported around the world. So badly have the banks been affected by collapsing valuations on structured securities that many have had to seek state support to avoid insolvency. The cost of intervention in the US alone comes to well over $1trn. In terms of product markets, this will translate into, at best, a punitive re pricing of credit risk and, at worst, a freezing of credit that could precipitate a wave of insolvency among relatively healthy companies with refinancing risk. The fall-out is far from over. To paraphrase Churchill, we are not at the end or even the beginning of the end; we might however, be at ‘the end of the beginning’ (Churchill 1942).

6. Conclusions: Co-evolution of nascent conventional wisdom and crisis in the old

The natural starting point for our conclusions is a return to the Galbraithian vision of the ‘conventional wisdom’ in economics, which at any point in time is inherently conservative and gives way not to new ideas but to circumstances it cannot explain. In this process, the gathering forces of change nurture the ideas that come to constitute the revised conventional wisdom. The period we have chosen, 1919 to the present, can usefully be divided into three of what might be described as ‘Galbraithian episodes’: (1) the end of the First World War through the end of World War II; (2) the end of the Second World War through the end of the 1970s; and (3) the late 1970s to the present.

During the first of these episodes, the conventional economic wisdom was laissez faire - until circumstances ushered in a belief that the government could usefully intervene to stimulate the economy. In the US, the 1920s experienced what Arndt (1944) described as an ‘astonishing boom’ (p. 15) which was unprecedented, if unequally distributed. Prosperity was characterised by a revolution in industrial techniques and organisation and rapid progress in new industries, especially motor cars and consumer durables. Early in 1929, however, growth in the US economy slowed and later in the year, the stock market crash exacerbated the downturn. By 1933, wholesale prices had fallen by 30 percent and industrial production and employment were down by 54 percent and 25 percent, respectively. The spring of 1933 also saw a financial crisis and the collapse of a number of banks. In response, the Roosevelt administration's New Deal represented the most comprehensive recovery package initiative by any democratic government. However, the US economy was less than fully responsive; and it was not until the additional boost to manufacturing created by the Second World War that the US economy fully recovered.

By contrast, the UK economy followed a different path and remained in the 'doldrums' throughout the 1920s as the Treasury followed a restrictive monetary policy in support of restoration of the Gold Standard at its 1914 parity. In 1931, however, a cut in interest rates, originally designed to reduce the burden of debt from the First World War, triggered a house building and consumer durables boom, which in 1937 was extended by re-armament.

Thus, in both the US and the UK, following the Depression, the government assumed a role in stabilizing the business cycle by fine tuning demand. But with the rise of neo-liberalism, the focus of theory and policy shifted to the monetary causes of inflation and the efficiency and welfare benefits of free markets. This involved a reversion to the pre-Keynesian view that rather than being a systemic problem, the responsibility for unemployment and poverty lies with the jobless and the poor. Since 1979, macro-economic policy has been dominated by attempts to control inflation by monetary means whilst responsibility for increasing employment has been delegated to market forces. Trade unions have been weakened, legal control of labour standards relaxed, out-of-work benefits reduced and subject to more onerous conditions; and wage subsidisation has been introduced with the express purpose of lowering NAIRU and generating higher levels of employment. Concurrently, markets and business have been deregulated; all restrictions on the money supply have been lifted; large sections of the public sector have been privatised; and taxes on the rich have been cut to encourage enterprise. In this new world of carrots and sticks, the carrot has been offered to those with the advantage while the stick has been progressively applied to the disadvantaged.

As with macro-economics, there has been a parallel progression in theory and policy with respect to industrial organisation and corporate governance. When industry was mainly small-scale, the theory and policy presumptions were that industrial concentration was in restraint of trade and as a consequence in opposition to the public interest. But as the scale of industry increased, the conventional wisdom evolved to contend that large firms had a comparative advantage in terms of fostering innovation in production and marketing. With developments in the stock market – in particular, the initiation and diffusion of hostile company acquisitions – theory lent force to the notion that the stock market serves as an efficient market for corporate control that monitors potentially malfeasant managers (the ‘agents’) on behalf of shareholder ‘owners’ (the ‘principals’); this is despite the fact that in legal reality, their ownership status has no foundation (Deakin, 2005). By this reasoning, the share price is interpreted as measuring the value of the company as an economic entity and in so doing links the worlds of production and finance.

From the 1970s, with the strengthening of the Anglo-American style ‘shareholder model’ of corporate governance and as limitations on the money supply were lifted, inflation in the stock market was fuelled by managerial efforts to increase share prices by whatever means possible. Advantage was taken of deregulation and complicated institutional arrangements, such as special purpose entities, by which securitised financial assets were used to disguise debts and inflate the market prices of shares above their real values. But when the underlying reality was revealed, confidence evaporated, causing the collapse of stock market prices. This brought down the underlying productive organization, like Enron and others, at enormous cost to its stakeholders, and to the broader social and economic system in which these companies were embedded.

Since then, financial market liberalization and the relaxation of regulation have greatly increased both the amount of finance available and the rate at which financial market innovations have outpaced the capacity to supervise and regulate. Rapid development in information technology made possible both the creation of complex and often dubious financial instruments and their rapid distribution to under-informed investors around the globe; it also allowed global markets to react much more quickly. As a consequence, when confidence in CDOs and other such derivatives was shaken, their markets rapidly unravelled, at ruinous cost to many of the financial institutions involved. The knock-on effect was a freezing-up of liquidity, collapse of security prices and inability of financial institutions to put a value on their holdings. As stock market prices fell, financing from the banking sector dried up and confidence disappeared. This rebounded on the non-financial productive system causing a collapse in effective demand as debt-laden consumers and others fearful of the future cut spending. In the UK, from the final quarter of 2007 to the second quarter of 2009 real GDP fell by 4.8 percent, employment fell by 465 thousand and unemployment increased by 833 thousand.

Adding to these costs, the UK government’s rescue of the banks and the increase in social welfare expenditure and reduced taxation accompanying the recession have increased the national debt by an estimated £175 billion. In response, the current debate between the UK Tories and the Labour government is how this is to be re-couped over the next few years by cutting government expenditure. At the time of the bank bail-outs, the Labour government had sweetened the pill with forecasts that the public money involved would be recovered, perhaps with a small profit, when the banks in question were returned to the private sector. This has subsequently dropped off the political agenda while efforts at regulation have made little real progress so far. Given the significant relative contribution that the financial sector makes to the UK macro-economy, punitive regulation seems unlikely since both the UK government and the banks have a shared vested interest in a return to strong profit growth in the financial sector. As a result, the real cost of the banking bailout is to fall on the recipients of government expenditure and workers in the public sector. But it will not end there. The multiplier effects of this level of cuts in government expenditure will be substantial and long-lasting.

In our view, subjecting the economy to this additional burden at a time when current indicators suggest that it is sinking deeper into recession is the inappropriate policy response. Moreover, the people being asked to make the sacrifice are in no way responsible for the mess that the economy is in. The fault lies with the bankers, who have neither accepted responsibility nor given any indication that they are prepared to alter their business practices sufficiently radically to avoid a repetition of the financial market chaos of the past two years. The more appropriate government response is to borrow the money required to combat recession, the cost of which would be relatively small because interest rates are so low. With respect to the portion of the debt generated by the bank bail-outs, actions should be taken to assure that these costs stand as a charge on the banking system. Such a levy would have the additional advantage of mopping up excess liquidity to guard against the sector embarking on any such reckless gambling sprees in the future.

Governance reform would, however, need to be congruent with the market. Both Wall Street and London's Square Mile acquired and built their influence as a result of 'light touch' regulation – resulting in what is known in The City as the 'Wimbledon Effect,' a great British tradition, but almost all the players are foreign. Initially attracted by the lack of regulation, they would be likely to move on, should London tighten regulation independently. The same would also apply to New York or any other financial centre. Regulatory arbitrage thus necessitates a globally enforceable set of rules. The over-reliance of post industrial economies, such as Britain and America, on the financial sector underscores the imperative of such a system and the ineffectuality of independent national regulation.

Ironically, Britain is, as in 1919, once again grappling with enormous government debt. But this time, it has far fewer options to manage either the debt or the rest of the economy.

Notes

[1] The exception to this was agriculture which was in recession throughout the 1920s

[2] For analysis of US policy in the inter-war years see especially Arndt (1944) and Laidler, (1999)

[3] Both Lauchlin Currie and Harry Dexter White became key policy advisors during the Roosevelt era. At the Federal Reserve Board and later at the Treasury and White House Currie became a leading advocate of expansionary fiscal policy, and White was a co-architect with Keynes of the Bretton Woods system (Laidler, 2002, p 515).

[4] As would also prove to be the case on "Black Wednesday," 61 years later when Sterling again proved vulnerable to currency speculation (see p.10 below).

[5] No such commitment was made in the US until the 1960s. However, as the dominant world economy whose economic infra-structure was undamaged by the war, and who became the major supplier of capital and resources for European and Japanese recovery; the US economy had little need of government intervention to secure full employment.

[6] The coincidence of accelerating inflation and rising unemployment

[7] See his authoritative entry and extensive bibliography in, The New Palgrave, a Dictionary of Economics, Volume 3, pps 293 – 296 (1987, London: MacMillan Press).

[8] Berk, 1994, Chapter 3, especially Tables 1 and 2, pps. 65 – 71.

[9] This is despite the reality that 'No legal system acknowledges the claims that shareholders "own the company"'. (Deakin and Singh, 2008, p2.)

[10] See Cosh and Hughes (2008). This paper this papers endorses the earlier conclusions of Singh (1975, p. 954: 'insofar as the neoclassical postulate of profit maximization relies on the doctrine of economic natural selection in the capital market (via the takeover mechanism) the empirical base for it is very weak'.

[11] In a process described by Chancellor Leo E. Strine as 'the separation of ownership from ownership' (Strine, 2007a).

[12] Royal Bank of Scotland 2006.
[13] Bloomberg.

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Appendix I: Securitized debt instruments

During the past two decades, securitized debt instruments have played a central role in the global financial crisis. These investments are structured such that they operate in a hierarchy, based on the level of risk of the investor. At the top, is the 'super-senior' tranche; the next tranche, the senior, is not serviced until the super-senior has been paid; 'mezzanine' investors are only paid once super-senior and senior have been satisfied; at the bottom of the pile is the equity investor. By way of example, n the event of the loss in the underlying securities, the equity investor might take the first 3 percent of losses; the various mezzanine tranches the next 9 percent; the senior tranche the next 10 percent; and only after 22 percent of losses have been absorbed would the super-senior tranche be compromised. (The precise parameters for the tranches – the 'attachment' and 'detachment' points – may vary). In this example, the investor in the equity position has, in effect, a 33 times leveraged position (100/3) in the underlying securities in the investment vehicle. Rating agencies took the view that the statistical improbability of losses reaching the senior and super-senior tranches warranted an Aaa/AAA rating.

For investors frustrated by the absence of yield in single-name credits, the super senior and senior tranches offered the opportunity to own very high grade credit at relatively attractive spreads. Its appeal was further enhanced for banks by the Basel II accord, which lowered the capital risk weightings on securitized transactions rated Aa or better from 100 percent, to just 20 percent. Similarly, US insurance regulators awarded their lowest regulatory capital requirements to the highest rated securities, regardless of what they comprised, enabling insurance companies to engage in 'ratings arbitrage', i.e., selecting investments which offered the highest yield for the rating without focusing on the underlying investment.

As banks sold CDOs and CLOs, they had no problem finding buyers for the senior and super-senior tranches, especially since monoline and mainstream insurers such as AIG Financial Products were willing to use their own balance sheets to insure or 'wrap' these products, providing an extra layer of security. However, they were often left holding the high yielding but high risk equity tranches.

The development of observed correlation markets and credit indices enabled banks to build their 'correlation' books from which single tranches could be sold and bought, allowing managers to construct and sell bespoke tranches without having to construct and sell the other parts of the capital structure. In addition, as market liquidity grew, small hedge funds proliferated, which were willing to commit investors' capital to buy the higher risk equity tranches, yields on which seemed very attractive. By way of example, at the market's most bullish point in 2006, you could still expect returns of 15-16 percent on an equity tranche of the I-TRAXX index of European investment-grade corporate credits. According to Moody's, average cumulative issuer-rated global default rates over any five-year period from 1970-2007 for investment-grade corporates were only 1.058 percent (Moody's *Corporate Bond Default Study*, 2008), which justified the huge implicit leverage in an equity position. By comparison, returns on single-name BBB credits at the same period were wrapped around 1 percent.

As the market matured and yields in structured products became less exciting, increasingly esoteric structures were created, such as Constant Proportion Debt Obligations (CPDOs). These invested in equity tranches referencing portfolios of investment-grade credit indices (e.g. I-Traxx), updated every six months, removing credits that were no longer investment grade. Since an investment grade credit has minimal risk of default over six months, the agencies rated these instruments AAA/Aaa, making them eligible for even the most conservative investment portfolios. In reality, CPDOs proved significantly more risky than their ratings suggested. Firstly, widening spreads in the reference portfolio forced the instrument to 'rebalance' by adding leverage. Implicit in this was the assumption that credit spreads would benefit from 'mean reversion' i.e., they would tighten back to the average level of the proceeding years.

Tight credit spreads resulting from excessive liquidity negated the mean reversion on which the CPDO rebalancing was based. In addition, since the senior tranches were usually held by the arranging institution, CPDOs typically contained a 'cash-out event', which wound up the product once the net asset value fell below a set percentage of the funds invested. This in itself would be indicative that the market was in distress. As a result, the wind-up would almost inevitably be executed under fire sale conditions. As an investor in the senior tranches, the arranger would get the bulk of the proceeds, leaving the equity tranche – the external investor to whom the instrument was sold – with very little. Although only one of a family of esoteric products, these instruments attracted so much negative press that faith in the rating agencies was undermined because they were based, quite simply, on an arbitrage of a rating agency model.