The 2008 Economic & Financial Tsunami – An Overview for the Lay Person

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(1) *Preface*

The present financial and economic crisis is aptly described as the Economic & Financial Tsunami of 2008 (E&F T 2008). Its speed and magnitude of devastation is as overwhelming and destructive as a tsunami caused by the forces of nature. Only this time, it is totally man made.

In my humble opinion, it is clearly avoidable had there been prudent financial and fiscal management. The obvious culprits are corporate greed and incompetence on the part of the US government in allowing the crisis to have started and gone this far. Now, it is like a wild fire that has gone out of control and has spread to the four corners of the global village. Each and everyone on planet earth will be adversely affected to some extent. Not even God can change history. Therefore, it pays for the lay person who is unavoidably affected to try to understand the nature of this E&F T 2008 and to take whatever steps possible to safeguard oneself as far as possible to seek shelter from its devastating fallouts. Hopefully, all those in power will learn from their mistakes and have the wisdom and fortitude to avert total global disaster.

I will not even begin to try and bring comfort to everyone by saying that the nature of the crisis is simple. It is extremely complicated but what else can one expect since human behaviour is in the centre of the picture. This paper is intended for the general reader. It is the civic right of every citizen to have a say in any public policy that affects the entire human population. How else can the lay person take part in the public discussion on possible remedial actions to stop the advance of this tsunami unless one has a basic understanding of the principles at work ? To this end, this paper will attempt to take the lay person through a crash course in all the relevant working principles. I must emphasize that I do not purport to give any personal financial advice. Each person and each country has some particular circumstances to consider as regards specific remedial or precautionary measures that should be taken. Seek professional financial advice as and when you need it.

For the professionally trained people, this paper is just the ABC of economics and finance. As for the lay reader I hope you will find the contents useful for a basic understanding of this global crisis at hand. You should find that most principles described here are within the limit of your common sense. Anyway, my aim here is to try to highlight the connections and relevance between the various economic and financial principles with respect to different aspects of the present crisis so that the lay reader may gain some basic understanding of its nature and the possible effects of any remedial measures (that have been taken or to be taken by government) on the general public. Before rushing into this crash course in economics, banking and finance it is only fair for me to provide a very brief personal profile. I am a retired tax consultant who used to work in Hong Kong from 1971 to 2005. I started my career as an assessor of taxes in the Hong Kong Inland Revenue Department of the former British colonial government. I found that I was a bit too rebellious to be a civil servant. So, I went to work for Price Waterhouse & Co. , CPA instead after a few years in the Inland Revenue Department. It was valuable experience to be working on both sides of the fence (as a government official once and in the professional and commercial fields later). I have both the academic training and working experience in economics, accounting, auditing, taxation and business / management consultancy. I had my own practice for over 20 years from 1982 providing all the above services to some prominent clients in the fields of banking, property development, construction, manufacturing, trading, insurance and shipping. I hope you will agree that I am at least qualified to explain the working of the basic principles of the various disciplines involved in this paper.

As the present crisis is ongoing and the facts are widely reported I will assume some general knowledge of the facts such as the tsunami started in earnest since the commencement of the US sub-prime mortgage meltdown in August, 2007 Freddie Mac and Fanny Mae which account for some 50% of the US housing mortgage market between them are not even involved in the worst types of mortgages in terms of recoverability. It is the so called CDO (Collateralized Debt Obligation) which is a blatant attempt to evade accounting disclosure requirements that is the origin of the sub-prime meltdown. The tsunami came to a head during the past few weeks with the collapse of the giant merchant banks starting with Bear Stern followed by Lehman Brothers. The related financial field of insurance underwriters, namely, AIG (American Insurance Group) and big US savings banks followed suite. The wild fire has now spread to Europe where UK is the first to be hit followed closely by Germany. There is also news about the possibility of the Iceland government and even the South Korean government heading for bankruptcy. The US states of California as well as Massachuette have also sounded the warning bell. The lightning speed of propagation of this crisis is frightening. It does not come as a surprise to anyone who knows the working principles of the world economic and financial system.

To have some basic grasp of the present turmoil one needs some basic knowledge in economics, accounting, finance, banking, fiscal and monetary policies. More important still is the way these various disciplines work in unison with one another in real live scenarios. It is the subtle connection between their interaction that provides the key to the understanding of the tsunami. To avoid confusing you with technical details I will confine my discussions to the barest minimum of the theoretical basis needed to understand the issues at stake. Whenever appropriate I will explain the relevance of the particular principle involved in the situation in question. This will help you to appreciate how the principles are applied in real live situations.

(2) *The basic tools required to understand the crisis*

Every discipline operates on some basic principles. When a system breaks down the malfunction is most probably due to the ignoring of its basic principles. For example, even seasoned professional golfers comment time and again that when they play badly it is usually some fundamental steps (such as their stance or the way they address the ball) that have been overlooked. I will list the basic tools required to understand the present crisis and briefly describe to which part of the problem each of the tool is related.

Basic *economic principles* (section (3) of this paper) of a market economy are the first and foremost tool because the financial market is part and parcel of a market or capitalistic economic system under which over 90% of the countries in the world operate nowadays including the most populous and “ politically socialist “ China. These principles deal with the *supply and demand conditions of all goods and services. Price stability*, *economic growth*, the *employment* situation and *distribution of national income* are the most important economic goals that can be achieved through the proper operation of the basic economic principles. There are two main schools of economic philosophy in the application of economic policies. The first one advocates the use of monetary tools to achieve the above 4 major economic goals of price stability, economic growth, full employment and a fair income distribution. One of the most prominent advocates of monetary policy is the Nobel Prize laureate, Milton Freidman. Incidentally, the former chairman of the US Federal Reserve Board, Alan Greenspan is another expert in applying monetary policies. They second major school proposes the use of fiscal measures involving public expenditure to attain the above major economic goals. The late UK economist Lord J.M. Keynes was the first proponent of this school of economic policies. His important economic theory on fiscal measures saved the day during the great global depression caused by the 1929 Wall Street stock market crash and culminated in US President Franklin D. Roosevelt's New Deal in the 1930s which included the establishment of the TVA (Tennessee ValleyAuthority) to oversee huge infra-structure development projects. The New Deal ultimately rescued the US economy in the 1930s and in turn brought the world out of the major economic depression.

Basic working *principles of the financial market* (section (4) of this paper) are another obvious candidate for the basic tools because the tsunami started in the financial market. These principles govern *money supply* (including credit), *banking* and *insurance* services without which no commercial transactions can be conducted. Furthermore, the vital issue of *stock market* operations which serve the most important function of raising money or working capital from both individual and institutional investors for investment in all large scale commercial undertaking and infra-structure building projects. This is the most important way people's hard earned savings are channeled into the investment market that ultimately create valuable employment leading to growth in national income. It can be easily seen that the capital raised by corporations or government in the the stock market has a direct bearing on the creation of jobs which will benefit the livelihood of the common citizen. In fact, all the principles explained in this paper are related and they should work in harmony (if applied properly) to keep our economy going. Everyone should have fond memories of the great contribution of Alan Greenspan, the former chairman of the Federal Reserve Board. He was famous for using the US money supply or appropriate monetary policies working through the financial market to stablize and to maintain the healthy growth of the US economy by means of a steady but non-inflationary money supply via the use of the official interest rate.

The third basic tool involves basic *accounting principles* (section (5) of this paper). These principles provide the theoretical, rational or philosophical basis (if you may) upon which accounting reports are prepared on the performance of corporations as regards their profitability. By law (in most countries except socialist states like China) such accounts have to be prepared and published at least once annually and subject to audit by certified public accountants to verify their correctness. Based on these *audited accounts* shareholders and investors can *make their investment decisions* on the buying and selling of the stock and shares of the profitable corporartions. The taxation authorities in most countries also assess the corporations' tax liability based on their audited accounts. Furthermore, *banks and other financial institutiions can also use these accounts* to decide on whether or not and how much they are willing to lend money to any corporation. Therefore, everyone should have at least some elmentary knowledge of the *generally accepted accounting principles* to enable oneself to understand the profitabilty and business performance of each corporation for investment decision making. Therefore, the accounting discipline is essential for the operation of the financial market and in turn serves to *propagate useful information to* i*nvestors and mamagement* alike.

This point on free propagation of useful information is one of the most important conditions for the open and fair operation of the market (or capitalistic) economy. You may recall that the notorious Enron scandal in the US stock market a few years back which was the result of the illegal and fraudulent act of preparing false accounts of the corporation to cover up the huge losses sustained by the corporation. The then CEO of Enron was subsequently prosecuted in court and is now serving a jail sentence for his serious financial crime.

The fourth basic tool relate to basic *principles of public or government finance* (section (6) of this paper). These form the philosophy or rationale behind all public revenue and expenditure (including national security and defence) needed by government to carry out its official duties of governing and proper management of the economy. Unlike private enterprises which are purely motivated by profit government economic policies have to take into consideration other factors such as justice, fairness, urgency and other legal and political obligations. Therefore, its income and expenditure patterns are not considered to be as economically efficient as the private sector in the material sense as you may recall that the major economic goals are concerned with the effective use and distribution of always limited resources and services. Of course, it is always open to argument as to whether or not only materialistic considerations are of paramount importance. It is a question of moral judgment and sense of value. Then by what standard should we judge the efficiency of government spending ? The short answer is by the effects the government budget have on the community at large within the generally accepted moral and political standards. We must also gauge the efficiency of government taxation andspending by comparing existing measures with other viable alternatives. More details on these basic principles will be forthcoming in Section (6). Suffice it to say here that a set of principles quite different from those at work in the private sector of a market economy is applicable to public finance.

The fifth basic tool is the working *principles of international economics* (section (7) of this paper) or international trade. As the global village is an ever closer place international trade relationships and the related issue of *balance of payments* between different countries have a primary bearing on the propagation of and fallouts from the E&F T 2008. This is a special branch of economics dealing with the principles governing international trading activities. Problems arising from balance of payment surpluses / deficits, effects of fluctuating currency exchange rates, arguments for and against import duties and tariffs, functions of international institutions such as the IMF (International Monetary Fund) and the World Bank, etc., are all part of this branch of economics that affect the international community as a whole. In the context of the present global financial crisis the importance of understanding its working principles are pretty obvious. Recently, the IMF is declaring that its has some 250 billion $US in emergecy facilities to help countries on the brink of bankruptcy on the governmental level like the Iceland to draw on for their dire needs. IMF also forms another forum apart from the G7 (Group of 7 advanced countries in the world)for the discussion of the necessary measures to be taken jointly and in unison by the leading industrial nations of the world to avert total financial disaster to the global financial system.

The sixth basic tool is the working *principles of monetary economics* (section (8) of this paper). This is a branch of economics dealing with the working of our money system. It mainly concerns the effects of money supply and variation in the interest rates on our economy. It is closely related to our banking system and other aspects of the financial market. However, it deals mainly with the theoretical aspects of the financial system while the working principles of money and banking are behind the practical aspects of our financial system. The supply of money in our economic system has a vital bearing on price stabilty (avoiding inflation) and the employment and economic growth of our society. Monetary tools are heavily relied upon in the modern economic management of a country's economy. The most notable example was the decade long steady growth in the US economy with no galloping price inflation when the former US Federal Reserve Board, Mr. Alan Greenspan used his skilful monetary policies to guide the US economy through a period of stability and prosperity.

The seventh and last basic tool required to understand the present financial tsunami is the *working principles of money and the banking system* (section (9) of this paper). As our market economy cannot function without money and a good banking system a basic understanding of their basic working principles are of paramount importance. Run on the banks and collapse of financial institutions are the prominent features in a financial and economic crisis. The common citizen is at a loss as to why the banks that are working so well previously suddenly collapse overnight. Questions inevitably arise as to the seemingly fragile banking system. If we understand the workking principle behind all banks we will realize that the system works entirely on the elusive element called comsumer confidence. If confidence in our economy is lost nothing will work effectively as they should be. To understand the financial and banking system we need to learn about the nature of money and the factors affecting its supply and demand. The function of the banking system in the operating of a market economy must also be understood. Working principles of money and the banking system also involve some knowledge of the law which we will come to in section (9).

Without further ado, let us start our discussions in greater detail but not in too great detail as to complicate the lay reader's understand of the already highly complex financial tsunami everyone is struggling hard to deal with. Before going further, I must emphasize that all the above basic tools are closely inter-related. Cross references which I will provide as and when necssary will assist you in understanding the basic principles involved and their relationship with one another.

(3) *Basic economic principles in everyday terms*

Economics has always been around human beings because we need to deal with choices concerning the production, distribution and consumption of goods and services. Even before the formation of society, human beings have to make constant choices about material resources. With the formation of human society and the establishment of political boundaries (i.e. nations and independently functioning states and regions) the governing organizations called governments have their own economic systems usually supported by the majority of their citizens except in totalitarian states (or dictatorships).

There are just two main types of economic systems, namely, the market *(capitalistic)* economy and the centrally planned (*socialist*) economy. There are, however, a lot of hybrid types having a wide ranging mix of the characteristics of the two. Most of us remember the famous free trade advocate Adam Smith as one of the fore fathers of free market or capitalistic economy while Karl Marx was equally famous as the founder of socialism.

Socialism advocates the state control of all means of production and distrbution of goods and services on a fair basis according to the supreme ideal of universal brotherhood to avoid exploitation by capitalists. This is obviously a very tall order that requires the highest of moral standards for everyone especially those in control of political power. In reality the socialist ideal is practically unattainable except in a very closely connected unit such as a family. I definitely practise communism at home where usually the father is the bread winner, the mother an unpaid home maker and the children recipients of all the benefits just by going to school. Everyone follows the noble communist motto of *" to each his needs and from each his abilities "* without weighing their efforts against the benefits they receive. Nor is this high moral requirement the only major flaw in in socialism. I must explain here that socialism is the preliminary step to communism. Karl Marx realised that it is most difficult morally to go directly to communism which requires the highest moral ideal set out in the motto quoted above. Therefore, he allowed for the intermediate step of socialism which allows the rewarding of individual efforts according to a fair rate of remuneration based on a standard labour unit. The really impossible act necessary for the successful implementation of socialism is the need for a God-like mind to know and plan all the supply and demand needs of every type of goods and services required to run the economy efficiently. As a result of these two impossible requirements (namely, extremely high moral standard and an all-knowing God-like mind to plan all supply and demand in each and every type of goods and services needed to allow society to function effeciently and fairly) socialism has never worked properly in practice. In short, there is no materialistic motivation for increased efforts from individuals under socialism except a high moral ideal. The reader will recall that the pityfall of this high moral ideal of equality and justice for all is aptly called into question in George Orwell's novel of great satire, Animal Farm where it was said that " all pigs are equal but some are more equal than others " depending on who are in control of political power.

On the other hand, *market economy or capitalism* relies solely on the *price system* to arrive at a the optimum equilibrium in the supply and demand of goods and services. Prices or the money vote is the most powerful motivation for exerting the maximum individual effort and the most efficient utilisation and distribution of resources. Another everyday term for the money vote is *GREED* with a capital *G*. In short, *" no money no talk "* is an apt motto of capitalism. There is no need for the God-like mind to plan for the optimum supply and demand. The price of every commodity is the indicator of people's demand for that particular item. A rising price means shortage of supply and vice versa. In the ideal situation where there is completely free competition and no barrier of entry into the market for that particular item new suppliers or manufacturers will automatically increase the supply to earn the abnormal or windfall profit resulting from the temporary shortage of supply. The supply and demand for that particular item will be at an equilibrium when the price stops to rise indication that the demand or excessive demand prior to the price increase has been met. At this point no more new suppliers will join the trade because there is no more abnormal profit to be earned. In fact, there should be a decline in prices to indicate that the supply has now overtaken the demand. This is the working of " the *INVISIBLE HAND* " as advocated by the free trade pioneer Adam Smith. Therefore, all market economists call for the greatest possible free trade opportunities as in the globalisation concept nowadays to achieve the most efficient utilisation and distribution of economic resources. Thus, it will be appreciated that an ideal free market economic system must have freedom of competition, freedom of entry and exit by suppliers, freedom of choice by the consumers as revealed through the money vote (or price system), free and fair flow of information to suppliers and comsumers or investors. The obvious weakness of a free market economy is its impersonal money vote and motivation of efforts through greed. However, this major weakness can, in theory, be remedied by just laws enacted by a democratically elected government through the one person one vote political system. Later on in this paper, the reader will learn that the best of theories will falter when complicated and cunning human minds and behaviour come into play.

Casual observation on these two basic economic systems will reveal the following characteristics. Firstly, politics go hand in hand with economics as both disiplines deal with people's affairs and their daily materialistic needs as they live and function collectively in the form of a human society. Secondly, *capitalism* with its emphasis on freedom of consumer choice blends in naturally with a *democratic* political system while *socialism* with its major goal of central economic planning functions most efficiently under the more *dictatorial* political system. This is because it is practically impossible for everyone to have a direct and personal say in the central economic plan of a socialist government. If everyone participates directly it will take forever to complete the plan. Furthermore, it would not be central planning but general planning instead if everyone takes part in it. On the contrary, in a market or capitalistic econommy every citizen can directly and personally influence the supply and demand of each commodity through the money vote or price system. Individual participation is guaranteed except for the less well to do who will be under the care of government welfare function. Once the underprivileged is given public financial assistance they will also be able to enter the market even though they will be active at the lower end of the market. That is why social welfare guarantees a minimum level of consumption in times of economic down turns. It acts as both a safety net for the underprivileged as well as a minimum support for the consumer market in an economic depression. The question of the proper way to handle social welfare will be discussed under section (6) in connection with public or government finance.

Capitalism became the dominant system since the start of the industrial revolution, first in its most fearsome exploiting form and later on in its more enlightened modern form which excluded the worst aspects of human exploitation so typical of the original raw and inhumane form of capitalism through the enactment of just laws, the rise of strong workers' unions and an unbiased and a critical free press to rein in the government against abused of executive power and over regulation. On the other hand, socialism is consistently hampered by the impossible act of a God-like mind to take proper charge of the central economic planning function so that the socialist system has been abandoned by over 90% of the countries in the world. The only truly socialist states left are Cuba, North Korea and a handful of smaller South American and African countries. You will know that these countries are run by dictatorial governments. In general, the yardstick for categorizing a country as being run on a socialist economic system is the percentage of their GDP (gross domestic product) contibuted by the government or public sector. Nowadays, any government accounting for more than 20% of the GDP will be considered socialist. Of course, there are other indicators such as the number of essential economic activities such as land ownership, finance, transportation and public utilities which are under government control. There are recent reports of loss of public confidence in the capitalistic system that is motivated by greed which is the obvious culprit of the E&F T 2008. The sale of Karl Marx's books on socialism has a reported 300% increase in recent months. It would appear that people are having second thoughts on the efficiency and aptitude of the the capitalistic or market economy as the right economic system for the global village.

To recapitulate, the main points of this section the E&F T 2008 has an obvious relationship with *corporate greed.* It appears to be a case of capitalism running wild with immoral and greedy behaviour of corporate management carried to an extremely bad or even criminally culpable degree. The present global crisis is the reminiscence of the uncontrolled and immoral form of the capitalism at work back in the 1770s in early industrialised England that saw the inhumane exploitation of women and children workers of the imperial era. That is why capitalism is synonomous with imperialism that involved the armed invasion of other nations to forcefully open up markets for the imperialists' excessive production of commodities which was made possible by mass production methods through mechanisation and human exploitation. It goes without saying that the ultimate aim of imperialism is excessive profits and greed. As applied to the E&F T 2008, the corporate personnels responsible for the introduction of substandard financial products such as CDO (collateralised debt obligations) based mainly on subprime mortgage lending can be likened to be highway robbers preying on the hard earned savings of investors, pensioners and retirees. It is my strongest conviction that *they* should face the fullest and most severe consequences of the law. Legal actions must be taken against offenders in case of misrepresenting the risks of their financial products or cases of falsifying or delibrately misleading accounting procedures to cover up the losses. Furthermore, a full enquiry should be undertaken on a global basis starting with the US financial market with a view to overhauling the capitalistic financial system before people lose confidence completely and fall back to the socilaist system again to the detriment of everyone. While democracy is not a perfect system it works reasonably well with a market economy which is still a relatively efficient tool for the utlisation and distribution of economic resources if it is not allowed to run wild like at the present moment.

I cannot over-emphasize the fact that any good system can be abused or pushed to the extremes if not regulated properly. While capitalism works reasonably well with free choice and fair reward for personal efforts (including innovative ideas) there is no such thing as unlimited freedom and endless rewards described as “ sky is the limit “. The concept of a fair and normal return on risk and personal efforts is the basic premise in a market system. A fair return on investment risk can be arrived at by comparing the rate of return on your investment with the prevailing bank deposit rates (which are of many different types). For example, a fair return on rental property should be higher than the bank deposit rate by say, 1.5 % to 2 % per annum because buying a property for rental is usually more risky than putting the same amount of money in a bank deposit. There are risks of default in rental payment by tenants and fall in property prices. Similarly, there are also fair standards for remuneration packages for CEOs and other corporate employees based on responsibilities and results of performance.

The only occasion where abnormal profit should happen is in time of an excess of demand over supply which will help to attract more resources into producing the product or service in short supply. This should be a temporary situation to kick start the equalizing price mechanism. If abnormal profits persist there must be some obstacles such as barrier to entry into the trade, obstructed information or other artificial human intervention. It is the government's responsibility to provide a fair and open market to promote free competition through proper and appropriate regulation to achieve the most optimal distribution and utilisation of resources. How can it happen that the CEO of the bankrupt Lehman Brothers merchant bank reaped a total of over 800 million US$ in commision and bonus from CDO in the past few years of financial boom while the investors and US taxpayers are now hit with a loss of life long savings and an increase of some 10 trillion in US national debt ? There must be something wrong with unlimited reward because it leads to excessive greed and motivation to commit fraud and corrupt practices. The US government has obviously not done a good job on regulating the financial market. An unhealthy financial product such as subprime lending (and CDO) where it will only work when the property prices are always on an upward trend should never have been approved or left uncontrolled. On the other hand, even if it is legal to get such a ridiculously immense remuneration package the CEO in charge of such a bankrupt merchant bank should be morally bound to repay a large portion of his remuneration to the shareholders via the corporation. I always wonder how the CEO of Lehman Brothers can sleep at night now that there are thousands of people out of work and committing suicide as the result of this financial tsunami.

Before examining other working principles the reader should note that any economic system relies on mutual trust and confidence of the general population. Money is just a piece of paper or an IOU. By issuing money the government owes you value (equal to the amount stated in the bank note) with an undertaking to repay the value of the goods or services exchanged for the paper money in due course when the bearer uses it to buy something else and when the money has been accepted by the new seller of goods who has now taken over the value promised to you by the government. Without the trust and confidence to accept money as a medium of exchange no economic system can function for the purpose of utlising and distributing economic resources. If the monetary system breaks down we will have to go back to the barter system in which goods are exchanged for goods necessitating the matching of the right buyers and sellers. That is the reason why people hold on to gold in times of financial crisis because gold is the only kind of money that is not the liability of somebody else. Any financial crisis must involve the loss of confidence in the promises made by people in charge of the operation of the financial system. Like the present financial tsunami, this can happen due to fraud and negligence of duties and responsibility by the financial officers including the CEOs in charge of the financial institutions in question. Once the crisis has started it will have its knock on effect or domino effect because all aspects of the financial system are closely and delicately connected as the reader will see in the next section.

(4) *Basic working principles of the financial market*

The *financial market* is a very complicated mechanism through which *funds are channeled from savings into investment*. As such, it is an important tool or is the motor running the economy in connection with the creation of employment through investment expenditure. The financial market is closely connected with the following commercial institutions the nature and functions of which I shall briefly explain in this section.

The major kinds of commercial institutions necessary for the proper functioning of the financial market are :- *Banks, merchant banks, insurance underwriters, investment funds, retirement (pension) funds and stock exchanges.* There are also typical government regulatory bodies acting as watch dogs over these institutions according to the financial laws and regulations in force in each country to protect the interest of the investing public. Different countries may have different names for these regulatory bodies but their function remains essentially the same in their specific area of responsibility. For banks, there is the monetary authority ; for insurance companies the insurance bureau ; for the funds and stock exchanges the securities commission.

We should also acquaint ourselves with the major kinds of financial products available on the market which are all created for the paramount purpose of *channeling* *savings into investment.* Although there are thousands of names for different financial products which may vary widely in terms of risks and return there are only 4 main categories of financial products. These are :- *Equities* (also called stocks & shares), *bonds* (or debt instruments), *warrants* (or options on shares or bonds) and *derivatives* (a financial product whose price depends on the prices of other financial products). We shall briefly explain the nature of each in this section of our paper. Any other types of financial products may have a mix of the characteristics of any one or more of these 4 main categories. For example, the infamous CDO (*collateralised debt obligations*) closely connected with the subprime mortgage lending is a debt instrument with special conditions attached.

To understand the basic working principles of the financial market we need to know something about the main types of *legal business entities* under which all commercial transactions or trades are conducted. There are 3 main categories of business entities. They are :- the sole proprietorship, the partnership and the *limited liabilitiy companies or corporations.* The first and second types have unlimited liabilities while the owners or shareholders of the third type have limited liabilities and is the most common type we encounter in the financial market. These can be huge international corporations that provide the majority of the employment opportunities in most countries and are responsible for the main bulk of the business investments in all advanced countries and the most sophisticated economies of the world.

In most countries, there is a separate set of laws governing the operations of limited companies or corporations. These are usually known as *company laws*. Most company laws provide for the segregation of corporations into public and private companies the former is allowed to invite public subscription for the corporations' equities or shares of the corporation listed on stock exchanges (these are also known as listed shares or listed corporations as the prices of their shares are listed in stock exchanges for public trading) while the latter type (i.e. private limited company or private corporation) cannot invite investors publicly. More stringent laws such as the requirement to prepare annual audited accounts of the corporation by certified public accountants are in place to protect the interest of shareholders who are legal owners of the corporation. Such protection is necessary because the day to day financial affairs of such public corporations are under the control of *corporate officers* such as CEOs (chief executive officer) and CFOs (chief financial officer) who report directly to other corporate officers called directors sitting in a management body called the board of directors.

Due to the fact that shareholders of large public corporations are numerous and the ownership of shares of the corporation can change hands very often without restrictions (i.e. these shares can be freely traded on stock exchanges) *corporate custodians* such as directors, CEOs and CFOs are appointed to manage the affairs of the corporation. Without proper control these custodians can rip off the corporation and the shareholders through excessive remuneration and extravagant business expenses such as private luxury corporate jet planes, yachts and memberships of exclusive golf clubs all in the name of business entertainment. Because of this *separation of ownership and management* with absentee shareholders and long term corporate custodians who in time become the actual controllers of corporate resources a lot of fraudulent or even corrupt practices are common place in some huge public corporations. *Company laws are always one step behind some malpractices* in these huge corporations. The present financial tsunami can be traced to some of these weaknesses and pitfalls in the running of such corporations although the *main reasons* for the present financial disaster are *corporate greed, lack of government regulatory measures and heavy reliance on debt* and borrowing to sustain a non-sustainable life style by many consumers especially in the USA where the origin of this global financial tragedy of epic proportion lies.

Now, let us take a look at the working of the main types of financial institutions which are all corporations with limited liabilities run by corporate custodians. The best known type is the *bank.* This is the most strictly regulated of all financial institutions because it directly takes cash deposits from the general public. There is always a special set of laws applicable to banks to protect the interest of the depositors. Any loss of confidence in banks will have disasterous consequences such as those seen in the present crisis. To ensure that banks can meet their obligations toward their customers (such as daily cash withdrawls) banks are required to hold a percentage of their funds in the form of cash and other specified liquid assets such as blue chip equities and government bonds. This minimum amount of cash to assets ratio in banks is known as the *liquidity ratio.* It varies from country to country and can be changed from time to time by order of the monetary authority. The ratio can range from the usual 10 % to 25 % in times of a volitile financial market. The bank's funds not held in cash in accordance with banking regulations are invested in approved investments of reasonable risks. The most common types of investment vehicles favoured by banks are property mortgages and trade loans to businesses most of which are secured on some valuable collaterals such as the property title in case of mortgages. So, it is easy to see that banks are forced by law to be prudent with their investment decisions. You will also realise that the bank can only pay interest to you on your cash deposits by lending it out to others to earn a higher rate of interest than that paid to depositors. This is the important function of channeling savings (your savings) into investments (people buying new houses for their own use or for investment and businesses as working capital to make more profit or other business investment such as productive machinery). Furthermore, you will realise that not even the biggest and strongest bank holds 100% of its assets in cash. Otherwise, the bank cannot earn income to pay interest to depositors. Therefore, if there is a *run on the bank* as a result of a loss of consumer confidence either in that particular bank or in the economy in general such as in the present case even the biggest bank will falter and go bankrupt unless there is support from other financial institutions or the government. In the present crisis the government must provide the rescue efforts because no financial institution is immune from a run on their deposits and, therefore, no financial institution can help. There is now a general panic among the entire population. This unfortunate situation creates a severe *credit crunch* throughout the whole economy which will have tremendous knock on effect that has now turned into gigantic waves like a tsunami. In turn, businesses and even individuals are adversely affected as banks refuse or are unwilling to lend funds to support businesses by providing working capital. Individuals can similarly be affected if they want to borrow funds to buy a house. When banks are willing to lend the interest rates charged must be high to equalise the increased risks of default. Worse still, when property prices fall many existing borrowers will have negative equity, their mortgage loan (which is their liability to the bank) being greater than the value of their property (their asset). When the present financial crisis leads to an economic depression people's jobs may be cut and they will no longer be able to meet their mortgage repayment obligations. This will give rise to foreclosure of properties by banks and the foreclosed properties being put to auctions in the already miserable market. A downward spiral of decline in property prices will ensue. It is easy to foresee the vicious circle starting to spiral. This is the chain of events that is unfolding in the USA.

Under normal conditions such as a run on just one bank for particular reasons related to that bank other banks may lend a hand but in times of general panic every bank must be prepared to handle their own possible bank runs. Therefore, the government must step in although this move involves public funds to save a commercial blunder which is not fair to the taxpayer. It is also against the basic principles of a market (capitalistic) economy of non-intervention. An inefficient bank or any inefficient business entity should be allowed to go out of business to avoid further waste of economic resources. However, where the entire economy will be affected and to avoid total annihilation of the economic system due to general panic the government has no alternative but to nationalise faltering banks as the US government is doing now. The USA is fast becoming a socialist government if it is forced to carry on nationalising major financial institutions. Had there been better foresight in reining in corporate greed and better regulation the present disaster might have been avoided. It breaks our heart to realise that some corrupt corporate custodians have wrecked the lives of millions of people around the world simply by their greedy attempt to grap their excessive remuneration of a few hundred million. Their selfish and immoral act has up to now cost the US taxpayers some 880 billion (as approved by the US congress) in the rescue package that works out to be more than an extra US$ 20,000 national debt for each American citizen young and old alike. Repaying this huge national debt will take at least two generations. How can the culprits live with such a malignant legacy ?

To sum up this brief discussion on banks we should understand that the banking system like all kinds of financial institrutions work on public confidence. Once the trust is destroyed by the immoral behaviour of just a few black sheep it will take a lot of reassurance to restore public confidence. Hopefully, the concerted efforts by all the governments of the major economic powers such as the G 20 countries (accounting for some 85 % of the annual world economic output) can arrest the present downward spiral and return our world economy to the right track.

The next type of financial institution to consider is the *merchant bank.* Normal banks (or sometimes called the retail or commercial banks) are under very strict supervision of the monetary authority. This close supervision is needed because depositors can withdraw their funds at any time. To cater for capital raising for longer term and more risky investment projects another type of bank called the merchant bank is allowed to operate under a less rigid set of laws. The merchant banks can either issue debt instruments (such as bonds) directly to raise funds from the public or act as underwriters (or guarantors) of bonds and shares (equity) issues by corporations on the stock exchanges for the purpose of undertaking huge investment projects such as building tunnels, bridges and other infrastructure projects. The reader should note that bonds usually have a long period of maturity so that not too much liquid funds are needed by merchant banks to meet their obligations. As for the issue of shares there is no need to redeem their value because the purchasers of shares become the owners or shareholders of the corporations issuing the shares (or equity which means ownership of the corporation). They will normally receive dividends as the corporations make profit from their investment projects. More details about the nature of equities and bonds will be given below. There are many pitfalls that the prudent investors should be aware of. Suffice it to say here that merchant banks are subject to less restrictions on their business although they are not allowed to take short term deposits from investors. However, they can handle investment portfolios of their clients, offer investment advice and carry on many other lines of business that retail banks are engaged in (e.g. property mortgage and fund management). Due to the fact that merchant banks are not required to hold too many liquid assets to meet short term obligations most of their assets can be used to earn income. It is easy to see that due to less stringent rules of operation things can go wrong more easily especially with bad foresight and negligence on the part of the regulatory bodies. It is not surprising that the E&F T 2008 started in earnest with the bankruptcy of merchant banks like Lehman Brothers and at an earlier date, Bear Stern both of which are in the USA. The infamous mini-bonds (of numerous classes to the confusion of the investing public) are based mostly on subprime mortgage lending disguised by CDOs some of which are cunningly insured to earn them the AAA rating from credit rating corporations (again run by corporate custodians who can directly benefit from the issues of these complicated financial products in the form of management fees and underwriting commission). With these cunning tactics it is very difficult to convince the investing public that there was no premeditated intention to defraud or mislead investors.

The third kind of financial institution that we need to know is the *insurance underwriters.* Insurance are required in our daily activities ranging from motor, medical, accidents, life to properties. It is even more important for businesses such as shipping, trading, building projects and key executives insurance to protect businesses from eventualities. As insurance underwriters also need to meet contingent claims they are also subject to a separate set of laws to cater for their particular business needs and for the protection of the insured sector of society. Same as banks they have to hold a prescibed amount of liquid assets to meet their clients' insurance claims. However, insurance underwriters take in a lot of cash from their clients in the form of insurance premiums. So, they serve a dual purpose of *insurance coverage* as well as an important *institutional investor* to support the investment needs of the community at large. Both investment funds and retirement funds are also important institutional investors as the reader will see in the following paragraphs. The reader may be tempted to think that insurance underwriting is a highly risky business but as a matter of fact this is not the case. To start with insurance underwriters employ highly skilled statistcal experts called *actuaries* to work out the correct odds of any event happening which is the subject matters of the insurance coverage. For example, what is the right premium to charge a person buying life insurance or medical insurance at a certain age. Then the insurance underwriters can calculate their premium accordingly plus a healthy mark-up for profit. Secondly, if they feel that a certain insurance policy is a bit too risky for them they can always refuse to accept the insurance proposal or *re-insure* the policy by dishing a part of it out to other willing underwriters. In any event, they can simply get a commission by introducing the " risky " business to some other more maverick firms in their trade. Despite all the above safety measures insurance underwriters do go into bankruptcy from time to time not in conducting their normal insurance business but in their failed investments. The culprit is again corporate greed and a lack of competent supervision by the releveant regulatory bodies. The recent example that contributed gravely to the financial tsunami is the largest US insurance underwriter, AIG (American Insurance Group) which went under and had to pass into government control. As the corporate custodians of AIG were also remunerated according to the amount of profits made by the company they were motivated to involve the corporation in CDO and subprime lending because these financial products (debt instruments) were supposed to pay a very high return in interest payment periodically plus the repayment of the principal sum upon maturity. When the ultimate subprime borrowers fail to make monthly repayments which can be anticipated just by using common sense the major portion of AIG's investment holdings became worthless (as CDO holders have no direct claim on the subprime mortgage properties). It beats our imagination as to why a huge portion of AIG's investment was tied up in such risky ventures. Perhaps the cunningly disguised act of insuring the CDO provided the corporate custodians of AIG with an excuse to make a fast buck for themselves from such risky investments. So there you have it. Even the relatively safe insurance underwriting business can go under due to corporate greed and a lack of competent regulation. As I mentioned at the very beginning of this paper there can be no simple and straight forward scenarios where the greedy and cunning human minds are in control. The best of theories will falter when the complicated, cunning and greedy human behaviour come into play.

We can deal with the *investment funds* and *retirement (pension) funds* at the same time. They are known by hundreds of different names. The main difference between the two types is that retirement funds are much more strictly regulated than normal investment funds. This is because of the need to provide more protection to retirees (and would be retirees) who are usually no longer income producing upon their retirement and are entirely dependent on their *superannuation* or *mandatory savings* partly paid up from their own employment income and partly by their employers for their living expenses. Investment funds are formerly known by their more popular names of *mutual funds* and *unit trusts.* Other add-on descriptions such as ABC EQUITY FUND (denoting that the main objects of investment are equities or shares in certain corprations), XYZ PROPERTY FUND (emphasis on property investment) and OPQ BOND FUND (main investment on bonds and debt instruments) are included in the name of the fund to give further details about the main investment theme of the funds which are all corporations with their usual custodians called *fund managers.* There is, however, one major difference between holding shares in a normal corporation and holding units in an investment trust fund. While shareholders cannot ask the corporation to return their paid up capital units holders of trust funds are normally able to redeem the values of their units in accordance with the prevailing market value by paying a small percentage of the selling price as administrative fees. For shareholders of listed equities they can always realise their original investment by freely selling their holdings in the stock exchange where the equity of that particular corporation is listed for trading purposes. Of course, many of these funds (both investment and retirement funds) are also involved with CDOs and subprime lending due to the lure of a high rate of return and fund managers (who are supposed to be financial professionals licensed under government regulations) may get a high rate of commission for buying and selling such risky products. In any event, the fund managers are also remunerated according to the profits made by the the funds they manage. Therefore, they are under constant temptation to earn a high rate of return and their judgment may fly in the face of high risk factors. The reader may note that the shares, bonds and investment units are very often traded at high prices on the accounting dates when the corporations' or the funds' annual audited accounts are due for publication. This is because professional investors (funds managers and the like) will make sure that they can reap a fat year end bonus based on a good set of financial accounts. By now, the reader should start to understand why everyone from huge international corporations to the individual investor and even the conservative retirees are hit by the financial tsunami. You will understand even more clearly after reading the natures of various financial products (especially derivatives) set out below because your investments may be tied up with CDOs and subprime lending without your knowing it.

With all these financial institutions doing various kinds of businesses and a variety of financial products to be traded for the purpose of channeling savings into investment and vice versa there needs to be a market to conduct numerous transactions involved in the trading of securities (a comprehensive term for equities, bonds, options and derivaties). The *stock exchange* is a highly organised *market place for the trading of securities and raising of investment capital* through the issue and listing of equities, bonds and other financial products. Again, there is a completely different set of very technical laws and regulations covering the operation of the stock exchange. The main emphasis of these laws are on protection of investors' interest and ensuring a fair and level playing field for all. Thus, servere criminal liabilities are imposed on false accounting to cover up losses or overstating corporations' profits ; misleading or misrepresentation of corporations' financial situation ; untimely announcement of vital business information (such as proposed takeovers and mergers) ; non-disclosure of conflicts of interest relating to directors and corporate custodians ; trading on insider information before disclosure to the public. Readers may recall the famous movie, WALL STREET which graphically portraits an incident of trading in securities based on insider information. Theorectically, it is a very fair investment game for every investor. The S*ecurities & Finance Commission* is the usual regulatory body and watch dog for the stock market and all listed corporations. It is also responsible for the licensing of financial and investment professionals to ensure that they are qualified to manage the financial affairs of investors. Notwithstanding all these seemingly strict rules the proper and fair functioning of the stock exchange and trading conditions can be severely hampered by loop holes in disclosure requirements and other fancy techniques in accounting procedures that can have an important bearing on the profit position of listed corporations. For example, by setting up offshore legal entities in tax haven countries corporations may be able to avoid a consolidated accounting of the performance of the offshore entity thus distorting the profit and loss position of the listed corporation. Where criminal falsification of accounts are involved it is even harder for the regulatory body or even the corporaions' independent auditors or CPA (certified public accountants) to find out the true financial position of the corporation. The notorious ENRON case in the USA a few years ago that led to the bankruptcy of the communications giant was the result of false accounting by transferring the huge losses of the corporation to an offshore entity resulting in the inflation of ENRON's profit position. The CEO of ENRON was found guilty of fraudulent accounting and illegally understating the corporation's losses and received a long jail sentence. In the process, the CEO had made personal gains of hundreds of millions by selling the ENRON shares at the inflated price resulting from the understatement of ENRON's actual losses. All in all, the stock exchange does play a crucial role in the channeling of savings to investment and vice versa. However, troubles can arise when there is insufficient regulatory control. When this unfortunate situation comes about this will have severe repurcussions on investor confidence leading to disasterous consequences. Again, corporate greed and neglect in regulatory control are the usual culprits.

By now, the readers should know that the sole motivation for personal efforts under capitalism is money (or greed). We must seriously re-examine the motto “ sky is the limit “ which is the ultimate recipe for the present financial disaster. Already, we have accepted the principle of social responsibility in a progressive taxation system that the wealthy or high income earners should bear a bigger responsibility in alleviating the sufferings of the underprivileged by applying successively higher rates of income tax to higher income brackets. This kind of taxation system is a more equitable way in redistributing (the Robin Hood syndrome) national income. I think it is time to apply the same principle to personal income as well. There must be a maximum limit above which CEOs and other high ranking corporate custodians should no longer be financially remunerated. Perhaps, then there will be less temptation for the black sheep corporate custodians to do mischief. If there is no longer any motivation on personal efforts beyond this maximum limit so be it. The capitalistic argument that any goods (or in this case personal services) should be priced according to supply and demand cannot be applied without modification to human beings. The simple reason is that human beings are cunning animals who can easily abuse the free market rule by dirty tricks. In the case of many CEOs they do very often inflate their own remuneration standards by paying excessive salaries to their assistants. By so doing they can buy their loyalty to themseves

(and not to the company whose legal owners – the shareholders are often absent or are changing their ownership all the time) and also provide a further excuse to get an even bigger remuneration packsge for themselves. In other words, they can inflate their own income by inflating the remuneration package of those under his command. It is all a matter of being " in the buddy, buddy boys club " with the sinister motto of " I scratch your back and you scratch mine". In any case, the position of all CEOs are somewhat unique so that it is very difficult to have a fair, objective and competitive measure of their remuneration package. There is always a grey area where they can find excuses to justiy their excessive remuneration. For example, the CEO of the now defunct Lehman Brothers merchant bank had reaped a 800 million remuneration package in the past few years because of the huge profits earned on risky CDOs and subprime lending during the good times. Now, the inevitable has happened and the corporation went under on his watch yet he is not legally liable to repay his excessive remuneration. It can be logically argued that the whole thing about the concept of CDOs is nothing but a scam to rip off investors with a view to obtaining an excessive remuneration package. The only way to counter this allegation is for the CEO to repay a large part of his remuneration package. Reward the successful (or efficient guys) and penalise poor performers – isn't this the philosophy behind capitalism ? If so, let the government strip him of his ill-gotton wealth and apply it to save the present financial crisis. Why is there only reward but no penalty for a total failure ? This clearly runs counter to capitalistic philosophy. The US congress had taken an encouraging step forward in forbidding any " golden parachute " compenstion payments to be made to corporate officers of any failed financial institutions that would be taken over by the US government under the massive rescue package of the US financial market. Seriously, it is of the utmost urgency to re-examine many of the extreme and unreasonable aspects of capitalism before radical elements of society call for the return to extreme socialism which will definitely lead to a waste of resources and deterioration of human rights. The same kinds of unreasonable aspects will again raise their ugly heads in the dealings of financial products in the market which we are now going to examine.

As mentioned above, there are only 4 *main types of financial products* but hundreds of others which may have a mix of the characteristics of the main categories. The most common category is e*quities* (or stocks and shares). The paid-up capital of a corporation are divided into units of fixed monetary amounts call shares. The public may take up ownership of any listed corporation by buying shares of the corporation in the stock exchange. These shares or sometimies called stocks and shares (the term stocks referring to shares combined in a fixed number as one lot approved by the stock exchange normally aiming at having approximately equal monetary value at the market price for each lot of every kind of shares on the market). The liabilities of the shareholders are limited to the face or nominal value of the shares issued by the corporation. In the unfortunate event of the corporation going bankrupt the *shareholders will not be legally liable for the debts owed by the bankrupt corporation to its creditors.* In the case of a sole proprietorship or partnership, the owners of the business operating under those two types of legal entities will be personally liable for all debts contracted during the course of the trading. That is the reason why huge corporations are created by law to undertake large scale and more risky business ventures by inviting public subscription of the corporations' equities to pool the public's savings for huge investment projects which will create employment to enable the economy to grow.

Without the concept of limited liability in business investments no individual will be willing or able to undertake huge investment ventures. As the net assets of the corporation grow over time due to accumulated profits the market prices of these shares freely traded on the stock exchange will be considerably higher than their nominal (or face) value. Shareholders are entitled to receive dividends when the board of directors recommends the payment of dividends from retained profits. This is usually done annually (final dividend) and sometimes semi-annually (interim dividend). The corporation is *not legally liable to pay dividends* even when it makes a profit during the year if the management (coporate custodians) sees fit to re-invest the earnings in other profitable ventures for the future growth of the corporation. However, most listed corporations will try their best to declare dividends in line with market practice and to keep their share prices on an upward trend. If the corporation does not pay dividends for a partcular accounting period it may lead to a drastic fall in its share price. This will adversely affect the credibility of that corporation which may find it hard to obtain public support when issuing new shares in future for other investment projects. *Every common share in a corporation carries one vote* which the shareholder can exercise at the corporation's annual general meeting (AGM) (*compulsory under the law to be held within a fixed period* after the annual audited accounts of the corporation have been prepared by the independent auditors) or extraordinary general meeting (EGM) to take care of special and sudden events of importance to the corporation as a whole. The sharholders have the legal right to accept or reject the audited accounts presented by the board of directors at annual general meetings. An annual report on the operations of the corporation must also be presented for approval at the same time as the audited accounts. A new board of directors for the coming financial year will be appointed by the shareholders present or by proxy (power of attorney) although existing directors may usually stand for re-election.

Theorectically speaking, the shareholders' rights are well protected by law but in reality many members on the board of directors are also major shareholders so that the board's recommendations are normally passed at AGM and EGM. There may be different classes of shares with different rights and obligations. For the public investor, it is most *important to learn about the nature of the corporation's business* and not simply to follow rumours about the financial position of the corporation whose shares they intend to buy for investment or speculative purposes. Investors should also realise that they are not automatically or legally entitled to annual dividends as explained above. Equities for blue chip (or high quality) corporations are very often preferred by investors because of the potential for growth due to a rising profit trend in time of an economic upturn to beat price inflation in the economy. That is why equities are sometimes known as a *hedge against inflation.* However, it must be remembered that equities carry a higher risk than bonds or other debt instruments due to the possibility of corporate failure. The advantages of debt instruments is the next topic of our discussion.

Bonds or *debt instruments* are very popular for investors because of their relative security compared to equities. Bonds are also IUOs issued by financial institutions or by the government to raise needed funds. For high quality bonds such as the famous US Treasury Bonds of varying terms of maturity (their maturity dates can range from a few years to 99 years). They usually carry a fixed interest rate depending on the prevailing market rates at the time of their issue. Interest payments are usually due annually. As the principal sum denominated in a particular bond will not be due for repayment by the issuer until the maturity of the term specified in the bonds they are sold at a discount by applying the prevailing rate at the time of issue. For example, a US $ 1,000 bond with a maturity period of 1 year at the current interest of say, 5 % per annum will be sold at US $ 950 because the buyer can only get back US $1,000 at the end of 365 days from the date of issue. The higher the interest rate for discounting the lower will the present value of the bonds. That is why *prices of bonds always run in the opposite* *direction to interest rates*. When the prevailing interest rate is high the bond prices will fall and vice versa. Apart from the security bonds are also considered to be liquid assets because of the ease and frequency of their trading in the securities market.

Although bonds are ideal investment vehicles in normal times things can also go wrong in a financial crisis. Bonds may be a financial claim by the holder against the issuing corporation or institution yet the bond holder (in this case he is also a creditor of the issuer) may not get back the full amount when the issuer become bankrupt. For certain categories of the mini-bonds issued by the failed US merchant bank, Lehman Brothers their market value is zero because they are linked to subprime mortgage lending where the borrowers have no proven source of income to support their loan repayment and the properties under mortgage have values far below the amount of the mortgage loan due to drastic fall in property prices. In other words, the mortgage loan cannot be fully repaid by selling off the property mortgaged. In this case the debt instrument concept has been abused by the issuing financial institution in stretching its meaning to avoid being regulated by prevailing financial rules. CDOs (collateralised debt obligations) are such a form of abuse which works through the loop holes in prevailing financial regulations. The financial instituion sets up a trust fund for which investors hold various classes of bonds in exchange for the money they lend to the institution. In this case, the bond holder does not have any direct claim on the property under mortgage but is *only entitled to the cash flow produced by the assets*. In the unfortunate event of a default in payment by borrowers on their mortgaged properties the CDO holders are repaid according to their seniority. The more junior ones are the more risky ones but they are usually entitled to a higher rate of interest during the good times. Such highly complex financial products are devised to avoid being subject to regulations by SFC (Securities & Finance Commission). CDOs are all held by offshore corporations (SPV or special purpose vehicles) in tax heaven countries to avoid the profits from being subject to US tax. Apart from avoiding tax such an arrangement can also *avoid reflecting any losses in the financial accounts* of the US merchant bank acting as the real trustees and asset managers of the fund set up by investors' money to buy those subprime mortgages. The reader will note that the purchase of the assets held by SPVs are entirely financed by money from investors who have a claim on the cash flow from those assets but not the assets themselves. The fund managers earn both commission and management fees for the sale of bonds and asset management respectively without any risk on their part. Had this kind of investment funds been created under the traditional type of financial institution such as merchant banks and registered investment funds the law will provide for a substantial amount of paid up capital as well as restrictions on the degree of risk that can be undertaken by the fund managers. By 1999, the banks are also allowed by law in the US to participate in CDO transactions either as trustees, underwriters, asset managers and promoters who put transactions together. As it is CDO funds are immune from regulation to the detriment of the public investors because they are not professionally equipped with the knowledge to assess the actual and potential risks involved in CDOs.

There is another major flaw with CDOs. As it happens CDOs can also be based on other CDO transactions. For example, some CDO funds are based on CDOs in other CDO funds as their income producing assets so that who actually owes who and how much can all be mixed up due to joint holdings of some CDOs by a number of funds. These crossed holdings have created a big problem for accounting which could result in inflating profits in good times and understating losses in bad. It has become virtually impossible to assesss risks and consequently the correct market prices of CDO based bonds even for skilful financial and accounting professionals because there may be too many links in the chain of transactions leading to the setting up of any particular CDO. It is quite obvious that this is the result of a reckless laissez-faire (total non-intervention) attitude adopted by the government in the financial market. This can lead to all kinds of irresponsible behaviour done in the name of freedom of consumer choice and unrestricted rights for the financial professionals to reap the highest possible remuneration from the uninformed public investors who are again lured by greed to try to earn an abnormal rate of return on their investments. There you have it. A theorectically sound financial product such as bonds or debt instruments created for the important economic function of channeling savings to investment can be so grossly abused through greed and neglect in regulation as to give rise to devastation results. It is of particular significance that some CDOs are specially insured by the asset managers to obtain AAA ratings from credit rating agencies. This says a lot about the conflicts of interest in the multi-roles played by some financial institutions. Some rating agencies are also involved in providing investment advice through their associate companies acting out the roles of both referree and player. There are very often other similar cases of a conflict of interest in the financial sector. For example, in the ENRON scandal the failed giant communications firm had its independent auditors also acting as accountants or booking duties for the corporation. When you are auditing or checking on something you have done by yourself it is more easy to pass it as properly done. Such incidents of conflict of interest should be prevented from happening in order to achieve a fair playing field for all in the financial market.

Warrants or *options* are rights to subscribe to equities or bonds at a future date and at a certain fixed price. Sometimes, financial institutions issue options to existing shareholders on top of dividends as an extra benefit. These are also tranferrable just like all qouted or listed securities. The special characteristics of these options are two folds. Firstly, it is just a right which will lapse and become worthless if not exercised by the holder on the specified date. Secondly, the potential profit and losses on trading in options are by nature tremendous. It's market price obviously depends on the market price of the related share. For example, an option for share A is issued to provide a right to take up one share of A at the prevailing market price of $100. The market price of the warrant or option will be determined by the expected price of A at the exercise date. If the expected price is $101 then the value of the option should be anything below $1 because nobody will pay for anything more than $101 to buy the option. Otherwise, the intended buyer can buy A directly for $101 in the open market without using the option. So, if the market price of A becomes $110 tomorrow the price of the option will jump to anything below $10. Thus the holder of the option for A will make a profit of $9 if he had bought it today at $1 when the expected market price of A at the exercise date is only $101. You will also note that the option will become worthless if the price of A falls to $99 at any time between now and the exercise date. Thus you will see that trading in options or warrants are highly volitile but can be most profitable in a rising market. This is again the principle of “ a higher return for higher risks “ at work. Investors must be very cautious in dealing in warrants or options. They are also the simplest and most common kind of *derivatives* which are financial products whose prices depend on the prices of some other products. In other words, they are means to an end. In this particular case, options are a means to buy securities at a fixed price at a fixed future date which is the end or object for buying the option. Warrants and options are so common that they form a whole class on their own. If the reader understands the working principles of options they will be in a better postion to aquire deeper insights into other much more complicated derivatives which form the next subject of our discussion.

Derivatives are the trickiest of all financial products because their prices depend on the values of other financial products. Based on the characteristics set out in the previous paragraph we can easily envisage the possibilities of other more and more complicated derivatives. Let us start with one popular example of trading on the index of a particular recognised stock exchange, say the Hang Sang Index Future (HSIF) relating to the stock market in Hong Kong, China. Hang Sang Index or all stock market indices are based on the prices of the blue chip shares from all important corporations from different trades listed on the stock exchange. If you have enough money just to buy one blue chip share on the Hong Kong Stock Exchange you cannot be 100% certain that its market price will rise even in a bouyant or “bull” market. To allow investors to diversify their risks the HSIF is created to enable investors to put their limited investment funds into the whole trend of the market. The prices of most blue chips will rise in a bull market but some may go the opposite direction for particular reasons such as bad profit performance. By buying the HSIF the investors can make sure that they will reap the benefits of a rising market although there is again no certainty that the market will be high at any given future date. So, investors must beware that there is no such thing as a certain win investment recipe.

To go one step further into the complicated nature of derivatives we shall consider an investment fund specialising in investing in derivatives. We shall call this fund Progressive Derivatives Fund (PDF) which is also listed on the stock exchange. Since all products held by PDF are derivatives the market price of PDF units will actually depend on the prices of the derivaties it is holding. These derivative products will in turn depend on the prices of the products such as equities and bonds or stock market exchange index futures upon which the derivatives themselves are based. Let us say PDF is so successful in its investment policies that it became one of the top 10 investment funds so that another new fund (we call PDF Holder Fund) is formed to invest in PDF units. You can easily image the complexity of the situation if you are the investor in PDF Holder Fund. The price of PDF Holder Fund units will depend on the prices of PDF units, the derivatives that PDF holds, the prices of products upon which the derivatives held by PDF are based.

The complications do not stop here. If there are crossed holdings in the different derivative funds the true value of the investment units in any particular investment fund becomes very difficult to determine because any slight changes in any factor or profitability in any one related fund or the product it holds will be magnified through the chain of holdings. The exact changes in the value of any final investment units can become totally blurred. It is reallly a case of creating so much complications in the game that we are all caught in the web of an enigma. Should the more complicated forms of derivatives be allowed to operate ? I have the gravest of all reservations. They are recipes for chaos and potential disaster. Admittedly, common sense and fairness dictate that *there should be some hedging and alternative vehicles to allow investors to the greatest flexibility to shelter themselves from exposure to market risks*. However, these alternative investment vehicles should not become a burden or even threat to the stability of the whole financial market as in the case of complicated derivatives which are incomprehensible to our intellect. These *undesirable financial products also create numerous loop holes open to exploitation by the black sheep* of the financial professionals at the expense of the ignorant investors.

Before we leave the complicated subject of derivatives I must recommend extreme caution by investors in dealing with more complicated forms of derivatives. The above situation is very simliar to the confusion in the CDO market that can bring total disaster to our economy. The reader must bear in mind that *many of the rules of thumb* governing the operation and investment procedures in the financial market are *formed by traditions* without any solid theorectical and scientifically tested basis. *Many of them are* *quite techincal and simply applied mechanically. They work during normal market conditions simply because everyone believe they do .* So, they just do as everyone follow the established conventions. When the market becomes volitile due to extraordinary circumstances prevailing like the present financial tsunami all hell breaks loose. All traditional conventions break down and the investors as well as the market will completely lose their sense of direction. That is the reason why in economics as in other social sciences where complex human factors are involved no certain prediction on the final result of any given chain of events is possible. Now, let us have a brief look at some common conventions and handy techniques in the financial market to conclude our ultra simplified study on the working principles of the financial market.

Speculation is the key word in the financial market for making huge profits. What investors are seldom told by their investment advisors is that higher returns are always matched by higher risks. This is the eternal law operating in the financial market. According to traditional economic theory speculation is healthy during normal market cycles. In fact, it is the reason why there are normal up turns and down turns to create a market cycle in the first place. As some speculators are betting on a rise in prices others may anticipate a fall so that there will be an equilibrium price at which a transaction is done. Unfortunately, when the market are under the influence of extraordinary circumstances like the present crisis which is mainly the result of the bursting of a credit bubble due to an extended period of low interest rate and upward trend in property and commodity prices the opinion may be one sided because the downside risk become overbearing. In the guessing game of *contingent decision making* which means that everyone's decision is based on the perceived opinions of everyone else the whole market may react like a frightened flock of sheep. The slightest sign of selling by the leading institutional investors may lead to a general panic sale by the majority of the investors. The reader will recall from the operation of banks and other financial institutions that when every investor seek to realise their investment or redeem their investment units from the investment finds or run on their bank to withdraw their deposits (perhaps due to drastic fall in prices of securities leading to a general loss of confidence in the financial system) no system can stand the tide of 100 % withdrawal by depositors. The wave of withdrawals will soon become a tsunami. Healthy banks may refuse to lend to other banks in trouble because the former must also be prepared for a possible run by their own depositors. All banks will now tighten credit by forcing their borrowers or debtors who may be either businesses or individuals to repay their loans. Most small companies short on liquid funds will go out of business because many depend on bank loans to finance their working capital. Businesses will in turn have to shorten their credit terms on their trade debtors. This credit squeeze will snowball and must ultimately lead to an economic contraction or depression with businesses going bankrupt resulting in severe unemployment in the whole economy. Thus, normal rules like speculation being healthy do not hold true in extraordinary circumstances.

Leverage is also known as *margin transactions.* The investor opens a *margin account* with a financial institution whereby the investor needs only pay a percentage of the purchase price of the securities (usually varying from 5% to 10 % depending on the credibility of the investor and the degree of volitility in the market). The securities purchased by the investors are held by the broker or the financial institution as a surety against the unpaid portion of the purchase price on which interest is charged. In other words, the broker is advancing the balance of the purchase price to the investor as a loan. If the market value of the purchased securities goes up the investor continues to pay interest without the need to make the full payment. If the price drops the investor must pay the amount of the decrease in price to keep the agreed margin of his purchase to 5 % of the total market value at the close of the business day on the stock exchange. If the investor cannot pay up in time the custodian of his securities is granted the right in the margin account agreement to sell the securities to pay up the margin or to settle the account. The short fall must be paid by the investor when the margin account is closed either voluntarily or involuntarily if the investor cannot keep up the agreed margin. In any case, the outstanding balance on the purchase price must be settled in full after a certain period. When credit is unavailable in a credit squeeze situation the margin investors will be forced to sell at any price without the hope of reaping any future recovery in prices. Of course, in a rising market the investor will gain in multiple amounts because using a margin of 5% the investor can buy 20 times more than making full payment on the price at purchase using the same amount of funds. Such a leverage or margin arrangement can also cause further drastic falls in security prices in a market downturn as margin financiers rush to cut the margin accounts of investors not in a position to meet their agreed margins. It was argued that the great stock market crash in 1987 was caused mainly by automatic computer instructed sale orders fixed at certain low price limits and massive cutting of margin accounts. Leverage which is another tool to allow investors to make more potential profits can again become a scourge on the market in bad times. Therefore, investor relying on leverage must be mindful of the potential mutiplier effect on their losses in a bear market.

Speculative demand very often forms a major part of the demand for any commodities in short supply because there is a lot of windfall profit to be gained. Numerous speculators will jump on the band wagon when prices of commodities rise sharply. Take the dramatic rise and fall of the price of crude oil from US$ 60 in July, 2007 to a peak of some US$ 140 in September, 2008 and down to US$ 56 back in November, 2008 as an example. The speculative element in this roller coaster ride in crude oil prices had been phenomenal. While it did provide a wake up call to our energy shortage thus serving an important function of the price system under capitalism it also created untold hardship on the common people in terms of inflation. The roller coaster ride of the prices of rice which is a staple food source for numerous people during roughly the same period is another more painful example. I am challenging traditional capitalism in advocating that *speculative demand should be discouraged* beyond a certain agreed price range for essential products. The reason for my contention is that *speculative demand is not a totally true demand* for a particular product in short supply for the actual purpose of consuming the same. Therefore, *speculative demand is not 100% demand in the true economic sense*. That portion of the speculative demand over and above the function of calling attention to the shortage is counter productive. *Excessive speculative demand will also defeat* two other major *economic goals of keeping down inflation and a fair distribution of income*. Those who will make the most windfall gains through speculation are also the wealthy portion of the population.

Another very common technique in making easy profit is *selling short.* In most markets investors are allowed to sell short. That is to sell before they buy because there is usually a settlement period of 48 hours in completing share transactions in most stock exchanges. This time lapse between selling or buying and delivery of shares provide the breathing space for short sellers. In times of falling share prices the investor can make a profit by selling at say $100 and buying on the next day at the fallen price of say, $95. He will simply make a $5 profit by receiving the difference in prices on the two consecutive trading days. In a falling market this kind of short selling activities will fuel the downward spiral as many investors make use of short selling techniques to earn a fast buck. However, investors must realise their precarious position. When there is the slightest sign of an upturn which must eventually come about every short seller will make a mad dash to cover their short position. The late ones will be hit by a price rise the difference of which must be paid by buying enough shares at the higher price to cover their shortfall thus making a loss in the process. As mentioned in the previous paragraph their losses could be multiplied considerably if they use leverage to trade.

There are other *rules of thumb* which are formed by tradition. For example, the rule of *" buy on the rumour sell on the facts "* is generally true and correct but is not infallible. Another school of thoughts in market strategy is *based on charts* depicting past trends in the movements of share prices. These chartists may be able to hold their ground in normal times but the trends become unreliable in turbulent market conditions. The *price dilution method or averaging* recommends the division of a fixed amount of investment capital into several chunks. If the price of the target shares falls after purchase the investor can lower the average purchase price by using the second chunk to purchase some more shares to lower the average purchase price. This method only works well if and only if there is a predictable cycle for the target share and if the target share is a good long term investment. In time of a deep recession the magnitude of the price fall may be too huge to be handled by just a few chunks of investment funds. Then there is the *set target approach* which recommends the buying and selling of target shares when their prices deviates by say, 5% up or down a traget price. The percentage that triggers the buying and selling can be widened for more aggressive investors. Other investors based their decision on *computer modelling techniques to predict the market trend.* Let me put it this way. All kinds of predictions are based on past performance. Therefore, any drastic changes in future will grossly distort the past average performance of shares. There is an unconfirmed story from Walls Street that there was a competition between two sharebrokers to prove that their method of predicting share prices is the superior one. One of them uses the computer to make predictions while the other throws darts at the names of shares randomly listed on the black board. Reportedly, the results of the correct predictions made by both of them came out even handed. Of course, this is just an unconfirmed story but the successful and modern scientific *Theory of Chaos* predicts that there is no special or detectable signs before any stock market crash or any other major catastrophies. Furthermore, the theory indicates that share prices follow a *Power Rule*. This means that it is more reliable in terms of prediction *to plot the logarithm value of the prices on a chart* rather than to use the simple numerical prices on a chart t*o arrive at their cyclical movements and overall trend*. According to this theory, this is a good method to work out the long term trend. For the conservative investors, they should buy and sell within a 5 % up or down price range within the average price at its logarithm value as shown in the trend of this chart constructed by using the logarithm value of the share prices.

There is no absolutely reliable investment method and the investors should never throw caution to the wind especially in a bull market and during turbulent times. I hope this simplified version of description of the financial market will provide the reader with the most elementary knowledge on the basic working principles of the financial market which is the disaster site of the E&F T 2008.

(5) *Basic accounting principles in layman terms*

The preparation of financial accounts and their critical appraisal are definitely a job for accounting professionals. However, some basic understanding of accounts is a handy tool for every investor for the purpose of making investment decisions.

Accounting does not only deal with the writing up a set of balanced books of accounts for a business entity. This part of the job is only the book keeping procedures or clerical aspects of accounting. Nowadays book keeping can easily be done by using the appropriate computer software. The most important part of accounting are the principles or philosophical reasoning behind the treatments of any item in the accounts. To be exact, financial accounts are an accurate financial history of a business prepared for the main purpose of providing a basis for management or investment decision making.

A set of financial accounts are only useful or reliable for decision making when they are accurate and prepared in such a way that they are consistent with generally accepted accounting principles. There are a number of conventions that must be followed in preparing a proper set of accounts. Otherwise, the accounts will not reflect the true financial position of the business. Furthermore, as everyone follows the conventions in preparing financial statements those accounts that do not will make no proper sense when being compared to accounts of other buinesses for the purpose of comparing profitability and return on capital investment. Let us have a very brief look at the more common conventions adopted in professional accounting or financial reporting.

The *Equity Convention* which states that the proprietor or owner is to be treated as a separate entity from the business he or she owns. This is important because if the personal transactions or non-trade transactions are mixed up with the trade transactions the true profit position of the business cannot be ascertained. For example, if the business has made a profit of $100,000 but the proprietor withdraws $ 40,000 for his own use during the year this does not mean that the business has reduced its operating profit to $60,000. In this case, the equity convention dictates that the proprietor's drawing of $40,000 be recorded as a cash advance to the owner and reflected as an asset of the business (an amount due by the owner to the business) in its balance sheet if the amount remains outstanding at the date of the balance sheet showing all assets and liabilities of the business. I shall briefly explain the different types of financial statements as regards their nature and purpose after I have finished introducing the more important conventions in accounting. It is easy to see that treating the business as a separate entity from its owner is necessary to avoid mixing up personal or non-trade transactions with trading ones so that the true profit position of the business' operating results can be accurately ascertained.

The *accounting period convention* dictates that accounts must be prepared consistently in fixed periods of usually one year to enable a fair and meaningful comparison of trading results. Obviously, it does not make sense to compare the profits of a two year period to those of a one year period. This convention does not forbid the preparation of accounts in shorter periods or at higher frequency. In fact, accounts are very often prepared half-yearly to monitor business progress during the year and for some listed corporations for the important purpose of declaring interim dividends. When there is a takeover of a business by a new owner accounts are also prepared to assess the true and fair financial position of the business for the change of ownership and to determine the purchase consideration to be paid by the new owner.

Conservatism is an inherent quality of the accounting profession. Its applications can be seen in accounting practices such as providing for losses before they are actually incurred but not recognising profits until they are realised. An actual example is the usually accepted practice of writing down trading stocks to their market value if this is lower than the original cost but it is not allowed to write up the stocks to market value if the cost is lower than the existing market value. Taking in the higher market value for stocks in the balance sheet has the effect of recognising unrealised profit which is not allowed under conservatism.There is also the practice of overestimating losses and underestimating profit or gain when there is a need to do estimates on budgeting and cash flow projections.

Materiality is a covention that introduces a sense of balance or proportion into accountng practice. For example, for published accounts of large corporations all figures are reduced to the nearest thousand. Other applications of this rule can be seen in the ignoring of minor irregularities in financial reporting if they have no significant effects on the overall position.

Consistency requires that treatment of items such as depeciation on capital assets and stock valuation be done in the same way in each accounting period to enable proper comparison of the true financial positions at different points in time. This is of obvious importance to the users of the accounts.

Before going further into the working of basic accounting principles let me point out the differences between accounting and auditing which are actually two different responsiblities carried out by different members of the accounting profession. Auditing is a special branch in the accounting profession in which accountants act as judges of the accounts prepared by other commercial accountants. Auditing actually means checking whether or not accounts have been properly prepared in accordance with generally accepted accounting principles which include the adherence to the above conventions and other more technical principles such as basis of stock valuation, depreciation methods and rules of bad debt provisions, etc. There are, in fact, two major types of audits, the iternal audit and independent or statutory audit. Internal audit is carried out by the internal auditors (not independent or public auditors) of the audit department inside large corporations to ensure that all accounts and accounting functions like stock control and payroll are done properly according to established rules set by senior management. It is an iternal prudent accounting measure not required by law (or something extra) carried out by management to ensure an efficient internal control. An independent audit or statutory audit is a compulsory procedure specified by law to be carried out usually on an annual basis on all limited liability corporations. This is to make sure that the financial statement presented to shareholders of the corporation in annual general meetings has been properly prepared to show a true and fair view of the corporation's finacial position in accordance with generally accepted accounting principles for the period covered by the financial statement. Only CPA (or certified public accountants licensed by the government) can carry out statutory audits to protect the interest of shareholders and investors or creditors as a competent and independent referee. The CPA is required by law to report any irregularities in the financial statement that may affect the rights and interest of the shareholders and creditors. To ensure the CPA's independence only shareholders in a general meeting can appoint independent auditors. Neither the management nor the board of directors and not even the shareholders can dismiss the independent audtors during their term in office which is at least one financial year. Auditors are also eligible for re-election at each annual general meeting of shareholders. The independence and integrity of the auditors must be inassailible in order to give them a free hand in objectively reporting on the true and fair financial position of the corporation for the protection of shareholders and creditors such as banks and other financial institutions extending loans to the corporation. Therefore, the independent auditors perform a very important regulatory function in the financial market and in turn for the whole economy.

Have you ever wondered why during big year end sale at huge department stores you can pick up bargain items for as little as 10 % of their original marked price ? Sometimes it is obvious that the reduced price paid by you cannot even cover the material costs. We usually say that the department store must have earned an enormous profit margin on the sale of the same product at its original price earlier in the year. In Chinese saying, this situation is called " making a profit at the beginning so as that company can afford a loss at the end. " This is only part of the truth because it is always bad for a company to show a loss in some transactions even when there are profits made on other occasions. The whole truth about this sale scenario must be understood in terms of accounting treatment of the value on slow moving closing stocks. You will recall from the conservatism convention explained above that accountants such as the financial controller of the corporation in question always adopt a conservative attitude in treating the value of assets. When some stocks in trade are slow moving or remain unsold over two accounting periods conservatism calls for a write down or even write off of their costs especially for items of fashion. Since the costs of items on sale may have been totally written off in the previous accounting period every dollar of the reduced price will mean total profit for the current accounting period. That is why there can be unbelievable bargains. Therefore, accounting procedures do affect the consumers as well as the investor in the material sense as can be seen below.

Different methods of stock valuation or depreciation also affect the profit position of a corporation. This will in turn *affect the amount of retained profits available for dividend distribution as well as the market value of the listed shares.* That is why independent auditors are required by law to highlight any changes in these and other accounting procedures adopted in the financial statement as compared to the previous one in the auditors' report. Changes in accounting procedures are allowed only when the new method is also recognised as valid under generally accepted accounting principles. Take depreciation methods as an example. There are many different acceptable methods. The most common one is the straight line method. Depeciation is provided by writing off the costs of a business asset such as a goods vehicle over its estimated useful life span against the profits produced during each accounting period because part of the vehicle is deemed to have been expended for profit making purposes in each period. Let us say the useful life of the goods vehicle is 5 years with a cost of $100,000. Using the straight line method will result in a depreciation of $20,000 over 5 accounting periods (i.e. 20 % per annum). Thus the profit for each period will be reduced by the same amount. The amount is put into a reserve account for the purpose of replacing the vehicle by a new one when the existing one runs out of its usefulness. Meanwhile, the actual funds may be tied up in other business investments such as stocks in trade. If the depeciation method is changed to another acceptable one called reduced balance method (at the same rate of 20 %) the amount of provision for depreciation will differ as follows. The first year is the same amount of $20,000 but the second year is only $ 16,000 (20 % on the remaining value of the vehicle of $800,000 at the end of the first year after deducting $20,000 in depreciation). Therefore, the profit of the corporation will be higher by $4,000 under a different depreciation method (other profit factors being equal). Therefore, the change in accounting procedure of a different depreciation method does have a bearing on the profit position of the corporation.

Another common way in which accounting procedures can substantially affect the corporation's profit position is the way provision for bad and doubtful debts are made. Under conservatism in accounting the maximum provision for bad and doubtful debts should be made. Unfortunately, in case of new financial products such as CDOs the way in which such products should be valued is open to interpretation. With cunning moves such as insuring some of the CDOs the corporate custodians are able to convince the auditors to delay or spread the provisions over different accounting periods to reduce the impact of potential losses in a particular period to keep up the market value of the corporation's shares. Underprovision will mean more profits available for distribution for the present period and shifting the losses to the future.

When there are grey areas for accounting treatment of profit and losses or assets and liabilities the corporate custodians will inevitably make use of those grey areas to their own advantage in presenting a better profit or asset position. In the case of international corporations there is always a possibility of shifting losses to an offshore entity as explained in the case of CDOs (collateralised debt obligations) or through other loop holes in the law. It is all a case of exercising adequate regulatory control by the government. Unfortunately, the past 8 years of the US president Bush administration (2000 – 2008) saw the progressive relaxation or deregulation in the financial market that has resulted in high ranking corporate custodians reaping excessive remuneration. This has left a hefty bill for the US taxpayers as well as the global investors on the inevitable downfall of the whole fragile financial system upon the ultimate bursting of the credit and property bubble in the USA with devastating consequences.

Before we go on to other topics I think the readers should have some ideas about the essence of financial accounting so that they will know what to look for when confronted with the financial statements of a corporation in which they are shareholders or investors. *The most important concept in financial accounting is the ability to distinguish between capital and revenue items.* To understand why this is the case, we must know the exact meaning of income because profit is arrived at by deducting expenses from income. At first glance it may seem that terms like income and expenses are self-explanatory but in reality there may be situations that are not as clear cut as we first thought. The ultimate purpose of a set of financial accounts is to ascertain the trading profits of the period (usually one year) under review and to set out the net asset position of the corporation together with shareholders' equtiy (the value of their investment holding). The profit and loss account is aimed at ascertaining the trading profits and the balance sheet is a statement of the assets and liabilities (external liabilities to creditors and internal liabilties or equities of shareholders) of the corporation. All financial statements are required by law to be prepared under the double entry system to ensure their accuracy.

Now, let us define income. I*ncome has been defined as the amount of financial resources we can consume in the current accounting period without reducing the value of our net assets as at the beginning of the period.* Profit is income less related expenses for the purpose of earning that income. If the corporation sells an old goods vehicle and makes a profit of $10,000 this amount should not be included as part of the trading profit because the normal trade of the corporation is not selling its capital assets held for the purpose of carrying out its normal trade of say, selling soft drinks. This $10,000 is a capital gain to be put in a reserve for the purpose of replenishing future assets. Any trading profit may be distributed as dividend but capital gains should not because by doing so the corporation's future earning potential will be reduced. That is the reason why we must distinguish between capital and revenue items.

As regards, expenses, it is easy to understand that in the trade of selling soft drinks (in the example cited in the previous paragraph) direct materials such as sugar and other ingredients for making the drink should be charged off against the selling price of the product (income) as outgoing expenses to arrive at the trading profit. But what should we do about the cost of delivery truck ? If we charge the total purchase price of the truck of say $100,000 in the first year of trading there will probably be a loss for the business. This method of accounting for trading profit is obviously incorrect because the truck has a useful life span of at least 5 years. Its costs should be spread over the 5 years of its useful life. This is the important concept of matching revenue (or income) with expenses of a revenue nature only and to distinguish between capital items and revenue items. By charging the total cost of the truck in the first year the trading profit for that year will be grossly distorted through understatement while profits for the subsequent 4 years will be inflated through overstatement. If the corporation is a listed one the shareholders in the first trading year will not get any dividend but those in the subsequent 4 years will be unfairly rewarded by the incorrect method of writing off the truck completely in the first year. The proper way is to write off the cost of the truck by charging a depreciation of 20% on the total amount against income over 5 year based on the principle of distinguishing capital items from revenue items.

To gain some deeper insights into the nature of capital and revenue items we can rely on many court rulings on these issues mostly in taxation cases. The main opinion of the courts of law is that *capital items must involved enduring or future benefits while values of revenue items must have expired during the current accounting period.* Examples of *capital expenditure* is the delivery truck (its benefit to the business extends beyond the current period) we have discussed above while *expense of a revenue nature* is electricity (its benefit has expired during the current period). We usually use the terms expenditure to denote capital items and expenses for revenue items respectively. This distinction between capital and revenue is also of vital importance when we come to the topic of government finance and fiscal policies (section (6) of this paper). By learning how to distinguish capital items from revenue items the reader is already half way to becoming a competent financial accountant. At the very least, the readers will now be more confident in knowing what to look for when they receive the annual financial statements of listed corporations of which they are shareholders.

To recapitulate the main points of this section. The reader must be aware that different methods of accounting can have a significant bearing on the profit position of a corporatoion. There are also many loop holes in existing financial regulations governing accounting procedures in listed corporations. These loop holes must be closed if any future financial crisis is to be avoided for only then will the true financial positions of listed corporations be revealed and the black sheep of the corporate custodians be properly held accountable to shareholdes, creditors and society in general.

(6) *Basic working principles of public or government finance*

Governments spend a lot of taxpayers' money in recurrent expenses as well as capital or infrastructure projects. The government budget is of direct relevance to our financial position and that of society as a whole. Citizens are very often asked to pay their share of these spendings through the increase of personal income tax or other indirect taxes such as sales tax or GST (goods & services tax). Incorrect ways of spending public funds will both do great damages to the economy and will result in great injustice.

Just as in accounting there are some basic philosophies involved in this specialised branch of economics. Let us have a brief look a few more important ones. Before doing so, however, we need to learn about some special characteristics of public finance. The concepts of *external economies and diseconomies* very often come up in connection with government spending because the government is responsible for many branches of social services. Here the terms economies and diseconomies refer to conditions and effects and not systems as such. A particular economic activity is said to produce an external economy when it can create benefits for other people who are not the intended target of that activity. Take the radio air wave for example. If the government sets up a radio station for its military service everyone else can also enjoy its programs without extra costs on the government. Again, if the government constructs a freeway to make it more convenient for citizens in the outlying areas to get into the city the freeway will also benefit those living along its route. The improved convenience will also lead to the increase in the value of properties in its vicinity. These are extra benefits to be reaped by society. On the other hand, some economic activities can create external diseconomies. For example, an electric power station that runs on coal will give rise to air pollution and will adversely affect the health of citizens living in its vicinity. Besides the moral issue the costs of the resultant long-term health care problems will be ultimately borne by society while the electric company simply makes the profit without bearing the full social costs. Nowadays, social accounting is becoming popular in some countries to find out the ultimate costs of to society. The fundamental lessons to be learned on these special characteristics of public projects are three fold. First, the decision to go ahead with such projects must be based not just on immediate or direct costs and benefits but on all external economies and diseconomies. Secondly, many projects with such special characteristics are very often more suited to public sector management because profit is not the sole consideration for the government. Thirdly, if it is decided that it is more efficient for private corporations to handle such projects strict control must be in place to ensure that costs of external diseconomies if any must be paid for by the private enterprise undertaking the project. Otherwise, corporate greed will again lead to some social costs being passed on by the private enterprise to the taxpayer. However, it must also be borne in mind that others things being equal first consideration should be given to allowing the private sector to take up the project under a market oriented economy to give priority to economic efficiency. The existing size of the public sector must also be considered so as to keep down government's share in the total economy to a reasonable proportion such as below 20 % of GDP (gross domestic product).

Very often there is some dilemma facing government in connection with the operation of many public services such as health care and social welfare. How much should the government charge citizens for using such services. If they are completely free then such services may be abused by those who may not really need them. Thus, it will lead to a waste of precious economic resources. On the other hand, if the charges are too expensive it will be unfair to the the underprivileged sector of society who may not be able to afford them thus creating a burden on the poor. Due to the special characteristics of such essential services the strict rules of the price system (or money vote and by supply and demand) under capitalism cannot work properly. Here again we encounter situations that cannot be satisfactorily handled by a strict application of the price system (prices to be determined freely by supply and demand) which is considered to be a sacred institution under capitalism. So, economists have come up with two useful principles that are quite handy in such tricky situations. They are called the *ability to pay* and *benefits received* principles in public finance. These two principles are not mutually exclusive but can be used in a certain mix to achieve the optimum balance on fairness and efficent use of economic resources.

The “ ability to pay “ principle requires that due consideration must be given to any hardship that may affect the user's ability to pay for the essential services while the “ benefits received “ principles specifies that users have the basic obligation to pay for any services they receive unless special circumstances warrant otherwise. Applying the above principles to use of the emergency ward of public hospitals an appropriate way to strike a balance between fairness and efficient use of the emergency facilities would be to charge a fee that will deter non-urgent users (benefits received principle) but the charge can be waived by the health authority or borne by the social welfare department in case of citizens already on the welfare system (ability to pay principle).

The government's budget can be used very effectively to achieve many economic goals such as creating employment (through fiscal spending), redistribution of income on a more equitable basis (through taxation), keeping down the inflation rate by a surplus budget (withdrawing more resources from the economy than putting back into it) and stimulating consumption in the private sector through a deficit budget (injecting more into the economy than withdrawing from it). There is usually no serious problem with a surplus budget except public criticism against the government for not taking better care of the underprivileged sector. However, if a surplus budget is called for to dampen an over heated economy by withdrawing resources from it the foregoing criticism will not stand. On the other hand, there can be a lot of controversey over a deficit budget (spending more than the amount of revenue raised during a financial year). This is because a deficit must be properly funded. There are basically *three way of funding a budget deficit.* First, the government can simply *print more money.* This is the worst and most irresponsible way because putting more money into the economy without a corresponding increase in the production of goods and services will simply lead to a higher price inflation which is will lead to hardship for the fixed income earners and reduce the competitive edge of the country as compared to other trading partners. Unfortunately, irresponsible and dictatorial governments such as Zimbabwe are doing exactly that. It had led to a hyper inflation rate of over 231,000,000% in Zimbabwe in July 2008 as compared to the previous year. The same tragic scenario also occurred in Germany after the First World War. The second way is to *raise more taxes* which will be a direct burden on the taxpayer and will be unpopular. The third way is *to borrow* from its citizens and outsiders (other countries and international corporations) *by issuing government bonds (national debt).*

There are some particularly tricky *problems connected with the question of national debts*. First and foremost, borrowing too much will subject the government to the influence of the creditors especially if these are foreign countries or international financing giant corporations. There is always the political consideration that these creditors can put undue pressure on the government to carry out policies to the advantage of the creditors. In extreme cases of excessive national debt the sovereignty of the national may be threatened. In the case of excessive national debt owed to its own citizens there will be a problem of *adversely affecting a fair distribution of income.* Those citizens who are most likely to buy government bonds are the rich people. Interest payment on bonds will ultimately be financed from taxation. This means that the rich will become richer at the expense of the poor. While only the rich receive interest payment on the government bonds they hold as investment every citizen (even the less well off) must be bear the tax burden in respect of that portion raised for the purpose of financing government bond interest payments. The rich are getting richer while the poor have less to spend due to a higher tax burden resulting from the need to pay interest on government bonds.

Then there is the *problem with the intergeneration transfer of national debt burden.* As many types of government bonds have very long maturity periods this will imply that a substantial amount of money raised by government bonds during the period of their issue will not be due for repayment until becades into thefuture. As mentioned above in section (4) in connection with the working of the financial market some US treasury bonds have up to 99 years before they are due for repayment. This created the situation of the national debt burden being transferred to future generations while the borrowed funds have been used in the current generation. Therefore, to be fair to future taxpayers long term government bonds should only be issued to finance long term infrastructure capital projects such as roads and bridges which have enduring benefits that will extend to future generations. This is the accounting principle of *matching capital expenditure (capital assets) with long term loans (or long term liability)* which is also applicable in social accounting to *ensure fairness to all citizens.* This treatment *also reflects the benefits received principle* in public finance. By the same token, short term government bonds should be issued to cover a short fall in revenue in a deficit budget for the increased current expenses of a revenue nature.

It will be recalled that there are four major economic goals for the government to achieve. To refresh the readers' memory, these are fullemployment, low flation, healthy economic growth (i.e. increase in living standards over time) and a fair distribution of national income (a major proportion of the population being in the average income and wealth bracket). There is now an urgent fifth goal of environmental protection. The most ideal conditions for the the economy is full employment with an acceptably low rate of inflation together with a healthy rate of growth, little disparity between the rich and poor plus a good and sustainable environment. Unfortunately, *some of these economic objectives are not totally compatible.* For example, an increase in fiscal spending can create more employment but it will also lead to a higher rate of inflation. Similarly, to achieve a higher rate of growth in a shorter period of time involves higher levels of spending (both in the public and private sectors) that will lead to a higher rate of inflation. Of course, the ideal way to achieve a higher rate of economic growth without too much addiional spending is to increase personal productivity (working more efficiently). Then, a more progressive rate of taxation will lead to a more equitable distribution of national income but it may sometimes reduce the incentive for more personal efforts. *Political considerations will also come into play.* For example, the best way for the world as a whole to achieve the most efficient use of resources is total free trade to promote competition and higher productivity or efficiency. However, trade unions in many countries where a democratic political system is at work will dictate minimum wage levels and working conditions which can make the work force of that country less competitive. The result is that trade unions in that country will call for more protection (such as quotas or import tariff) against cheap labour producer countries. The conflict arises because of different working and remuneration standards between the advanced and developing countries. This is a major problem confronting members of the *WTO (World Trade Organisation)* which was formed to promote free trade on a global basis (or more popularly known as *Globalisation)*. A skilful and fine balance must be struck by a capable government to achieve reasonable progress in all five economic goals the latest one of which is environmental protection.

Just one word of reminder regarding government spending in relation to the capitalistic rationale of “ big economy, small government “. In case it is necessary to support a declining economy this can be done fiscally by either increasing public spending or a reduction in taxes. Everything being equal the above capitalistic rationale warrants that cutting taxes should be given priority because the private section is supposed to be more efficient in deciding what to do with the extra money resulting from a tax cut. The public sector, on the other hand, is usually more wasteful because the government does not need to make a profit on its operations. Furthermore, a freedom of choice for the citizens to spend the extra cash from the tax cut in their own chosen way is consistent with the democratic principle.

Having acquainted themselves with the basic working principles of public finance the readers will now be more confident in assessing government policies proposed or taken to combat the the E&F T 2008. Hopefully, everyone will become an informed citizen to have a say in these public policies through the vote which all citizens of a democratic country posses to make a difference towards the recovery process.

(7) *Basic principles of international economics*

As the world becomes a global village the working principles of international economics are indispensable tools to understanding interactions between different countries and economic areas (such as the Euro Zone and US Dollar regions). If the readers have the basic economic knowledge in international economic dealings between countries they will find it easier to envisage the whole picture of the financial tsunami swallowing up every country and causing damages of varying degree.

Let us start with the differences between an open and a closed economy. An *open economy* is one that has little or no restriction on movements of capital and free entry, withrawal and competition for all businesses. This is the ideal picture of capitalism.There are very few examples in real life but Hong Kong is one of the closest you can get to this classical capitalistic model. Due to her unique position as a special administrative region of the Peoples' Republic of China Hong Kong can carry on with her role as an international financial centre where many international corporations are listed on the Hong Kong Stock Exchange. There are numerous corporations many of which are from China are raising capital and loans through the Hong Kong financial system. Except a few minor restrictions businesses of any country of origin can carry on their trade in Hong Kong. There is no exchange control (free movements of capital), no limitations on foreign shareholdings in any local corporation except the media (newspapers, radio and TV). With limited land and other natural resources Hong Kong is wise to adopt such an open system to attract foreign investments. Hong Kong has been consistently voted among the top 10 most competitive and free economies in the world. However, the downside of such as system is that it is directly affected by all kinds of ups and downs happening in the whole word especially its major trading partners like China, USA and the Euro Zone. This disadvantage means that economic, monetary, financial and fiscal policies will have their desired effects substantially reduced. For example, if the government of the Hong Kong Special Administrative Region decides to use fiscal spending to support the economy as it is doing now to counter the effects of the financial tsunami such extra government spending will not totally filter through to local consumer spending to stop a recession. This is because many giant construction firms being awarded the building contracts are from other countries. The profits earned by these contractors will ultimately be repatriated back to their home countries. Nevertheless, the foreign engineers and managers will create a new demand for luxury housing, expensives cars and high end entertainment. They will also pay local tax on their income earned in Hong Kong and so will their corporations. The local workers they employed will be the foreign corporations' contribution to the local employment situation. In short, the increased fiscal spending will not be 100% recycled back into the local economy to boost local consumption.

On the other hand, a *closed economy* is one that imposes some restrictions on the three major factors of production, namely, land, capital and labour. There are usually other restrictions such as foreign exchange control and the maximum annual limit for repatriating profits back to investors' home countries. The economic systems of most sovereign countries are closed ones to varying degrees. The latest economic philosophies dictate that all economies should be as open and competitive as possible to facilitate the efficient utilisation of global resources. This is the very " in " concept of *globalsiation* which means different things to different people, perhaps to suit their own purposes. A closed economy has the advantage of being able to use fiscal and monetary policies to achieve the country's economic goals according to their own preferred priorities. This is also more politically convenient for whatever government that is in power.

The main issues for this particular branch of economics known as international economics concern *exchange rates, international trade, foreign exchange reserves and balance of payments problems* for different countries. Such issues have a very important bearing on world economics and global finance. As such they are of great significance in the context of the present global financial crisis. These different issues are all interconnected.

There are two schools of thoughts in relation to the way a country should manage the exchange rate of its currency. The *fixed rate school and the free float school.* The fixed rate system requires that a country maintains a fixed rate of exchange within a narrow limit of its official rate. The advantage of a fixed rate is obvious. It is easier for *businesses* in that country to *make financial and investment decisions without having to* t*ake into account the risks in fluctuations in the currency rate.* The reader should bear in mind that the exchange rate is mainly relevant for businesses because they deal mostly in the import and exports of goods and services that involve settlement in other foreign currencies. For those *private citizens* who do not rely on imported goods the fluctuations in their country's currency *may not be of too much significance* except to the extent that they consume products with foreign components. For a country like Australia which is mainly commodities based most essential products are made locally. This is most fortunate for their citizens who call their home the Lucky Country. The same argument is, however, invalid for open economies with little natural resources like Hong Kong. The devaluation of its currency will give rise to serious inflation because most products are imported. The Hong Kong Dollar is pegged to the US Dollar at HK$7.8 to US$1with a fluctuation range of 2% - 3 %. While USA is also richly endowed with all kinds of natural resources it is unfortunate that its outgoing government has mis-managed her economy by failing to regulate her financial markets properly and by allowing the black sheep in the financial profession to wreck the life of everyone including other global citizens through corporate greed and deceptive practices. A fixed currency exchange rate will also *encourage more foreign investors* from taking up investment projects or pure financial investment in the country simply because there is one fewer risk (foreign exchange risk) to undertake under a fixed exchange rate system.

Of course, there is a huge cost to be paid to maintain a fixed or pegged rate. *First* of all, the *government must have enough foreign exchange* reserve to buy and sell its own currency to *maintain a desired fixed rate*. Money is just another kind of commodity whose price is determined by its supply and demand. Only in this case money is a special kind of commodity because it is a medium of exchange as well as a product that is wanted for its own sake (i.e. to hold as investment to earn interest income – or investment demand as opposed to trade demand - settlement of trade accounts). We will learn more about this in section (8) of this paper on monetary economics. Not many government is capable of operating a fixed exchange rate system even if they wanted to. They will have to build up a sufficiently large foreign exchange reserve from international trade surpluses before they are able to maintain such as system. Take the Hong Kong dollar as an example, it is 100% backed by the US dollar. In other words, the Hong Kong Special Administrative Region government is holding in its monetary reserve as much US dollar in value as the amount of Hong Kong dollars in circulation. All these US dollars have been earned in trade surpluses made in past years. Secondly, there is the *disadvantage of a less fexible price adjustment mechanism for the country's exports* because the level of international trade will also be reflected in the country's currency (its trade demand component). A fixed exchange rate artificially maintained by the government will distort any trade demand component. Believe it or not the fixed rate system is also based on the moral argument that *a country's currency is an IOU or debt obligation.* Therefore, it is *morally bound to keep up the value of its obligations*. This is a question of face. However, this argument appears to be an outdated notion because the actual purchasing power of any currency will decline over time even if the numerical value is maintained.

For the *free float school, the rationale is basically related to the total free trade* and free market mechanism involving complete freedom of movements in supply and demand of any commodity including currency. The downside of the free float system is the *exchange risk* element which is *allowed to have its full effect on the economy.* Businesses and investors do not like it because there is the extra risk factor to consider. *Too much devaluation* of a country's currency due to excess supply over demand (due to a weak export situation or reduction in investment demand due to the lowering of interest rates) *will lead to loss of confidence for foreign investors.* Less foreign investments will mean less local employment and more burden on government and coporations if there is a lot of foreign debts to service. *Increase in the value of a country's currency means increase in the prices of its export* which will be less competitive. This is the reason why we hear so much arguments between countries on what the appropriate exchange rates should be for one another's currency because the value of their currencies has a direct impact on the prices (and consequently, their competitive edge) of their exports to one another. For the competitive edge in international trade, no country would like their major trading partners to maintain an artificially low value for their currencies to gain such advantage over their own exports. Similarly, some countries of the WTO will lodge a complaint against their trading partners to the arbitration body of WTO to stop them from paying government subsidies to industries of their trading partners. Such subsidies will artificially lower the costs of production of the subsidised industries to gain a competitive edge over the complainant's exporting corporations. From time to time, governments of different countries will actively intervene in the foreign exchange market to regulate their own currency to within an appropriate range to achieve an advantageous trading position in terms of competitive edge. This is not actually a rigid application of a fixed rate system. All these currency manipulation measures are goal specific so that the range of the desired value of their currency may vary widely during different periods. These are now accepted practice.

Now, let us go on to another very important issue in international economics, namely, *balance of payment problems*. The balance we refer to is the balance in the foreign exchange accounts of countries which is the result of both visible and invisible trade with any one of their trading partners. The balance can either be in surplus or in deficit. Very seldom, it may be even or in exact balance which is the most ideal situation for both partners economically speaking. There are *specific problems for both surplus* and *deficit balances.*

Let us take a particular situation for two prominent trading nations, the USA and Japan. Both are a major trading partner of the other. Just as in accounting (in this case, balance of payment accounting), we have to take one set of books at a time. From the point of view of Japan there had been consistent trade surpluses in her trade with USA. To counter this situation USA had been pressing hard on Japan to keep the Japanese Yen at a higher level to reduce Japan's competitive edge and to put pressure on Japan to buy more US products and services to reduce Japan's trade surplus against the USA. Japan had been able to resist such pressure because she has her own trade agenda. This has highlighted the *controlling position of the surplus country* which can always wait for the right moment to utilise its surplus as a bargaining chip with the deficit partner for political support or for policies favourable to the surplus country. The deficit country, on the other hand, is in a bad position because a huge deficit will usually lead to a fall in its currency which will have political repercussions from its citizens with looming inflation if the deficit country is import oriented. With a lower currency value we will describe the situation as having a weaker *term of trade* for the deficit country meaning its currency has less purchasing power compared to the surplus country. However, a weaker currency has its upside as mentioned above. That is it makes the exports of the country with a weaker currency cheaper to make it easier to earn more business from overseas. Countries like Thailand and Korea weathered the 1998 Asian financial crisis well because of the drastic devaluation of their currencies to make their exports much more competitive than they were before the crisis. Most of these countries had fully recovered from the crisis within a matter of just 3 years or so. Unfortunately, it may not be that easy for other countries to allow a free float of their currencies because their government may have to struggle with political pressure from their citizens due to a more democratic political system.

Apart from political pressure, the *deficit country will be faced with all the related problems of balancing the deficit or servicing loans in relation to it* as discussed in the principles of public finance above (section (6)). Therefore, it is obvious that there will be a lot of hard times for deficit country. For smaller deficit countries it may come to a point when the global community will completely lose confidence in their currencies. This can and have happened constantly because their currencies are not welcome due to a lack of useful goods and services produced for export by such countries. In such an unfortunate scenario other countries will inevitable ask for US dollar settlement for such countries. That is why the US dollar has not devalued so much even with the onset of the financial tsunami. Even though we may not buy goods directly from USA there are always people asking for it because most people do need US dollars to trade with the biggest economy in the world and many other countries use US dollars as their foreign exchange reserve and backing. The reader will recall that the US treasury bonds are still one of the best debt instruments to hold for interest and in terms of security because at some point in the future the holders of US dollars will come to need them for consumption or investments. Furthermore, very few people wish to see the US dollar devalue (except those holding debt obligations denominated in US dollars) because most assets people and countries hold are connected with the US currency. That is the greatest advantage held by the USA as the world's biggest borrower as well as a banker nation. The more debt instruments USA issues the more US dollars assets are being held by investors and countries worldwide who do not want to see the US dollar fall in value. USA is living on borrowing or spending her future potentials well ahead of her productive capacities. In short, USA is living on some one else's money. With such an extravagent consumption pattern such as spending US$ 4 billion daily in conducting the unjust war in Iraq USA is dragging the whole world down through her spending spree fueled by low interest rates in the past decade. A huge credit bubble was created waiting to expolde when the last straw falls on the camel's back with the subprime lending crisis.

The only proper way for a country to deal with an exchange balance deficit is to reduce consumption and increase investment in productive capacity. This simply means shape up and become economically more efficient. In other words, work harder and earn an honest buck without resorting to fraudulent financial trickery such as CDOs and other even more farfetched and fancy gimmicks. The *ideal situation* between two trading partners is *a balance without surplus or deficit on either side*. For the surplus partner it is a case of not making full use of its buying power while it is simply a case of over spending for the deficit partner. It is not to the advantage of the surplus partner to earn every possible dollar from the deficit partner at which point your trading partner (customer) is totally bankrupt and cannot buy your exports any more. If this is done to everyone of your trading partners you will be the only seller left in the world but without any buyers who are all economically and financially broke. Keep your partners or customers thriving and you also keep their business. *International trade can be mutually beneficial to all trading partners* if everyone plays a fair game. In the context of the E&F T 2008, the WTO and all its members should get together and seriously consider taking effective steps to open up all international trading opportunities to revitalise the global economy. Any trade surplus are unused buying power that can increase the total volumne of global trade that can translate into increased empolyment, consumption and growth. The announcement from China on 9/11/2008 to spend some US$870 billion (equal to some 8 % of her GDP over two years) in infrastructure projects and earthquake related reconstruction is a bold and constructive move that will benefit the global economy especially resources based countries like Australia. This sets an outstanding and courageous example for all responsible countries in the global village to follow. It is high time that USA should make amends for the serious harms Uncle Sam has done to the world economy. During hazardous time of the tsunami it is very easy for countries to fall back on *protectionism* which involves imposing import tariffs and other trade barriers that will spark trade wars resulting in twindling world trade and a long and winding road to global economic recovery. The readers will recall that both the First and Second World Wars were preceeded by *trade protectionism* and *political isolationism* in major economies such as the USA. We must not make the same mistakes again simply because the global village is just too tightly intertwined to allow protectionism and isolationism which can easily flow through to the whole world at an instant. Tragically, we are experiencing first hand the lighting speed at which financial troubles can spread throughout the global economy and financial system.

(8) *Basic working principles of monetary economics*

The government can *influence the general direction of the economy in two main ways*. One is by *fiscal spending* which we have already dealt with in section (6) of this paper and the other is through *monetary policy* which involves t*he use of interest rates* to regulate the supply of money and credit through the banking system. We shall deal with the theorectical side of monetary policies in this section and the more practical aspects of money and banking in the next section.

Most countries and economically independent regions like Hong Kong have a central bank or a monetary authority (in the case of Hong Kong) to regulate the money supply and credit availability. The *central bank* may be called by different names. The central bank of Australia is known as the Reserve Bank of Australia. In the USA monetary policies are decided by the US Federal Reserve Board and executed mainly by the US Treasury and a whole network of US Federal Reserve Banks. Apart from the primary function of being *in charge of monetary policies* another important function of the central bank is to act as the *lender of last resort* to throw a life line to faltering banks and other financial institutions if it is deemed to be in the public interest to do so.

Interest is the cost of holding money. When the interest rate is high people tend to hold on to money to earn more interest income and will be less likely to spend them. Less consumer spending means a weaker demand for goods and services in the economy and hence fewer business investments will be made resulting in a fall of total employment and slower rate of economic growth.The same argument is also applicable to investment spendings as well. On the other hand, when interest rate is reduced total consumption will usually increase because people will find that they are earning less interest on their bank deposits so that the cost of parting with their money is lower. Even the costs of borrowing for the individual and businesses will come down. It becomes easier for them to make business investments or purchase more durable goods like home appliances, etc. In short, credit facilities will be easier to come by for more investment or consumption.

Before we proceed, we should learn about a very important economic concept called *elasticity of demand.* The demand for a product or services is called *elastic when a decrease in its selling price will bring about a more than proportional increase in its demand.* Conversely, for a product with an *inelastic demand an increase in its selling price will bring about a more than proportional decrease in its demand*. *Demand elasticity* is important to the extent that for commodities with an elastic demand a lowering of price can increase total sale revenue and vice versa. Normally, the *demand for essential goods is elastic* while that of *luxury products are inelastic*. Knowing the elasticity of demand for a particular product or that of the aggregate demand curve of an entire economy will enable us to decide when and how much the price of a product should be lowered to obtain the maximum effects in the increase in sales revenue or income. Furthermore, by lowering the interest rate a country can reduce the value of its currency to the appropriate level to increase its exports. A reduction in the value of a country's currency will mean an across the board cut in the prices of its products and exports. This will make the country's exports more attractive to buyers from other country's thus contributing in a positive way to any existing balance of payment problems which we have discussed in the previous section.

Thus, the government can l*ower interest rates in times of a downturn in the economy to encourage increase in consumption*. In times of an *economic boom* when upward inflationary pressure is high the government can *raise interest rates to dampen the over comsumption* to keep price level steady. That is a good and subtle way of suppressing demand without directly interfering with the market resources. The reader will note that since the start of the present financial tsunami many governments of large economies have reduce their official interest rate drastically several times to encourage more consumer demand. On top of interest rate reductions, most governments also resort to fiscal spending such as China's proposal to spend US$ 870 billion and the USA US$ 880 billion in a rescue package to boost their economies to avoid the on set of a recession.

The founder of the *monetarism* is the American Nobel Prize laureate, Milton Friedman who pioneered the use of monetary policies to regulate the economy in an indirect way back in the 1960s. He is also the leader of the distinguished Chicago School of economic philosophy, having done most of his economic research at the University of

Chicago. He favoured monetary policy because he held the view that governments should not meddle with the free market economy. His philosophy can be summed up as " *positive non-intervention* ". The government should only be allowed to take economic action when the circumstances are such that automatic adjustments by the free market forces do not appear likely. Even so, the government must interfere with the slightest possible disturbances to the economy and must allow the market forces of supply and demand to work through the price system to achieve the necessary equilibrium. Therefore, he advocated the indirect intervention through the use of monetary policies to motivate consumers to do the right thing. Economists have compared monetary policies to the scalpel used in surgery and fiscal policies to the hammer used in construction work. The former is good for fine tuning while the latter for heavy duty assigments.

We must also bear in mind that monetary policies work indirectly and also slowly. Policy makers must be very patient to assess the results of any monetary measure taken before deciding to go further or hold back. It could take up to 6 months in many cases before the full results of any monetary moves made by the government have their full effects. This is because *monetary policies are passive in nature.* This characteristic is both their strength and weakness. Being passive and leaving all economic choices to the consumer it is not intrusive on the economy. Conversely, their passive nature also make them slow working. For example, when there is an interest rate cut the increase in available credit must flow through the banking and financial system one step at a time. Then the consumers will have to size up the effects of the rate cut with respect to their investment portfolio and asset position. Whether or not they will increase spending is entirely up to the consumers. They usually do when there is a rate cut but if the economic future is highly uncertain like the present financial tsunami consumer confidence may be shattered so that cutting interest rates will not have their usual and full effects in boosting consumption. At such perilous times, cash is king as the saying goes. There is a very useful economic indicator called the consumer confidence index which is created by asking a representative random sample of consumers whether or not they think (just based on their spontaneous feeling) they will be better off in three months' time. An index to measure people confidence in the economy is prepared by taking a particular date as the starting basis point of 100 which serves as a basis for comparison in future and regular surveys. Many different countries have been keeping such an index for the reference of both givernment and private sector.

In applying monetary policy as the mainstay economic strategy the *government needs to set certain targets in respect of the five economic goals* of acceptable inflation rate for consumer prices, target economic growth rate, tolerable unemployment rate, equitable distribution of national income and the degree of commitment to environmental protection. Each one of these economic goals has to be weighed against the others by reference to the available resources and the value judgment for the majority of the citizens. For example, my adopted country of Australia places much emphasis on price stability, fair distribution of income and resources over and above economic growth while China puts a lot of weight on economic growth. As regards the acceptable targets for each economic goal it differs for each country but the prevailing economic thinking as proposed by international organisations (such as International Monetary Fund, World Bank and UN) indicate that the acceptable long term inflation rate should be within the range of 3% to 4%. Long term unemployment rate should not exceed 5 % of the able bodied work force. The long term economic growth rate is preferrably 2.5 % to 3 %. Regarding the fair income distribution index, the ideal position should be gauged by the percentage of the population earning the median income. The higher the percentage of the population earning the median income the better. This means that the middle class is strong and economically healthy in such a country. Anything above 40 % will be considered satisfactory. There is also another index which can act as a litmus test for distribution of income. It is to ascertain the percentage of the population holding 10 % of the country's wealth. If 10 % of the country's wealth is held by fewer than 10% of the population it means that wealth is highly concentrated in the hands of only a few. The higher the percentage of the population holding in total 10 % of the country's wealth the more evenly is the country's wealth distributed. Each country can set their own targets in these economic areas and then the government will regulate the supply of money and credit in the economy through periodic changes in interest rates along different parts of the economic cycle to boost or dampen demand.

Before we leave this very brief discussion on monetary policies let us take a look at why monetary policies are so passive by nature. There are many technical details in the execution of monetary policies such as the auctioning of US treasury bonds, working of the complicated Federal Reserve System, bank liquidity ratio directives and inter-bank borrowings, etc. From just a few examples of these monetary mechanisms the reader should realise the indirect way the effects of monetary policies filter through the long chain of the banking and financial systems. Apart from the above technical details the consumer decision making process also has an important bearing on the passive and sometimes unpredictable nature of monetary policies. Their long term effects are pretty reliable but their short term influence can be erratic. Human behaviour is very hard to predict. For consumer decision making it appears to be contingent upon the decisions and behaviour of others. Economically speaking a *consumer's decision to enter the market does not depend on their current income alone but mainly on expectation of* future *income.* Even if they are earning a lot of money now they are not willing to keep to the current pattern of spending if they expect a fall in their future income. Furthermore, there is an element known as *wealth effect* that *plays an important part in their decision to spend.* Suppose the stock market or the property market is booming. This will make the shares and properties owners more valuable by market standards. This *feeling of increased wealth will induce them to spend more* although they may not actually sell their investments to realise the gain. The shares market and the property market can fall later but very often this feeling of being richer at this moment will induce us to spend more. It may sound illogical but that is the way our minds operate.

To recapitulate the main points of this section, monetary policies are very useful tools for achieving economic goals because of their non-intrusive and subtle nature but they usually have a longer time lag than fiscal policies to have their effects on the economy. Therefore, in times of great urgency to fix up snowballing problems like the present financial tsunami monetary policies must be supplemented by heavy fiscal spending to stop the situation from further deterioration. However, monetary policies are still the best economic tool for achieving long term economic goals. In the past 30 to 40 years most governments of the world including USA and Europe had relied heavily on monetary policies to regulate their economies to varying degrees of success. Unfortunately, there has obviously been a mortal mistake on the part of the US government in not properly regulating her financial sector. This is a very tragic end to a long period of successful implementation of monetary policies in USA to bring about successive economic booms. Of course, there are some economists who have now put blame on the long period of low interest rates in the USA. This long period of easy credit that has led to the sustained economic growth without high inflation has at the same time created a credit bubble which has now burst due to negligence in proper regulation of her financial sector by the US government.

(9) *Basic working principles of money & the banking system*

Money is the vital medium of exchange that has enabled our economy to work. Without the concept of money we would still be under a barter system to match the right seller with the right buyer which is not a practical system at all. The *nature of a medium of exchange for values* or resources must either *has economic value in itself* (e.g. that can be consumed or applied in an economically useful way) or *it can provide so much trust that everyone will accept them* for the purpose of storing purchasing power for its owner's future use. Unfortunately, very few items on earth except some *precious and scarce metals or minerals* such as gold and diamonds have these qualities. If everyone only uses gold and diamonds and their likes *as money their scarce supply cannot keep* up *with our economy's need* for daily increases in the volume of our trading and investment activities. Besides their short supply these *physical money is not easily divisible* to cater for transactions of smaller value such as a kilogram of rice, etc. Apart from the money's function as a *medium of exchange* it must also act as a *storage of value and a unit of accounting for resources.*

The only other viable alternative for money (as a medium of exchange) is *fiat money or documentary financial obligations representing real values.* The term by fiat means standing in the place of something or by proxy. *Fiat money is a documentary financial obligation of the issuer promising future value in the numerical amount denominated in the document* (which is a piece of paper money or I owe you – IOU). Fiat money stays good as long as other people accept them (their trust) or as long as you can use them to buy the things you want from the issuing country and other suppliers. In any event the issuer has the certain advantage because the purchasing power of any currency normally declines in time through inflation. This mean that the actual value which you have given up in exchange for the money is almost always less than the value you get when you actually use the same amount of money in future.

When fiat money was first circulated in the world economy in late 17th century in substantial amounts it is *backed by gold as a reserve*. This system of money backing system is *called the Gold Standard.* Different countries adopted the Gold Standard at different times with UK being the first in 1695 due to her need for large amounts of fiat money to support her quickly expanding trade resulting from the industrial revolution and her empire building through colonisation. The USA adopted the Gold Standard in 1873 in fact and by law in 1900. The Gold Standard was established to support consumer confidence in using and the paper fiat money. Prior to 1932 the value of the US dollar was fixed at a rate of US $ 20. 67 to one troy ounce (31.1 grams) of gold. The advantage of the Gold Standard is to provide a valuable resource base for fiat money to prop up user confidence. Even more importantly it imposes a physical restriction on governments to freely issue money to rob their citizens and other users of their currency through unrestricted printing of money thus leading to a certain devaluation of their currencies. On the other hand, the limited supply of gold cannot cope with the ever increasing need to issue more money (under the Gold Standard system) to service our drastically expanding economic activities. Finally, due to the First and Second World Wars and the Great Depression in the 1930s much of the official gold reserves were used to finance the wars and the crumbling world economy. It was agreed by the major nations in the *Bretton*

Woods Agreement of 1944 to use the US dollar as a reserve for all major currencies. The US dollar is acceptable as a reserve currency for other countries partly because of the huge productive powers of the USA and partly because of the convertibility of the US dollar into gold (then fixed at a higher price of US $35 to one ounce of gold). This implies that all other major countries have more or less abandoned the Gold Standard by allowing the conversion of their currencies into US dollar only. The same problem of over spending during the Vietnam War forces the US president *Richard Nixon to abandon the convertibility of the US dollar to gold and to abolish the official price of gold at US $35 per ounce in 1971. This marked the total demise of the Gold Standard.*

Nowadays all of the world's currencies are *full fiat money* meaning it has no material or resource base backing. Such currencies become legal tenders merely by the enactment of law and a simple promise by the issuing government to honour their value only in the numerical amount as denominated on the paper money which we have seen must inevitably decline in real value over time. In other words, trust them at your own peril. Money supply is not equivalent to physical cash in economics because money as a medium of exchange is also available in the form of credit given by banks and other financial institutions (bank overdrafts and margin facilities), the governments (special drawing rights between countries used in foreign aids). Even the credit terms (say 30 days or 60 days for settlement of trade accounts or 45 days for credit card accounts) used so often between businesses and their customers or between themselves are also alternative forms of money supply as a medium of exchange. Any shortening of the credit periods in the above areas will give rise to a credit crunch which will adversely affect consumption. Recent reports from Hong Kong (in October, 2008) have indicated that many banks have prolonged the settlement of their credit card accounts to businesses (representing their sales proceeds from customers using their credit cards issued by banks) from the usual 4 working days to 45 or 60 days. This credit squeeze by banks on their credit card purchases have caused a dramatic fall in the retail sector consumption through the negative multiplier effect. This is a dangerous move that will lead to a rapid decline in consumption which should be discouraged. If most credit providers are resorting to such drastic measures any effects of a reduction in interest rate to counter the financial tsunami will be totally neutralised to the detriment of everyone including the credit providers themselves.

As the *multiplier effect (which can work both positively as well as negatively)* is such an important influence in our economy we should have some understanding on its working. This effect is vital in the study of consumption and national income. The multiplier concept refers to the multiple increase or decrease in total national income as a result of an increase or decrease in consumer spending respectively. Take the very simple example of the readers getting $1,000 increase in monthly salary. They will probably spend $700 of the increase (assuming a *propensity to save* of 30% on income by the readers) or some other amount which will have a similar multiplier effect. Let us say the $700 is spent on employing a lady piano teacher for their children which they cannot afford to do before this salary increase. With the $700 tuition received by the piano teacher she again spends 70% of it (i.e. $490 - again asumming a 30% propensity to save on income) on some beauty treatment service which she could not afford to enjoy before the extra $700 additional income. In turn, the beautician spends another 70 % (i.e. $343) of this extra income of $490 in employing a gardener to improve the landscaping in her garden which she has intended to do for a long time but cannot do so due to insufficient income. The gardener will again spend 70% of $343 in something else and so on. The end result for the initial increase of salary for the reader in the amount of $1,000 has finally generated an additional total income for other people totalling at least $1,533

($700 + $490 + $343) just on the third step of the multiplier process. There are endless steps to this positive multiplier effect with diminishing amounts of income created on each successive step. The size of the total accumulated additional income depends on the *marginal propensity to save* by the consumer. The term marginal is added to denote the % of saving on the last batch of income increase. The marginal, last or latest increase in income is important as the % saving on income normally increase as income for individuals rises because as they get richer many things they want to buy would already have been in their possession.

Such subtle issues are important for the government in its decision on how to increase people's disposable income through a reduction in tax which has the same effect as an increase in people's income. Another corollary from the concept of marginal propensity to save on income is that *a progressive rate of taxation* on personal income is not only *good for a more equitable distribution of income it also works well in the area of boosting consumption* because richer people do not spend so high a percentage of their income in consumption. By the same token, *a healthy welfare system works well as a cushion in times of an economic depression* because there will be basic support in consumption to avert a further fall in economic activities as welfare payments must rise to ensure basic spending in bad times. The readers must be aware that a decrease in income will produce a negative multiplier effect which will lead to a more than proportional decrease in consumption. In serious cases of a huge reduction in national income a vicious circle of downward spending contraction spiral will be formed to pull the economy into a deep economic recession. Here, the reader should also know about a very strange economic phenomenon called the *paradox of thrift* in economics. *For the individual it is common sense that they should spend less if they are poor.* This is the revered virtue of being thrifty or spend less and save more. At first glance, it would seem that the same principle should be good for a country's economy. Unfortunately, this is not the case to our greatest surprise. Due to the multiplier effect described above any drastic reduction in spending will lead to further decline of the economy on account of weak consumption. In the case of the on set of a recession (generally taken as 2 consecutive quarters of successive reduction in consumption), the government should take a decisive lead in boosting useful spending such as pushing forward infrastructure construction projects to provide more employment to prevent a downward spiral of deflation. At the same time, government should be careful to *find the best way to finance the deficit budget designed to save the economy without giving way to price inflation and an inequitable distribution of income.*

To fully understand the volitility in the financial system reader will need to learn the difference between the stock and flow concepts. Money supply is highly volitile not only because the financial system works on consumer confidence which is a both elusive and fragile state of mind but also because *money supply is a flow concept* or a mobile element. *A fixed amount of money supply* (the sum of money and credit facilities) in the economy *can instantly increase its efficiency and create more income* (also a flow concept) for people (through the more efficient distribution of goods and services and more encouragement on production of such goods and services) *if the same amount of money supply is turned around more rapidly in the economy.* The way to induce people to part with their money more readily (for the purpose of moving it around the economy more quickly) to produce more income through increased consumption (using the multiplier effect) is to lower the interest rate. We must always separate the financial system with its money supply (a flow concept) from the economy proper with its physical resources of materials and labour (a stock concept). The highly volitile financial system is a tool to serve the economy in connection with the efficient production, distribution and utilisation of the main types of economic resources known as factors of production (land with natural resources, labour from workers and capital stock being productive machinery). A healthy tool will greatly facilitate economic efficiency. Conversely, a crippled financial system like the almost dysfunctional system we are facing in the present E&F T 2008 will inevitably lead to a sick and stagnant economy. The need to distinguish between stock and flow concepts arises from their different characteristics. The amount of factors of production which are stock or fixed concepts have physical limitations while money supply and income which are flow concepts have no fixed limits. Therefore, we must apply different methods to ensure that they achieve their optimal effects. The secret to achieving a healthy money supply is to move it around at a suitable speed and frequency to coincide with the need of the economy to attain a reasonable rate of economic growth and at an acceptable inflation rate. On the other hand, for physical resources the secret to their best utilisation is intensive application and recycling where appropriate.

Since the emergence of globalisation after World War II the world financial system is becoming more and more tightly knitted due to drastic increase in international trade and international movements of capital. Thus, there is a need to form some international organisations to discuss and to exercise control over mutual monetary objectives. The more important ones are the *IMF* (International Monetary Fund) and the *World Bank*. These are formed mainly as forums to discuss monetary issues of international interest. The member countries also set up emergency funding facilities to assist member countries whose money and banking system come under threat or at the brink of collapse. However, with the huge scale of the present financial tsunami the available emergency funding facilitities of the IMF and World Bank can hardly cope with all members in trouble. Priority is being given to smaller countries like the Iceland who has no way of helping themselves. There are also some important monetary agreements in place and concluded by most nations through the IMF and World Bank structures. In the context of the present global financial crisis it will take an across the board co-operation between all international monetary and economic organisations and other economic forums such as the *G 20* (group of 20 most important economies of the world) in taking a concerted effort in fiscal and monetary measures to stop the destructive tidal wave of the financial tsunami.

Banks are an integral part of our monetary and financial system. Thus, it pays to understand some subtle parts of their operation. The important elements of the banking system have been discussed earlier in section (4) in connection with the working principles of the financial market. Here, I just wish to hightlight some subtle aspects of the banking system. Bank operations are fairly similar all over the world. In the forefront are the retail or commercial banks which are the mostly closely regulated of all financial institutions due to their general influence on the public investors. There is usually a special regulatory body for banks. It may be known as the monetary authority or banking commission. Regardless of their nature they all serve the important function of acting as a watch dog over the operations of banks to ensure they comply with the strict banking laws in force. The most important regulation relates to banks' liquidity ratio which specifies how much lquid assets banks must whole compared to the deposits made by their customers. The normal requirements on *liquidity ratios* vary between 10% to 12.5 % depending on the prevailing economic situation. The tricky part is what constitutes liquid assets. The *recognised liquid assets* under the relevant banking laws are usually listed in banking operation directives prepared by the banking commission. These are usually cash deposits held with the central bank or other approved banks; physical gold ; blue chip securities that can be readily sold on the financial market at short notice; reliable government bonds issued by countries with strong economies and commercial bonds from approved international corporate giants. These liquid asset porfolios may be altered by regulatory directives from time to time.

The normal process through which the effects of a reduction in interest rate by the central bank flow through the banking system is by filtering effects through each step of the borrowing chain. If the commercial banks can borrow from the central bank for their normal operations at a lower interest rate the costs of their funds will be reduced. As a result, they can also lend out their available funds to end users such as businesses or individual home buyers at a lower rate to attract more business to maximise profits on banking operations. This is the flow through effect. There are also frequent daily inter-bank lendings and borrowings going on to take care of settlements between their customers. For simplicity we just imagine that there are only two banks in the economy. The larger bank A has 80 % of the citizens as its customers while B has the remaing 20 %. At the end of any particular business day all the cheques drawn by both A and B's customers have to be honoured by both banks. Because of the much larger market share of A on average 8 out of 10 cheques paid out for the day will be bank A's cheques. For cheques paid by one customer of A to another customer of the same bank A need not use any cash because bank A can simply tranfer (on paper in the bank's accounts) the required amount payable by one of A's customer to another who also happens to maintain a bank account with A. Only when a cheque from bank A is paid to customer of bank B that A needs to settle it with B and vice versa. Bank A must keep an account in bank B and B in A. In fact, all banks must have an account with every other bank as well as the central bank to settle daily balances. Since A has far more customers than B, the amounts paid by B's customers to A's customers must be less than the that paid by A's to B's. Consequently, for the purpose of settlement for the day, B will have to pay A the net balance of the total cheques exchanged between A's and B's customers. In the meantime, bank A can make use of the funds of its depositors to earn income much more than bank B can because bank B always owes money to bank A daily in respect of the difference between the amounts of cheques paid by customers of the two banks. In other words, bank B always has to pay a daily cash amount to bank A on the deficit in B's business account with A. That is why banks always try their best to grab the largest possible market share through mergers to obtain the best possible use of depositors' funds. Therefore, it is unfair for banks, especially the big ones to ask for a 3 working days period to clear your paid in cheques. Most of the time, the big banks need not wait for the cash when both parties in a particular cheque transaction are customers of the same bank. The banks simply use this administrative excuse to delay paying you your funds which they keep longer to earn income for themselves.

The most important lesson to learn from the working of the banking system with respect to the present financial tsunami is as follows. When there is a credit squeeze due to a rise in interest rate or loss of consumer confidence in the financial market the credit crunch will have tremendous knock on effects which will be severely amplified by the multiplier effect in spending patterns of consumers. Under such circumstances, the central bank must step in to take a lead in lowering the prime lending interest rate as well as act as a lender of last resort to rescue banks that run into liquidity problems. None of them must be allowed to falter because this could very well give way to general panic in which case the healthy banks will also suffer bank runs from their customers. Very soon the whole financial market and, indeed, the whole economy will plunge into total chaos as we have the painful and first hand experience since September, 2008 triggered by the collapse of the big merchant bank, Lehman Brothers in the USA. Having equipped ourselves with the above seven tools we can now proceed to apply them to this both mystifying and intriguing financial tsunami which has so much bearing on our financial well being.

(10) *Applying the above principles to the present crisis*

This paper is not an expert analysis of the financial tsunami but simply an overview for the lay person based on elementary economic principles. For this reason, applying the basic working principles to this tragic situation will likewise be done on the general and elemantary level.

From the point of view of the economic philosophy (section (3)) behind the market or capitalistic system which is the back drop of this intriguing drama the present fiasco has brought out *the ugliest side of capitalism and its greatest weakness of motivation by greed.* To be more specific, it is heartless corporate greed that has done the deadly blow. The real tragedy is that it could have been avoided had there been more vigilance and foresight and greater diligence on the part of the George Bush administration in regulating the US financial sector. Furthermore, the painful and yet inevitable conclusion is that sometimes *the law cannot protect us from immoral behaviour* of black sheep among men with a smart brain that can always find grey areas and loop holes in the law to exploit in order to prey on their fellow global citizens' hard earned dollars. With over-emphasis on material and especially financial success in the capitalistic system we desparately need a better education and a healthier culture of fairness and compassion to avoid bringing total disaster on our society.

Regarding rules of the game in the financial market (section (4)) we should realise that our *financial system is closely interconnected globally*. It is a fine, intricate and sensitive web of fragility that is *supported by consumer confidence alone*. Once this elusive state of mind is shattered by deceit and fraudulent practices of black sheep corporate custodians the very foundation of the system will be totally shaken and collapse is inevitable. Looking at the ultra complicated rules and products in the financial market we must conclude that some revolutionary reorganisation is urgently called for in the financial market. The result of all these *highly technical and sometimes crossedly held derivative products* is that there are *ample chances for abuse* by bad elements among the financial professionals. I am pretty certain that the true risks of some of these monster products cannot be truly and realistically assessed even by financial experts themselves. Further cosmetic camouflage by insuring and professionalising (marked for professional buyers only) these products added much fake sense of security for the unsuspecting investors who are also motivated by greed to purchase such products to their own detriment. The promise of an excessive rate of return has blinded them to the *eternal law of balance between risks and return* in the financial market. The *excessive rate of return on these products clearly sounds the warning bell* that has fallen on deaf ears. To this extent some investors are partly responsible for the own tragic fate. In future, such *dubious products must be barred* from entering the market. The proliferation of these undesirable gimmicks were the result of the well intended motive to provide extra hedges against investment risks. However, there is no such thing as absolute freedom in the same way as there are no absolute rights. When these investment products pose a threat to the integrity and stability of the fragile financial market the public interest must be the top priority. On top of this, CEOs and other high ranking corporate custodians must *not be allowed to draw exorbitant amounts of remuneration* and a cap on payouts to these personnels should be imposed. Unlimited reward will only bring out endless greed and the darkest side of human nature. *It is high time that a more enlightened form of capitalism with its responsibly exercised and sensible consumer rights and freedom that will not threaten to bring down the whole system as they are doing now be put in place,.* Common sense also dictates that conflicts of roles must not again be allowed to exist. *Improper practices* such as credit rating agencies or their associates acting out as financial consultants; the same financial professionals acting out potentially *conflicting roles* as promoters, trustees, asset managers and brokers all at once; and CPAs doing accountancy (running the accounting system) work for clients and acting as auditors on their own work at the same time *should all be banned.* Then, those obvious *loop holes* that lead to corporate custodians being able to hide their corporate losses in unregulated tax haven legal entities offshore *must be plucked.*

Accounting principles (section (5)) play an important role in our economy insofar as they help us place objective values on our resources using a common basis. Accounts prepared in accordance with generally accepted accounting principles give us a true and fair view of the state of the financial affairs of a business. Such vital business information is essential for investors to assess investment risks and thereby facilitates the operation of the capital market to chanel savings into investments whcich in turn support economic growth and provide employment. Having said that the present crisis has also revealed a lot of weaknesses in the laws enforcing the application of these accounting principles. Too many loop holes exist that can be exploited by black sheep corporate custodians to hide corporate losses so that a true and fair view of the financial affairs of public corporations is not being presented to investors for their scrutiny. It is not so much the accounting principles themselves that are to blame but the lack of proper regulation on their implementation due to *defective laws relating to preparation accounts that need be reformed.* This is an urgent task that requires international co-operation and consensus. In any event, it must be accomplished as soon as possible to avoid a repeat of the present worldwide tragedy.

To save the day most governments are now doing the right thing in approving enormous amounts of fiscal spending to support their faltering economies. This is done in conjunction with drastic reductions in interest rates. To assess the aptitude of these huge spendings the principles of public finance (section (6)) must be used as the measuring rods. *The main pitfall to avoid in executing these spending rescue packages is not to spend everything in one shot.* Governments must be prepared to boost their initial spending by further instalments in case their first move does not succeed in regaining public confidence in the financial market in the heat of the present general panic. More important still, governments must be careful in *choosing the correct methods of financing their huge deficit budgets to avoid undesirable side effects* such as inflation and unfair distribution of income (please refer to section (6) for the circumstances giving rise to these adverse effects). *Priority and fairness to all sections of society are the basic rationales* behind apporpriate government spending. The question of an acceptable government share in the economy is also important in a free market system. The prevailing philosophy seems to be *" big economy, small government "*. Anything beyond 20% of GDP for the government annual budget will be considered excessive. To reiterate, the presumption of inefficiency in government spending is derived from the fact that it is not forced by the profit objective to be economically efficient. Everything being equal any economic undertaking should be given to the private sector as the preferred operator. The problem of *inter-generation transfer of national debt burden should be avoided as far as* *possible.*

Since the financial tsunami is a global problem the principles of international economics (section (7)) must be understood. Different countries have already been struggling with balance of payment deficit problems before the occurrence of the financial tsunami. It is very easy for governments to fall back on protectionism at these perilous times because every government is under tremendous political pressure to protect their own industries and their related employment opportunities from international competition. Protectionism will seem to work in the short term but it will lead to a global shrinking of international trade volume in the long run that does nobody any good. The total world income will slowly diminish under a prolonged period of trade protection by the major economies thus leading to a downward spiral of global recession with no light of hope at the end of the dark tunnel. Therefore, more trade disputes between countries can be anticipated at these bad times but common sense must be allowed to rule the day. Give and take is the right approach. The advanced economies must be careful not to abuse their strong position to bully the weaker countries who will find it hard to defend their trading rights in a global economic down turn. With all its faults the free market system is still the lesser of two evils, the other being a totally planned economy. Therefore, *to avoid protectionism is the current order of the day.* The best way to correct balance of payment deficits at the present time is to *let the free market forces determine the appropriate level of the value of a country's currency. A lower currency will create a better competitiveedge* for the country's exports because the fall in the value of its currency is equivalent to a fall in the prices of its exports. The quick recovery of the Four Asian Dragons from the Asian financial crisis of 1998 was mainly the result of a free fall in their currency values.

Monetary economics (section (8)) is a very powerful tool in achieving economic objectives without direct intervention in the economy. It is especially effective when used at the same time as fiscal spending so that they complement each other. Governments must be aware of the fact that *monetary policies are passive in nature.* Their effectiveness very often depends on the circumstances and general conditions at the time of their implementation. *If consumer confidence is high they will achieve their maximum effect.* On the other hand, if confidence is weak the effectiveness of monetary policies will be questionable but at least huge reductions in interest rates will prevent the total collapse of the financial system by making credit more readily available to save those businesses at the brink of bankruptcy. There is only so much the reduction of interest rates can do. Unless the government is prepared to go into the negative interest rate range which is highly irregular (only Switzerland and Japan have tried this measure in recent memory) the effects of a reduction in interest rates diminish quickly as the rate approaches zero. Many countries like the UK has cut their prime interest rate to 3 % as of early November, 2008. There is not much room for further reduction to stimulate their economy. So, monetary policy advocates beware. It is not wise to rely too much on this tool which is good for fine tuning the economy because it is only at its best when dealing with long term objectives. At this moment it is a desperate situation for most countries so that it is more direct measures such as immediate government spending that will effectively arrest the head long dive into a global depression.

As regards the working principles of money and banking (section (9)) we have come to *the same important conclusion that the consumer confidence is the corner stone of the banking and finance system*. As we go briefly over the history of money we realise that the building of user confidence has been a long and painful process from commodity money which is based on its physical value (like gold) to the Gold Standard which was still dependent on a link to gold. As gold is in short supply many of the world's major currencies were officially linked to the value of the US dollar in 1944 at the Bretton

Woods Agreement. Since the USA had an officially fixed gold price of US$ 35 per ounce all major currencies in the post Second World War era were in effect still indirectly linked to gold via the US dollar which became everyone's reserve currency. Not until 1971 when US president Richard Nixon abolished the official price for gold (due to the heavy draining of the US gold reserve on account of the Vietnam War) that full fiat money based on pure trust by the users take centre stage. *It took centuries of human culture to foster consumer confidence in our present monetary and financial system.* Therefore, it really breaks everyone's heart that consumer *confidence has evaporated into thin air over night simply because a handful of black sheep have behaved immorally* and, in my opinion, criminally. Front line or commercial (or retail) banks are highly regulated in terms of acceptable risks they can take. More risky financial products are supposed to have been taken over by merchants banks which mainly deal with professional investors and licensed fund managers. This being the case the regulatory bodies especially those in the USA should be particularly vilgilant to prevent inappropriate behaviour on the part of the merchant bankers. Unfortunately, consumers' trust in the regulatory system in the USA seems to have been misplaced. *The US financial system and the US government have let the whole world down badly.* For a second time in less than a century (since the 1929 Wall Street stock market crash), the US finance market based in Wall Street, New York has caused a severe global economic and financial crisis in 2008. Since both major global crisis had their origin at Wall Street it will be useful to have a look at their similarities and differences to see if any useful lessons can be learned to enable us to sail safely through the present economic and financial tsunami.

(11) *Comparison with the 1929 Wall Street crash*

We shall not go into the historical details of the crash because the readers can simply look them up in Wikipedia on the internet. Let us start with the *similarities* of the 1929 and 2008 crises. Both were triggered by the *sharp fall of in the prices of securities on Wall Street.* Interestingly, both occurred at a time *when the US property market also started to fall.* In the E&F T 2008, the collapse of the merchant banks that was the last straw before the bubble burst was directly related to subprime lending most of which was tied to the faltering property market. In the case of the !929 Wall Street crash, there was no such direct link. *Both crises happened at the end of a long period of rapid credit expansion that created a bubble.* In 1929, there had been a 5 year period of sustained credit expansion while in 2008 the low interest and easy credit period has been well over 10 years. Perhaps, the most significant similarity was the over heated economy with excessive consumption probably due to the easy availability of credit. The Wall Street crash of 1929 ended the booming era of the Roaring Twenties (1920s). Let us hope that the E&F T 2008 would not do the same for the first decade of the 21st century.

Perhap it is comforting to note that there are a number of major differences between the two crises which are advantageous to the taking of crisis management procedures in the present crisis. Back *in the dark days of 1929, there was no lender of last resort* as such. Although the Federal Reserve System had been in place since 1913 there were some 12 major but autonomous Federal Reserve Banks in 12 different regions such as New York, Chicago, San Francisco, etc. The Federal Reseve Act of 1913 did not mention the establishment of a single central bank to act as the lender of last resort for fear of the government being accused of running a monopoly in banking through a single central bank. Instead, the major regional Federal Reserve Banks were autonomous in their operations and had a completely free hand in credit policies. Thus, there was a complete lack of a nationally co-ordinated credit rescue net work in case of a banking and credit crisis such as the Wall Street crash of 1929 occurred. *Today, the Federal ReserveSystem has been totally reformed based on past painful lessons and is delegated with many other financial responsibilities apart from being a lender of last resort*. For one very important thing, it actively and decisively influences the money supply in the US economy through monetary policies to provide a concrete backing to economic activities and healthy economic growth. But still, consumer confidence is the single most decisive factor in the proper functioning of any financial system by their participation. If consumers vote on the system with their feet it does not matter how much money supply is pumped by the government into the system recession is still inevitable.

Another very important difference is the US government's ignorance of the significance of using a deficit budget to stimulate the economy. The whole world went into a severe depression during the decade after the 1929 Wall Street crash. In those days, the governments of every country in the world did not know about the paradox of thrift. Being thrifty is only good at the individual level (in microeconomics) but not for the entire economy (in macroeconomics) due to the multiplier effect explained in section (8). It was the great British economist, Lord J.M. Keynes who first proposed the use of fiscal spending to lead the economy back from recession to a boom. His philosophy was finally accepted by the US president, Franklin D. Roosevelt who put his New Deal into operation in the form of infrastructure projects like the TVA (Tennessee ValleyAuthority hydro-electric power project) to lead the US economy on the road back to prosperity. An economic boom in the US economy occurred at a timely moment in 1939 just before the outbreak of the Second World War. Nowadays, governments have access to all the expert advice they need to enable them to do damage control and carry out crisis management. This is another saving grace we hope that will carry us through this potentially deadly financial tsunami.

Thirdly, the economic climate on the global scale is also much more conducive to the effective implementation of any rescue measures than it was back in 1929. *Co-operation on an international level is more effective at the present day due to well established international organisations such asthe IMF and World Bank and other economic forums like the G 20 and WTO to discuss and co-ordinate international rescue efforts.* Barring any conflicting political issues and irreconcilable economic agenda a concerted international effort could be mounted to proceed with the very important mission of rescuing the global economy from a prolonged recession. This is the only realistic way forward to combat this global financial tsunami with destructive effects that have never been experienced before by human society in both scale and magnitude.

(12) *How will the tsunami affect you ?*

The effects of the tsunami will be felt by everyone of the global citizens including you and me. Its specific effects on individuals depend very much on their background, age group as well as the economy in which they reside.

For *open economies* such as Hong Kong the effects will be swift and direct because there are no cushions to absorb the trauma. In the case of Hong Kong where I originated its strongest economic sector which is financial services are the battle ground and epicentre of the present disaster. Therefore, she will face a steep uphill battle on the road to recovery. The silver lining I can see for Hong Kong is her economic flexibility which has been proven in the past. The free and open market conditions there will be a valuable asset in times of crisis. To increase productivity will be an added advantage but her pegged currency to the US dollar can be a hinderance to a fast recovery. The reason is that the US dollar has not been devalued to an extent commensurate with her declined economic position. This is a legacy from its privileged position as a reserve currency for other countries and its role as a safe haven in times of financial upheaval. Since the Hong Kong dollar is pegged to the US dollar it means that her exports are artificially held at a higher price not related to their demand and supply conditions. This will not improve her competitive edge in such difficult times. For individuals living in such an open economy consolidation is the best bet to weather the financial tsunami. Do not rush in to change your investment portfolio at this unclear stage. It takes costs and may be further risks to change the make-up of your portfolio. Up to now, your investments would have taken a heavy beating regardless of their form (i. e. property, equity or bonds). Hopefully, you did not speculate too much using margin accounts or leverage. Otherwise, your holdings might have been forcedly sold without the possibility of waiting for an economic recovery to regain lost ground. For those who are still liquid wait for the proper opportunity to go bargain hunting on undervalued stocks which preferrably are not equities in financial institutions. There would still be turbulent movements in the share prices of such equities. The term bonds (which represents a nightmare for Lehman Brothers mini-bond holders) is still a possible target for investment but only buy quality bonds such as US treasury bonds. Wait for the next auction of such bonds by the US treasury to assess their popularity before buying. You should go for the medium (2 to 3 years) to long (over 5 years) term. Speculation should be avoided unless you have plenty of spare cash.

For a *closed or sheltered economy* like Australia which is commodity based it is in a better position to weather the storm because there is always a demand for basic commondities although the demand as well as their prices will fall in the short term. The Australian dollar has gone down a lot in value due to the financial tsunami and it has thus made Australian exports more competitive. This is a positive development for the Australian economy. Like everyone else Australian investors must have taken a heavy beating. Personal net worth will have fallen substantially but stay calm. All is not lost yet. China's latest (as of early November , 2008) extra spending package of some US$ 870 billion (equal to about 8 % of her GDP) has given a tremendous boost to the Australian dollar because of huge potential increase in demand for Australian resources. If the concerted international effort in increased spending to support the ailing world economy go ahead Australia will stand to gain tremendous economic advantage not possible for other countries. This scenario is more than likely to happen. Therefore, do not be too pessimistic about the Australian currency. Besides, the interest rate in Australia is still relatively high in comparison to that of other countries.

I think *US citizens* are among the hardest hit population in the world as far as the present global financial crisis is concerned. The hard working *middle class is the most innocent victims* except for those who have speculated heavily in defiance of imminent risks on account of their insatiable greed. The amount of increase in US national debt of up to 10 trillion (half of which had been added in the past 8 years) that blew the electronic display board in Time Square, New york City, will take at least two generations to repay. In the meantime, all the debt servicing are done out of taxation on each and every hard working US citizen who is already struggling hard to cope with their deteriorating financial situation. There are only very limited ways open to the US government to finance the gigantic size deficit spending. More taxation is out of the question because that will hurt consumption. The other two available channels are printing more money which is inflationary and irresponsible and the only remaining channel of increasing national debt which will lead to inequitable income distribution and inter-generation transfer of the debt burden (see section (6)). The US government has to choose the last but still unsatisfactory solution in financing the huge deficit spending simply because there is no other option open to it.

What about the diminishing value of *our superannuation funds* ? Alas, this is a sad but unchangeable fact. The sensible strategy to adopt largely depends on your age. If you have 20 or 30 years to go before retirement the problem is not so bad in the sense that you still have a lot of time to make up for the huge amount of losses. If the existing mix of your porfolio is on the progressive side then it pays to change some of your future contributions to the more conservative products that are aimed at long term growth rather than for instant price appreciation. There are bound to be turbulent spells in the securities market in the short to medium term. If you are planning to retire in the near future the best advice is to defer it as long as possible to allow more time in the hope that the market will regain some ground when the situation has stablised. If you must retire shortly try to delay drawing on your funds for as long as you can if you have savings or other side income. The worst part is not the loss of your asset value which may recover to some extent in time. It is the loss of job opportunities for those about to start their careers. The above general suggestions have not taken into account your tax position and existing financial commitments. As I mentioned at the very beginning everyone must look carefully at his or ger own particular circumstances. Ask for professional financial advice as and when you need it.

The property market in the USA was hit badly. In fact, it is the source of the present crisis. Recent reports indicate that the US property market has been on the rise for the past 5 years so that adjustments had been expected since more than 2 years ago. The credit bubble created during the last decade or more seems to have fueled the extended property market boom through subprime lending. Many US property owners are borrowing beyond their means. The American dream to own one's home has now turned into a nightmare for everyone. When the US property market started to decline in 2007 many *no recourse mortgages* were dishonoured by the borrowers who simply gave up their house for bank foreclosure without having to pay the shortfall between the lower forced sale (by auction) price and the outstanding mortgage loan amount. Numerous forced sale of properties by mortgagees such as Fanny Mae and Freddie Mac (together they account for some 50% of the property mortgages in the US market) invariably lead to further tumbles in all property prices across the board. A rough forecast has suggested another 20% fall in US property prices before things will stablise. So, further failures of financial institutions in USA can be expected.

Recall that money supply is a flow concept (section (8)). The unwillingness on the part of banks and financial institution to extend credit facilities for fear of default or a possible run on themselves together with the massive withdrawal of funds from the financial system due to fall in consumer confidence all add up to a sluggish circulation of funds through the system. Such drastic slow down in the rate of fund circulation very quickly turns into a super crunch in credit being amplified by the knock on effect. The worse part is that some of the cash withdrawn is now kept in people's own safe at home. There was an interesting report from the UK that the business of security vault installation companies have recorded more than 300% increase in their business. This really tells a sad story about the total loss of consumer confidence in the financial system.

All in all, everyone in the world has been adversely affected to different extents depending on where they are; how old and what their personal circumstances are. Do not despair if your net worth has shrunk. Just remember that there are many more people who are worse hit than you. The most important thing is to keep your health and your humour. Live to fight another day. Let me put it this way. As long as you have the basic essentials plus your health, humour, happiness and home (meaning family) the momentary increase or decrease in your wealth in numerical terms is not that important. After all money is nothing until you spend them. You cannot even take a single cent with you when heaven (or hell) calls you up. While you are alive you will not plan to spend all of your wealth anyway. So, it is just a number game that should not affect the other important things that you own as mentioned above. Call me stupid if you like. I think true happiness for a person should not be measured by how many things he or she has but by how few things he or she needs. Now, let us get on with our final leg of seeking the causes of this devastating financial tsunami.

(13) *How and why did the tsunami happen?*

The short answer is *corporate greed and negligence on the part of the US government in not properly regulating her financial market.* A smaller amount of responsibility should also be put on some greedy investors who jump on the band wagon of buying dubious financial products with unreasonably high returns. Such abormally high rates of return should have sounded the warning bell. They simply fly in the face of imminent risk and throw caution to the wind. The eternal investment law of the balance between risk and return must be kept firmly in the minds of investors.

Of course, the above is an over simplification of this tragic fiasco. The *background economic conditions in the USA which are an important contributing factor must be understood. During the past decade the credit situation in the US financial market has been easy and facilitities are readily available.* There has been steady economic growth under relatively low interest rates as the US government pursued monetary policies to increase money supply to promote steady growth at acceptable rates of inflation. The overflowing liquidity situation has prompted financial institutions to look for vehicles to produce higher rates of return to cater for investors' demand for better returns for their investments as compared to the bank deposit rate. Due to loop holes in US financial regulations and the lack of proper supervision dubious products like CDOs and other worse kinds of their derived forms flooded the financial market through the use of special purpose vehicles (SPV – corporate entities established in tax haven jurisdictions like the Cayman Islands which are exempt from US financial regulations). The final destination of the investment *funds raised through these SPVs are directed mostly to subprime mortgages* in the US property market and to a lesser extent to other high risk business ventures. Subprime mortgages refer to property mortgages whose borrowers need no proof of their income to show their ability to service their mortgage loans. In worse cases, even past defaulters are eligible for new mortgage loans without any effective scrutiny. The easy availability of mortgage loans through subprime lending further fueled the property market which was due for adjustment after some 3 years of previous boom. All these irresponsible lending arrangements are possible because of too much liquidity and improper regulation all done in the name of a free market for profit maximisation. It was a tragedy waiting to happen when the last straw falls on the camel's back. *It was a tremendous credit bubble destined to burst at the slightest poke.*

In such a volitile situation, black sheep among the corporate custodians used their trickery to complicate matters by promoting and setting up numerous investment funds aimed at luring other investors to put their money into CDO related funds. Very *often, there are cross holdings between some of them to make proper risks assessment* of *these investment funds quite impossible even for financial professionals.* In the meantime, the corporate custodians of corporations acting as fund promoters, asset managers and financial advisers are reaping hundreds of millions in commissions and management fees with the CEO of the bankrupt Lehman Brothers merchant bank pocketing US$ 800 million over the past few years based on his testimony to the US congressional committee set up to look into the collapse of the giant US merchant bank. To gain more consumer confidence, some of these SPV had their CDO related assets insured to obtain AAA credit rating from recognised credit rating agencies to make it more readily acceptable to other professional funds managers who could in turn sell the products more easily to the unifiormed individual investors. In general, individual investors are not in a position to tell their own risk exposure although the unreasonably high rates ot return should have sounded the warning bell.

The origin of the present financial tsunami can be traced back to the collapse of the subprime mortgage market in August 2007. As the US property market started to decline at the time due to what can be considered as part of a normal cycle of downward adjustment many property owners had negative equity in respect of their property under mortgage. This means that the market value of their property is lower than the amount of their outstanding mortgage loans. As *many of these mortgage loan agreements carry the no recourse provision* borrowers started to give up their property rather than to carry their negative equity since there is no more legal obilgations to bear after giving up their mortgaged property to the mortgagee (the bank or financial institutions like Freddie Mac & Fanny Mae). The foreclosed properties then flooded the market through forced sale auctions to push the prices in the property market on a downward spiral. The reality was that many property owners who jumped on the band wagon at the height of the US property market boom cannot really afford to buy their property if it were not on account of the easy availability of finance through subprime lending. So, they are in a way victims of the credit bubble although they are still responsible for their own decisions to go into the property market. But who can blame them having regards to the long established American dream to own one's home. It is a combination of all these unfortunate circumstances some of which arose as a result of corporate greed and lack of regulation in the case of CDOs and related financial products that jointly led to the tsunami.

The main reason for the spilling over of the subprime crisis to the whole world *that culminated in the E&F T2008 is the complicated nature of CDO related products. For this reason alone, CDOs and the like should have been banned from the financial market.* Through the working of financial derivatives (see section (4)) many innocent investors in other parts of the world including Euor Zone, Asia and Oceania have found themselves involved in CDO related products without really knowing it. The reason is that many investment funds (including pension and superannuation funds) can be tied to CDO products through investment in a long chain of related funds. When things go well and the market is on the upward trend all funds can afford paying financial returns to investors so everyone is happy. The mass hysteria is such that even normally conservative banks are all involved through their associated corporations. They could not afford not to be part of the CDO band wagon at least in some minor way because their operating profits will be less attractive compared to othe banks who were part of the CDO band wagon. As a result there are unfortunate incidents of even some remote municipal councils in the country of Norway going bankrupt from CDO related investments. These communities have never benefited from globalisation but their first taste of it is financial disaster. This is simply tragic.

This brief initial post mortem on the present financial crisis is by no means complete. Nor is it in depth as it has not touched upon the technical workings of the global financial market which is beyond my ability and the scope of this paper. However, the present brief discussion does hightlight some important areas that should be addressed in a much needed regulatory reform of the global financial market starting with that in the USA. I sincerely hope that this can be achieved quickly at the G 20 Summit now under way in Washington, D.C., USA.

(14) *Conclusion and predictions*

It may be too soon to draw any valid conclusion from this still developing crisis. However, it would not be too presumptuous to point the finger at *corporate greed and failure of proper regulation of the financial market as the prime culprits*. There is also an urgent need to re-examine the basic philosophical outlook of using profit as the sole motivator of efforts under a capitalistic or free market system. Regardless of the severity of the law and the tightness of regulations the *cunning human mind can and will find loop holes and grey areas in the law to exploit.* There are always the legal brains to create morally questionable albeit legal (when the full benefit of the doubt legal principle is applicable) schemes such as CDOs to aid the black sheep corporate custodians to rip off some greedy investors. This is because both the legal advisers and the dubious corporate custodians are solely motivated by profit. When there is enough money up for graps there are always greedy and immoral characters to successfully take up the challenge to dodge the law. Then, the *legislators and law drafters can never completely envisage all possible real life scenarios that should be taken care of* when they pass the relevants laws and regulations. The *criminal brain is always one step ahead of the law because the black sheep and their helpers have the benefit of real life commercial experience* to understand the various pitfalls in existing regulatory measures. The usual confidence and reliance on professional integrity by the investing public has been totally shattered by the immoral and quasi-criminal behaviour of black sheep financial professionals. This is a serious and mortal blow to the proper operation of the financial market in future.

The only satisfactory solution is to *revise our standards and values for measuring success and rewarding efforts under the free market system which most of us still cherish as the lesser of two evils when compared to a centrally planned economy* (see section (3)). Some *urgent and radical reforms to the financial market* banning some dubious products and practices that involve a conflict of interests are on order. There should not be unlimited reward to induce the endless pursuit of higher profits by corporate custodians notwithstanding obvious risk and immoral behaviour. *Concerted international efforts on fiscal spending and active monetary policies* must be implemented as soon a possible *to stimulate the global economy.* The good news is that all of these important issues are on the agenda of the G 20 Summit being held at in USA starting from 14th November, 2008. These 20 countries represent some 85 % of the world's total annual economic output. So, whatever positive steps agreed by them will have a decisive effect on the global economy. Countries with ample foreign exchange reserve surpluses such as China (with US$ 2 trillion in reserve) and countries in the Middle East will play a major role in the recovery process. They must *avoid falling back to trade protectionism and pushing their own political agenda at the expense of a global economic recovery that will positively affect every global citizens* (see section (7) on ideal use of foreign exchange surpluses).

I would venture to propose one of my personal conclusions on the present economic upheaval. There is a very useful lesson to be learned by investors. With all the advanced mathematical modeling in the predictions on market trends using powerful computers there is *no certainty on any prediction.* If there were, the computer would have been king of the investment jungle. You should see that all predictions are necessarily based on past performance and trends. These are all histrorical factors the trend of which must necessarily change when there is a drastic change in the prevailing circumstances such as in the present financial tsunami. In other words, the marginal or latest figures will inevitably affect the past average prices. The more drastic the recent fall in prices of securities the greater changes in their past average prices. The very useful scienctific theory of CHAOS which originated from weather forecasting in the 1960s predicts that there should be no particular or special signs for any imminent catastrophic changes in the investrment market. An equally bad situation like the collapse of the US subprime lending market might not have caused a disaster of such a global scale at other times. It is when the conditions are right in their sensitive combination that has led to the tsunami. In other words, the last straw in any catastrophy could have been as light as a feather. It all depends on the complicated interactions between minute changes in the previous history of the whole system leading up towards the built-up of the final tragedy. Like an avalanche at the peak of a snow capped mountain. When and how an avalanche will occur depends on intricate factors such as the topology of the mountain terrain, the weather conditions, the amount of previous snow fall, the gradient or slope of the snow accumulation, etc. When the avalanche finally happens the last straw could be a gust of strong wind, a slight rise in the air temperature or a loud shout from an excited skier. It is all a matter of intricate interactions of the physical factors. In the investment market it is even harder to predict the final outcome of impacting events because it is mostly complicated human opinions and contigent (based on individual assessment of the reaction of others) decision making that are involved. Caution is the only reliable advice plus the reliance on the time honoured investment law of a balance between risks and returns. This conclusion of mine must not be taken to mean that all professional financial analysis should be ignored completely. However, it does mean that there are limitations to the certainty of any prediction. In the present crisis there are clearly human causes of corporate greed and improper regulation of the financial market that are avoidable.

Notwithstanding the uncertainty of any prediction, we still have to make an educated guess on the possible future course of events for our own financial guidance. Without committing myself totally and with a degree of confidence of say, 65 % of my personal level of confidence I would predict a stablisation of the situation based on the hopeful signs of a concerted international efforts especially by member countries of the G 20. As regards the length of time before the situation will stablise, I would place a rough estimate at 6 to 10 months. This is based on an allowance of 3 months for some kind of positive consensus among G 20 members and a further 3 to 7 months for the execution and resultant effects of the economic stimulus measures. This is, of course, based on the assumption that a mutually acceptable agreement on the rescue package is forthcoming within 3 months. If this were not the case then there would be the possibility of a deep world economic depression on a scale never experienced before. At this stage, I am still optimistic on an effective rescue spending package being agreed to by all G 20 members because we have come a long way from the dark and ignorant (of the relevant working economic principles behind boosting consumption in times of a reccession) days of the previous world depression in the 1930s which was mainly due to a prolonged credit crunch and reductions in government and private spending. G 20 members should know better not to make the same silly mistakes again.

Based on a normal economic cycle of 2 to 3 years, the peak and trough of the cycle occurring at roughly half of that period, the most optimistic prediction on the time of recovery from the lower extreme position of the present downturn should be 3 years (doubling the normal time of one to one and a half years during normal cycles). So, we must be prepared for the long haul. More pessimistic prediction would place the upturn from the present decline which has not yet bottomed off to 5 years. If this were the unfortunate case, the whole cycle for the anticipated world depression could be as long as a decade. Again, there is the assumption that the G 20 will come to a consensus within 3 months. Anything longer than this period will further dampen consumer confidence which will lead to more drastic shrinking in consumption. This will result in a greater increase in unemployment and could lead to trade protectionism in different countries because of political pressure from trade unions, etc. Once protectionism (see section (7)) has again raised its ugly head the chances of a fast global economic recovery will have been lost for good. Let us all hope and pray that common sense will prevail and the more optimistic scenario will become a reality. My humble predictions here may have to be revised in the light of further developments of the present crisis and the outcome of the G 20 world economic summit. In the mean time, let us keep our fingers crossed and be prepared for the worst while always hoping for the best.

It is customary practice and out of courtesy to give credit to the source of information and borrowed ideas upon which a paper is based. In this instance, I cannot exactly pinpoint the sources of all the relevant principles described here because they are all a part of my knowledge bank kept in my head which I have accumulated throughout my university days, professional training and work experience. There is definitely no question of plagiarism here because none of the principles have copy or intellectual rights attached. They are all basic and common knowledge in their respective areas. For the foregoing reasons, I should perhaps thank my professors, lecturers (two of whom are now vice-chancellors of different universities in Hong Kong) and tutors (one of whom is now in charge of the monetary authority in Hong Kong) back in University of Hong Kong where I got my first degree back in 1971. Then, I have my mentors to thank during my professional career in Price Waterhouse & Co., CPA and my immediate senior officer in the former Inland Revenue Department of the British colonial government (who was the Commissioner of Inland Revenue in Hong Kong before his retirement – that office is now held by my classmate from the University of Hong Kong). Last but not least, I give credit to Wikipedia, the free encyclopedia on the internet for some data and historical facts on which I needed to refresh my memory.

Appendix - other frequently asked questions

(1) Why is *monopoly* sometimes allowed in a free market economy ?

Basically, monopoly is against the free competition principle but it may be tolerated and strictly regulated by law in the case where a huge amount of capital and risks are involved in a giant infrastructure project such as a mass transit system or electricity generating and supply grid (or network). Monopoly is tolerated under such circumstances because no other investor will be willing to undertake the project unless a certain period of non-competition is ensured to get a payback on the capital investment plus reasonable profit. The monopoly must be re-tendered after a fixed period and deregulated (opened to competition) as soon as possible.

(2) Should we rely on the professional analysis based on available methods of *predicting market trend* for securities ?

As mentioned above, there can be no certainty in any prediction on market trends. Even with mathematical modeling using the most advanced computer that takes into account all relevant factors and all past data. It is the nature of unpredictable human behaviour which is the driving force behind the market. During normal business cycles such predictions are more reliable but all predictions will fail in times of huge and volitile upheavals. However, it would be fair to say that professional analysis is the best available source of advice in an imperfect world. Therefore, use them as reference only and never fully commit your investment based on advice alone.

(3) Where have the *funds* corporations set aside from *provisions for depreciation* of capital assets in each accounting period gone to before the actual need to replace those capital asets arises ?

All the provisions for depreciation on capital assets come from current year operating profit. Before they are actually needed such funds will be tied up in other income earning assets. We can see the application of funds in the funds statement of a corporation which forms part of the published annual audited accounts of the public corporations together with the profit & loss account and balance sheet for the period.

(4) How will the government's decision to *issue more national debt affect me ?*

National debts must be ultimately borne by every citizen of a country. To start with all debts must be serviced. Interest payable on national debts come from taxes collected from the citizens. If you are the rich ones who have bought the government bonds you earn income from the interest payments due on the bonds. Although part of the interest come from taxes you paid other poorer citizens will also have to pay extra tax but cannot share in the interest payment on the national debt. The rich becomes richer the poor poorer. If the national debts are long term ones there will be an inter-generation transfer of the debt burden which your children will have to bear.

(5) How will a *fall in the value of my country's currency affect me* ?

It depends on your pattern of expenditure and your economic position (i.e. if you are an employee or a proprietor, etc.). In a closed economy which is the case with most countries citizens who use local products manufactured locally based on local components will be less adversely affected than those who use imported items. Foreign travelling and outward remittance of funds will be more expensive. In the unfortrunate case that your country needs a lot of imported products due to a lack of local resources like Singapore then there will be a high rate of inflation. If you are an employee under these circumstances your fixed salary will never catch up with rising product prices. Your standard of living will deteriorate. On the other hand, if your are in business you can always increase prices of your goods instantly. Furthermore, the effective lowering of the prices of your exports due to a fall in your currency value wil make your business more competitive in the world market so that you probably end up with more business and, therefore, more profit.

(6) Why is the *lowering of interest rate* by the government *sometimes ineffective in boosting consumption ?*

Monetary policy is a passive and non-intrusive economic tool. When consumer *confidence is low* due to an uncertain future such as in the present crisis consumers are not easily persuaded to increase their consumption. Everyone will be conservative and keep to the motto of " saving it for a rainy day ". *More direct measures such as fiscal spending must be taken* to complement the effect of a lowering of the interest rate. This is exactly what the G 20 economic summit is discussing at this moment in the hope of avoiding a severe global economic depression.

(7) Why has the *US dollar not fallen drastically* in line with the steep decline in the US economy ?

This is because the US dollars is widely used for both trading and *as a reserve currency* for many other countries. Although the volume of trade in the USA has decreased and its exports weakened many people still need US dollars to trade with other countries and for investment needs. In fact, past history tells us that the *US dollar has always worked as a safe haven for investors in an economic upheaval* probably because people still think that the US economy will ultimately recover in the long run so that there is always a useful purpose in *holding US currency for their future needs.* More importantly, the amount of *US dollar denominated assets* such as US treasury bonds (the total 10 trillion US national debt are in a major part supported by US treasury bonds issued over the years – some more than 99 years ago) *held by other countries* like China *are so huge in value that no one wants to see their US dollar denominated assets depreciate in value.* Therefore, such *non-trade demands for the US dollar support the US currency value.* This fact is going to hold true until such times as another popular reserve currency is found to replace the US dollar.

JKHC (18/11/2008)