From crisis to hard times: the value of money

Letters *from* Tom Kremer

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From Crisis to Hard Times

The economic puzzle in 10 simple, easily understood moves

By Tom Kremer

the man who brought Rubik's Cube to the world

with Johanna Möhring

The Book

These ten friendly, informal letters have most of the answers to the questions we are all asking:

What has caused the recession, who is responsible, how bad is it, when will it end and what about its aftermath?

The writing is straightforward, succinct, interesting and eminently readable.

The text is miles away from the dry, technical jargon associated with the subject.

The ideas on money, expectations and assets, government and free markets are refreshingly original. The reader is left with a good grasp of basic economic principles as they relate to the 21st century.

The content may well be controversial but the research is sound and the conclusions convincing.

About the Author

Thomas Kremer was born in Transylvania. He survived the concentration camp of Bergen-Belsen and fought in Israel's war of independence. After reading Philosophy at Edinburgh University, he carried on post-graduate research at the Sorbonne and King's College in London.

Having pioneered game-based therapy for disturbed children, he designed a range of educational games adopted by primary schools throughout the UK.

As a professional inventor, Thomas Kremer has created over 250 games and toys now widely distributed in all international markets.

He is the chairman of numerous middle-sized companies he himself founded over the years in Britain, Germany, France and the US. Chief among them is an ideas laboratory that is now the leader in its field in Europe.

Author of the critically acclaimed *The Missing Heart of Europe*, he has now turned his attention to publishing with a focus on trying to resurrect the art of the essay.

Thomas Kremer and Lady Alison, his wife, live in a minor Elizabethan manor house in Devon, restored to something like its original glory through 25 years of deeply satisfying labour.

Letter 1
Questions

In times of great uncertainty, the instinct is to find a convenient culprit.

Five years into the ongoing financial and economic turmoil, I had expected your minds to be set at ease by the impressive performance of world leaders so united in the face of the global crisis. United in identifying causes and allocating blame. United in saving the world from the dismal effects of the recession. United in unleashing all governmental resources, irrespective of cost, to stimulate the economy. United in creating a brand new world financial order. United in providing sufficient funds to the relevant international bodies to bail out insolvent national economies. United in exercising self-discipline not to favour and protect their own electorates. United to constrain bankers and emasculate tax havens. United, as per usual, to combat global warming and ease the lot of the global poor. After all, the media, in general, applauded, the markets notched up a few points and the leaders smiled at each other as they embarked on triumphant homecomings.

So why do I see so many misgivings, so much doubt, such continued bewilderment in your missives? The question exercising all of you is how severe the economic downturn is and how long it will take us to get out of. This question is not currently on any conference agenda agenda and, I must confess, its absence is not a great surprise. It is a cardinal rule at all summits never to put items on the agenda that do not lend themselves to unanimous and solemn proclamation. In the absence of any notion about the dimension of the crisis, it is only natural to doubt the competence of the people claiming to be charge of it. And doubts, as we know, breed a whole host of further questions, more penetrating than the original one.

As a measure of the general ignorance obfuscating the field, the pronouncements of our past Chancellor serve as a good illustration. Fortunately, Alistair Darling, unlike his predecessor, did not suffer from delusions of omnipotence and infallibility and so he was prepared to admit having been wrong from time to time. In an admission, made public just before the April 2009 budget, Darling conceded that he had not realized the severity of the recession when presenting to Parliament with his pre-budget financial assessment. Previously, he had talked about *quantitative easing* being merely an academic possibility

– some three months before the printing presses started rolling. In the summer months of 2008, with the property market in free fall and the credit crunch biting hard, Darling thought of recession as a distinct future possibility. The previous autumn, he had considered the collapse of the Northern Rock an isolated incident, to be handled at relative leisure, whilst our *real economy* was happily sailing along. So a man with all conceivable sources of information at his behest and hands firmly on the major levers of power had been systematically six to twelve months behind economic and financial events.

The former British Chancellor should not be singled out unfairly. Some ministers, in treasuries elsewhere, may have been a little quicker on the uptake, but it is a fact that no one in power, and wielding tangible influence, knew in time what was coming – a financial and economic crisis, combined with a sovereign debt crisis, which still threatens to blow up the eurozone – just as no one in authority can tell us now how bleak the future will be. Your doubts as to the ability of world leaders to control the course of the economy, in ignorance of the true dimensions of the crisis, have given rise to questions of such diversity that they cannot be dealt with on an individual basis. The best I could do is to group them and formulate a small number of questions that, in their totality, reflect your most acute concerns.

How has it been possible for those in charge of our financial and economic institutions, both public and private, never to have seriously envisaged such a dire scenario? How could the world's major bankers lend with gay abandon money they did not have at ridiculous rates to borrowers congenitally unable to repay? How could pension fund managers invest little people's savings in questionable and vastly overpriced assets? How could a British Prime Minister, having served ten years as Chancellor of the Exchequer, believe in 2007 that economic cycles had had their day, declaring that he had forever done away with an economy of boom and bust? How could property prices continue to rise long after those properties had become unaffordable? Why did alarm bells observe universal silence until it was far too late to moderate events?[1]

What goes for a pathetic excuse of an answer, widely adopted by all those responsible for not anticipating the crisis, is that it was unforeseeable and that its occurrence is unprecedented. In common language the words 'unforeseeable' and 'unprecedented' have quite precise meanings. Despite sophisticated monitoring devices, natural catastrophes, such as tsunamis or earthquakes remain to a certain extent unforeseeable. A universal cure for all cancers, on the other hand, has not yet been discovered yet but is eagerly anticipated. That the crisis was unforeseeable implies that it was something like the striking of a natural disaster. But unlike the sudden shockwaves of an earthquake, there were signs in abundance of the impending recession. The claim that the crisis is unprecedented is only partially true. Recession, depression and cyclical downturns are well-rehearsed economic phenomena, but their occurrence on such a global scale is admittedly very rare. Even so, with global communications, global travel, global trading, global financial transactions and a closely interwoven global economy, would it not have been reasonable to expect a financial and economic meltdown to be global too?![2]

So the next logical step is to seek reasons for such a blatant failure to recognise the danger. Strictly speaking, there can only be three possible ones: lack of information, ineffective organisation of information available, and a powerful disincentive to face the facts. Our 21st century economic and financial condition certainly provides a great abundance of data, perhaps too much of it. Stock exchange indices are updated minute by minute; company results, profitability and prospects, flood in daily; government foreign exchange reserves, country by country, are in the public domain, so are their deficits and borrowings, the notes and coins of their currency in circulation as well as the broader measure of money supply[3]; private earnings and borrowings, the consumer price index and employment figures all carefully tabulated; interest rates across the world are logged, analysed and predicted; natural resources, both above and below the ground are accurately estimated, national economies are regularly audited by highly respected international bodies like the OECD[4] and IMF[5] who also forecast world trends; and so on and so forth.

So what about the organisation of this wealth of information? Professional analysts, hunched over their screens still interpret data, predict and advise. Fund managers struggle to read the signs of a wildly perambulating market as they re-arrange their portfolios. Economic gurus are still gainfully employed to make some sense of the daily inflow of news. Bankers, having given away the bulk of their shareholders' money, are sitting tight, haunted by their worst nightmares. Great international institutions keep on publishing their routine predictions in the light of past events and present statistics. Academics, having dusted off the pages of classic economic theories, argue their relevance to the current situation. And governments, worldwide, are too busy formulating policies and launching initiatives to bother with digesting the brutal facts.

These attempts at organising and interpreting a voluminous flow of data may be of value in some instances when restricted to very specific matters. A thorough analysis of company balance sheets will give a good indication of their fragility. The size of a budget deficit should determine a government's room of manoeuvre when considering expansion, taxation and borrowings. The statistics of dry goods shipments, their volume, free capacity and rates, tell the story of the probable trend of global economic activity in the succeeding months. The world's potential copper production in relation to a projected demand will definitely have a bearing on its estimated future price. Some of the predictions derived from an assiduous study of specific economic or financial factors turn out to have been on the nail, others end up many miles from the eventual outcome.

The trouble is that it is not possible, with any degree of certainty to know in time, which is which. But even choosing to follow one set of predictions, perhaps based on better research and more cautious assumptions will not tell us how deep the world recession is and when it will end. Unfortunately, the same applies to national economies given their ever-closer inter-dependence.

So if the organisation of the information is inadequate, the next logical question is this one: is the exact meaning of what is being measured by the available statistics clearly understood? More simply, do we know what the figures show us? Some of you mention, for example, a key measuring instrument, known as the Gross Domestic Product (GDP). Every national economy has its own figures made public with monotonous regularity every quarter. It enjoys the status of biblical sanctity, its meaning never questioned, never probed. It is supposed to be a measure of how well or badly an economy is doing. Positive figures mean growth, the higher the figures the greater the growth. Year-on-year growth means more activity, more output, more jobs, and more tax revenues. But what does GDP really measure? If it measures anything at all, it tracks the aggregate volume of economic activity. This activity includes virtually everything under the sun: manufacturers producing physical goods, plumbers plumbing, policemen policing, teachers teaching, nurses nursing, armies fighting. But, you are asking, does GDP tell us anything beyond the volume of the economy? Does it measure the quality, the profitability, the sustainability of these activities and their contribution to the value of the economy?[6]

You are, of course, right in pointing out that a manufacturer may be producing goods at a loss; traders may be merely replacing items prematurely expired; the police, the army, schools and hospitals, all critical to the well being of our society, constitute costs not gains; bank paper profits, as we are now witnessing, may damage the economy rather than contribute to it. Indeed, the volume of any business has little to do with its viability and prospects. Relying on GDP as a key indicator of the health of a national economy is akin to estimating the earning power of a family by counting the number of times its members go in and out of their front door. This might be putting it a little too strongly, but an answer to the basic question is crucial. To estimate the true state of the economy, we need other analytic tools.

But would improved analytic tools on their own be sufficient to help us get to grips with the true nature of the crisis? Or is there a common fault line in economic models implicit in the explanations currently on offer to account for the savage downturn? Economic theories made their first tentative appearance with the Age of Enlightenment when mankind became convinced that the universe, and everything within it, lent itself to rational explanation. But unlike full-blooded sciences, such as physics, chemistry and astronomy, all subject to objective observation and experiment, economics have never attained such scientific credentials. Whilst statistical data of economic transactions grew in sophistication and detail, divergent theories have grappled with the burning issues of the day: balancing demand and supply, freeing trade and abolishing tariffs, controlling the money supply, regulating financial markets, guiding government intervention, managing inflation and deflation, avoiding excessive growth and severe contraction. But fragmented debates and considerations of bits and pieces do not create a coherent whole.

Confusion reigns supreme because economic theories, from Adam Smith to Keynes, Hayek and the Monetarist School, do imperfectly mirror 21st century realities.[7] Those at the forefront of advocating various measures to alleviate the current situation tend to use selected distortions of respectable theories to justify their proposals. What we need is a new conceptual architecture to prepare the context for the strands that make up the crisis. Historically, the crucial missing element from economic models is man himself, the principal agent of all material transactions. The difficulty economists have always had in quantifying human nature as a factor in any equation. Insofar as man featured at all, it was as someone having rational, or on rarer occasions, irrational expectations. But what is happening now has little to do with a distinction between aberrant and calculating behaviour. It has all to do with a wide-ranging spectrum of fears and ambitions that underlie the human psyche. This psyche has to find its way into any meaningful economic model.[8]

Many of you are deeply puzzled by the credit crunch, especially after having lived through at least a decade of everyone busy lending and borrowing. The credit crunch, such a prominent feature of the crisis, is characterised by fear. A fear that is holding financial markets in its grip, slowing down the movement of money and making loans of all sorts so hard to come by, despite creative manoeuvring by the Federal Reserve Bank, the Bank of England and the European Central Bank, all flooding the markets with liquidity. This is a real conundrum. To try to get to the bottom of it, we have to learn to appreciate the wondrous and unique quality of money. This needs some explaining and a letter for itself.

But, irrespective of the mysteries of money, you go on and ask how could the financial markets on their own create havoc with a real economy supposedly so strong, so healthy, so resilient? The much-cultivated claim of material economic soundness uprooted by financial frenzy, promoted in governing circles, is gaining general support.[9] Frankly, I am very sceptical as to its merit. It is too convenient a lightning conductor to locate the epicentre of the crisis in the financial world. It is fairly obvious that financial markets and the real economy cannot be related to each other in terms of direct cause and effect. If one is to determine the other, it is the real economy that would be more instrumental in shaping financial markets rather than vice versa. But it is more realistic to think of the economy and the market as mutually reinforcing. If the economy is strong, the market is buoyant and when then market sentiment is optimistic, money moves more easily, boosting the economy. I suspect therefore that there has been something radically wrong with the economy. Something that has been the major cause of the crisis, something vital that we have failed to see.

Some of you are getting a little tired of hearing the constant refrain of *the global crisis*. It tends to convey the impression that somehow the crisis is not of our making, that it belongs to the world at large and that it is the world's business to get rid of it. On the face of it, there is nothing wrong with reminding us that the severe recession affects all economies of our planet. And it is a fact that virtually all economies have been growing apace for the best part of two decades. But the term 'global' conjures up a misleading image of a seamless universe within which a variety of substances circulate freely. Rises in temperature, the finality of resources, trade, terrorism, epidemics, flow of information, the spread of culture, all have an obvious global dimension. But their effects are not uniformly distributed and the response to them must vary from country to country. The current crisis does have a global aspect, but not every economy is equally indebted, suffers the same severity of imbalances or is in so dire a peril. You are right, instead of using the mantra of *global*, we should try to understand with greater accuracy the nature of economic interdependence, as we address the complexity of the crisis.

By far the most frequently posed questions concern the government. You all want to know what role it has in the crisis. The general tone of official and unofficial pronouncements makes it clear that the government has been in no way instrumental in the inception of the recession, that its present well-intentioned intervention has the power to end the crisis. I suggest we do not dwell on the inherent contradiction implicit in these statements, it is too obvious. Whatever the impact of the government, its influence on the economy must make itself felt as much in good times as in bad ones. And its power is considerable. Let me just say here that it is the employer of a big chunk of the working force, it is by far the largest single spender and borrower and that it has the unique authority to create money and determine its cost.

The extent of government control over the economy raises all sorts of questions about the measures now being taken to reverse the downward trend. Irrespective of the differences swept under the carpet, there was a performance of unanimity at the G20 as to what should be done. The world leaders were at one on the need to stimulate economies, on bailing out banks and countries in financial difficulties, on injecting liquidity into the system, on borrowing and creating new money, on penalising greed and pursuing tax evasion, on regulating the entire financial world more severely and on abjuring all forms of selfish protectionist moves. And looking around, there are not many dissenting voices. People are mostly content to ask how effective these measures are, and how quickly they will put an end to the crisis.

I know you are instinctively troubled by the whole approach. You are uneasy about accumulating more and more debt on top of the massive amount most of us have. You find it hard to believe that our ills could be remedied by the very medication that caused the illness in the first place. As for myself, I have no doubts. I am certain that the medicine being administered is toxic. It is more dangerous than even the toxic debts on banks' balance sheets. Radical and sudden government intervention in the organic functioning of any economy has invariably had a negative outcome. What is being done now, as a consequence of a profound misdiagnosis, will damage our economy, our finances and our society for at least one generation to come.

Of course, the question on every one's lip is when will the recession end and the economy return to normal? You will have noticed just how vague, evasive and unhelpful the proliferating answers to this reasonable query are, five years into this crisis. Even when officials, experts and advisers venture to hazard definite dates, these bets are hedged by so many conditionals as to make them worthless. In any case, these hypothetical dates tend to change with every fresh fragment of information leaking out of governments, companies and financial markets. Yet, once the state of economies is properly assessed, it is not impossible to reach a prognosis, to venture a well-reasoned guess.

Using the language of common sense, free of technical jargon, the question answers itself. The meaning of money and the market becomes intelligible. The economy, made up of expectations and assets, is no longer a forbidding complexity. The heavy hand of governments is exposed for what it is. And we may find that the crisis does not so much end as transforms our way of life. Maybe society would have to moderate its material demands and, in years to come, we will all learn that what we now consider a *normal* economy is anything but.

References

1 There most certainly have been individuals in academia and the media who have periodically warned of the dangers posed by highly leveraged financial systems and dangerous global imbalances well ahead of the crisis. Prominent among them: Nouriel Roubini, professor of economics at Stern School of Business, NYU, famously nicknamed "Dr. Doom" and Gillian Tett, assistant editor of the Financial Times. The rare warnings were systematically ignored by virtually all key decision makers. Lehman Brothers, a prominent US investment bank collapsed in September 2008, marking the onset of the credit crunch. Right up to then, market participants had traded every imaginable asset with remarkable abandon.

2 Interestingly, the narrative hasn't changed a great deal. So far, in the past, every recession or depression has been presented as unprecedented and unforeseeable.

3 The terms for money supply may be different in the US, the UK and the Eurozone. But all rank the different categories of money flowing through their system according to liquidity. Money is created via the monetary base, which includes notes and coins in circulation and bank reserves held at the central bank. Fractional reserve banking, with only a fraction of funds loaned kept as a reserve, allows thus banks to multiply the money supply. In the UK, there are just two official money supply measures, M0, called "Monetary Base" and M4, called "Monetary Supply". One wonders what happened to poor M1, M2 and M3. M0 includes all cash outside the Bank of England, as well as Banks' operational deposits with the Bank of England. M4, a broader measure, defines all cash in circulation with the public and non-bank firms. This includes private-sector retail bank and building society deposits, as well as certificates of deposit.

4 The Organisation for Economic Co-operation and Development (OECD) is based in Paris and groups together 30 mostly rich, industrialised countries that share a commitment to democracy and the market economy. It was founded in 1848 to help administer the Marshall Plan and foster post-War reconstruction in Europe. Nowadays, it acts as a think tank to industrialised countries, collecting and analysing data, as well as disseminating best economic, social and environmental practices.

5 The International Monetary Fund (IMF) is a child of the Bretton Woods system set up in 1944 to establish a framework for international economic cooperation. Today, almost all states are members. The IMF's job is to stabilise international exchange rates, encourage global monetary cooperation and secure financial stability. Countries pay a membership subscription with contribution determining voting weight and access to IMF financing. Special Drawing Rights (SDRs) are an internationally accepted legal tender based on a weighted basket of currencies currently including the US dollar, the euro, the yen and sterling. If a country is on the brink of default, it can approach the IMF for emergency loans. It will then have to submit to stringent macroeconomic management and supervision.

6 GDP, Gross Domestic Product measures the total value of *current* goods and services produced domestically. It can be calculated in two ways: Summing up expenditure (demand) or the income (supply) side of an economy.

What counts towards GDP?

a) GDP counts only the goods and services purchased by their final and ultimate users. Intermediate stages of production are not included.

b) GDP counts only the goods and services produced during the year. Sales of used or second hand goods are excluded. However, sales commissions charged on the sale of a used product are included.

c) GDP excludes <u>*financial transactions*</u> and <u>*transfer payments*</u> since they do not represent current production, but rather exchanges of goods. This would exclude stock and bond sales along with welfare and social security payments. Net interest expense is a transfer payment in all sectors except the financial one, where they are seen as value added and counted towards GDP.

The most common approach to measuring and quantifying GDP is the expenditure method:
GDP = consumption + gross investment + government spending + (exports – imports), or,
GDP = C + I + G + (X – M).

C – **Consumption** (Personal consumption of households) makes up the largest portion of GDP. It includes durable goods, non-durable goods and services and accounts for over 2/3 of GDP.

I – **Gross private Investment** (expenditures of business): Important, as it is an indicator of "the economy's future productive capacity". It includes replacement purchases, net additions to the stock of capital assets plus investment in inventories. Interestingly, buying a new house by private individuals also counts among investment.

G – **Government consumption and gross investment:** Purchases of goods and services by federal, state and local governments are included. Transfer payments – social security, welfare – are not included.

X-M – **Net Exports:** Total exports minus total imports.

You can also derive GDP by using the income approach summing up the following components:

- Employee compensation
- Proprietors' income
- Rents
- Corporate profits
- Interest Income
- Indirect Business Taxes
- Depreciation
- Net income of foreigners (income foreigners earn domestically minus the income that domestic citizens earn abroad)

As an indicator, Gross Domestic Product (GDP) has attracted its share of criticism from many directions, but is nevertheless widely used as authoritative indicator to assess the health of an economy. In all fairness, its inventor in the 1930s, Simon Kuznets, was aware of its shortcomings pointing out that distinctions had to be kept in mind between quantity and quality of growth. That is to say, between costs and returns, and between the short and long run. According to Kuznets, goals for more growth should specify more growth of what and for what ("How To Judge Quality", The New Republic, October 20, 1962).

7 Adam Smith (1723-1790), John Maynard Keynes (1883-1946) and Friedrich Hayek (1899-1992) are distinguished scholars associated with different schools of economic thought. The Monetarist School's most prominent representative is Milton Friedman (1912-2006).

8 The author of these letters is only too aware that he is not the first to point out this deficiency of mainstream economic theories. From the Keynesian "animal spirits" to Minksy's "systemic instability" and Shackle's "uncertainty", efforts have been made to incorporate the human element into economic models. Unfortunately, these efforts have mostly been forgotten, neglected or calculated away.

9 Financial markets have operated as huge betting shops rather than efficient allocators of capital in the recent past. It is therefore quite conceivable that the financial tail

wagged the proverbial real economy dog. However, does that mean that financial markets caused the crisis? A virus is a nasty thing, and how you react to it depends on the strength of your immune system. If the financial crisis is as a virus attacking the real economy, it is obvious that a well-balanced economy should have been able to withstand the onslaught. Hence, the real culprit is not the financial sector, but fundamental economic imbalances throughout the word.

Letter 2
Money

The distance between the original lender and borrower is one of the key factors in determining the degree of risk involved. The more intermediaries there are, the greater the risk.

Embarking upon an attempted explanation of the crisis, the first pre-requisite has to be a clear understanding of money. As money is at the heart of all economic activity and part of our daily lives, we take our familiarity with it for granted. We ask how much we have, how much we need, how much we expect to get, yet we never wonder what money is: a unique and wondrous thing, with nothing quite like it in the whole world.

Once upon a time, there was no money. A breeder would bring his pig to the market and exchange it for two knives, to trade one for three bags of corn, two of which were then used to secure a necklace for his wife. Bartering was a lengthy and cumbersome affair, and many a time the market lacked suitable items for an exchange of goods. Then along came the world's first financial entrepreneur with a basket full of cowry shells. The shells were not as useful as pigs, knives and corn but they were pretty and hard to find. After days of heated argument, all those who came to the market accepted the shells as a means of exchange. Money came into being and the entrepreneur, controlling the supply of shells, became the world's first banker.[1]

While shells as currency were introduced in China about 1200 BC, bronze, silver and, gold, first as ingots, then as coins carrying the facsimile of kings and emperors, have been the principal means of trade for almost four millennia. Made of material with an intrinsic value and minted by a recognised authority, coins had obvious advantages over shells. The royal head vouched for the quality of the currency, thus when Henry VIII debased the English currency by minting coins with an inferior metal content, it lost some of its value against French or Spanish equivalents.[2] As recently as the nineteenth century gold coins still played a vital role. The English treasury had to supply a great quantity of them to finance Wellington's troops in Spain against a continent-wide Napoleonic embargo. Fortunately, the Rothschild network, based on brotherly trust, was there to effect the transaction.

The Chinese invented paper sometime between 150 BC and 110 AD. It took almost another millennia to be adopted as printed money.[3] While precious metals as money continued to rule supreme for much of our history, the explosive growth of trade in the late 18th century made a gradual transition from metal to paper money inevitable. You are all too young to remember the inscription on the banknotes issued by the Bank of England guaranteeing the payment of the equivalent value in gold on presentation of the paper bank note, but I clearly recall the personal signature of the Governor of the Bank. The divorce of paper from gold was, as divorces tend to be, a messy and painful affair. European and US governments were the agents of change, first unwillingly, then willingly. From 1914, when Britain had to suspend full convertibility, to the severing of the last remaining link by the US Federal Reserve Bank in 1971, all efforts to somehow anchor money to gold have failed.[4] We are now left with paper money having to support itself. I am not fully convinced that decision makers realised the full ramifications of the divorce. Yet we still suffer the effects, as the gravity of our current global financial crisis clearly shows. However pathetic the explanations offered for the status quo, the consequences for currencies without content of some substance, unanchored, are drastic.

At the initial stages of paper money, authorities were content with printing notes. But it did not take long for financial wizards to discover the vast potential of creating money by using paper in forms and ways far more exciting than multiplying humble bank notes. One creative exercise popular since the founding of the Bank of England in 1694 has been the issuing of governments bonds. These are promissory notes bought by all and sundry and repaid by the government at the end of a set period of time with standard paper money. In the interim, bondholders receive regular interest payments at a rate fixed at the time of issue. These gilts circulate in their lifetime very much like bank notes. They are used as guarantees against debt, or as components of secure pension schemes. The beauty of this simple device is that it doubles the amount of money in circulation at one fell swoop. For every pound now there are two, the one paid by the purchaser and the other printed by the government. Of course, the great and good will tell you that second pound is merely a loan and once repaid, the original total is restored. This would be true if the government repaid the loan with money from its coffers but this happens very seldom. Almost invariably, the repayment of bonds is made by an issue of new bonds. Historically, the aggregate nominal value of bonds has tended to increase, not diminish.

Another form of money creation is even simpler. The Treasury dispenses spending departments, such as the Home Office or Education, money in excess of its own revenue. Money, in other words, it does not have. But the 'non existent' money is actually paid to policemen and teachers. This newly created money is called, on a need to know basis, a budget deficit. Ever since the 17th/ 18th century, almost every economy in the world has had a permanent budget deficit, but with varying dimensions. On the whole, budget deficits have a track record of growing rather than waning. Technically, these deficits are considered loans. Practically, their growing popularity would indicate that they are a convenient means of creating permanent debt and devalue the currency.

Despite the recent travails of the southern Eurozone countries, which have seen their debt downgraded to junk status, you will be reassured by the stalwarts of the financial industry that in theory there is nothing wrong with bonds and that many stable and respected companies in the private sector issue their own corporate paper. This is, of course, undeniable but there is a crucial difference between the two. The accounts of corporations are audited, their borrowings underlined, their balance sheets analysed and the price of their shares subject to the daily whims of the market. Britain Plc, France Plc, US Plc and World Plc do not quite suffer the same scrutiny.[5] The private sector does not specialise in supplying raw money, governments do.

This distinction highlights the manifold incarnations of money. To begin with, money is a commodity and an asset but is also, at the same time, the instrument that measures the value of all other commodities and assets. Like gold, copper, coal or property, it has a price at which it is sold and bought. Like them, at times it is available in abundance, at others it is in very short supply. Generally speaking, when there is a lot of it about, money is cheap and when it is scarce, it is expensive. As a measuring instrument its use is ubiquitous. Virtually nothing changes hands without an agreed price. All industrial and commercial success or failure is quantified in monetary terms. The wealth of individuals, companies and countries is estimated as their monetary worth. Wages, salaries and bonuses are negotiated with money as the principal objective.

But as a measuring device, money has a serious flaw. Somewhere in the bowels of a French scientific institute near Paris, I believe, there is a metal object that retains an absolute length of 1 meter irrespective of atmospheric conditions. But even ordinary measuring tapes are reliable enough. Thermometers tend to accurately measure body temperature for medical purposes. A compass will invariably point to the North except in the polar regions. Money is at odds with all of them. Its value fluctuates from day to day, from currency to currency, from purchasing power to purchasing power. Just imagine if a tape measure, a thermometer, or a compass would behave thus. You would have a Savile Row suit with arms to fit a gorilla, possibly die of a fever and find yourself in the Atlantic instead of scaling Ben Nevis.

You are being told by the high priests of the financial industry that, on the contrary, the value of money can be expressed by three distinct means: exchange rates, relative price to gold and purchasing power. The value of our money, for example, has fallen sharply since the outbreak of the financial crisis in 2008. Its rate against the Dollar, the Euro and the Sterling index itself has measurably deteriorated. The price of gold in Sterling has risen by a specific amount. The purchasing power of the Pound, as reflected by retail price statistics, has fallen by such and such percentage points. This information should more than suffice to estimate the value of your money.

I wish it were as simple as that. With most of the major currencies maintaining a stable exchange rate against each other, the rise or fall of the Mexican Peso or the Hungarian Forint in relation to them, would indeed tell us something about the value of these, and other, minor currencies. However, substantial shifts of value as between major currencies floating freely, can only ever indicate the relative, instead of absolute value of money. Its usefulness is limited to international trading transactions and the selection of bargain holiday destinations. The situation is no different when the major currencies move in unison during global deflation or inflation.

Gold did play a significant role in anchoring the value of paper money, as long as paper volumes were restricted to the quantity of precious metal held by central banks. Alas, with the rupture of the anchor chain, the price of gold cannot help determine the value of money. Its price is volatile, influenced, as it is, by mining costs, demand for industrial use, the policies of governments as to the form of foreign reserves and other extraneous factors. Measuring the purchasing power of money can be of considerable benefit in deciding whether to shop in Dover or Calais on any given day. As a serious means of determining the absolute value of money it is meaningless since the type of goods and services, and their demand, varies enormously across international markets. What is priority in one culture may be of secondary interest in another, as are the differences between the spending ratios on food, housing, transport, health and leisure in the family budgets of Africa, China and the US.[6]

But, beyond being a commodity and an instrument of measure, perhaps the most significant attribute of money is the ease with which it is lent and borrowed. Nothing else in the world has such a facility. None is lent and returned by the borrower in larger amounts, as a rule, than the original debt. A book, a car, and apartment, may be lent and the very same book, car, apartment, is returned if perhaps slightly worse for wear. A borrower may even pay to a librarian, a garage, an estate agent, for the use of the item but the book acquires no new pages, the performance of the car does not improve and the apartment is not enlarged. Not so with money. Apart from transactions between family and friends, lent and borrowed money carries interest. This interest, piggy-backing on money borrowed and lent, gives money a unique and immense dimension. It tends to grow the stuff for those who have it and shrink it for those who lack it. The amount gained by the lender equals exactly the amount lost by the borrower.

For centuries, alchemists have tried in vain to turn base metals into gold. Money lenders proved more successful turning, without lifting a finger, money into more money. It was this magic attribute that created a hugely sophisticated and diverse financial industry. The mechanics of modern economies enabled, incidentally, the current credit crunch. For, as you well know, to handle magic can be most dangerous. To be safe, its sorcerers have to be insightful, sage and well practiced in the occult monetary arts. The Venetians maritime merchants, the Fugger, the Rothschilds, understood precisely where to lend and where not to lend, how much to risk and what interest to charge. There were, of course, grave mistakes but there was no one to bail out the culprits and the price had to be paid in full. The most powerful banking centre of Genoa was almost wiped out when the city banks financed the wars of Philip II in the Netherlands.[7] They failed to take account of the disruption in bullion supply from the Americas, as Spanish fleets were ravaged by hostile navies flying buccaneer flags.

It was this same magic attribute of money, multiplying itself, that made Islam and the medieval Christian church suspicious enough to condemn lending for gain as a sin. Future related financial transactions were by then too integral to every economy for lending to cease. So lending at profit found forms circumventing the technical definition of usury or was left to infidels and Jews.

For the financial industry to work, certain simple guidelines have to be in place. There has to be a general consensus and confidence that the money lent, at least by far the greatest portion of it, will be returned. Lenders, and the amount of money willingly lent, have to be in approximate balance with borrowers and the amount of money willingly borrowed. The rates of interest at which the money is being lent have to be proportional to the output of the economy so that there is sufficient revenue to pay the debt and accrued interest. Indeed, until the crisis, we assumed these guidelines were not only essential but were also being followed. Although more essential than ever, the crisis demonstrates that these guidelines have simply been ignored. Witness recent deals on Greek and Cyprus government debt, in which investors were asked to accept a hefty haircut. There is very little consensus and hardly any confidence as to when and how the world debt will be discharged. The money on loan far exceeds the available financial resource to repay it.

The financial sorcerers of our generation proved a pathetic shadow of their illustrious predecessors. They were seduced by the magic, and, dazzled by its glittering promise, failed miserably to appreciate the deadly danger it posed. In their excitement, seeing the money grow and grow, they abandoned common sense and neglected most elementary banking practice: whom to lend to, when to lend, at what rate and under what conditions. You may well ask how come the failure was so complete and so collective. I put it down to their membership the same sorcerer's union, reading the same trade publications, socialising at the same bars and inhabiting the same virtual space. And, of course, continually watching the same changing screen from very close.

Nevertheless, it would be unfair to allocate principal responsibility for the debacle to the high priests of the financial industry. The bankers merely handle and mishandle money and if they siphon off unreasonable amounts for themselves, that alone cannot tell the whole story. For the primary cause of our troubles we have to look elsewhere, to those who are uniquely qualified to manufacture money, control its supply, manipulate its value and regulate its legitimate use. It is governments who to a great extent determine the amount of money circulating, its value in relation to other currencies and purchasing power, and the basic rate at which it is lent.[8]

Governments are also principal borrowers and spenders, owners of assets and employers beside regulating and monitoring the financial and economic life of the nation. Now more than ever, money, in its purest, most simple and brutal form is the business of the ruling authority. To understand the financial crisis, we have to examine first the government's role in creating it.

For a good number of years prior to the crisis, it was obvious that there was too much money all around. Credit cards were offered to all and sundry with lax spending limits and repayment terms. Mortgage lenders were fighting each other to make more money available at more and more competitive rates. Banks were on the prowl to finance acquisitions, institute mergers and develop innovative financial products. And, above all, governments, anxious to prolong their hold on power, kept increasing their spending to please a demanding electorate.

If you remember, we often asked ourselves where all this money was coming from. That it was largely borrowed could not be denied but we were being reassured by stories of untold and inexhaustible wealth residing in Japan, in the sovereign wealth funds of China and the Gulf states, in private fortunes nurtured in Swiss banks, in the gold ingots of central banks, in the vast mineral resources lying in wait underground. For a while, tonnes of paper money, in one form or another were flying about with gay abandon all over the world. American debt, as treasury bonds, was bought by the East, interest on the mortgages were being paid as property prices kept rising and the volume of economies kept expanding year after uninterrupted year. There was a wealth of evidence pointing to our economy, much like other national economies, suffering from a variety of dangerous imbalances. But the proof, the smoking gun, is simply the mystery of the vanishing money.

As the crisis has been unfolding, in the best tradition of Hercule Poirot, the mystery has evolved, becoming more and more mysterious at every turn. At first there was aberrant sub-prime lending in America, then came the collapse of the housing market and the rapid decline in the value of stocks and shares. This was followed by the domino effect of failing banks and the process of bail outs. Next, the Great Credit Crunch made its unwelcome appearance to be dealt with by banks borrowing from wealthy sovereign funds, vast private fortunes and the inexhaustible riches of the East. When these lenders and their pots of gold failed to materialise, the politically troubled classes went on pumping money into their economies by the simple device of manufacturing money instead of goods. Somewhat embarrassed by the negative connotations associated with printing money, too close to forging, the authorities invented the more user-friendly term of *quantitative easing*.[9]

Not surprisingly people, bemused and bewildered, began to ask where all this wonderful amount of money, so bravely accumulated over these bountiful years, has gone. I put the question of the vanishing money to the Belgian detective who has long specialized in solving apparently unsolvable mysteries. My faith in his little grey cells was not misplaced. In his memorable words: 'There is no mystery, my friend, the money was never there'.

What concerns me most in the midst of this crisis is that those responsible for the money supply, as well as the high priests of the financial industry do not know total world debt and corresponding total world assets. And, more than that, they have no objective means of measuring the total amount of money that should be allowed to circulate in the world economy. The only attempt at justification of printing money seems to be a reference to the rate of growth of the GDP. But even if we accept that there is a simple, direct relationship between the two, which is most unlikely, we have no coefficient to indicate how much growth justifies how much increase in the money supply. As we have no notion what a correct starting point would be, changes in GDP and money supply in relation to each other are meaningless. And if this is true of the national economies, in global terms it is significantly more so. This means that we discover the oversupply and undersupply of money once their effects are plain to see. In other words, far too late.

This is the seminal uncertainty that lies at the root of the current financial and economic paralysis. In the absence of reliable first principles, no amount of financial stimuli, further borrowings and quantitative easing of the money supply will revive confidence. We have to understand why we are where we are, where we aim to be and how we are going to get there.

References

1 Shells (China) and coins (Lydian Kingdom in Western Anatolia, China) were adopted as currency roughly in the last millennium BCE. Cattle, together with grain had been variously used as means of payment and storage of wealth as early as 9000BCE. The invention of writing in Mesopotamia around 3000 BCE, mainly used for record keeping, fostered the development of banks. The code of Hammurabi

(1792 – 1750) enshrined banking laws. In the third millennium BCE, silver ingots make an appearance in the Kingdom of Cappadocia in Eastern Anatolia.

2 The story of inflation is almost as old as history itself. One of the first examples dates from the period of the 2nd Punic War between Rome and Carthage 218 to 201 BC, when Roman rulers had to debase the purity and weight of their coins to be able to pay the troops.

3 Paper's use to print money is thought to be the result of a severe shortage of copper for making coins during the reign of the Emperor Hien Tsung (806-821 AD).

4 In 1914, Britain had to suspend convertibility for the duration of the First World War to fund military operations. It resumed the Gold standard in 1925, followed by Germany, France and others, only to be forced off in 1931 due to the deflationary impact of a rising demand for gold. After WWII, the depletion of British gold reserves made a readoption of the Gold standard impractical. Recognising that paper money on its own was perilously weak, there were a number of attempts at a second marriage. The Bretton Woods "affair" establishing a system of global monetary management in 1944 being perhaps the most famous. The system obliged participating countries to maintain their exchange rates within a fixed value vis-à-vis the US dollar. The dollar itself was backed by gold guaranteed at a fixed price. However, the attempts to keep alive the tenuous marriage between gold and paper were doomed to fail. The US Federal Reserve Bank severed the last remaining link under Richard Nixon in 1971. The cost of financing the Vietnam War and copious social spending had taken their toll.

5 International financial markets do impose some restraint on governments, since they are needed to finance national expenditures and budget deficits. Countries are scrutinised and ranked according to three risk parameters: Country risk (risk of political instability), credit risk (risk of a default of government debt), and exchange rate risk (risk of currency fluctuations). The allotted country rank translates into the national cost of borrowing abroad.

6 Using the cost of a Big Mac as a gauge, *The Economist's* Big Mac Index is an original, if inadequate attempt to assess whether national currencies are over or under valued. Purchasing power parity is achieved via the long-term exchange rates with the US Dollar, so a burger should theoretically cost the same in China, France or Nigeria as in the US. This approach however is not a comparative measure of the value of money.

[7] The Genoese commercial opportunity came with the state bankruptcy of Philip II in 1557. This debacle threw the German banking houses into chaos and ended the reign of the Fugger as Spanish financiers. Only in 1627 when Philip III refused to pay interest on its debt did the Genoese pull back from lending money to Spain. The Spanish crown's frequent bankruptcies ruined many of Genoa's merchant houses, but it was the decline of Spain as a great power that sealed the city's fate.

[8] Even though equipped with impressive tools to manage domestic money supply, including printing money as a last resort, central banks and treasuries are neither totally free, nor all-powerful in their actions. Above all, their freedom of movement is constrained by the verdict of international financial markets. In the case of Eurozone members, national actions are ruled out from the start, as the European Central Bank (ECB) is calling all monetary shots. Neither can the effectiveness of monetary intervention be guaranteed. Despite vastly increasing the money supply by all conceivable means, economic activity has so far failed to reignite. Banks prefer to consolidate their balance sheets or to hoard the money, rather than lend it to businesses and consumers. In about a third of the eurozone countries, banks are deeply troubled, just about managing to stay afloat with the help of cheap liquidity provided by the ECB. Worse, national banks and their respective sovereigns are tied together in a dance of death: national banks cannot refinance themselves, and propping up banks is weighing down the creditworthiness of countries, which in turn diminishes access to international capital markets for banks.

[9] Both quantitative and qualitative easing, its cousin, are attempts to bring more money into circulation. Under quantitative easing, central banks flood the banking system with liquidity by buying government or corporate bonds. Such operations increase the *size* of the balance sheet of the central bank through an increase in its liabilities. Qualitative easing is a shift in the *composition* of central bank balance sheet, accepting less liquid and riskier assets as collateral from banks to observe their reserve requirements. The US Federal Reserve (Fed), the Bank of England (BoE) and the ECB have all engaged in qualitative easing, their balance sheets ballooning in size and diminishing in quality. The Fed and the BoE, who have happily engaged in quantitative easing for the last five years are currently looking for ways to phase it out. As for the ECB, it has so far ruled out quantitative easing. Any intervention in secondary bond markets is sterilised, meaning that money pumped into the system is reabsorbed.

Letter 3
The language of the crisis

The deficit in any economy, expressed in terms of borrowing consists of pure, unrealised, expectation.

Language informs content and content shapes language. The discussion of the present crisis creates terms and conjures up images that have a bearing on our thinking and therefore on our actions. One of the most widespread expressions employed in the debate runs along the lines of 'we must do x, y or z in order to jump-start (or kick start) the economy'. The implied image is a well-oiled, perfectly functioning machine or vehicle temporarily stalled with a flat battery, simply restarted with an externally provided electric charge. For some, the electric charge (the x, y or z) invariably takes the form of a sudden infusion of money. Others, by contrast, swear by strict austerity measures radically cutting government expenditure to revive economies. The idea conveyed is that of an economy going along nicely until bankers mishandled finances so that repairing the finances would allow the well functioning economy to resume its calm and measured progress.

The other concept that has acquired a consensual status is one that we should not dig too deeply for causes of the unprecedented and unforeseeable crisis. The matter is of such urgency that we need to act at once to save the world from an economic meltdown. We have time enough to assess what went wrong at leisure and put in place such reforms as may be necessary in the more distant future. Delay could have fatal consequences.

Like you, I am aware of how disconcerting these expressions, images and ideas really are. The assumption that national economies in their global totality were sound, moving under a benign sky towards ever accelerating growth, is one the most arrogant one ever entertained. Even in profitable companies cash flow problems seldom appear out of the blue and are almost invariably related to more fundamental weaknesses. Not that economies throughout the world, taken as a whole, are profitable.

The two presumptions, that the economy is basically sound and that you do not need to understand the root causes of the crisis, apart from being facile, have this in common: they shield the principal architects of the failure from all blame and attempt to separate the inseparable. The financial sector and what is lazily termed the 'real economy' are deeply interwoven. The health of any economy is determined by its profit and loss account, its balance sheet, its borrowing, capitalisation and cash flow. The finance industry, in its turn, rides the waves of the 'real economy', the pattern of crests and troughs mirror each other, albeit with some time lag.

You must find it astonishing, as I do, that governments have been taking all kinds of actions with coordinated haste to stimulate economies in response to diverse episodic and local eruptions of the crisis without an all embracing comprehensive idea of the crisis itself. You may well ask how is this possible. After all, we have a far greater wealth of economic and financial data than at any time in history. The International Monetary Fund and OECD report on the state of the global economy, past, present and future, at quarterly intervals. A significant number of highly respected academic institutions produce a stream of well-researched papers, explaining the past and forecasting the future. The 24-hour global stock market records millions of transactions, having every asset in the world priced on a continuous basis. Traders and analysts, with eyes glued on multiple screens, try to interpret every scrap of information rather like African witch doctors interpret the dried bones of sacrificial fowl. And yet we can neither explain nor anticipate events that vitally affect all our lives.

You ask, what about economic theories. You mention Adam Smith, John Stuart Mill, Hayek and the Austrian school, Keynes, Friedman, the monetarists of the Thatcher era and others, I confess, I have never heard of.[1] You remind me that economics has become a highly respected academic discipline with a fair number of Nobel prizes awarded to its more distinguished exponents. After all, no bank, no financial institution, no government department, would permit itself to function without the advice and guiding hand of senior economists.

As you well know, I am a rank outsider. Being untutored in the historical sequence of economic theory I am not competent to explore a minefield of conflicting ideas and academic debates that are unlikely to be resolved in the foreseeable future. From the little I know, the major theoreticians of the subject have developed profound ideas and bequeathed valuable insights to our own academic generation. Accordingly, I will restrict myself to a few comments on past theories only insofar as they touch on our present predicament.

The discussion, as conducted through the media invokes but a few terms of academic credentials. There is much talk, naturally, of deflation and inflation, free market and regulation, productivity, growth and contraction, government intervention and money supply, free trade and protectionism, recession and depression. Bits and pieces of various well-known economic theories are quoted in support of arguments or as justification for proposed measures to alleviate the crisis. What strikes me is that these abstractions and extractions, piece-meal as they are, do not aspire to form a coherent theoretical base for a satisfactory explanation of our predicament. The terms employed seem to be taken for granted as if their meaning was clear and, even more questionably, as if they were sufficient to carry the whole burden of the discussion itself.

Despite the fact that economic growth has made a modest comeback in the US and the risk of an immediate breakup of the eurozone has somewhat receded, facts are stark and brutal. Property prices are sharply down. Equities, across virtually all sectors and nearly all markets have lost more than a third of their value since 2008. Jobs are are still being shed at an alarming rate and businesses continue to fold all over the place. Private, corporate and national debt, already vast, is growing out of all proportion. There is insufficient liquid money to meet debts. How does economic theory explain this state of affairs?

"Classical" economists talked in terms of supply and demand.[2] At its simplest, if demand exceeds supply, prices go up and, as a result, demand drops. If there is an over supply, prices drop and demand rises. Thus, whilst there are bound to be temporary fluctuations, markets always come back into balance. Such a basic model would suggest that we have simply produced too much in relation to existing demand and as the price drops, human appetite will grow to absorb the supply. Markets then will once more come into a customary equilibrium. Such a model seems to work for specific components of an economy, copper, soy beans and oil for example. The model fails when the whole economy goes into reverse so precipitously and on a global scale. It fails for multiple reasons: the economy is too complex, the free market is never absolutely free and demand, being subject to the whims of human beings, is not wholly subject to variations of supply.

The theory advanced by Adam Smith in his *The Wealth of Nations*, although still serving as an inspiration for all free marketeers, cannot in itself cope with our present predicament for some of the same reasons. Free trade, as free markets, is an ideal worth striving for but in a world constrained by political pressures and diverse national governance, it is unachievable.[3] The imbalances as between producing and consuming economies may indeed be a contributing factor to the crisis but the malaise is too deep and too general to be healed by only dealing with these imbalances.

The historical parallel drawn between our situation and the prelude to the depression of the thirties, and the oft-quoted Keynesian remedies, does little to explain the nature of our present experience. The narrative for what happened in the thirties runs like this: excessive borrowing and wild speculation created a massive stock exchange bubble; the bursting of the bubble plunged the American economy into a grave recession; the Federal government responded by adopting protectionist measures that damaged international trade; as a consequence the grave recession turned into a world wide depression. The New Deal[4] of President Roosevelt reversed the policy, injecting large government funds into the economy and reviving international trade; as a result America and the rest of the world gradually recovered from the depression. And, with the benefit of hindsight, Keynes formulated his salient economic principle of corrective government intervention in periods of deflation and inflation.

As we are on the brink, if not already in the midst of deflation, governments, following both the Monetarists and Keynes, are inundating contracting economies with money. They increase the money supply and dispense fiscal stimulus via government expenditure. But both doctrines are, at best, questionable and, at worst, dangerously flawed. The narrative implies a few yawning assumptions: that of a perfectly well-balanced economy collapsing under the weight of a market downturn; that the New Deal would have had the same impact at the beginning of the depression, not after three years of economic contraction; that total debt, building up throughout the twenties, was in balance with total assets at the time of the crash. That without government intervention, the consequences of the downturn would have been even worse than six years of general misery.

Economists from the monetarist persuasion, dominant in the Thatcher, Blair/ Brown and Cameron era, accept the notion that controlling the money supply could, on its own, enable governments to determine suitable levels of inflation in line with overall economic growth. The simplicity of the idea, as well as its mathematical mechanics is most seductive. In practice however, the approach has serious weaknesses. To begin with, it is reactive - it responds to trends once they have started to materialise. Also, managing the money supply has a track record of fostering bubbles. But perhaps most gravely, there is no reliable benchmark as to what, at any given moment, the overall money supply ought to be.

The only theoretical formula for quantifying money creation, the Quantity Theory of Money (GDP = Velocity x Money Supply)[5] suffers from several grave deficiencies. As Velocity is assumed to be constant in ‘normal’ economic conditions, the Money Supply factor was used to keep growth of the economy within desirable limits. In a credit crunch, with the velocity of money nearing zero, increasing money supply is supposed to protect the economy from crashing. So the central banks are now in the business of generating a near endless supply of money in the belief that economies all over the world will resume their customary growth. The trouble with this formula is that with weak Velocity you will have to print a hell of a lot of money to make any difference to GDP. This is exactly what is happening today: instead of extending a helping hand to borrowers, banks have become reluctant lenders. All they care about is their own financial viability, no matter how much money is made available.

There is a more serious problem with the monetarist approach, one that is shared by other respectable economic theories. The problem lies with the essence of GDP. This ubiquitous term is used as a comparative measure to judge economies in relation to each other as well as in relation to their own historic performances. In general, for political and commercial purposes, the performance of any given country depends on how fast, or how slowly, its GDP is growing. The most common statistic used to measure the gravity of our crisis, is the alarming rate of global GDP decline.

Being such a crucial term in the language of economics, you would naturally expect that its meaning is crystal clear to everyone, from the exalted circles of government and the City to financial journalists and the readers of their newspapers throughout the land. And in one sense this is true. The meaning of the term is taken for granted, we all understand that the Gross Domestic Product is a measure of scale, it tells us the size of an economy.

Now, I must ask you to pause and think for a moment. Apart from social transfer payments and financial transactions, such as the sale of stocks and bonds, GDP includes any and every item and service sold within the economy. The sale of every can of beer, loaf of bread, bottle of shampoo produced locally in a given year counts. So does every operation performed privately or by the NHS; every court case with the attendant legal fees; the cost of building an educational establishment, its staffing and running costs; every bit of military hardware and the personnel manning the army, navy and air force; the activities of all banks and insurance companies; the legislative process and the enforcement of the myriad of regulations it produces. The periodically published GDP figures measure the total monetary value of virtually all economic activity except, of course, the black economy which ought to add another 10%-20% to the official figure.[6] It is a comprehensive account of quantity without, and this is most significant, telling us anything about quality.

Every household, every business, every national economy produces revenue and generates expense. Working members of a family earn money, which is then saved or spent by, and on behalf of, all the family. If expenses exceed income, money has to be borrowed. The annual account of every business fundamentally has two columns, income and expenditure. The balance between the two totals determines the profit on which taxes have to be paid or the losses, which diminish the value of the business. The same, of course, applies to the ingredients of government activity as expressed, more or less accurately, by the Chancellor's annual budget. What is significant about GDP is that it measures total economic turnover without regard to the quality, profitability, viability, health, balance and future prospect of the economy it portrays.

Size matters. In Judo, as between two fighters of equal skill, victory is expected to go to the heavier one. On the other hand, history abounds with examples where numerically inferior armies, better equipped, motivated and led, defeated vastly larger forces. In economic terms, an estate centred on an antiquated mansion that requires huge resources in staff and maintenance is at a far greater risk than a modest town house inhabited by a couple of high earners. Similarly, companies with a relatively low turnover and high profitability are a better bet than companies with large turnover and low profit margins. Certainly, even in an age characterised by expansion through acquisition and merger, no one would dream of assessing a company just by its size. Yet such an assessment of national economies, using GDP, is not only practiced but has become a matter of routine. Economists, in their theoretical mode, would naturally object to such an oversimplification. The breadth of the economic base, natural and human resources, infrastructure and many other factors would all form part of the criteria used in an overall assessment. But, in practical and political terms, GDP as a simple figure plays a central, and often a crucial, role.

Let me hasten to add that there is nothing wrong with measuring the GDP of a national economy. If you want to transport oil it is useful to know the capacity of the ship that will carry it. But it would be sensible, would it not, to inquire what the ship is made of, how well it is constructed, what navigational instruments it has, and how competent the captain and crew are. If we need to assess any economy, to ascertain its strength, health and stability, in order to determine what volume of money represents its realistic worth, GDP is not only insufficient but, as currently used, highly misleading.

In trying to understand the crisis, to map its origins, we need to find a way to determine how much of the total GDP constitutes a contribution to the asset base of our economy and how much of it is a burden. We need a model for the national economy that reflects the income and expense columns of a household budget and that of the profit and loss account of any reputable company. A national economy is hugely more complex than a household or business one and therefore creating an appropriate terminology will not be easy. But without such a critical distinction we cannot even start a meaningful discussion.

So, instead of criticising and fiddling with the existing language of discourse, I find it easier to start from scratch and try building a new conceptual architecture. Such a framework will need criteria to distinguish between sheer economic volume and the enlargement of its hard asset base. It will also have to take account of the much neglected human factor which is, in the final analysis, at the base of all material transactions.

References

1 Adam Smith (1723-1790), John Stuart Mill (1806-1873), John Maynard Keynes (1883-1946), Friedrich Hayek (1899-1992) and Milton Friedman (1912-2006) are distinguished scholars associated with different schools of economic thought. Adam Smith, a Scotsman, can be portrayed as the founder of classical economics,

stressing the operation of spontaneous market forces in capitalist systems. John Stuart Mill, born and bred in England, was a classical liberal philosopher advocating utilitarianism and deeply interested in the political economy. Just as Adam Smith had shaped the perspective on economics of his generation, Mill's views on free markets, as well as limited government intervention dominated the latter half of the 19th century. Keynes, a British economist and founder of the discipline of macroeconomics drew attention to the many theoretical and practical shortcomings of classical economic thought. In response to the Great Depression, he posited the necessity of counter-cyclical government intervention as an antidote to economic crises. Varieties of Keynesianism have been hugely popular until the 1970s. They are now experiencing something of a renaissance as an alternative to policies focusing exclusively on budgetary austerity. Hayek, an economist and philosopher, belongs to the Austrian School promoting *laissez-faire* liberalism and a small state. Having forsaken his native Austria in 1938, Hayek saw free-market democratic societies as bulwarks against authoritarianism and collectivism. His thoughts have been hugely influential during the "Thatcher Revolution" and in central and eastern Europe post-1989. The Monetarist School, whose most prominent representative is Milton Friedman, an American, accept the importance of government intervention, but see its role limited to the management of the money supply. According to monetarists, both inflation and deflation can be prevented through clever monetary policies. These ideas are currently sorely tested, but are still influential.

While current economic models have developed from the broader 19th century field of political economy, ideas inspired by enlightenment thinking have been addressed long before. The Indian scholar-philosopher Chanakya (c. 340-293 BCE) for example, is credited with the invention of concepts that would many centuries later become standard fare of micro- and macroeconomics: the demand-supply framework, asymmetric information, producer surplus, public goods, as well as the distinction between the short run and the long run, to name just a few.

2 According to 'classical' theory, going back to Adam Smith's *The Wealth of Nations* (1776), the economy, including financial markets, is essentially stable. If people rationally pursue their own economic interest in free markets, they will use all mutually beneficial opportunities to produce goods and exchange those with one another, with the benefit of full employment and significant welfare gains.

3 It seems important to elaborate a little on the term "free trade" as first conceived by David Ricardo, as well as on the concept of "free market" as introduced by Adam Smith.

Ricardo (1772 – 1823), one of the great classical economists coined the idea of 'comparative advantage', thereby single-handedly explaining the existence, and proving the mutual benefit, of trade. Producing and exchanging products where nations have comparative advantage brings welfare gains all around. Experimenting with autarky and protectionism is ultimately wealth-destroying. Today's proponents of free trade often overlook the fact that Ricardo did not conceive of a world where rootless capital roams around the globe in search of short-term profitability.

While Adam Smith uses the image of the 'Invisible Hand' allowing all market participants to magically achieve equilibrium, he in no way conceived the market as a place free of rules. *The Theory of Moral Sentiment* (1759), the indispensable ethical and philosophical base to *The Wealth of Nations* (1776) is often given short shrift in this respect. In fact, free markets depend on the respect for the rule of law and its enshrined notions of propriety. While enforceable property rights immediately come to mind, smooth interaction between market participants also relies on rules of custom and tradition. In fact, a free market does not exist in a vacuum – it relies on social fabric built over many centuries.

4 The New Deal refers to a collection of measures to end the depression of the 1930s in the United States. Upon taking office in 1933, Franklin D. Roosevelt launched a series of government programs to help the unemployed, reform the business environment and foster economic recovery. Opposition to state intervention on this level was fierce, with the US Supreme Court ruling some of the schemes unconstitutional. Reviews on the effectiveness of New Deal measures remain mixed, but they have had a lasting impact. Some of the institutions founded in the period from 1933 to 1936 remain to this day, for example the Federal Deposit Insurance Corporation (FDIC) ensuring bank deposits, the Securities and Exchange Commission (SEC) supervising some aspects of the financial market and the Social Security System.

5 The Quantity Theory of Money (QTM) was conceptualised in the 16th century. As gold and silver inflows from the Americas into Europe were being minted into coins, inflation rose. In 1802, the economist Henry Thornton posited that an increase in money supply, not backed up by an increase in economic output had to result in inflation. The relationship was enshrined in the so-called Fisher Equation **MV = PT** named after the economist Irving Fisher 1867–1947. It sets Money Supply (M) times Velocity (V, the number of times money changes hands), taken as a constant

equal to Gross Domestic Product made up of P (Average Price Level) times T (the Volume of Transactions of Goods and Services).

6 The shadow economy, or, how it prefers to be officially called, the hidden economy, is economic activity based on clandestine and/ or illegal work. The size of a country's hidden economy is generally associated with the tax and regulatory burden, the level of unemployment and government spending, as well as with the efficiency of the justice system. There are umpteen methods trying to assess the hidden economy. They include measuring the demand for cash as well as real electricity consumption. For 2012, the European Parliament estimated the average size of the black market of EU members at 18.4% of GDP, totalling EUR 2.35 trillion. Bulgaria scores an impressive 31% of GDP, while the UK sports a more modest 10%. The shadow economy of the United States was estimated to weigh in at 9% of GDP in 2009.

Letter 4
Expectation

All economic activity is subject to the distance between expectation and the probability of its realization.

Expectations being generated exclusively by human beings, it is the character and psyche of the people that determines the direction and dynamics of economic movement.

The study of economics can be reduced to two basic components: material factors and human behaviour. In academic circles a great deal of thought has been given to the physical aspect of the economy, relatively little to its human element. Probably because things like money, debt, property, output, trade, product, profit and loss can easily be quantified whereas men's reactions in any given circumstance are difficult to predict. Economics being a relatively young discipline, aspiring to a quasi-scientific status, it was only natural that its academic establishment should focus on numbers rather than people. Unfortunately, this resulted in theories that are less than helpful in illuminating more extreme economic upheavals where emotions like fear and greed are predominant. It is not as if the powers that be are unaware of the importance of these emotions, after all they are regularly considered the principal agents of our current predicament. It is just that emotions, especially dominant ones, tend to be discounted when it comes to economic theory.[1]

It seems obvious to me that until the human factor is integrated into its conceptual framework any economic theory will not only fail to forecast future scenarios but will not even be capable of explaining the present.[2] As far as economic activity is concerned, the human factor is manifest in what men do or refrain from doing and what men are likely or unlikely to do in the future. Although these actions or non- actions are inspired and nourished by feeling, feeling may or may not lead to action. Between feeling and action there has to be an interface, something that turns emotion into an act, and in the present context, an act of economic significance. That something is what I take to be an *expectation*. I may feel concerned about a situation and do nothing. If I do decide to withdraw my money from a bank I do so in the expectation that it is safer to keep it under the mattress. I may feel highly optimistic about my business and do nothing about it. If I do decide to expand it, buy machinery and employ additional staff, I do so in the expectation of making a greater profit.

Most economists have used the term *expectation* in a very limited sense, referring to a rational calculation of likely rise in inflation or movements of market prices. For me, the term signifies the total human orientation towards the future as expressed in intended action. On the one hand we have all the stuff that exists at any given time, possessions, property, income, savings, commodities, factories, schools, hospitals and what have you. On the other, we have our expectations of earning money, winning the lottery, of a rise in the value of properties, expectations with regards to free medical treatment and education for our children, pensions on retirement, safety and security provided by the police and the military and justice from our courts. Everything that exists is a reality, every move that is directed towards the future is expectation. To come to grips with economics, we must have some understanding of the universe of expectations, for it determines at least half of what takes place here and now.

In the annals of economic theory human psychology appears in the guise of *rational expectation.*[3] I suppose this term is meant to draw a distinction between rational behaviour which is to some extent predictable and actions generated by feelings and so disqualified from being part of quantifiable patterns of economic motivation. To anticipate a gradual, moderate rise in the price of bread and to demand a compensatory increase of wages is part and parcel of regular patterns incorporated in any economic theory. A collapsing banking system or greed-driven gambling on the heels of a steep and uninterrupted boom in property prices, are periodic aberrations in social order and economic activity. They are regrettably present in free market economies and from time to time distort the *normal* course of the economy.

There is something radically wrong with any economic model built on a rigid distinction between rational and irrational human behaviour. Decisions and actions of men do not fall neatly into two such economically convenient categories. The choice of objects we acquire in a lifetime may depend on specific needs or simply a yen to own them. Both utility and attraction determine an acquisition, very seldom is it a case of either or. Careers are chosen for earning potential, family tradition, natural leaning or accidental circumstance, usually a combination of some or all of them. The fate of family businesses turn as much on the adventurousness or timidity of successive generations as on prevailing commercial conditions. Even at governmental level, decisions are at least partially based on party political advantage that is itself inspired by personal character, beliefs and dogma rather than cold calculation of the nation's well being.

Even if we could define the rational as distinct from the irrational in an economic context, such a distinction could never serve as the basis of a conceptual framework. Both elements are too closely interwoven in virtually all decisions that lead to action. What is undeniable is that all conscious human action necessarily follows expectation, be that expectation rational or irrational, inspired by fear or greed, justified or not, wildly off the mark or modestly cautious. Feelings, however strong, may or may not motivate actions but no action is taken without expectation. You may be afraid but do nothing to alleviate your fear. You may be angry at missing out on a promotion but make no retaliatory move. You may covet the wife of a colleague but make no attempt to seduce her. The emotional universe is vast but it affects the economy only insofar as the feelings are translated into action. And this translation from feeling to action can only be mediated by expectation. The human factor in the economic equation finds its natural expression in the concept of expectation since it is expectation that makes human psychology relevant and is the essential link between feeling and action. This is why it seems right that *expectation*, pure and simple, should occupy a central position in the construction of a conceptual framework.

The counterpoint of expectation is *asset.* Asset encompasses all that we already have, expectation is made up of all that we may, or may not have. Asset accounts for the present, expectation embraces the future. Together they constitute the whole economy. There is nothing in the economy that is neither expectation nor asset.

What we wear, our home if un-mortgaged, our means of transport, our savings deposited in a bank guaranteed by the government are all part of our assets. In the balance sheet of a business, machinery, premises, if owned freehold, its intellectual property, goods in its warehouse and cash at the bank make up its net asset value. The same principle applies to the assets of the country as whole although its total value is infinitely more difficult to measure. Gold reserves are straight-forward and so are the land and properties owned by the state. When you come to underground mineral resources, it is still possible to adduce a meaningful estimate by taking into account the anticipated volume, the difficulty and cost of extraction and the market value of the commodity in question. But a massive part of state assets comprise schools, hospitals, roads, bridges and the whole conglomeration of items that make up the loosely defined category of *infrastructure*. All these are considered, rightly or wrongly, as assets. But unlike gold reserves, their value depends on the cost of maintenance and, more importantly, on the contribution of their services to the well-being and wealth of the state. And this contribution has to be measured both in terms of current use and the expectation of its future addition to state assets. Any bridge is built on condition that savings for the transport used by it would exceed the cost of its construction over a certain number of years. The debate preceding the building of the channel tunnel ought to have revolved largely around this question.

It is obvious then that, although *asset* and *expectation* are distinct elements in terms of our equation, in practice, there are few pristine assets or pure expectations. Mostly, assets contain an element of expectation and vice versa. For the purposes of our proposed economic model what matters is precisely their relative proportion. The less expectation is in the compound, the more solid the asset, that is to say, the more confident we can feel about its enduring value. The price of gold does vary from day to day but at any given time, the market verdict of its value is precise and final. A company manufacturing vehicles is, of course, an asset and its shares can be bought or sold any day of the week. However, sale of its product is conditional on demand for models designed years in advance and manufactured months ahead of a possible purchase. What we have here is a significant element of expectation and, as we watch the virtual worldwide collapse of the auto industry, a great deal of this particular expectation could not be realized. Thus production facilities are less of an asset than gold or even the mortgage-free house, which you own. The asset status of state-owned and government-run entities, like schools for example, is very delicate. The investment in purpose-built buildings, in human resources, in ever more demanding and sophisticated equipment, is continuous and massive. Emerging graduates are supposed to join the workforce with an education enabling a more productive performance. The expectation element in such an enterprise is not only significantly greater than in property and industry, it is also virtually impossible to measure. Schools in any society are, of course, mandatory. Although they vary in the quality of learning they provide, their input to human resources contributes unquestionably to the wealth of the economy. The question is, to what extent, or what degree, are they an asset.

The differentiation of assets is mirrored in the categorical classification of expectation. There are virtually no pure, asset-unrelated, expectations. The measure that has to be applied is theoretically simple: how likely is it for any specific expectation to be realized. Most of the time, in our daily lives you use this measure without a thought. You get up in the morning, commute to your job and return in the evening, with the implicit assumption that a train will transport you to a job that is still yours and on your return you will find your house still standing. The chance of your expectations not being realized is too tiny to worry about. Buying lottery tickets is more in the realm of hope than expectation. A weekly dip is easily written off but if, seized by a mad impulse, you were to gamble all your saving on a lottery, your expectation would be wildly out of alignment with reality. The chances of your gamble coming off are minuscule, as the distance between expectation and its realization is forbiddingly vast.

Just consider a family buying a new car. It happens quite often. They will take account of many features of the transaction, including the price of the car, its predicted life expectancy and, naturally, their own financial resources. They are bound to ask themselves whether they can afford it. If the car lasts as many years as was predicted and their earnings keep pace with their calculations, all is well and they have the means to buy another new car. The distance between expectation and its assumed realization was manageable. If, however, the car died prematurely or some of the earners lost their job, that distance becomes too wide. The family now has to borrow money for the purchase of a new car. Such a borrowing, from then on, would play an important role in their economy, weakening their asset base.

Or take the case of a small company, such as mine, wanting to expand. We may need additional staff, a larger product line and incremental marketing effort. All this means significant expenses well ahead of anticipated revenue. Before going ahead with the expansion we have to question how long will it take to recover our investment and, more importantly, how likely is it that our projected increase of revenue will materialise. In other words, what is the distance between our expectation and its probable realization. Fortunately we have the capital to risk such a move and do not have to borrow the money needed. But whether we use our own capital or borrow money, our asset base diminishes in case of failure.

All this is so elementary that I am embarrassed to bring it to your attention. I do so because such a basic principle applies equally in the larger theatre of the national and global economy but is completely ignored in the hubbub of voices dominating the current debate. The situation resembles the aftermath of the collapse of the tower of Babel with many languages, none of them understanding one another. Just substitute the overambitious project of Babel with the global financial system growing wildly out of all control.

The economy of our country, like that of any household or business, is conditioned by the distance between our expectation and the probability of its realization. In other words, the gap between what we actually have and what we expect to have. In order to realize our expectation, so as to bridge the gap, we need to produce, build, research, educate, improve infrastructure and generally raise the standard of living of our people. All this costs money. And money costs money. And this is the beginning of our troubles. As you have noticed, our government, as most of their lot, does not have any loose cash. On the contrary, they, as virtually all governments, are in debt. The magnitude of the deficits varies but it is serious and increasing fast. To the government debt we have to add the borrowings of businesses and individuals. The balance sheets of the commercial sector and the booming credit card business show these sums to be considerable.

For at least two centuries, broadly speaking, growth of economies has been financed by borrowings.[4] Paying back the money borrowed has always been conditioned by the realization of expectations. So long as this realization kept pace with the rate of the required repayment, the economy was manageable. But from time to time expectations grew out of all proportion to the volume of borrowing. When, as a result, repayments became difficult, or impossible, the economy had to undergo what professionals call a 'correction'. The magnitude of the correction generally corresponds to the distance between the total resources that exist and the expectations on which the borrowings are based. If the distance is not too excessive we have a recession, if it more than that, the recession turns into a depression. The difference between them is a matter of degree. In practice it is virtually impossible to measure global assets against global expectation. The best, and possibly the only, indicator of this critical distance is the degree of difficulty in coping with the world's indebtedness. The meltdown of the banking and financial system and the credit crunch clearly signal a major correction, well beyond any of the post-war recessions.

You are too intelligent to be misled by the government line fostered from the Prime Minister downwards, that the crisis was the work of some aberrant bankers ruining a basically sound economy. The financial sector is part and parcel of the economy, both arising from, and flowing into, its material sectors of service, manufacturing and trade. The wealth bubble could not have come about without a consumer splurge and an accelerated, over ambitious business expansion during a 15-year period of continuous growth. No one bothered to ascertain how much of this growth belonged to solid assets and what part of it simply was greater expectation. Judging by the cumulative effect of all these years, our society has lived a seductive dream only to wake up to a harsh and unforgiving reality.

As an element in the realm of economic activity, expectation matters only in terms of the distance from its probable realization. Whether an expectation is rational or irrational, even if such a distinction were possible, makes no difference. The question is simply how likely is it to happen. An index-linked pension flow guaranteed by the government is a certainty, so long as the country does not go bust. Buying a painting or a property in the expectation that its value would rise is chancy. For a Tesco to open a new outlet in Doncaster is less risky that for an unknown leather goods merchant to open shop in Bond Street. A bank is more likely to recover its mortgage from an embedded employee in a solid local firm than its loan to an unknown conglomeration of individuals on another continent. And any government with an ever increasing budget deficit and a weakening currency is fast approaching a point where its expectations can no longer even be entertained.

We are all taking these measurements of the likely realization of our expectation as a matter of course in our daily life. So are businesses. Banks are supposed to be doing this all day long. It is obvious that they have neglected to do so. As for governments, they have other priorities. They are geared towards the coming elections so raising expectations takes precedence.

All this is common knowledge. I would not have put them in writing but for the fact that our society as a whole, from individuals to businesses, to banks and governments, has chosen to disregard the elementary guideline of keeping expectations close enough to the real world. It is as if we have communally taken leave of common sense.

But perhaps such an occurrence is not all that surprising. Throughout history, it has come about periodically, even cyclically. You see, we live in a culture of expectation. Subliminally, as well as consciously, we just expect the morrow to be better than today. We expect all kinds of improvements to our, and our children's lives in a never-ending upward movement. This has not always been so. Medieval man merely hoped that under the newly crowned king things would not get worse.

References

[1] There are two notable exceptions to this deplorable trend – John Maynard Keynes and Hyman Minsky. In his seminal work *The General Theory of Employment, Interest and Money*, John Maynard Keynes (1883-1946) introduces the element of long-term expectation. Investment and lending decisions are influenced by confidence and the belief that a prevailing trend is likely to continue into the future. Confidence, however, is a fickle thing subject to occasional wild swings. "Animal spirits - a spontaneous urge to action rather than inaction" (Chapter 12, VII, The State of Long- Term Expectation), are the main driver and element of instability of an economy.

Unfortunately, instead of heeding the voice of the master, from the 1970s onwards, his disciples, in cahoots with 'new classical' economists managed a betrayal of gigantic proportion: By seeking refuge in ever more complicated mathematical models, theorizing about the magic of 'complete markets', they excluded even the possibility of systemic malfunctioning.

Partly as a consequence, Hyman Minksy (1919-1996) was for much of his lifetime a lone voice in the economics desert. He continued Keynes' research on animal spirits, closely studying the interaction between financial markets and the 'real economy'. His classic *Stabilising an Unstable Economy* (1986) contains an uncomfortable truth, instability is system-inherent. Our economies are unstable because it is part of their nature. While orthodox economists might dream of a paradisiacal end state of eternal economic equilibrium, Minsky knew better than overlook the presence of the snake. A sunny economic stretch invariably fuels expectations, risk taking and financial innovation thereby approaching its ultimate downfall. In our current crisis, we are experiencing a 'Minksy moment' of biblical proportions.

2 G.L.S. Shackle (1903-1992), another rare and notable economic renegade, went so far as to deny the predictive potential of economics, calling on the profession to drop its scientific pretensions. Trained under Hayek and strongly influenced by the work of Keynes, he worked on the concept of probability and expectation. How could surprising events be accounted for in economic theory? Refusing the determinism underlying mainstream economics, Shackle thought it impossible to model expectations. According to him, individual decision-making in an uncertain environment was driven by highly subjective suggestions.

3 The theoretical paradigm of 'rational choice' is widely used in disciplines such as economics and political science to model individual and collective behaviour. We might have our own idea of what it means to be rational. But rationality in the context of rational choice theory merely posits that individuals will always strive for the best action possible based on existing preferences and given situational constraints. Before individuals make decisions, costs and benefits of expected outcomes are carefully weighed, with the aim of maximising personal utility. While the methodology has been useful in predicting certain kinds of social interaction, especially in microeconomics, it has failed to grasp human behaviour in its often confusing totality. Human beings are perfectly capable of acting against their own best interests, quantification therefore is a vain attempt to emulate natural sciences. In *The Romantic Economist* (2009), Richard Bronk encourages his readers to steer clear of such simplistic mathematical assumptions. Instead economists needed to immerse themselves in the literature and culture of the societies they are trying to explain.

4 Public debt has had its ups and downs, but mostly ups. Warfare in the 17th century lies at the origin of the first national debt. At the end of the 18th century, total public indebtedness of the world stood at about £1.7 billion. In 1890, it had risen to an estimated £18.5 billion, an increase of more than 1000 percent! Post World War I saw public indebtedness decline, but the Great Depression wreaked havoc with public finances in the Western World . Not surprisingly, World War II caused national indebtedness to sky-rocket, leaving Great Britain de facto broke in its aftermath. The economic boom years of the 1950s and 1960s brought relief, but they also saw the largest expansion of public spending on social programs in history. When growth stalled in the 1970s, their cost, combined with military expenditure in some countries, notably the US, had a devastating effect. From 1970 to 1995, in

OECD countries, the average share of debt per GDP increased 30 percentage points to more than 70 percent. Austerity programs were very much en vogue in the 1980s, but they have been able only to slow, but not to reverse, the trend.

The ongoing financial and economic crisis has dramatically increased the debt burden of European economies, for multiple reasons: rescuing banks has proved a costly undertaking. And while tax revenue is diminished by morose economic growth, crisis-related expenditure, in the form of unemployment benefit and other social transfers is increasing sharply. Interest payments on existing debt stock are putting added strain on public finances. In 2013, according to Eurostat figures, the UK's official government debt stands at 90.7% of GDP (although the figure would be closer to 150 % of GDP if the costs of bank bail-outs were to be included). France should weigh in with at least 94% of GDP, while Germany, at 81% continues to reduce its debt burden. There are currently five euro zone members with debt-to-GDP ratios higher than 100 percent of GDP, led by troubled Greece with 160 % and followed by the bloc's fourth biggest economy, Italy, with a debt of 130 % (Portugal, Ireland and Belgium are the three remaining culprits, with respectively 127%, 125.1% and 104 % of GDP). Some countries, such as Greece or Cyprus, are not able to honour their international financial obligations, and this despite drastic austerity measures, as well as bail-outs organised by the EU and the IMF.

Letter 5
Assets

In periods of growth or contraction of the economy, asset-related activity and expectation are mutually reinforcing.

In basic economic terms, *asset* is the counterpoint to *expectation*. It comprises all we possess. For individuals, this means personal belongings, property, skills and qualifications. Business assets are items that appear on its balance sheet, such as inventory, equipment, property, cash at the bank and money owed by debtors and also items not recognised by auditors: production capacity, position in the market, reputation, intellectual property rights, expertise and a well-trained work force. The state owns what does not belong to individuals or companies in the country. Land, roads, buildings, infrastructure, the NHS, schools, police, armed forces, the judiciary establishment, the civil service, all belong to this category.

In the last letter, we have distinguished expectations in terms of the likelihood of their realization. We will now have to differentiate assets in terms of their contamination by expectations. The extreme diversity of what is considered as asset is bound to make such an evaluation difficult. I am making an attempt at a broad classification not in the hope of discovering some elegant formula but because even an imperfect model is helpful in gauging the strength and the soundness of any economy.

There are few pure assets as there are virtually no pure expectations. The bulk of economic activity has within it both elements but in variable proportions. When it comes to assessing assets, their content is determined by the degree of their dependence on expectation. The more an asset is contaminated, the less solid it is. As a very rough guide, gold, minerals, commodities, property, land and what appears in company balance sheets as *net asset value*, are relatively less dependent on expectation. At the other end of the spectrum, sophisticated financial instruments, especially those of recent vintage, dependent as they are on future returns, are hugely expectation-biased. The value of this kind of asset is not only more fragile but also very difficult to assess. Toxic debt belongs to this category.

Gold is obviously an asset. It is a regular commodity insofar as it is used in the manufacture of jewellery but its significance lies in the handsomely shaped ingots buried in the vaults of central and private banks. In that guise gold is a solid asset, despite the oscillation in its monetary value, since its quantum does not diminish. It could also be said that it is a passive asset, not bearing interest and not taking a direct part in economic activity. At the same time, the ingots provide the most secure of securities against which money can be borrowed. Indeed, in past times, all paper money was nothing more than a government debt secured by its possessions of yellow and silver metal.

In stark contrast to the solid and passive gold, the genius of a celebrated artist is an asset but one whose realisation lies wholly in the future. Any work of art as yet uncreated would most probably fetch a six-figure sum but the artist may suffer a fatal heart attack or simply cease working. The value represented by an unpainted painting I think deserves to be termed *a potential asset*. It is immediately evident that this

category of assets reaches far beyond the spectacular individuals inhabiting the world of entertainment and the arts. Every scientist, teacher, surgeon, in fact, every professional and skilled worker is part of the asset base of our national economy, so long as we keep in mind that these assets are strictly potential. In terms of our new conceptual structure, it is crucial to assess just how large an element of expectation forms part of any asset.

It seems fairly obvious that, all things being equal, the element of expectation in a surgeon "asset" is proportionally greater than the same element in a barber "asset", no matter how proficient or popular that barber might be. And this difference is twofold: it takes at least ten times the time and expense to train a surgeon than a barber and a surgeon is expected to deliver perhaps twenty times more value to the economy over his career. To quantify this difference, it is helpful to compare the cost of three haircuts per hour with the cost of an operation lasting twice that long. People, on the whole, do not make career choices based on economic grounds alone, at least not in affluent Western democracies. Blue-collar workers and professionals diverge through aptitude, family tradition and opportunity more than through sheer earning power. Nevertheless, we constantly make decisions based on the relationship between investment in effort, time and money on the one hand and of financial return on the other. And society certainly has to make this kind of calculation when apportioning resources between primary, secondary and tertiary education.

The same principle applies to industrial assets. A car-manufacturing plant carries an investment of what may be loosely described as set-up costs. Before a single car leaves the assembly line, a facility has to be built, equipped both with machinery and a trained workforce, let alone years of research and development. Once the shining new cars are ready to roll, the success of the entire enterprise resides in the realm of expectation. The production line may come to a grinding halt as workers strike for better pay, the particular model may unpopular, demand for cars in general may plummet and unexpected environmental legislation may force expensive modifications. Any combination of these eventualities would play havoc with the original expectation at the creation of the car plant. The disappointment of expectation means that the whole enterprise diminished, rather than contributed to, the asset base of the economy.

Although industrial assets, comprising machinery, technology and know-how, have the more solid and quantifiable feel, human resource can have an equal, perhaps superior, track record. The kingdom of Hesse derived its main revenue by leasing out its army on a regular basis until the latter part of the 19th century, as did the Swiss before turning their mercenaries into universal bank clerks. An even better example is the success of Hong Kong with an economy built entirely on the industry and enterprise of its people. In assessing the solidity of the economy, a more promising categorising of assets is along the lines of primacy.

The production of food is perhaps the best example of a primary economic activity. Packaging, transporting and retailing it may be thought of as secondary, marketing and advertising it as tertiary, whilst applying health controls is more remote still. The same classification could apply to all products, with an increasing number, in the massive proliferation of choice, riding piggyback on others. If the car is considered a primary product then motorways, garages, fuel supplies and insurances are, to varying extent, dependencies. The degree of interdependence, complexity, sophistication of an economy is not irrelevant to its solidity and state of its health. I am tempted to think that a high degree of vertical complexity is in itself an economic weakness.[1] The further society moves away from a historically primitive model, the more vulnerable becomes its economy. Our food production may be less exposed to the vagaries of the climate but our highly sophisticated economy is more susceptible to hundreds of other variables. One of the key features of our present predicament is the want of reliable measuring devices to keep pace with the complexities of a global economic system. We did not have any sure-fire indicators foretelling the severity of the crisis.

Perhaps, an even more pertinent distinction in the asset realm is what may be termed the *expense element*. Apart from the cost of keeping ingots safe in a bank vault, maintaining gold is expense free. Disregarding extraction and storage costs, much the same applies to non-perishable commodities in general. Human resources have a more serious expense element inasmuch as personnel do need to be kept up to speed in their speciality and face total replacement on retirement. As for machinery and technology hardware, the expense element is important enough to be written down in the company's annual balance sheet.

Taking a snapshot of the economy, asset, in terms of human resources, constitutes partly past expectations realized and partly potential future output based on skills, knowledge and expertise already present. The economic equation is then this: how does past investment relate to current asset enlarging output? If the result of the equation is positive, it means that past investments more than paid for themselves and the asset base of the economy grew. If the result of the equation is negative, it means that some of the expectations did not materialise and the asset base of the economy, at least in human resources, diminished.

But it is with public sectors, forming part as they do of the welfare state, that the expense factor becomes critical. The health service, the educational establishment, the police, army and the civil service, are essential to the fabric of our society. They are rightly considered assets. But we must bear in mind that they are expensive assets. To maintain, enlarge and improve them means a continuing and ever increasing investment. As return on this investment, we expect an improved society: a more comprehensive health service, a better educational system, a fairer administration of justice, a more effective police force, a higher quality of social workers and whatever else public opinion desires. To what extent the returns on this on-going investment meets our expectations has become a statistical football kicked back and forth between political parties with the whole exercise cheered on by the media.

You will tell me that all this business about barbers, surgeons, car plants and public services is rather elementary and you would be only too right. Sadly, if we aspire to have some understanding as to why the world's car manufacturing industry is near collapse, as to why we may be facing the woes of unemployment and social unrest on a scale not seen for half a century, we have to go back to basics. Especially so since our leaders, in the public, private and academic sectors, are disinclined to do so.

The mantra of our economic life, for quite some time now, has been *growth*. Everything seems to have been growing: world population, production of goods, general prosperity, sophistication of the law, social justice, demand for resources, money supply, and, above all else, expectation. In fact, the more the economy grew, expectation grew even more. Perhaps there is some truth in the belief that the more one has, the more one wants to have. Growth came to dominate our collective thinking to such an extent that we took its upward path for granted. And, more than that, we made growth the main, if not the only, criterion of the health and strength of our economy. And we have sanctified GDP as the sole measure of its extent.[2]

Measuring the volume of an economy is not only insufficient, it is also misleading. It lulls us into believing that because the economy grows we are doing well. Ironically, if the quality of an economy is weak, the faster its rate of growth, the more grave will be the inevitable correction that must follow. The unfolding gravity of the crisis demonstrates that these weaknesses are most profound.

In sheer economic terms, the investment into national assets as against the improvements it brings, could never be quantified. It is obvious that the introduction of a cheaper and more effective drug represents a genuine asset gain. It is also evident that one biochemist or engineer is more likely to increase the national asset base than fifteen graduates in media studies. If Britain Plc, or any other national economy, were a publicly audited company, the profit and loss account and balance sheet would show the quantified result of investment, net loss or gain, as well as accumulated assets. Audits of national economies are less transparent. We have to be content with the overall yearly government revenue and expense. Annual GDP figures unfortunately tell us nothing about the economic quality of growth.

One of the few indicators that is relevant, if only indirectly, to assessing economic quality is the annually published statistic of the national budget deficit. This figure is supposed to be the measure of the difference between government income and expenditure. Government revenue has many sources and not all of them are helpful in measuring asset-positive against expense-loaded economic activity. For example, revenues derived from VAT do not distinguish between profitable and loss making transactions. Taxes paid on company profits, on the other hand, do tell us something about the state of the asset base of a national economy. If, measured by GDP, economies have been growing steadily and company profits have not kept pace, the relative asset base must have shrunk. Thus, volume of economic growth with a preponderance of the expense element within its asset base would result in a weaker, more fragile, *real economy*.

There can be little doubt that this is precisely what has happened over the last decade or so. Despite the self-deluding boast of a chancellor who believed to be the master of the economic universe, our economy was neither sound, nor healthy, nor resilient. There is a wealth of evidence pointing to our economy, much like other national economies, suffering from a variety of dangerous imbalances. Expectation and assets with a built-in element of expense far exceeded the growth of material assets with a solid, reliable base.

If Gross Domestic Product is a measure of total turnover, then I propose that Net Domestic Product (NDP) should be a measure of asset enlargement activity. The rough guidelines of qualifying for inclusion in the NPD centre on creation of assets. Thus money derived from outside the economy, whether brought in by visitors, foreign investors or exports, naturally represents an increase in the national asset base. Correspondingly, native money transferred abroad, whether spent on leisure or imports or investments does not qualify. Income produced by investments abroad does count when repatriated. Manufacturing, along with agriculture, mining and quarrying are obviously included since they produce goods that were not there before. The service sector, in the greater part, is excluded since, vital as it is, it maintains what is there without adding to the asset base. However, services strongly linked to production, such as for example transport, storage and communication, as well as research and development could count towards asset generation. Addition to the national housing stock, property construction and transport infrastructure in general has to be included. I am inclined to treat the building of new schools and hospitals in the same way, although they will hardly produce any revenue and, throughout their lifetime, they will cost the national economy a great deal money.[3]

In modern mixed economies, the state tends to provide the essential conditions for a society to maintain itself. This means looking after the people's health, education, social welfare, defence and security. Comprising the public sector, this involves a massive use of human and material resource. So for the purposes of the distinction we are drawing, this vast sub-economy represents a drain. It cannot form part of the NPD. We all want a superb universal health care system but, with people living longer and ever-improved treatments available, this costs more and more money. We depend on skilled and well-educated future generations but whilst they are schooled and trained, they are a burden. We are striving for a more refined justice system accessible for all, but administration and enforcement of the law is very, very expensive. The legislation

'industry' has never been more productive and never as oblivious to the cost of each additional right, each additional bit of legal protection and opportunity to engage in litigation. We are keen to extirpate any and every conceivable discrimination, but has anyone ever calculated the associated cost? Compensation paid by an NHS primary trust in case of medical negligence, the legal and administrative costs involved, are transactions that swell the GDP figure whilst diminishing the economy. This is why we need to distinguish systematically, on an ongoing basis, between asset-enhancing and asset-using activities on a national scale.

You know me well enough not to take these analytic proposals as a general attack on various aspects of the welfare state. Efforts to improve the lot of our society are generally desirable and the resource devoted to each single implementation of it may well be justified. But we have to know how much of it, in total, we can afford whilst we maintain, or improve, the balance of the economy. This is especially critical in a crisis when the measures administered are a general stimulus to the broad economy, measured, as usual, in terms of a percentage of the sacrosanct GDP. To determine affordability, it is not enough to calculate the money available for the Treasury at budget time. It is critical that we assess the quality of the economy as manifest in the balance between assets and expectations, between revenue-yielding and revenue- spending sectors, between hard and soft assets.

To evolve a quantifiable formula for the Net Domestic Product will not be easy. It will require a much closer analysis of the middle ground stretching between obvious asset production and sheer, non-investment, expense. It will have to distinguish between investment into human resources likely to produce future revenues and investment likely to improve the quality of life at additional cost. It will have to take account of factors like levels of primacy in the production process and the future growth potential of individual industrial sectors. But no matter how imperfect the first formulation of the NDP definition turns out to be, it will be the only tool to meaningfully assess the state of a national economy.

Once we have a figure for the NDP, its relative proportion to the GDP will yield a numerical coefficient to tell us what kind of economy we are assessing. If the NDP is 90% of the GDP, the coefficient is 9, if it is 10%, the significant figure is 1. Neither case is practically possible, of course. A primitive agrarian economy is likely to have the highest coefficient, with an oil-rich Sheikdom coming a close second. For the lowest coefficient we would have to look at advanced economies leaning heavily on social-democratic models. My guess is that Western economies would range between 2 and 4 with the majority around 3. I do not think there is an ideal coefficient guaranteeing a perfect balance. But there are limits, and breaching those leads inevitably to economic crises, or social upheaval, or both. The greatest danger, however, lies in relying on GDP and ignoring how much of it nets down to a sustainable economic base.

I do not know what calculations are currently used by central banks in the US, UK and Europe to determine the rate of money creation. I suspect it has to do with GDP yet it seems obvious that economies with higher Net Domestic Product coefficients could afford larger monetary expansion than those with lower ones. If currencies are based on the economies they serve, and with gold gone there is nothing else in the offing, the balance of the economy, and not just its size, should be reflected in the relative strength of any currency. In addition, when contributions to the EU and other international bodies are allocated, NDP should be part of the equation if that system of proportional contributions is to survive.

All this now becomes apparent with all the simplicity and clarity of hindsight. What we desperately need is an economic model that is capable of predicting a crisis before it hits home.

References

1 In an attempt to visualise an economy, it might be helpful to imagine it in terms of both horizontal and vertical complexity. Horizontal economic diversification is something to be applauded, as it offers many avenues for economic growth. The more economically diverse, the faster a country can adapt to shocks. If one industrial branch goes into decline, there will be others to absorb excess labour and capital. Vertical complexity, although very much a sign of the times, is another matter altogether. The closely coupled vertical supply chains, often very specialised and stretching across the globe are vulnerable to disruption and potentially devastating in consequence.

2 Gross Domestic Product (GDP) measures the total value of current goods and services produced domestically. While GDP continues to reign supreme, it has attracted its share of criticism over the years. In all fairness, its inventor in the 1930s, Simon Kuznets, was aware of its shortcomings and advocated the distinction between quantity and quality of growth, as well as between costs and returns. Some critics highlight the problem of uncounted economic activity, be it the black economy or unpaid household or social work. Others have chastised the worshipping of growth on the grounds of the associated potential human, social, cultural and environmental costs. More recently, GDP has been called out for mis-measuring our increasingly service-oriented, information-based digital economies. Given its focus on physical goods produced, GDP is deemed to only imperfectly mirror the ever-more immaterial nature of modern economic activity. It also stands accused of failing to capture the rise of the non-monetised economy, where perfect strangers are willing to collaborate in the digital realm without direct monetary return.

3 You will not be surprised to find that all economic activity, down to the minute detail is carefully classified, measured and logged. In the battle for statistical superiority, two classification systems are fighting it out, but are deemed roughly equivalent. There is the NACE Code, a pan-European classification system and the US SIC (now NAICS), the Standard Industrial Classification Code. All economic activity is first grouped under a letter - from A, *Agriculture, hunting and forestry* to Q, *Extra-territorial organizations and bodies*, and then attributed digit numbers, steadily increasing the level of detail. Breaking down economic activity in such a manner is both instructive and entertaining. You will find gems such as "Regulation of and contribution to more efficient operation of business" under L, *Public administration and defence; compulsory social security* or "Botanical and zoological gardens and nature reserves activities" safely tucked under O, described as *Other community, social and personal service activities*.

Stressing the importance of the productive sector of the economy, the author hopes that he is not accidentally mistaken for an advocate of ancient industrial policy. Far from suggesting the propping up of ailing manufacturing sectors, he merely wants to highlight the economic facts arising from an unbalanced economy. An indicator for such imbalances is a negative trade balance. It signals that a nation is no longer able to pay for its imports and is borrowing from abroad instead.

Letter 6
The Market

The accuracy of risk assessment is in inverse proportion to the magnitude of the entity assessed. The larger the entity, the less accurate the risk assessment.

A financial transaction of actual assets has a limited capacity for further financial transactions based solely on the original transaction itself.

There is a well-known saying that the market is never wrong. Recently, some commentators advanced the notion that, on the contrary, the current crisis demonstrates just how fatally wrong the market could be. Although both views tend to be expressed in loose language, the underlying dichotomy deserves some thought.

In the strictest sense, the market can be neither right nor wrong. The market is simply there to facilitate commercial transactions, recording these transactions minute by minute as they take place. The over-riding purpose of any free market is to allow goods to be traded. Financial markets help companies and governments to raise capital by borrowing or by selling bits of themselves. As a further sophistication, they facilitate international trade and transfer risk by dealing in increasingly sophisticated financial products. And, finally, the market performs the role of a gambling joint where punters place bets on future price movements. Taken as a whole, the market is complex, essential and inherently uncontrollable.[1]

It is important to remind ourselves of these facts now that the financial market, as against fish or cattle markets, has acquired dimensions way beyond its initial remit.[2] Its statistical arms now produce a welter of indices relating to the market as whole or various segments of it, be they industrial averages, commodities, currency rates, and many others. These indices open the way for buying and selling not just material goods and shares in specific companies but also entities that do not exist. You can buy into the future by betting on the rise or fall of the numerical value of any index within a given period of time. Beyond that, you can sell company shares you do not even own, merely promising to purchase them at a certain price on a specified future date. No cash is needed if your prognosis of the future turns out to be correct.

These possible deals on the stock exchange barely touch upon transactions of far greater sophistication offering the chance of making more and more money with less and less initial outlay. The technical terms employed in discussing such transactions are leveraging or gearing but there is no need for us to explore the intricacies of this whole business. It is sufficient to bear in mind that the higher the gearing, the greater the potential profit and, naturally, the risk.[3]

Any financial market dealings entail a large dose of expectation. Even the most simple purchase of company shares carries a significant element of expectation simply because their expected future earnings is built into their price. This factor is expressed as the company's P/E, or price-earnings ratio, which takes into consideration a quoted company price and its earning as stated in the last audited accounts. A high P/E indicates a strong future expectation of higher earning growth whilst a low one takes a pessimistic view of the company's future. But as you go up the level of sophistication, potential gains and risk rise exponentially until you have a financial edifice built virtually on expectation. This edifice happens to have played an important role in the tangible crisis enveloping us all.

When a future is constructed at such a huge distance from the current reality, the gap is filled by a universe of uncertainty. This universe is the fertile breeding ground of a whole gamut of 'experts' who claim that they are equipped with knowledge we ordinary investors do not possess. Armed with this privileged expertise, they offer to guide us through the strange and uncertain world of sheer expectation. The offer is invariably characterised by three key features: the money outlay and risk is wholly yours; they are adequately recompensed however the future may turn out; and they are much better at explaining the past than plotting the future. They are always ready with a reason why their prediction, always well reasoned, happened to have failed.

The experts operating in this rarefied atmosphere of pure expectation have varying techniques and go by different names. Bankers take your surplus cash, consolidate it with that of other depositors into large chunks of money which can be used with greater effect due to its sheer size. You have, of course, some say in which particular chunk your bit of money goes: those with a fixed rate of interest, those which are invested in equities or debt instruments, those with a destiny linked to a particular segment of the market, those confined to stocks and bonds traded on the home exchange and those quoted on other international markets.

Independent Financial Advisers have to be qualified and approved by the government before dispensing their advice. They tend to be concerned with individual or company pension schemes, recommending reputable funds on the basis of track records over the previous few years. Their field is very limited and the advice depends on relatively minor differences between most conventional fund managers who, more often than not, tend to think alike. In the food chain these creatures are the last in the line, as they just advise, but never act.

Fund managers appear to vary a great deal across an extensive field. At the one end of the spectrum, they deal with funds made up of a lot of small contributions and restrict themselves to shares of major companies. At the other end, managers lead closed funds with a high threshold of minimum invested sums and with the life cycle of the fund determined from the outset. These managers are adventurous, trusting their own judgements and tend to react fast to short-term price movements. They are thought to be much smarter than their average colleagues, moving moneys with an even higher element of risk and therefore involved with fewer investors of significant private or institutional wealth.

Banks, both investment and commercial, as well as funds employ another breed of creatures in the universe of expectations, to help formulate investment decisions. They are known as analysts and, as their name suggests, their job is to analyse investment opportunities. This often means in-depth research into the affairs of countries, companies, commodities and currencies, tracking indebtedness, profitability, net asset values, cash resources, the composition of trade, a company's position within a given sector and many other factors. They offer a quasi-scientific evaluation of risk and reward. This, at least, is the theory. Analysts come in all shapes and sizes, varying in profundity of insight, financial acuity and specialisation. Two of the more interesting species, being furthest from pragmatic assessment of ongoing realities, are the *cyclists* and the *chartists*. The cyclists believe in predetermined periodic swings of stock exchange values while chartists, broadly speaking, are in the habit of constructing graphs of price movements, be it individual shares or of the exchange as whole. The presumed cycles may vary in duration from a few years to many decades, while graphs are presumed to identify critical price levels, which, once breached, change patterns radically. Both cyclists and chartists are operating at the outer reaches of the universe of expectations. Their mathematically oriented theories are reminiscent of those produced by inveterate gamblers at Monte Carlo who believe they discovered the infallible formula to beat the house. Except that, in this rarefied atmosphere, they have been taken very seriously.

Forgive me for such a brief, superficial description of a scene with which many of you are familiar. I merely wanted to present at a glance the conglomeration of bankers, financial advisors, fund managers and analysts, who, together with investors, form the human element of what is now called the financial industry. Add the institutions they run and you have the market, referred to in Britain as The City and in America as

Wall Street. So now we can go back and give sense to the question whether the market is, or is not, always right. The original, narrow, meaning of the market is simply the execution and recording of transactions. The secondary meaning is this thriving universe of virtually pure expectations, fuelled and inhabited by the financial community. So the question is really about whether the financial industry, as a whole, is always right about the real value and true prospects of the material economy.

The various species of the financial community, whilst agreeing or disagreeing about this or that, are always in very close touch. They meet, lunch, drink, phone, confabulate, make deals, share information, watch screens, all in company of fellow residents of this world of pure expectation. Having, in addition, received training at the same institutions, they generate some sort of common attitude towards fragments of information filtering through from the material economy. This common attitude is called *market sentiment,* and may be considered a measure of confidence, or the lack of it, in the market's future prospects. We have been wallowing in a warm, comforting sentiment for at least fifteen consecutive years before this sentiment took on the sombre, dark, menacing aspect it presents today, although memories of the acute panic of 2008 are beginning to recede.

So is the market sentiment a good measure of the true value of the material economy? The difficulty of responding to this question is that in a free economy we do not seem to have another, and better, measure than the results of market transactions. It is a simple fact that the value of anything, not its worth, is what someone is prepared to pay for it. In a command economy, the government decides the price of bread. In a free economy the price fluctuates according to supply and demand, which in turn depends on harvest, retail competition, transport, substitutes available, consumer preferences and labour costs. Accordingly, the question formulated thus can have no answer.

What about asking whether market sentiment is a good indicator of the future prospects of the material economy? This formulation has its own difficulties. It has been accepted wisdom for a while that the market is about six months ahead of the material economy. Thus, for example, the price of a company share is supposed to reflect the performance of the company six months ahead of time. And the same could be applied to any market segment or the market as a whole. In other words, the idea is that the market discounts expected economic events in the following half a year. But even if such an observation were roughly valid, we would never be able to prove its validity because at the end of the sixth month period, new variables of expectation would have entered the equation. Short-term traders can and do take advantage of anticipated price movements. But whether market sentiment is aligned in anything beyond the shortest term with the future of the material economy, is just not a sensible question to ask. Was market sentiment incrementally right all along the last decade and is now suddenly wrong, or was it incrementally wrong then and has now come to its senses? Either assertion may be right or wrong, you can take your pick, it makes no difference.

In trying to understand the market in relation to the material economy, there are other issues that do matter and matter a great deal. To start with, the two are not as independent of each other as it has been made to appear. The notion, much cultivated by ruling politicians, that the financial meltdown brought about the economic crisis is a dangerously misleading simplification. The material economy, as I mentioned in one of my previous letters, is a fusion between asset and expectation, thus it dynamically interacts with market sentiment, each reinforcing the other. In a benign economic climate, share price rises encourage consumption, investment, borrowing and growth. And this in turn further improves market sentiment, and so on. Conversely, during an economic downturn, especially if it follows a prolonged boom, market sentiment darkens, accelerating the pace of the downturn. It is my belief that the market and the economy are seldom in equilibrium, they are in movement with the direction of the movement generating its own momentum. Expectations rise and expectations fall, invariably too far and, towards the end of the cycle, too fast.

As you know, I am barely familiar with academic economics, and I instinctively hesitate to draw on its historical views. Yet in this context, the ideas of Hyman Minsky have shown such foresight that I am bound to make an exception. What strikes me is his observation that over periods of prolonged prosperity, the financial sector tends to be particularly innovative, creating greater and greater complexity that leads to the next crash. At such moments stable financial relations change to ones that destabilise the system. His observation that economies with highly diversified financial markets are especially prone to such crises, made some 25 years ago, has an uncanny echo today.[4]

As the market trades for a large part in pure expectation, winners and losers should be in some sort of balance. If you bet on an index movement, or sell short, and lose, there should be someone, somewhere that profits from your loss. Although agents conducting each transaction skim a percentage off the top, the world should not be too affected by changes in the ownership of expectations. This despite the exorbitant

bonuses, golden parachutes and pension deals so prevalent in the financial industry, especially as these moneys generate taxes and make their way back into the material economy. It is true, of course, that when the circulation of money slows, creating a credit crunch, companies with a weak financial base have to suffer. But no credit crunch appears from thin air - the ultimate cause lies still is the imbalance between assets and expectations.

The financial industry tends to breed an inward looking community, curiously cut off from the rough and tumble of the material realities of daily commerce. The information that trickles in from the outside world appears in the form disconnected statistical figures, dispersed across a huge variety of topics and sources and is monitored by separate people. The price of gold, of oil, company results from here and there, jobless totals, factory output prices, summary reports from government and international bodies, treasury yields and hundreds of other bits and pieces of economic data from across the world form a pretty indigestible 24-hour information diet to test even the most lucid of thinkers. Add to it the compressed time scale allowed for decision making and you have a good rendition of chaos. . There is no single voice that asserts with any authority how profound the crisis is, what its root causes are and what will happen next. What is lacking is a systematic conceptual structure, backed by more relevant and refined tools than GDP, Money Supply and inflation statistics, to help assess the actual state of the total economy.

Perhaps, and most importantly, we have to re-acquaint ourselves with the crucial importance of a maximally free market. There has been a great deal of loose talk in the media about the faults of the free market, some commentators even venturing to predict the imminent demise of capitalism. The most vociferous outcry is for a more strictly regulated financial industry and thus, by implication, a more restricted market. In the midst of our crisis, this demand is very popular. People who have been badly hurt, or expect to be hurt, by the ever-deepening recession, are naturally looking for someone to right their diminution of wealth and defend them from losses to come. Bewildered by the collapse of trusted institutions they imagine that more rules, better enforced, would provide protection. In political circles the demand strikes a chord, both by deflecting blame and increasing governmental power.

But I advise you to beware of these noises. They are a typical case of barking up the wrong tree. Behind this clamour lurks the illusory idea that everything has an intrinsic value, even though the market, at any given time, is either prepared to pay a premium over the price or demand a discount from it. This idea, although useless in economic terms, is instinctive and deeply ingrained in the human psyche. Houses are made mostly of brick and mortar, we all paid a certain sum to acquire ours, took out a mortgage against its putative value and believe it is worth this or that much. In the meanwhile it provides a roof over our heads and a home to our families. So be it. But, as we are only too aware these days, the value of a house does go up or down depending on the property market and the general economy and, for any practical purpose, we have no other measure of its worth than what someone is ready to pay for it. This is the essence of the free market, a market that is perhaps the single most precious component of our, more or less, democratic life.

Of course, strictly speaking, there has never been such a thing as a completely free market. There have always been rules and regulations governing transactions to ensure that the transacting parties fulfil their mutual obligation and, well beyond that, insisting on what is called fair competition. These provisos are set partly by the market itself and partly by governments. The ongoing debate is about the part to be played by each of these forces. Before embarking on reform, at the very least, we must have an idea of what we want to legislate about. The financial market is now a highly sophisticated and intentionally opaque thing. It has grown organically over many centuries. Please remember that nothing is more dangerous to vibrant activity than government seeking short-term popularity.

The key to any reform of the financial industry has to concentrate on some basic distinctions within this manifold world. The activities of building societies and high street banks are, or ought to be, light years away from those of hedge funds. Any individual walking into a high street establishment, to deposit her hard-earned cash, or take out a personal loan, or buy herself into a pension scheme, should have unqualified assurance that her money is inviolate. This means severe restriction as to what that bank is allowed to do, backed by an absolute bank guarantee. The regulations may be as strict as you like but those must not apply to other segments of the financial sector.

Commercial banks, operating in the corporate field, would form the second tier of the market. The transactions would be business to business, so we are entitled to assume that bank managers at this level and managing directors of the companies involved would have enough savvy to act within a more tolerant regulatory regime. The banks would, of course, have full discretion as to which companies to back. Investors with the bank would have the assurance that loans are granted only to companies operating in the *real* economy. These lending operations would entail no government guarantees.

Financial products, of whatever kind, would be the domain of private banks and hedge funds. Transactions here are really a diverse and sophisticated form of gambling, conducted between two private entities, so special regulations are irrelevant. Ordinary law concerned with fraud should provide sufficient protection.

What matters is that people bringing money to the market should know exactly what to expect. Walking through the green doors of high street banks they would be safe with a modest return on their capital. The amber doors of commercial banks would offer more attractive prospects with a measured element of risk. The doors of private banks and hedge funds would be painted red, with an emblem of skull and cross bones added, just to ensure that visitors are entering into the realm of casinos. No single regulatory system can encompass the entire financial industry but making the basic distinctions clear would provide what we most need: transparency.

References

1 Financial markets can be national, regional, international within or without the jurisdiction of a specific country. The market in which residents of different countries trade assets is called the international capital market. We are dealing here with a group of closely interconnected markets, backed by a network of financial centres linked by incredibly sophisticated communication systems. The digital revolution, as well as the "light-touch regulation" regime has fostered globalisation of finance. It has allowed the sheer number of transactions that take place every second, and trade in sophisticated financial products, to rise to giddying heights. Assets exchanged on the international capital market are stocks and bonds, as well as currencies. An important activity is the creation of complicated financial instruments to hedge against risk. The main players in the international capital market are banks, large corporations, non-bank financial institutions, such as mutual funds. They are joined by central banks, operators of the "shadow banking system", as well as a few fantastically wealthy individuals.

Over the last 15 years, the financial system has increasingly relied on shadow banking institutions, which include, among others, hedge funds, investment funds, entities dealing in asset-backed securities, money market funds, as well as credit insurers. To use a little bit of finance speak, the shadow banking operators borrow short in liquid credit markets and lend long circumventing cumbersome banking regulation. They finance their own investments or take over the role of lender. This business model crucially depends on the availability of cheap short-term finance. The moment liquidity evaporates, things get complicated. In 2008, some of these pioneers of the high seas of finance had to resort to fire sales of their assets in a desperate attempt to stay afloat. They had the weight to drag down large parts of the economy with them.

According to the ECB, in 2012, shadow banking institutions accounted for more than 20% of all assets held by financial institutions, roughly 11 trillion EUR (banks were holding 55%). Given their systemic importance, financial regulators are waking up to the need to identify, monitor and regulate shadow banking.

2 Given the diversity of agents, instruments and markets, and the lack of transparency, it is extremely difficult to accurately estimate the size and nature international financial markets. But no-one can deny the sheer explosion of international trade in financial products. In the early 1980s, the volume of transactions of bonds and securities between domestic and foreign residents accounted for about 10 per cent of

GDP in the United States, Germany and Japan. By 1993, the figure had risen to 135 per cent for the U.S., 170 per cent for Germany and 80 per cent for Japan. Poring over the figures that are made available by the Bank of International Settlements (BIS), one finds that foreign claims on residents of all countries stand at roughly $30 trillion in 2013 (up from $15.7 trillion in 2003). The daily volume of foreign exchange transactions in international financial markets has grown from $820 billion in 1992 to $3.2 trillion in 2007 and to $5.3 trillion in April 2013! Growth has been even more impressive in the market for derivatives, financial instruments that broadly speaking derive their value from an underlying more or less hard asset. Their gross market value, the cost of replacing all contracts at current market prices stood at $24.7 trillion at the end of 2012, up from $14.5 trillion in 2007 before the onset of the financial crisis. As a comparison, world GDP is supposed to be roughly $75 trillion in 2013.

[3] The internationalisation of capital markets, as well as its increasing complexity has in part been driven by the wish of market participants to diversify the risks of their portfolios. Derivatives provided the perfect, and occasionally fatal answer. You might have heard of them as forwards, futures, options and swaps. Imagine the purchase of such an instrument as broadly comparable to buying a classic insurance contract. While you would hate to pay for new windows following a particular destructive hailstorm, a mutual fund might be worried that falling exchange rates would wreak havoc with its investment strategy. But, never fear, the purchase of a suitable derivative might not only hedge against such losses, but also bring in a neat profit in case the event materialises. But as so often in life, too much of a good thing can have disastrous consequences. Trade in credit derivatives, invented by Wall Street in the course of the 1990s to insure against credit defaults ballooned to $12 trillion in less than a decade. Another category of derivatives blamed for the global financial fiasco are credit default swaps (CDS). To quote again from the statistics of the Bank for International Settlements, in December 2007, there were $57.9 billion in outstanding CDS, and another $71.2 billion of unallocated CDS. In June 2012, the numbers stood at $27 billion and $42 billion, respectively.

[4] Hyman Minksy (1919-1996) closely inspected the relationship between the financial sector and the real economy. According to Minksy's *Stabilising an Unstable Economy* (1986), economies with highly diversified financial markets were especially prone to creating crises from within themselves. 'Over periods of prolonged prosperity,

the economy transits from financial relations that make for a stable system to financial relations that makes for an unstable system.' Financial innovation, as well as the propensity to lend, go up in economic boom times creating more and more complexity that invariably leads to the next economic crash.

Letter 7
The heavy hand of government

A free market is only free to the extent that it is uninfluenced by government intervention in determining the supply and cost of money or manipulating supply and demand.

In a Western democracy, built-in expectations are the major constraint on government action and inaction.

The possibility to trade freely is the heart and lifeblood of all non-command economies. If we cannot sell our goods without hindrance and buy what is freely available at competitive prices, both the material economy and the financial base supporting it would cease to exist. A few years' experience of having lived behind the iron curtain would be enough to make that statement self-evident. Of course, no free market is entirely free. Many drugs cannot be traded, alcohol cannot be sold to minors, substances considered harmful are prohibited, goods have to have accurate descriptions of their origin and content, monopolies are illegal, trading companies have to be continuously solvent, and another one thousand and one regulations constrict the freedom of market activity. Society has learnt to adapt to these restrictions often imposed by popular demand, and mostly by politically motivated governments. Paradoxically, even rules generated by the European Union, with questionable democratic credentials, have gained formal acceptance throughout the continent.[1]

Although the degree of market freedom, as it varies from country to country, is important, the debate about the economic and financial crisis is not really about that. The case brought before the court of public opinion is that the market itself is the true culprit, the architect of our misfortunes. The narrative goes as follows: the recession in the material economy was caused by the near meltdown of its financial base which in turn came about through the incompetence of the banks and the collective folly of the global financial community. In other words, the market itself was to blame.

There is no doubt that the free market is intrinsically vulnerable to deviation.

Temporary imbalances are part and parcel of fluctuations in the daily life of the market. Demand exceeding supply will naturally increase prices, as evinced by the gradual rise of oil costs prior to 2008. However, the price of $150 for a barrel in 2008 did not reflect the true differential between material demand and existing production rates. With the current price at around $100 a barrel (back up from $50 in 2009), it is safe to conclude that the oil market had been affected by something else than simple supply and demand. This something else was pure expectation of oil price fluctuations within the financial markets and it amounted to a massive turbulence in the material market itself.

Examples of market manipulation abound, they may be of short duration but devastating in consequence. A common manoeuvre causing market deviation is *short selling*. For those of you fortunate enough not to be involved with stocks and shares, this means undertaking the sale of a company share, or a commodity or a currency, at a fixed price and at a fixed future date. What is somewhat peculiar about it is that you need not possess the shares, or the commodity or the currency, at the time of the original transaction; a signed document by a financially reputable bank or individual is quite sufficient. The short-seller will "borrow" or "rent" the paper to be sold, and later purchase identical papers for return to the lender. If the eventual sale price is below the ruling price at the fixed date, you make a profit. If, vice-versa, the sale price is above the ruling price, you have to fork out the difference. This was the simple ploy used by George Soros on Black Wednesday in 1992 humiliating the government of the day and striking it rich in the process.[2] Used many times over, it has been a major contributing factor in world-wide wave of spectacular bank collapses over the last two years.

Market manipulation by financial actors, undoubtedly, does at times result in damaging deviations of the material economy. Shorting bank shares can lead to the collapse of a financial institution. Shorting shares of industrial or commercial companies may reduce their financial standing and make it difficult for them to obtain the capital required for running their business effectively. There is a particular nasty way of short selling: a naked short sale occurs when a security is sold short without first ascertaining that one can borrow the security. These dangerous ploys are magnified when traders combine to act, overtly or covertly, in unison. They are capable of generating a trend that carries its own momentum to deadly extremes.

To counter short selling is one of the prime items on the agenda of the international movement for regulatory reform. In fact, at the height of the banking crisis in autumn 2008, the US government outlawed short selling for 14 trading days, to poor reviews. Historically, attempts at regulating such activity out of existence have proved futile. This is hardly surprising given the human temptation to bet on the outcome of any uncertainty. In any case, a consensus to refrain from buying the shares of a company would by itself drive down its share price and the gathering movement would result in a scenario not dissimilar to short selling.

A more effective method than legislation to deal with short selling is readily available. Companies traded on a given stock exchange could contribute an insignificant fraction of their their market capitalisation to a defence fund. A body elected by all participating companies would govern the fund. Faced with a short selling attack, a company could then appeal to the fund with evidence demonstrating its financial stability and economic viability. If the governors considered the company fundamentally sound, they would buy its shares and thus reverse the trend. Acting with judicious timing, they would sink the short sellers with heavy losses. It would require but a few such debacles to extinguish any short selling appetites. If I am not mistaken, the Chinese government is already considering creating just such a defence fund to protect its own domestic investments. As a general rule, fighting money with money is more effective than fighting money with regulation.

Market-generated deviations, in general, have their inherent limitations. Betting on the future movement of prices invariably involve losers and gainers, roughly in the same proportion. So in total the overall result is almost market neutral, disregarding the various incidental fees absorbed by the financial institutions instrumental in the transactions. Takers of commission are the only sure winners. What makes speculation in pure expectations so noxious is the fact that the losers are very often small investors whilst, inevitably, the insiders have the advantage of being inside. The other significant limiting factor is that markets have a nasty habit of biting back, leaving the risk-taking manipulators heavily penalised. The shrinking oil price grievously hit all who went long or not short enough on that commodity. Generally speaking, in the very short term, gambles going with market trends have been more productive than those in the opposite direction. The Norman Lamont disaster of 1992, our Chancellor at the time, was something of a foregone conclusion since the British government tried to manipulate the price of Sterling against a market that was deeply convinced of its overvaluation.

This brings us to the role played by governments in the workings of the market. So far in our crisis the multiple failings of management within banking institutions have been highlighted. The political establishment, as evinced by the summits of G8, G20, and the frequent gathering of Finance Ministers, central bankers, and directors of international financial institutions like the IMF could agree on one thing only – the need to regulate banks and markets more severely. Once bankers would have been taught how to behave by means of some international body of law, or various national regulations, the world economy would be zinging along and everyone would be basking in the prospect of steady, sustainable growth in a sea of universal prosperity. These days, this idea seems to have been quietly abandoned. Banks might be a bit better capitalised and a bit more risk-averse, but all and all, they have successfully resisted attempts to regulate them into submission.

The first priority of any market is, of course, money. Before any other consideration, what determines the activity of the market is the availability and price of money. All things being equal, the more money is available and the cheaper it is, the more active the market. But there is one and only one legitimate authority that can control the amount of money in a national market and set its basic price. And that authority is the central bank, which generally is a creature of government. In some economies, the US, UK and the Euro zone, among others, the central bank is supposed to be independent and free of political influence, but in today's conditions no one could seriously believe that there is no collusion between central banks and governments.[3] The exception to this sad state of affairs surprisingly is the European Central Bank, where the sheer number of participating governments and diverging interests *de facto* preclude coordinated influence. Be that as it may, the market does not generate its own money and the rates of interest charged by banks, although variable, are basically the function of interest rates set by a central financial authority.

If the government's role consisted only in governing the supply and price of money, that in itself would suffice to make it the prime manipulator and distorter of the market.[4] One of the characteristics of the pre-crisis decade, accelerating with the economic slump after 9/11, was the easy availability of money. Markets were awash with the liquid stuff, with investors seeking less and less viable opportunities and banks competing to loan to more and more questionable individuals, companies and ventures. Where did such amplitude of money come from, if not from the governments via their central banks? Unless you posit an alien race of invisible forgers intent on destroying the world economy, you will have no option but to conclude that the great distortion of the market was accomplished by governments. It was this massive distortion, accumulated incrementally over many years, that prepared the ground for the unforgivable banking excesses that culminated in the crisis. Without the abundance of relatively cheap money and a culture imbued with a belief of perpetual growth, so happily propagated by politicians, bankers would not have been infected with a virus of universal recklessness.

But, of course, the extent of governmental influence does not end with the control of quantity and price of money. The government is by miles the largest employer, with, depending on countries, between 15% and 35% of the workforce on its direct, or indirect, payroll.[5] It sets the parameters of wages and salaries, benefits and pensions, in fact all the financial terms for half the population. Concurrently, the government is also, by a distance, the largest single spender of money within the economy. Figures for its projected and past expenditure is made public quarterly and, I imagine, is much studied by the learned analysts of the financial community. But by any standard government expenditure exceeds that of the private sector. Health, education, security, transport infrastructure, social welfare, legislation and law enforcement, defence, tax collection and the civil service, taken together across the whole population demands vast quantities of money. To meet these costs the government has to have revenues, and the unique source of this revenue is taxation. Paying taxes is not one of citizen's favourite occupations. Thus democratic governments, anxious about their popularity, are reluctant to increase the burden. Unfortunately, the opposite applies to expenditure. Cutting any of the public services or state benefits is anathema to practicing politicians. If cuts are undertaken at all, they are done by stealth with a sleight of hand.

This dichotomy in Western democracies – between ever increasing government spending and a natural reluctance of tax payers to fund its cost – catches political parties on the horn of popularity. To be elected, they feel the need to promise expanded goodies with reduced, or at least just incremental, taxation. Since any such exercise is axiomatically futile, governments are reduced to taking the only option available: borrowing. Borrowing for governments has wonderful advantages not open to ordinary households or viable businesses. Every household and every company has to ensure that its indebtedness is kept within manageable limits and, preferably, repaid within the foreseeable future. Failing to do so, individuals and companies go bankrupt and cease to exist as economic units. Not so nation states. Although in the annals of political history, there have been occasions where the treasury of a country failed to pay its external debt on the due date, matters were then fudged, mainly to the detriment of the lender. Argentina is a recent case in point. Way back Philip II of Spain had to alter the calendar when the supply of gold from America failed to materialise and he was unable to pay the bankers of Genoa who funded Spain's war in the Low Countries. Not surprisingly it was the bankers who eventually went bust under Philip's son and Genoa never quite recovered its prominent position in the 16th century banking world.

The ramifications of national bankruptcy are highly relevant to the global crisis. Without international intervention of some sort, whether by the ECB or the IMF, Greece, Cyprus, Portugal, Spain, Ireland and a number of other European countries would be incapable of meeting their external financial obligations. But the governments of countries in perilous condition know just how reluctant the world is to let them admit formal insolvency. Just as governments are forced to bail out their major banks, the world has to save failing countries. Both fear the domino effect of any one such collapse. If a number of central and Eastern European countries fail to pay their debt, the Austrian banking system collapses, which drags in the European Union, and so on. When it comes to the more substantial economies, like France or the UK, the general sense is that their internal resources are large enough to meet their financial obligations, eventually. But even that cannot be taken for granted. France's debt burden looks less and less sustainable. And we should not forget the 1970s when Denis Healey, the UK Chancellor at the time, arranged for the United Kingdom to be rescued by the IMF. As for the US, a bankruptcy scenario is scarcely imaginable. The mighty Dollar, the world's dominant reserve currency, ensures that nothing like that should ever happen, although it is perhaps prudent to say never say never.

So, one way or the other, governments do not feel the threat of going bust in the same way as households and companies do. Sadly, with some justification, they allow themselves the luxury of thinking that the future would take care, somehow, of their accumulated debt.

References

1 Regulation imposed on markets can be loosely grouped into three categories: Market enabling regulation enshrining the basics, such as property rights and contract enforcement mechanisms. Secondly, regulation to foster market functioning, anti-monopoly legislation falls into this category. Lastly, a third category that does neither, and in some cases may be detrimental to market operations. It is up to each society to decide its level of regulation, how much it trusts market participants to make the right choices, and how much it fears negative externalities linked to market freedom.

2 George Soros bet against the ability of the British Government to keep Sterling above its agreed lower limit in the European Exchange Rate Mechanism. Incidentally, he acquired over one billion US Dollars in the process. With not much really new under the sun, the first case of selling short goes as far back as 1609 involving Isaac Le Maire, a Dutch trader with a dominant share holding in the Vereenigde Oostindische Compagnie. Despite a variety of bans throughout financial history, short selling has always made a come-back.

3 Willem Buiter, former *Financial Times*' Maverecon wrote a moving orbituary to independent central banking (*1989 +2007). The mythical Deutsche Bundesbank established in 1957 is credited with being the first pre-modern independent central bank. Starting in New Zealand in 1989, the idea moved to the UK and Japan in 1997, and to the Euro zone in 1999, to spread around the globe thereafter. Buiter differentiates between target independence (the ability to set targets, such as the inflation rate, instead of having it dictated by the Treasury, like the Bank of England) and operational independence (the ability to pursue set targets as it sees fit). Operational independence is based on three main factors: political independence (being free from political interference), technical independence (having the right

tools to achieve its targets), and financial independence (being equipped with enough capital and a secure budget). Seen through this prism, central bank independence is not an absolute, but rather a matter of degree. The current financial crisis has rendered central bank independence moot. Central banks taking on significant credit risk in their attempts to revive national economies have to cooperate closely with national fiscal authorities.

Ever since the financial crisis has morphed into a solvency crisis for some Eurozone countries starting in 2010, the European Central Bank finds itself in a curious position. In the absence of a European treasury, the ECB, acting independently, has done everything within and quite a bit without its mandate to keep the eurozone from falling apart. But such valiant and creative efforts have only postponed the ultimately inevitable: either further integration bringing about the mutualisation of debt, currently forbidden under EU treaties, or a break-up of the eurozone.

4 The word distortion is used here purposely. Market distortion is an intervention in a given market by a governing body, setting for example price ceilings or granting subsidies. Market distortion creates market failure, with inefficient allocation of production or use of goods and services.

5 In Europe, Scandinavian countries score highest when it comes to public sector employment and Mediterranean countries the lowest. As for the United Kingdom, in 2013, almost 2.5 million people were employed by local, and almost 2.7 million people by the central government. The public sector, including the 466,000 strong NHS, is by far the largest employer in the UK, absorbing 19% of the UK workforce.

Letter 8
The Global Dimension

There is no global economy. There is only the closely enmeshed inter-dependence of national economies, which is not at all the same thing.

Nowadays, the word 'global' trips too easily off the tongue. There are lots of 'globals': global warming, global companies, global trade, global communications, global health risks and, of course, what concerns us here, the global economic and financial crisis. As the use of words helps to determine our thinking, we have to be a little careful about the exact meaning of our terms. We have a mental image of an unhindered flow of whatever substance is discussed: virus, climate, trade, information or *the crisis*. Like all powerful images, this one has a substantial element of veracity as well as a potential to mislead and confuse.

True, global warming presents a danger to us all but its effects could vary enormously from one geographic location to another. Half Bangladesh may be submerged under the Indian Ocean whilst Greenland becomes a brand new Riviera. The bird flu virus could have, theoretically, spread throughout all continents but regional measures curtailed its progress. Digital transmission is now undoubtedly capable of reaching every corner of the world but the culture and information disseminated will not be the same all over simply because governments and media will selectively restrict its flow and subjectively interpret its content. International trade has breached most borders but the failed Doha round of negotiations serves to emphasize divergent national and regional interests.

Politicians currently in power, especially those with many years of tenure, are keen to insist that this economic and financial crisis is global, that we are all in this together, and that we have to act in synchronised concert if we are to restore our individual economies to their customary state of good health. That there is a large international economic interdependence no one can deny. This does not mean that the roots and manifestations of the crisis, and therefore its appropriate antidote, are the same everywhere. This obsessive insistence reeks of a desperate need to disclaim any responsibility for the crisis itself. *The whole world is in a mess, so the mess here has nothing to do with me, I cannot possibly be blamed, I have nothing to apologise for, we were doing just fine for ten years* *until a world wide financial tsunami devastated our flourishing economy.* So, the use of the term 'global' in this context merely serves to mislead and provide a fancy cloak for an abysmal failure.

I do not wish to dwell on the apportioning of blame for the crisis, the historical perspective will do that. It is important, however, that you understand just how global the crisis is and what its global aspect really means. It may be more helpful to talk of economic and financial interdependence, leaving 'global' out of it, since *interdependence* highlights differences as well as similarities. All economies are suffering, at least to some degree, from contraction but not all are short of cash, not all are in debt up to their neck.

To grasp the meaning of this interdependence, it is as well to contrast it with self-sufficiency. In today's world, very few economies, perhaps none, are virtually self-sufficient. Of the major countries, India comes closest with an estimated figure of 80%, even though it is now significantly expanding its international economic links. Although China is heavily into supplying the world with inexpensive consumer goods, its sheer size alone could potentially allow her to thrive entirely within her own boundaries, were it not for her voracious appetite for energy resources. Until the 1970s, the US had the capacity and resources to operate effectively within her own domain. In fact, throughout the 1950s and 1960s, it was a net exporter running a trade surplus of about one percent of GDP. Since then, her rampant consumerism fostered a growing dependence on foreign manufacture. The inevitable consequence has been a seemingly unbridgeable trade deficit and a severe reliance on foreign funding a mountain of American debt.[1]

The architects of the European Community envisaged a self-sustaining continental monolith on the complementary model of French agriculture and German industry culminating in a single market looking inward. That regional dream of a single, inward-looking market is nowadays confined to the realms of sleep. In terms of energy resources, Germany depends on Russian gas, Britain on Gulf oil, France on nuclear fuel. German high-tech exports need world markets, the UK finance industry is sustained by sources well beyond Europe whilst EU Mediterranean countries require barriers against food imports from the rest of the world.

Although countries with primitive economies have tended to be self-sufficient, the general trend has been moving fast in the opposite direction. And not only in terms of material trade, but, as significantly, in terms of skills, movement of money, information and culture. Any innovative piece of technology originating in one country will find its way, within a remarkably short time, into the rest of the world. Well-capitalised, successful companies, like Wal-Mart or Tesco, are ambitious enough to establish their business on all continents. The internet, no respecter of borders, transmits events as they are happening, and instantly comments on them, simultaneously to all corners of the world. It has become difficult to guard privacy or keep secrets. As for cultures, be they that of TV soap operas, reality shows, popular music, fashion, sport or the Jihad, they all migrate, cross-fertilise and mutate with bewildering momentum, impacting economies everywhere.

So the picture, from self-sufficiency to various forms and degrees of interdependence is enormously complex. This is not saying anything new, or controversial. I rehearse it here because to believe that the governments of the G8, or G20, or the apparatus of the EU, or the IMF, or the World Bank, all know what is happening, are in control and are agreed on a common course of action to resolve the crisis. This is far removed from reality. Actions taken and proposed have been more or less panic measures by frightened men with a short-term scope. Actions are made to appear commonly agreed and closely co-ordinated whereas they vary with individual economies and are tailored to individual interests. Insofar as they could be said to be unified, they are all meant to build confidence. Confidence to induce the private sector of the economy, business and household, to return to the fray in the hope that it will be all right on some undefined future day.

Building confidence is not the same as building an economy. It requires more than pouring tons of freshly printed money to prop up dodgy banks. Engaging into manifold government projects may or may not, eventually, pay for itself. But taking such measures, with universal abandon, by economies the world over does not alter the odds of success.

The complexities of international interdependence are such that any overarching agreement in principle reached by world leaders is meaningless. It is all very well to announce a common international accord that all economies should be stimulated, that all banks should be governed by the same rules, that all tax havens should be eradicated, that protectionism is damaging every one, that environmental issues should remain in the forefront, that the poor throughout the world should be shielded from the effects of the crisis. But how do all these fine words translate into action in the real world?

Falling oil and gas prices help drive activity in energy importing markets but have the opposite effect on developing gas fields in Russia and oil production in OPEC countries. Supporting car industries simultaneously in Japan, Korea, the US, Germany and France aggravate market conditions already suffering a massive oversupply. Measures to help the ailing housing market in Britain and the US may just have a temporary local effect without contributing a great deal to the global economy. Encouraging consumers to spend more would benefit exports from the Far East but widen even further a trade imbalance that is one of the root causes of our crisis. The notion that a freshly created financial architecture governed by a newly created international authority, whose rule would run effectively from Vladivostok to Rio de Janeiro, is a figment of political imagination.

Eradicating tax havens is a highly popular target but it is easier said than done. They are widely popular, as the former Financial Service Secretary of the Treasury, Baron Myners, the British government's chief eradicator knows, having used them to his advantage for many years. In any case, funds sheltered in tax havens are not stored in safe boxes under the Caribbean Sea. They are kept out of the hand of governments but are actively invested in various national economies and so contribute to overall activity. Abolishing them, were it possible, would make precious little difference to the general situation. In the meanwhile, the most likely scenario is that those with substantial wealth will always evolve techniques to keep their assets one step ahead of pursuing tax collectors.

Quoting the now biblical reference to the thirties depression, the general belief is that protection of domestic economies prolongs the downturn. Such a belief may be justified but quantification of the global effect of protectionist measures is a tricky exercise. Moreover, we are not even clear as to exactly what constitutes protectionism.[2]

Speaking on international platforms, politicians sermonise about protectionist vices but when faced with their own electorate, it is British jobs for British workers, American jobs for projects funded by the American taxpayer, and French jobs for the French auto industry.

I am sure you prefer to look at what governments do, not what they say. About one year into the crisis, every single action actually taken by every government had been based on one consideration only: a hoped-for benefit to their own economy. The World Bank published a report on March 2, 2009, which showed that seventeen of the nineteen developing and industrial nations plus the EU had introduced restrictive trade practices since their solemn November 2008 pledge to forego protectionism. Every country with an endangered banking sector, where financial support was ultimately provided by the tax payer, has indulged in financial protectionism. The Irish tried to safeguard their banks in September 2008, the Germans did the same shortly after. The British have bailed out virtually their entire finance industry since trouble started in 2007, the French have underwritten their own car industry. The Chinese are directing vast financial resources to develop their own domestic market and the Americans do what the sheer size of their economy permits them to do, everything in their very own interest. As for the travails of the eurozone, the only credit-worthy country still standing, Germany, is steadfastly resisting siren calls to mutualise eurozone debt knowing full well that it would bear the brunt of such an undertaking.

There is nothing wrong with all that, it is precisely how individuals, companies and nations are expected to behave. And this orientation has a tendency to become more pronounced when times are bad and danger is closer to home. Now, some of the measures taken in self-interest also happen to be to the benefit of trading partners and even competitors, but that is not the primary purpose of the move. The first sign of a change in willingness to improve international co-operation would be the speedy and satisfactory conclusion to the Doha round of talks aimed at removing trade barriers.

This has not happened and it has not been on the agenda of the latest G20 or any other eagerly awaited summit meeting. So do not hold your breath.

As examples of international activities taken under the global umbrella, let's have a look at fighting climate change and world poverty. No other topics have attracted a greater number of international conferences, expressions of commitment, agreements and resolutions in recent years. You are familiar with the Kyoto Protocol agreed in 1997 establishing greenhouse gas emission targets and a market for trading permits of pollution. Sixteen years down the road, after endless talk and substantial resources spent on fostering renewable energy, global carbon emissions are up, not down. Talks on a new comprehensive agreement for the period after 2013 collapsed end of 2009, and a face-saving fudge negotiated in December 2011 de facto postponed all actions until after 2020. We obviously do have to worry about global warming and measures need to be applied across the world. The question is whether these high-level gatherings and international undertakings on paper are the best way to go about it. Since whatever kind of action taken has to be within the workings of national economies, it seems natural to let their private sector, encouraged by its own government, take the initiative. Local pressure driving the exercise is more powerful than an ever more complex set of targets and regulations imposed from the top. The incentive to invest in new technologies on a national level is their potential future worldwide application. There are signs, in practice, that this already happening.

California plans to substantially reduce its own carbon emission without waiting for further intergovernmental agreements. Israel is building the infrastructure network needed to make electricity powered cars a more viable alternative.

The gesture to extend a helping hand to developing countries is a noble one. It has been on the agenda of virtually every international gathering of the great and the good. So far as I am aware, the vast resources channelled through governmental and international bodies to Africa has either made no correspondingly substantial difference or, in many instances, held back organic local advancement.[3] Certainly, a significant portion of such impersonal subsidies ended in Swiss private bank accounts. In contrast, private initiatives backed by charitable bodies and implemented by inspired individuals on the ground did produce some tangible, meaningful results. But most importantly, economic growth in developing countries is lifting billions out of poverty. The common sense view is that the greatest help Africa could use would be the removal of tariff barriers by the developed countries. This is precisely what is not happening because of the self-interest of European and American agriculture. China, although acting in its national interest, is in the business of forging strong commercial links with the African continent. They need the mineral resources of Africa and envisage it as viable market for its military and consumer products.

You must forgive me for rehearsing these uncontroversial facts well known to you all. I do so because it may help us understand how misleading it is to think of the crisis as global and how futile to seek a global solution. You will find that none of the measures in response to the crisis was taken as a consequence of international agreements, except bolstering the budget of the IMF. Naturally, actions in one economy have had a bearing on those taken in some of the others, but there is nothing new or unprecedented in that. Economic and financial interdependence is greater than ever but the fundamental dynamic between the individual entities remains the same. Each one acts in response to its own imperatives whilst taking into account what happens all around. Relationships in some areas may have become formalised and persist over a long period of time. For example, OPEC, the North American Free Trade Agreement and the Single Market under construction in Europe. Other relationships thrive on a deal by deal basis, as the continuing massive purchase of US debt by Oriental sovereign funds demonstrates. The overall pattern is one of an intricate mosaic that cannot be reconstructed by a single overarching algorithm invented, on the spur of a moment by any illustrious conference.

Just consider these facts: Japan ran its economy with virtually zero interest rate for more than a decade, the US collapsed its nominal interest rate to 2 % at least a year before vaguely similar moves were made by the Bank of England and the European Central Bank.[4] Rescuing or not rescuing banks has happened haphazardly market-by-market, case by case, as the crisis developed. Crisis triggered taxation changes vary significantly from one economy to the next. Increase in government debt is conditioned by the pre-crisis status quo and the degree of recklessness of each central authority. Printing money in quantities is not to everyone's taste or pocket. Variations in the degree of currency dilution is bound to cause additional turbulence in a faltering international trade. The US went ahead with an overhaul of the regulatory system of its own finance industry in the hope that it would be adopted globally. There is no reason to believe that Europe, Japan, China or India will, or could, follow suit.

In 2009, the German government decided to pay 2,500 Euros to each owner of a car at least 9 year old, provided it is destroyed and replaced by a brand new one. I am not sure that this measure made a big dent in the serried ranks of unsold cars filling deserted airfields but at least it was a brave try. Other governments adopted the same strategy.[5] The US government has bought up mortgages that are in arrears to help revive the property market. Again, this may or may not make a difference and other governments may or may not try something similar. But whatever happens it will not be as the result of any international agreement but as a national government's own experiment.

We have to keep in mind that there is not one global crisis. Instead, there are many interdependent national crises, as there is not one capitalism, but many variations. All this hullabaloo about a global crisis and the need of global solutions is not harmless. The grave danger is that we lose sight of the responsibility borne by national governments for the crisis and their undoubted potential to make the situation worse. I am wary of all committees, be they within corporate, administrative or government circles simply because the buck is circulating all around and has nowhere to stop. If the crisis is global and its resolution has to be globally agreed, we cannot be expected to get ourselves out of the crisis. And this is the opposite of what is wanted.

Each national economy must confront its own truth, allow for profound, organic self-correction to take place, in the hope of other economies doing the same. There is no single authority or, any combination of authorities, that comprehends what is going on, or where we all are and what we should be doing. Beware of opposing claims. Trust your common sense and translate all statements into terms that apply to your own business, your own household. If the two are in conflict, your simple analysis will be right nine times out of ten.

References

1 The Balance of Trade is the difference between the value of exports and imports over a certain period of time. A positive balance of trade is known as a trade surplus; a negative balance of trade is known as a trade deficit. The United States has been in the red since the late 1960s. In the late 1990s, its trade deficit was around 100 billion USD per year. Since then, it has been increasing rapidly, hitting a record high of 817.3 billion dollars in 2006. During economic slowdowns and recessions, the trade deficit is prone to shrinking, as domestic demand for imports wanes. America's trade balance currently hovers around minus $40.3 billionUSD. The recent discovery and exploitation of shale gas might have a permanent impact on the Americain trade balance, as it lowers production costs of domestically produced goods. In addition, the US is expected to become a net exporter of gas.

2 While we are all familiar with traditional protectionist measures, for example tariffs and import quotas, the so called "new generation" regulations is a much more complicated beast. Increasingly, governments, in an attempt to protect certain industries from international competition invoke environmental, health and safety regulations to much the same effect. This poses the question: Are protectionist costs outweighed by possible welfare gains through better health, as well as less pollution?

3 Witness Damisa Moyo's *Dead Aid* (2009), where the Zambian economist calls for ending all foreign aid to Africa within 10 years. According to her, a trillion dollars spent over the past 60 years has been a complete waste. Worse, Moyo argues, it

has prevented Africa from becoming self-sufficient. In his book, *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good* (2006), William Easterly, an American economist specialising in international aid, comes to a similar conclusion.

4 In consecutive steps, the UK interest target rate was slashed from 5.75 % in July 2007 to a nominal 0.5 % in March 2009, with the largest cuts at the end of 2008 and at the beginning of 2009. It has promised to keep its interest rate at 0.5% until 2016. The European Central Bank (ECB) moved from a high of 4.25 % at the end of 2008 to nominal 1 % in May 2009. It currently hovers at 0.5%. The US started out from a 5.25 % in 2007, going down to 2 percent in 2007 and reaching the magic floor of 0 to 0.25 % at the beginning of 2009, where it has remained ever since.

5 The measure, originally limited to 600 000 cars and timed to end before 2010 has been criticised for failing to boost German car manufacturers: consumers broadly opt for small, fuel-efficient cars produced mainly by French or Japanese car companies. Despite mixed reviews, the French, Luxemburg, Rumanian, Slovak, Austrian and UK governments followed the German example.

Letter 9

Good and bad medicine

Active government intervention could have a benign, if limited, effect on an expanding economy, but seldom on a contracting one.

In medical circles it is customary to diagnose the ills of a patient before commencing treatment. There are, of course, exceptions when immediate response is mandatory. A heart attack, a raging fever, or breathing difficulties require radical intervention even before their cause is fully investigated. At the onset of the crisis in 2008, the authorities in charge of the crisis were at great pains to depict the recession as just such an emergency, in need of instant government intervention to save the life of the economy. Blood transfusions, electric shocks, "pumping" liquidity into the ailing patient, are typical metaphors used to reinforce that perception.[1]

However, even in cases of dire emergencies a thorough medical analysis is crucial for administering the most effective course of treatment. Once the vital functions of the patient are secured, doctors usually proceed to establish the cause of the heart attack, the fever or breathing difficulties. You would expect therefore for those who claim to take charge of the crisis to do the same. Especially, since they are so fond of using a medical vocabulary. Had you expected that, you were bound to be sorely disappointed. Worldwide, the economic and financial establishment is driven by what to do and is content to attribute the cause of the crisis to the aberrant behaviour within the financial markets. Blaming bankers has huge advantages: as a convenient lightning rod for the rising anger of the population; as a diversion from delving into the underlying causes of the crisis; as a relatively easy target for systematic reform.

You know the extent of my disagreement with such a cavalier dismissal of the origins of the crisis. Greed is a constant factor of the human psyche and financial excesses are part and parcel of every free market. Greed is an exaggerated form of ambition just as paralysis is an extreme form of fear. The question remains, why is paralysis such a feature of the crisis and, more significantly, why was greed rampant in the period leading up to it? In 2009, a parliamentary select committee grilled the head of Barclay's Bank as to how the entire financial world, composed of highly experienced and intelligent people, failed to realize that the sector was vastly over borrowed, mired in indiscriminate deals and running habitually insane risks. His answer was revealing: such a monumental failure cannot be understood without taking account of the whole financial culture of the period. Money was plentiful, growth was accelerating, profits, at least on paper, materialised out of nowhere and general optimism rode sky high. He may have added, with equal justification, that such a culture also applied to the whole economy.

As you must be aware, no smoothly functioning, well-balanced, sound economy can be brought to its knees by the speculative excesses of bankers, no matter how influential. They certainly had a disproportionate impact and their collective failure undoubtedly triggered the collapse. But triggering is not the same as causing. They could not have operated as they did if economies across the world had been sound. The key to understanding the underlying cause of the crisis lies in the *culture of expectations.*

The culture of expectations is all-pervasive in our society. As a household, as a business, as a nation, as a race, we all generally tend to expect to be better off tomorrow than we are today. This has not been so in the Middle Ages and may not be so from here onwards but it has been for centuries a sign of the times. Expectations are an integral part of the human psyche, they are the spur to the evolution of mankind. We strive to achieve goals set by ourselves and most of the goals have a material component. The umbrella term for this drive is the *improving of living standards*. And overall, in terms of relative creature comforts, possessions and relief of suffering, over the last millennia we have not done too badly. There is, however, one critical condition for expectations to be beneficial. They have to be within reach. If they stray too far from a reasonable likelihood of fulfilment, the outcome is bound to be painful. In psychological terms, an individual in the grip of endemically disappointed expectations makes for a miserable specimen. In economic terms, an unmanageable gap between excessive expectations and reality inevitably leads to the kind of crisis that is engulfing us now.

That such a gap is at the very root of our current crisis is not yet common knowledge. But the evidence of its existence is incontrovertible. The demands of our society, in terms of health, welfare, education, social justice, legal protection, leisure and lifestyle have been permanently on the rise. Net revenues to meet these demands have increasingly failed to keep pace. Pre-crisis property prices made no economic sense and stock markets virtually the world over were moving only one way. The overall world debt, personal, corporate, and national, bore no relation to the underpinning assets. Neither could they be totally repaid or serviced in a conventional manner. In our hearts, we all knew we lived beyond our means. Common sense told us that this would end in tears. The writing was on the wall but the people running our countries and operating our economies, with a few notable exceptions chose not to see it.[2]

In hindsight, all this is obvious. But a question still remains: why did the people at the top close their eyes and refuse to even envisage the probability, or at least the possibility, of a crisis scenario? After all, in the micro world of households and businesses, we constantly make reasonable assessments of the status quo, even if we do not always act rationally in response. An average family knows quite well what its income is, and possibly likely to be, what its debts are and how to curtail its expense. Similarly, all companies have annual balance sheets reviewed by independent auditors to make management fully aware of debt in relation to assets. Individuals and companies do still go bankrupt but not in blissful ignorance of the health of their finances. But what distinguishes economic awareness in household and business from the corresponding national perception is transparency, or the lack of it. When it comes to clearly seeing net income versus net spending, household and business have it, the national economy has it not.

Some experts in the field will tell you that governments do publish annual, even quarterly, balance sheets, showing clearly their assets and liabilities. This is, of course true, but such an objection misses the point. The government balance sheet is not the same as the balance sheet of the national economy. The government collects VAT, whether the transaction involved is profitable or not. Individuals in the public sector, a significant share of the population, pay income tax from salaries and wages provided directly or indirectly by the government itself. Households pay property taxes irrespective of their income and business provides massive sums in national insurance even if they make no profit. Balancing the books is a rare government pastime, but theoretically, government budgets could be in surplus while the national economy is in a parlous state. Not enough money is made to sustain the lifestyle demands of its population. This is not an academic speculation if you care to remember the economies of the Soviet states. In a mixed economy, a top-heavy public sector must result in either substantial budget deficits or the erosion of the asset base of the country. Very likely a toxic mix of both. I am afraid that the measures currently being taken may lead down this very road.

The government is assiduously measuring the country's Gross Domestic Product.[3] This, roughly corresponds to total household spending, turnover of every private sector entity, as well as government expenditure. Judging by GDP, two households could engage in equal spending, with one financially healthy and the other struggling to make ends meet. Similarly, two companies could have the same turnover, one building its capital base whilst the other is accumulating liabilities. GDP is a measure of volume, rather than of quality. Nobody in his right mind would assess anything in the whole wide world by this single dimension. Difficult as it may be for you to believe, governments have made this GDP a religion and worship on the altar of its *growth*. What every discussion is about, what every governmental action is focused on, is the reversing of GDP decline.

Reducing interest rates to near zero, implementing tax cuts, quarantining toxic debt, buying corporate bonds, cultivating huge budget deficits, subsidising failing enterprises, multiplying infrastructure projects and, if all else fails, engaging in quantitative easing (printing money), have all but one purpose: to grow GDP. By this parameter alone, everything is now judged.

In contrast to the prevailing view, I believe that the banking failure, the credit crunch and shrinking GDP are not the causes of crisis, they are the symptoms of a much deeper malaise: the yawning gap between expectation and reality. And we are all aware of the perils of treating symptoms instead of the disease. Such treatment will not only fail to cure, it is likely to make matters worse. This is precisely what is happening all around us. The government has pledged to restore confidence, thereby raising expectation, in other words, increase the fatal gap. To this end it has undertaken to expand its own expenditure, to borrow and print quantities of money, to encourage the banks to lend and the people to spend. You may find it weird to be forced to swallow a medicine that caused the disease in the first place but there it is. Strange pronouncements fill the media waves, such as *we must borrow our way out of the recession* and *we must borrow from ourselves*, with few people batting an incredulous eyelid.

This scenario calls to mind the famous Rasputin principle. A charismatic peasant and a man of the cloth, he bestrode the firmament of pre-revolution St. Petersburg. A most influential figure at court and intimate friend of the Czar and Czarina, he exercised considerable influence over Russian government and military affairs during WWI. His message, addressed particularly to adoring female members of the high society, was that in order to gain redemption one had to sin first. The greater the sin, the more profound the redemption. And he practiced what he preached. The orgies he conducted in the bathhouses of the city proved very popular, with the ladies loving the sin as much as the true forgiveness that followed. So we are asked to indulge ourselves now with the reward of a redeemed economy later. There may be something to be said for the Rasputin principle, so long as we remember that he came to a sticky end. He was successful for a while and governments now are doing everything to gain popularity, at least to see them out until the next round of elections. Redemption is in the distant future, to be secured through someone else.

But enough of bad medicines, are there any good ones? If you want to tackle the illness itself, you will have to try and reduce the fatal gap between expectations and assets. This can only be done by cutting back expectations or enlarging the asset- related sectors of the economy. Almost certainly, you will need to do both. Perhaps, the first step in this direction should be the construction of a device capable of measuring the width of the gap. Such an analytic tool would be helpful not only in the midst of a crisis but in the normal course of economic cycles as the gap shrinks and expands periodically.

Taking account of it may even help moderate the heights of inflation and the depths of depression. The challenge is to distinguish between asset producing and asset using activities within the national economy. This distinction is easily made on a household or business scale and should not be impossible to define for the substantially more complex economy of a nation. After all, the same fundamental principles must apply irrespective of the size or complexity of any economy.

As a necessary first step in reaching a better understanding of the state of the economy, I put forward the concept of the Net Domestic Product. In contrast to GDP, which is a measure of quantity, NDP is a yardstick of quality. In outline, export revenues, inward investments, and home produced industrial and consumer goods, virtually uncontaminated by expectation, form the backbone of the NDP. Excluded from NDP are activities that do not contribute to the asset base of the economy. By far the greater portion of the public sector falls within this category. Health, education, the administration of justice and the enforcement of law, defence, consumer protection, the civil service, are all key ingredients provided by the state of any civilised society. We cannot do without them. But they are an expense, not an investment. I say that because hospitals, for example, or submarines, are often loosely considered assets. There is nothing wrong with considering them assets, as long as they form no part of the NDP.

Education, on the other hand, is an expense that could be classified as investment since it creates a human resource, essential for the functioning of the economy. At the same time, it is an asset immersed in expectation. It takes may be 10 years to produce blue collar workers and some of them will never be gainfully employed. It takes 16 years to produce media studies graduates who are unlikely to justify the investment during their working lifetime. Engineers, scientists and surgeons are better economic bets as are premature school leavers destined to become successful entrepreneurs. If expenditure on education is deemed an investment, it ought to feature in the NDP figures but not necessarily in full. Unlike material products, it has such a preponderant element of expectation that its value should not exceed 50% of the total.

The service sector relates primarily to safeguarding and maintaining existing assets and as such it does not naturally fall within the NDP. Yet inasmuch as it serves the commercial and industrial sector it does form part of the productive, revenue generating economic activity. So perhaps 50% of the total should count. These are fairly arbitrary percentages that a more detailed statistical analysis could well modify. Even so, taken together with the more established categorisation of economic activity, the NDP would be a far better indicator of the true state of the economy than the universally accepted, and dangerously misleading, GDP. I am sure that my suggestion will be heavily criticised, and perhaps dismissed, as based on a distinction too crude and arbitrary to apply to 21st century economies. There is no doubt that it has to be developed, clarified and refined but something very much like it is absolutely necessary.[4]

Replacing GDP with NDP, as a key measure of economic activity, would be of great practical benefit. The limits of what the government could afford to spend on improving our lot at any time would be more transparent and credible. The same principle applies to increasing money supply. For, in the absence of the gold standard, the total currency in circulation has to mirror the total value of the economy underpinning it. And this value has nothing to do with pure expenditure, it has everything to do with the generation of assets. So, beyond having a sobering effect on the volume of government expenditure, seeing the NDP as a ratio of the GDP, should help re-prioritise the targets of monetary government intervention.

It follows that the only effective intervention in the present crisis is to support the NDP sector instead of propping up, indiscriminately, the whole economy. The political establishment is rife with initiatives: creating jobs, cutting taxes, expanding the public sector, borrowing more money, attacking tax havens, tightening financial regulations. They all resonate in the media, they all sound popular, but as medicine they are not only useless, they are positively harmful. Being obsessed with growing the GDP, all the government is doing is to enlarge the fatal gap between expectation and reality, the root cause of all our troubles.

Digesting the comparative figures of NDP and GDP would concentrate the mind on the cost/benefit aspect of new legislation. One of the characteristics of the post World War II era has been society's wilful disregard of the economic consequences of the ever expanding stream of regulations coming from all quarters. The workings of the European Union have been, of course, a major contributor. Sadly, national bodies did not lag far behind. The sequence of events leading to so-called reforms has a familiar pattern.

Beyond targeting the NDP sector, the other beneficial treatment to reduce the gap comes at no expense whatever. It requires simply lowering our expectations. This has already happened throughout stock markets, to some extent in the property world and is in progress on the high street. Where any signs of it are notably absent is the level of wages, salaries and pensions in the public sector. Car workers have accepted part- time work and loss of earnings, state employees are merely discussing rates of increase despite virtually flat inflation. This will further deteriorate the NDP/GDP ratios. Instead of talking about tough times and early signs of green shoots appearing, our political leaders could tell people that their standard of living, on all fronts and for the foreseeable future, is bound to take a beating. This would really help individuals and society adjust to the world as is, and likely to be for the foreseeable future. Quite a refreshing political thought.

Periodic economic downturns are inevitable. The economy is not a self-regulating machine with fine automatic adjustments. The speed and direction of its movement is not uniform. It is bound to exceed the desirable speed limit, and in consequence, is subject to periods of frenetic braking. But recessions are not all they are cracked up to be. We are fed on a diet of miseries with unemployment, struggling households, failing businesses and government austerity. All this does reflect reality and is really sad but it is only one side of the coin. Recessions also have their merit. The household retrenchment changes modes of behaviour. Luxuries are no longer necessities, humble things closer to home become more appreciated, priorities are likely to be better balanced, people become more careful and may acquire new skills. Collapsing businesses are the ones most fragile, with problems of cash flow and profitability. Many of them may be duplicating enterprises without sufficient differentiation. Do we really need so many makers of cars, so many shopping outlets, so much travel to similar leisure destinations, so vast an array of choice?

Recessions, with all the pain in their wake, do clear the ground for stronger enterprises to survive and become stronger. They force essential savings long overdue. They encourage the exploration of more difficult, and perhaps eventually more rewarding, avenues, uncovering hidden talents and promoting innovation. Recession makes us value what we have and what we manage to retain. So in the midst of this crisis, let us welcome recession, the neglected guest whose time has come. Handled with respect, it may even do us some good. Let us not seek green shoots in the winter, but appreciate the winter for what it's worth.

References

1 Given the domino effect of failing major financial institutions, a case can be made for not allowing Lloyds, BNP Paribas, Deutsche Bank, the Bank of America, and their like, to simply expire. But why are banks so special? Why grant huge bailouts to the financial sector and let real economy companies go to the wall? The answer, even though hard to swallow on grounds of fairness, lies in the systemic importance of the banking sector. Money is the lifeblood of every economy and it needs safe and healthy conduits to flow freely. Banks occupying this key position have to be protected . Otherwise, everything could come to a grinding halt.

2 Politicians at the levers of power simply had no incentive to advocate caution. The very few who did mention moderation were to be found in the opposition. In 1996, former US Federal Reserve Board Chairman Alan Greenspan used the phrase "irrational exuberance" in a speech at the American Enterprise Institute. However, he did not heed his own warning. Instead, he presided over the cultivation and bursting of several economic bubbles in the 1990s and 2000s. He retired at the

end of 2006, just in time not to be held accountable for the perfect economic and financial storm to come.

3 Gross Domestic Product (GDP) measures the total value of current goods and services produced domestically. GDP can be calculated in two ways: summing up expenditure (the demand side) or income (the supply side). GDP counts only goods and services, produced in any given year and purchased by their ultimate users. Only the value added is included, so price of flour sold to a baker is not included, only the value added of turning wheat into flour. Sales of used or second hand goods are excluded. However, sales commissions charged on the sale of a used product are included. GDP excludes financial transactions and transfer payments since they do not represent current production. These are stock and bond sales along with welfare and social security payments. GDP is measured in currency units to weigh the value of all goods and services. The most common approach to quantifying GDP is the expenditure method: *GDP = consumption + gross investment + government spending + (exports – imports)*, or, GDP = C + I + G + (X – M).

4 A table presenting NDP versus GDP figures of the US, UK, Ireland, Germany, France, Norway, Israel, Ghana, Japan, China and Australia can be found in the Annex.

Letter 10
The Outcome

The soundness of any economy is determined by how far expectations exceed the value of assets.

Since we have embarked on our quest to make sense of what has been happening, the financial and economic crisis continues to envelop all markets and economies throughout the world. As this is my last letter, it has to be all about the answers to our troubling questions. We visited virtually all the stations of the financial and economic world. We went to the source of money; studied the language of the crisis; criss- crossed the market; pored over the insatiable appetite of human expectations; defined the meaning of assets; felt the heavy hand of government; encompassed the global dimensions of the crisis and dispensed good and bad medicines. The answers in this last letter formulate themselves naturally from the experience of our explorations.

The dominant remaining question is when will the recession be over, when will the economy be back on track? The image implied is one of something moving happily along, accidentally falling into a hole, with only a matter of time before that something resumes its natural course. Formulated thus there can be no answer to the question since there is nothing like a god-given, pothole-free, regular track designed for a normal economy.

The post WWII world, especially its Western portion, experienced a more or less continuous rise in its standard of living. This brought with it a general culture of expectations, which is now deeply embedded in the psyche of three generations. We all believe that the morrow has to be better than the yesterday. Nay, many of us do not just expect it, we feel entitled to it. The economy is constituted by just two ingredients: assets and expectations. The distance between them determines the state of the economy. If the gap is narrow, a risk-averse society with little ambition, the economy is sluggish. If the gap is too wide, with expectations far in excess of practical realization, there is always the danger of economic contraction. Right now, the gap is an abyss engulfing the economy in the worst crisis since the great depression. So in the first instance, the answer to the oversimplified question is straightforward: the recession will end when the gap between expectations and reality is brought back to manageable proportions.

There has been, as far as I know, no quantitative formula for measuring the size of the gap on a national, let alone the global scale. Every household, every enterprise, is able to assess the odds of realizing its expectation. This is so because they can estimate the value of their assets and the extent of their expectations. To quantify national assets and expectations in relation to each other is, of course, considerably more problematic. Even so, an analytic tool to define this ratio is critical for a meaningful assessment of the state of any economy. It is critical, because the key measure universally employed to do this is not only inadequate, it is dangerously misleading. Gross Domestic Product, or GDP, is strictly a measure of volume. It recognises no distinction between income and expenditure, between asset creation and asset use, between profit and loss. It would be a useful tool if, as its inventor intended, it was employed in conjunction with other tools, measuring the quality of the economy.

Recession is officially acknowledged when two consecutive quarters show a negative GDP. No doubt, the recession will be officially declared over when a similar period shows a growth in GDP. This figure includes virtually every activity under the sun, from collecting rubbish to building aircraft carriers, from manufacturing goods to dispensing health, from servicing washing machines to administering justice. Some of these activities are revenue producing to the national economy and some are depleting its resources. Disregarding this distinction you may bask in the glow of growing GDP figures whilst the economy is sinking quietly below the horizon. You will only notice that something is radically wrong when credit dries up, enterprises go bust, the budget deficit balloons, and the government swings into manufacturing money. This is not a theoretical possibility, it is what continues to happen now after many decades of virtually continuous GDP growth.[1]

Realizing that something is radically wrong when the crisis is already upon us is a little too late. To anticipate grave imbalances, and to redress them in time, we must abandon GDP as our principal measure. It has to be replaced by a qualitative analytic tool capable of more meaningfully assessing the state of the economy. My candidate for such a tool is the Net Domestic Product, as set out in some detail throughout our previous correspondence. The envisaged NDP segments economic activity, grading it in terms of degrees of contribution to, or depletion of, the national asset base. In the broadest of outlines, making things, material or digital, is a net contributor; the public sector, including the bulk of the welfare state, is a net spender; the service sector does support, in part, the production process and so could be considered part contributor and part spender; education, although a major expense, does supply the human resource and thus it should qualify, in part, as an investment into the economy, not just an expenditure.

The NPD, or something like it, is crucial for delineating assets and expectations in relation to each other. There are few absolute assets and not many baseless expectations.

Nevertheless, it is useful to think of assets as primarily residing in NDP whilst the rest of GDP is made up of expectations. In other words, the NDP/GDP ratio will tell you how much of your economy is real and how much is hostage to future fortune. Applying these figures to national economies, you will see at once why we are in a crisis, how individual economies vary and, most significantly what it will take to bring them into some sort of balance.

Take our UK economy as an example. The last Labour Chancellor never tired of claiming ten years of steady growth under his personal guidance. He was, of course, referring to GDP figures, but was strangely oblivious as to what exactly grew. But we know very well that it was services, property prices, paper profits of the City, together with the public sector, the welfare state and government expenditure that grew. And we also know that the asset base of the economy did not grow, or at least not at a rate anywhere near enough, to keep pace with the increasing GDP. As a direct consequence, the NDP/ GDP ratio deteriorated, the gap between reality and expectations stretched to a breaking point and we were in a crisis. Whatever else happened in the world, whatever triggered the collapse, these are the hard local facts. If you have any doubts about my common sense analysis, you may be reassured by the view of Robert Chote, the director of the influential Institute for Fiscal Studies. In a recently published study he reaches the very same conclusions, albeit described in somewhat different, more academic, terms.[2]

It is true that something similar happened world wide but not uniformly to the same degree. Comparative NDP/GDP ratios show significantly diverging patterns. The scenarios in Canada, Norway, Poland, for example, look not nearly as sombre as those in Hungary, Spain, Italy and the UK. America, for multiple reasons, is a case apart seemingly able to withstand the laws of economic gravity. However, its imported consumer bias, trade and budget deficits, an up until very recently declining manufacture base, all indicate a massive volume of over-expectation. Given the variations in the gravity and form of the recession, it is obvious that the end of the crisis and its aftermath will also vary from country to country. The recession may be global, economic recovery will be highly specific.

Since the need for qualitative assessment of economies is elementary, how come we ended up worshipping at the altar of GDP growth? After all, we have household budgets, profit and loss accounts and balance sheets of companies, so why not subject national economies to the same discipline? The answer is simple: almost everyone has a vested interest in cultivating expectations. We feel entitled to state benefits in terms of health, education, justice, internal and external security, consumer protection and the provision of an array of equalities. Businesses are geared to deal in products that create demand. The financial industry is wholly built on expectations. Governments, at least in Western democracies, come into being and survive by raising expectations. And then there is a culture, fostered since the industrial revolution that the morrow had to be better than the past.

Against such forces, what are the chances of NDP being taken seriously? After all, in an affluent, morally sophisticated society, mundane considerations of cost, debt, affordability and value are only ever paid lip service. What matters that the principle of prolonging life in virtually all circumstances takes many billions from the exchequer? What matters that vast amounts of moneys are spent on protecting people from falling off ladders or falling off moving trains when they are foolish enough to open unlocked carriage doors? Any small series of shocking incidents may generate prolonged official inquiries and bring forth a plethora of sensible recommendations, new laws and multiple regulations, that may, or may not, turn out to be helpful. But no one cares to calculate the total financial parameters.

Bernard Shaw, with his perspicacious wit, puts words into the mouth of Doolittle that have a particular bearing on this matter. Eliza's father, a dustman, tells Professor Higgins that is all very well for the middle classes to have morals but he cannot afford them. Class distinctions are less relevant today but the point remains valid: all principles have a price. I am sure that the social aspirations of our society are noble, but I am not sure that we can afford them all at the same time. When a household is in financial trouble, it can moderate its life style. When a business is overstretched, it can downsize. When a government gets into difficulties with an overblown budget deficit, it can tighten the financial screws. But when the national economy, as a whole, is massively out of balance, we are in deep, deep trouble. This is why, despite overwhelming resistance, the concept of NDP will have to come to the forefront of the economic debate.

What happens now depends on three factors: the gap between expectation and reality; the form and extent of government intervention and the native enterprise and resilience of the people. As all these factors differ significantly from economy to economy, the duration of the recession and its aftermath will vary too. That said, certain features, to a greater or lesser extent, are common to most Western economies. Judging by NDP/GDP ratios, public sector commitments, overall indebtedness, and the inflated valuation of assets, the critical gap is at an historic high. This means a radical restructuring of the economy is in the offing. Left to itself, any economy would eventually redress its own imbalance simply because at the end of the day it is always the hard facts that determine the outcome. The process of self-balancing is painful, with the sacrifice of treasured enterprises, destruction of 'secure' wealth and personal deprivation on a disturbing scale. For any government to appear to be idle amidst such devastation is politically unacceptable. It is not going to happen. So instead we have frenzied initiatives and a substantial supply of paper resolutions. What remains to be seen is how helpful government intervention proves to be in narrowing the expectation gap, which is what really matters.

So far what governments have done is to safeguard the existing banking system, and in the case of the EU, to fight for the survival of the eurozone. While euro countries prodded by Germany were forced to adopt austerity measures, the US and UK have tried to stimulate economies by pumping them up with astronomic quantities of borrowed or manufactured money. The question is at what price and what is the continuation? The price was on a scale of billions or trillions. However measured, the sums are massive in relation to the size of the economies. As the rescue acts were accomplished by borrowed or manufactured money, the expectation gap must have widened considerably everywhere.[3]

In the follow up, an army of regulations is lying in wait at the door of the financial industry. Regulations are seldom conducive to the creation of wealth and those currently prepared, in a mood of general hostility towards money men, may do more harm than good. Rather than a raft of legislation encompassing the whole sector, it would make sense, in the interest of cost and transparency, to paint the doors of the financial institutions with three different colours: green for retail banks, residing in the High Street, amber for the corporate sector, and red for the more adventurous activities of investment banks, hedge funds and inventors of sophisticated financial instruments. Walking through the green door, depositors would receive modest returns but have peace of mind. Their money would always be guaranteed by the government. The amber door would signify higher returns but also higher risks with moneys invested in the material economy solely at the bank's discretion. A relatively simple set of regulations would suffice here. A red door would offer wonderful prospects, as well as the distinct possibility of complete financial wipe-out. Just like in any gambling joint, you pick your horse, or lucky number, and take your chances. As transactions here are between two private entities, there is no room for any government intervention beyond the existing civil and criminal laws.[4]

Such an attempt at simplifying the financial world is bound to be met with serious objections. As an example, we will be told that short selling, conducted privately behind red doors, could damage perfectly sound commercial enterprises, hence the need for regulations. The damaging aspect of short selling is not in dispute. But fighting money with bigger money is more effective than fighting it with regulations. Each stock exchange, the DAX, the CAC, the LSE, and the NYSE, could establish a fighting fund, with relatively small contributions from all its quoted companies. So every coordinated shorting attack would face a possible counter attack by the fighting fund at a time of its own choosing. A few resounding defeats, with corresponding losses would see off unjustified shorting permanently. This is not such a far-fetched idea. The Chinese are already thinking of doing something very similar.

The whole trouble with the banking world is a virus so far officially unclassified. The name of the virus is marbleitis. Its origins go back at least to the 18th century when every bank on the European continent was dressed in marble from the entrance steps upwards. The importance of marble cannot be exaggerated. It embodied wealth, durability, smoothness and class. It created an aura of awe so that ordinary members of the public shrunk to half their size and were lulled into a deep sense of false security. They were simply inflicted with marbleitis. Bankers always understood the impact of the bug and so have carefully cultivated it to the present day. The European Bank of Reconstruction and Development (EBRD) was established in the City of London in 1991. Its mission has been to foster the private sector in the backwaters of the continent. The newly appointed president of the bank, Jacques Attali, a pure product of the French elite and former adviser to the French President Mitterrand, had scarcely put foot in the splendid new building before setting out his priorities. The rather ordinary marble was ripped out and replaced throughout by specially selected, and most expensive, Carrera marble imported from Italy. Here was a true banker who really knew what mattered in the banking world.[5]

I do not know how many banks are still marbled head to foot on the continent. But this no longer matters, the virus is firmly ensconced in the psyche of everyone. It is particularly infectious in the upper circles of the Bank of England, the Financial Services Authority, the Treasury. If not for marbleitis, how else do you explain the financial collapse and the absence of penetrating supervision? Or the 17 million pounds pension pot taken by the departing chairman of the failed Royal Bank of Scotland Sir Fred Goodwin with government blessing? Governments instead prefer to direct their wrath elsewhere. The attack on tax havens is popular because it is seen as a punishment of the devious rich. Unfortunately, it does nothing to improve the situation. Insofar as it is successful, it merely transfers funds from private investors to governments who are less skilled, and less interested, in distinguishing between wealth creating opportunities and popular projects that consume resources.

But it is the artificial, indiscriminate stimulation of the economy that matters most in distorting the shape of the recession and its aftermath. It is easy to applaud moves to help mortgage defaulters keep their homes, to rescue hard hit industries, to reduce the number of jobless, to shield public services. They all help improving GDP figures, creating an atmosphere of confidence. This is supposed to re-animate economic activity and lift market sentiment, creating enough momentum to pull us out of the recession.

On the face of it, such an approach may appear reasonable. But it rather depends on the starting point and the NDP/GDP ratio of each individual economy. In developed Western economies, ignoring differences, the expectation gap is substantial, the NDP/GDP ratio is unfavourable, and the financial resources needed have to be borrowed or printed. All this makes for a lethal mix. Injecting resources you do not have widens a yawning gap still further. By going indiscriminately after growth, the balance between the asset positive and asset negative will deteriorate. In hard times, the instinct is to support those who suffer most, not the ones who are most productive.

So in the final analysis, paradoxically, the more GDP figures improve, the deeper we sink into the recession. I realize that this conclusion will be met with universal incredulity. It flies in the face of everything that is being said and done by those who guide our destinies. Nevertheless, the conclusion is the final logical step in the analysis that leads up to it. If there is a fundamental imbalance in any structure, the fault line will grow with its expansion. This is just common sense.

Taking Britain as a European example, the likely outcome is this: In 2010 the economic downturn slowed, followed by hope of a significant rebound. This hope was dashed and will continue to be so because the improvement in GDP figures simply is no indicator of a true economic recovery. In a great measure, it reflects growth in government financed activity, in the retail and service sectors that make up 75% of the rest, leaving little room to account for any change in the asset bearing, productive part of the British economy. In the fiscal year of 2011-2012, the government will have created an annual budget deficit of some 120 Billion Pounds, more than 7.5% of GDP. This will be further augmented with another 80 Billion Pounds deficit expected in 2012-13. The government will be under tremendous pressure to find the money to just maintain the built expectations of our society. As for the retail and service sectors, they piggy-back on the productive economy and live off the disposable income of individuals and corporate appetites. So no relief here. In consequence, the next decade will see our economy, at best, bump along 2012-2013 levels in terms of budget deficit and economic growth. At worst, with the continued weakness of Sterling, we could be mired in a prolonged period of stagflation, a phenomenon not totally unfamiliar in these shores.

The future prospects of other European economies are no less bleak. Although Germany and France might have better NDP/GDP ratios and are less burdened by the weight of government borrowing, they have difficulties of their own. Germany is forced to rethink its entire post WWII model of economic success based on export-led growth, while France is saddled with a huge, unwieldy public sector gobbling up more and more resources. The game is largely cutting back expectations and neither political establishment had any significant success in reforming labour laws, pension entitlements, and levels of over-all taxation in their countries. In addition, the German economy is the principal support pillar on the European Union and the financial backbone of the entire Euro zone. Without raking over the European map, it is fair to mention some exceptions to the dismal scene. Some of the central European countries, such as Poland and the Czech Republic, for example, are in a stronger financial position having undergone painful reforms over the last one and half decade. They certainly feature fewer built-in expectations with their people actually interested in working, not just securing better working rights.

China presents a contrasting picture to the European scenario. Even taking the official statistics with the proverbial grain of salt, for many decades now, the net revenues of the economy seem to have far exceeded national expenditure, be they public or private. Expectations, in terms of state provisions to the individual have increased at a slower rate than the rate of growth of the productive, asset oriented, economy. As an obvious consequence, the gap between expectations and reality in China is much narrower than almost anywhere else in the world. The evidence is there for all to see: the recession there meant a reduction of GDP from a 12% annual increase to a mere 6%; at the start of the slowdown, China had adequate reserves and resources to support its economy on a large scale without having recourse to borrowing or manufacturing money; with 79.6 percent in 2009, the NDP/GDP ratio continues to be far superior than that of the West.[6]

The work ethos inspired by Confucianism and collective life just as deeply inhabits the industrial and commercial China of today. Worker output and worker entitlement are nowhere near those on an Occidental scale. Provisions in the field of housing, health, social welfare, pensions and justice are relatively modest and likely to remain so in the foreseeable future. Being still a half-way command economy, government intervention can be targeted to the productive economy and is likely to be far more effective since the money finds its way there with relatively little leakage to the banks. If the government decides to build 3 million new homes, the land, money and materials will be at the disposal of the contractors, and the houses will be occupied promptly on completion by tenants paying rents within their, government ensured, means.[7]

For these reasons, the outcome of the global recession should be very different in China than elsewhere. Although their consumer related export industries have suffered heavy blows and domestic demand is seriously underdeveloped, the country has the will and the means to restructure its economy. It will turn inwards, moving to a greater degree of self-sufficiency whilst still maintaining an impressive momentum.

Can we be as optimistic about the USA? The simple answer is 'not necessarily'. The fault line in its economy closely resembles European weakness. Over the last 40 years, the country moved backwards from world dominance built on a strong, well- balanced economy with ample financial reserves, a stable currency, substantial budget and trade surpluses, to a shadow of what it once was. The dollar, still the only true world reserve currency, is no longer stable. The nation has become a predominantly consuming, not producing, society. This to such an extent that the national economy can no longer fund its own consumption, but has to rely instead on foreign countries to buy its government debt and provide their own ever-improving, highly competitive products. The result, when the crisis hit in 2008 was a dismal catalogue of self- inflicted woes: burgeoning budget and deficits; a collapsing property market; failing industries; steeply rising unemployment; a whole economy that had to be bailed out with many trillions of dollars the US just does not possess.[8]

It is true that America has huge natural, technological, military and human resources, far superior to those of Europe. In a world of lightning changes, such resources, well fostered and intelligently deployed, could make all the difference. But for this to happen, the entire culture of the economy would have to change. But such a radical change is made possible only by a great shock to the whole system. There are small grounds for hope. For the first time in decades, US households are saving again. Companies have either gone out of business or have consolidated. The trade balance is improving, both because of less domestic consumption and a quite recent trend pointing to a degree of re-industrialisation.

Human beings, sadly, learn mostly through pain and this applies with equal force to their economy. Deep recessions are not the product of a banking tsunami. The misery they bring are warning symptoms of things being radically wrong. Missing the symptoms or mistaking them for the root causes of the illness is much more damaging than the initial recession itself. By widening the expectation gap even more, the leaders of the West will have, in the medium term, deepened the crisis. But, even worse, they will have missed the great benefits wrought by every major shock to the system. Only when the crisis bites really hard, is it possible to reassess the profound economic imbalances and redress the expectation gap. The problems of unrealistic state pensions in France, of stifling labour laws in Germany, of an insatiable welfare state in Britain, of an ungovernable Italy, and of unsustainable financial governance in the US, could become at a stroke less intractable. People across the West would have to lower their material expectation simply because the money would have run out.

Among the worst offenders in this regard are the politicians and officials of the European Union who continue in their habitual vein to pile on admirable regulations irrespective of attendant costs, setting the EU and the entire Euro zone on a course to economic irrelevancy. Yet the recession offers a once in a lifetime opportunity to substantially reform the Union and save it from a painful disintegration. Sadly, there are those countries who instead of pushing through painful economic reforms hope instead to be saved by the mutualisation of eurozone government debt.

It is highly unlikely that at this late stage of the recession, Western leaders will change tack. It is safer to assume then that they will continue to use all their financial means to boost confidence relying on GDP growth. This means, of course, raising the bar of expectations even higher without developing the corresponding asset base. In the aftermath of the crisis, the global economic centre of gravity is bound to shift from West to East, from the relatively affluent, spoilt societies of the European and North American continents, to a more industrious and more hardened China and its satellite countries in South East Asia. When this tectonic movement, with all its implications, becomes apparent, historians will record the current crisis as a convenient point of reference.

References

1 Gross Domestic Product (GDP) measures the total value of current goods and services produced domestically. GDP counts only goods and services produced in any given year and purchased by their final and ultimate users. GDP can be calculated in two ways: Summing up expenditure (the demand side) or income (the supply side).

2 Gordon Brown's version of events shows a British economy happily motoring along over the last decade in the famous Goldilocks state – not too hot, not too cold – before unexpectedly succumbing to the nasty American credit crunch bug in 2008. But did we really witness such a spectacular bust without a boom? In his April 2009 Observation, Robert Chote, the director of the Institute for Fiscal Studies, disagrees. By consistently overestimating productive potential of the economy, the Treasury, aided by a Bank of England, whose only job has been to keep inflation under control, kindled a dangerous boom in asset and credit markets. From 2000 to 2007, the economy expanded to the tune of 3 to 4 percent above sustainable growth levels, abetted by government spending and stimuli: a spectacular failure of macroeconomic management.

3 The IMF reckons that government efforts to rescue the financial system will wreak havoc with public finances. Average government debt of wealthy industrialised nations will exceed 100 percent of GDP in 2014, up from 70 percent in 2000.

4 For this simple, but sound principle to work, there are a few preconditions. Cross-ownership between the three banking groups is excluded. In the same fashion, lending among the second and third tier is prohibited. Regulation could emulate the second Glass-Steagall Act passed in 1933 as part of the New Deal in the US. It introduced the strict separation of investment and commercial banks. After years of lobbying, the banking industry had the Glass-Steagall repealed under the Clinton Administration in 1999. It is not too far-fetched to believe that the repeal contributed to the financial crisis. In 2013, the fight to reintroduce such limitations rages on in the US, the banking lobby fighting tooth and nail to prevent such a measure.

5 Attali was forced to resign from the EBRD in 1993 amidst a financial scandal involving lavish spending on headquarters, as well as his use of credit cards and chartered aircraft.

6 There is, however, an ongoing debate about the sustainability of this respectable-looking growth rate of the world's third-largest economy. Many China observers deem yearly economic growth of 8 percent the critical level for the government to be able to control tens of millions of newly unemployed migrant workers and to prevent social unrest in the countryside. Even though equipped with a huge, so far almost untapped internal market, China's fate remains tied to the health of the global economy. A worrying sign is that power consumption, less vulnerable to official statistical "massaging" has plummeted suggesting that the real drop in output far exceeds publicly admitted figures. Domestic demand is expected to remain low, as an almost non-existent social safety net forces the Chinese to save up to 25 percent of their disposable income. Another structural problem is a demographic forecast even more abysmal than Europe's.

7 Keynes himself made it quite clear that state intervention in the economy sat uneasily with democratic governance and would work best in authoritarian systems. The Chinese government's 2009 £381 billion stimulus package foresaw huge infrastructure projects, cuts in export taxes and increased bank lending. But even under these favourable structural conditions, without intelligent management, the danger of massive resource misallocation remains high. It is public knowledge inside China and without that graft and corruption, out of control, is responsible for gigantic amounts of money simply disappearing. This is especially so in the provinces and in the field of construction. Witness the massive failure of the relocation of millions for the construction of the Three Gorges Dam. Future tenants are left sitting on the street or petitioning Beijing to do something.

8 The economy of the United States is the largest in the world, weighing in with a staggering GDP of 16,6 trillion USD in 2013. It is characterised by high levels of innovation, labour productivity and flexibility. America has owed the bountiful economic growth of the last two decades to the expansion of its service sector, accounting for 79,6 % of GDP in 2011. The US is heavily dependent on China and other exporting nations to feed and fund its voracious consumption. About three quarters of GDP is accounted by consumer spending. Even though the economic crisis has forced economic actors to save, the US economy suffers from high levels of debt, be it household, corporate or government, and from a negative trade balance.

Annex

NDP of the US, UK, Ireland, Germany, France, Norway, Israel, Ghana, Japan, China[1] and Australia

NDP is calculated by adding to, and subtracting from, official GDP figures. All asset-producing activity counts towards NDP. In our calculation, the productive sector of the economy is assumed to include agriculture, mining and quarrying, the manufacturing sector, as well as 50 percent of the service sector.

Public spending has to be deduced from NDP, as it is an expense. The sole exception is the cost of education, of which 50 percent is calculated towards NDP as an investment for the future.

The black economy has to be taken into account, too. It is broken down into chunks mirroring the economy it shadows. If a country's service sector is 73 percent and its productive sector 27 percent of GDP, the figure for its black economy is split along the same lines. The asset-producing share is then added to the country's nominal GDP, while 50 percent of its shadow economy service sector is subtracted from it.

The author is at great pains to stress that this is very much a work in progress. This first attempt to calculate NDP relies on simplification, yet a first picture nevertheless emerges. Further refinements will be needed to fully grasp the productive sector of the economy, to do justice to the service sector, to refine spending on education and to accurately reflect the black economy.

How should you use NDP and its *compagnon*, COQ, the Coefficient of Quality visualising NDP as share of GDP? Quite simply, NDP and COQ give you a clear idea of the true resources available to fund existing and future expectations. Contributing to the asset base of an economy allows you to spend on values. Depleting the asset base diminishes your room for manoeuvre. Small changes in the COQ from one year to the other, let's say from 4.6 to 5.0 would signify a significant shift towards asset production.

Such shifts would be much more significant than the elusive measure of GDP growth in assessing the health and the potential of an economy.

Reference

1 Official Chinese statistics have to be taken with the proverbial grain of salt.

Statistical Country Overview
GDP vs. NDP, COQ, as well as Government Balance and Public Debt

	GDP 2008 (USD bn)	*NDP 2008 (USD bn)*	*COQ 2008*	*GDP 2009 (USD bn)*	*NDP 2009 (USD bn)*	*COQ 2009*	*Public Debt 2008 (% of GDP)*	*Public Debt 2008 (% of NDP)*	*Public Debt 2009 (% of GDP)*	*Public Debt 2009 (% of NDP)*	*Average Government Balance 2004 - 2009 (% of GDP)*	*Average Public Debt 2004 - 2009 (% of GDP)*
USA	14,264.6	**6,762.9**	4.7	**13,946.1**	6,536.7	**4.7**	38.1 (net)	**80.4 (net)**	52 (net)	**111.1 (net)**	-2.7	**39.8 (net)**
UK	2,673	**1,258.7**	4.7	**2,125**	902	**4.2**	52	**110.4**	320	**754.9**	-5.4	**90.4**
Ireland	273.0	**159.9**	5.8	**224.2**	124.4	**5.5**	41.8	**71.8**	58.6	**105.6**	-2.1	**32.6**
Germany	3,664	**1,852.3**	5.0	**3,098**	1,458.4	**4.7**	64.4	**127.4**	78.4	**166.5**	-2.2	**68.2**
France	2,866	**1379.5**	4.8	**2,622**	1,210.9	**4.6**	68.1 (net)	**141.5 (net)**	75.8 (net)	**164.1 (net)**	-3.6	**67.1 (net)**
Norway	451.8	**279.5**	6.2	**380.9**	221.3	**5.8**	44.2 (net)	**71.4 (net)**	51.1 (net)	**87.9 (net)**	14.8	**52.8 (net)**
Israel	199.1	**99.5**	5.0	**173.2**	80.3	**4.6**	78	**156**	85.9	**185.3**	-2.4	**86.9**
Ghana	0,014.6	**0,013.5**	9.2	**0,013.3**	0,011.2	**8.4**	62.3	**67.4**	79	**93.8**	-7.7	**67.3**
China	4,416	**3,509.7**	7.9	**4,806**	3.827.8	**8.0**	15.9 (net)	**20 (net)**	19.6 (net)	**24.6 (net)**	-1.3	**20.3 (net)**
Japan	4,908.4	**2,085.6**	4.2	**4,972.2**	2,092.2	**4.2**	173	**407.1**	190	**451.5**	-4.1	**174.4**
Australia	993.4	**505.6**	5.1	**864.5**	416.8	**4.8**	13.9 (net)	**27.3 (net)**	18.5 (net)	**38.4 (net)**	0.6	**16.4 (net)**

Calculations based on Economist Intelligence Unit forecasts, which are continuously updated (Sources: IMF, International Financial Statistics)
As the reference currency is USD, numbers are also subject to changes in the exchange rate.
Please note the distinction between Gross and Net Public Debt. Although gross debt is the best guide to governments' financial obligations, net debt, which subtracts the value of their assets, is a better indicator of a country's creditworthiness. Unfortunately, there is no overall coherent reporting in either Gross or Net Public Debt, making comparisons difficult.

Tom Kremer, "From Crisis To Hard Times", July 2009

2009 Net Domestic Product (NDP) data of selected countries (continued)

	Nominal GDP 2009 (USD bn)	*Public Consumption 2009 in USD bn (% GDP)*	*Public Spending on education in USD bn (% GDP)***	*Net Public Consumption (Public Consumption – 50 % of public spending on education)*	*Black Economy USD bn (% GDP)*	*Service Sector (% GDP)*	*Net Service Sector (50 % service sector + 50 % black service sector)*	*Revised GDP (GDP plus Black Economy non-service sector share)*	*NDP 2009: Revised GDP – (Net Public Consumption + Net service sector)*	*NDP % of GDP*	*COQ*	*Public Debt 2009 (% of NDP)*
Israel	**173.2**	**42.7 (24.6)**	**11.9 (6.9)**	**36.7**	**34.6 (20)**	**113.6 (65.6)**[-]	**68.1**	**185.1**	**185.1 – (36.7 + 68.1) = 80.3**	**46.4**	**4.6**	**185.3**
Ghana	**0,013.3**	**0,003.5 (25.1)**	**0,000.7 (5.4)**	**0,003.1**	**0,008 (60)**	**0,005 (37.5)°**	**0,004**	**0,018.3**	**0,018.3 – (0,003.1 + 0,004) = 0,011.2**	**84.2**	**8.4**	**93.8**
China	**4,806**	**466.7 (9.7)**	**144.2 (3)**[+]	**374.6**	**961.2 (20)**	**1956 (40.7)**	**1173.6**	**5376**	**5376 – (374.6 + 1173.6) = 3.827.8**	**79.6**	**8.0**	**24.6 (net)**
Japan	**4,972.2**	**1,097.8 (22.1)**	**179 (3.6)**	**1,008.3**	**646.4 (13)**	**3,634.7 (73.1)**	**2,053.6**	**5,154.1**	**5,154.1 – (1,008.3 + 2,053.6) = 2,092.2**	**42.1**	**4.2**	**451.5**
Australia	**864.5**	**155.2 (17.9)**	**40.6 (4.7)**	**134.9**	**129.7 (15)**	**610.3 (70.6)**	**350.9**	**902.6**	**902.6 – (134.9 + 350.9) = 416.8**	**48.2**	**4.8**	**38.4 (net)**

Source: If not otherwise stated, IMF data for 2008, Economist Intelligence Unit
[-] Bank of Israel
° African Economic Outlook
+ OECD Observer 2006 China Policy Brief
* OECD at a Glance 2008
**Human Development Index 2007/08, Human Development Report
Net public debt: financial liabilities issued by the public sector less its holdings of liquid financial assets, such as bank deposits

2009 Net Domestic Product (NDP) data of selected countries (continued)

	Nominal GDP 2009 (USD bn)	*Public Con-sumption 2009 in USD bn (% GDP)*	*Public Spending on education in USD bn (% GDP)***	*Net Public Consumption (Public Consumption – 50 % of public spending on education)*	*Black Economy USD bn (% GDP)*	*Service Sector (% GDP)*	*Net Service Sector (50 % service sector + 50 % black service sector)*	*Revised GDP (GDP plus Black Economy non-service sector share)*	*NDP 2009: Revised GDP – (Net Public Consumption + Net service sector)*	*NDP % of GDP*	*COQ*	*Public Debt 2009 (% of NDP)*
Israel	**173.2**	**42.7 (24.6)**	**11.9 (6.9)**	**36.7**	**34.6 (20)**	**113.6 (65.6)**-	**68.1**	**185.1**	**185.1 – (36.7 + 68.1) = 80.3**	**46.4**	**4.6**	**185.3**
Ghana	**0,013.3**	**0,003.5 (25.1)**	**0,000.7 (5.4)**	**0,003.1**	**0,008 (60)**	**0,005 (37.5)°**	**0,004**	**0,018.3**	**0,018.3 – (0,003.1 + 0,004) = 0,011.2**	**84.2**	**8.4**	**93.8**
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