Modern Management: The Barrier to Recovery through the Impact on Profit Margins.

Report No. 394

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6th December 2011

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Modern Management: The Barrier to Recovery through the Impact on Profit Margins.

Summary.

1. US profit margins are at a record high level and over the past 3 years margins have expanded while output fell.

2. We consider three possible explanations. **(i)** A decline in the bargaining power of labour. **(ii)** The change in the worldwide supply of labour and capital due to China's participation in the world economy. **(iii)** A change in management behaviour resulting from the change in management remuneration.

3. **(i)** We show that the fall in unionisation and strikes, which have gone together, has been a steady feature of the post-war era - accompanied for 30 years by falling margins and then for the next 30 years by rising ones. This explanation does not fit the facts, nor has it any justification in theory.

4. China's arrival on the world scene has initially increased the ratio of world labour to capital, which has then eased with China's massive level of investment. This could have explained an initial rise in margins which then eased off. **(ii)** Therefore, neither fits the trend of the past thirty years, nor the oddity of the past three.

5. We therefore favour **(iii)** which fits the usual explanation for a change in behaviour, which is a change in incentives. The huge increase in bonuses linked to short-term measures of performance, such as returns to shareholders and return on equity, has naturally encouraged the observed changes, including an increased willingness to sack labour, combined with a disinclination to lower prices and a preference for share buy-backs over investment.

6. If profit margins were at their average level, US domestic profits before tax would be only half their current level.

7. Narrower profit margins are a necessary condition for sustained economic growth with lower fiscal deficits. By increasing management resistance to them, the bonus culture is seriously inhibiting recovery.

8. There has been no relationship since 1945 between profit margins and investment. But, when margins dropped dramatically in the 1930s, the fall was accompanied by a collapse of investment and output. We therefore need to see margins fall steadily rather than sharply.

9. If we are lucky, margins will decline under increasing pressure from competition and a change in fashion will lead to less attention on profit margins and more on growth in output. If we are unlucky, it will require another severe recession to bring down margins and change the current absurdities resulting from the bonus culture.

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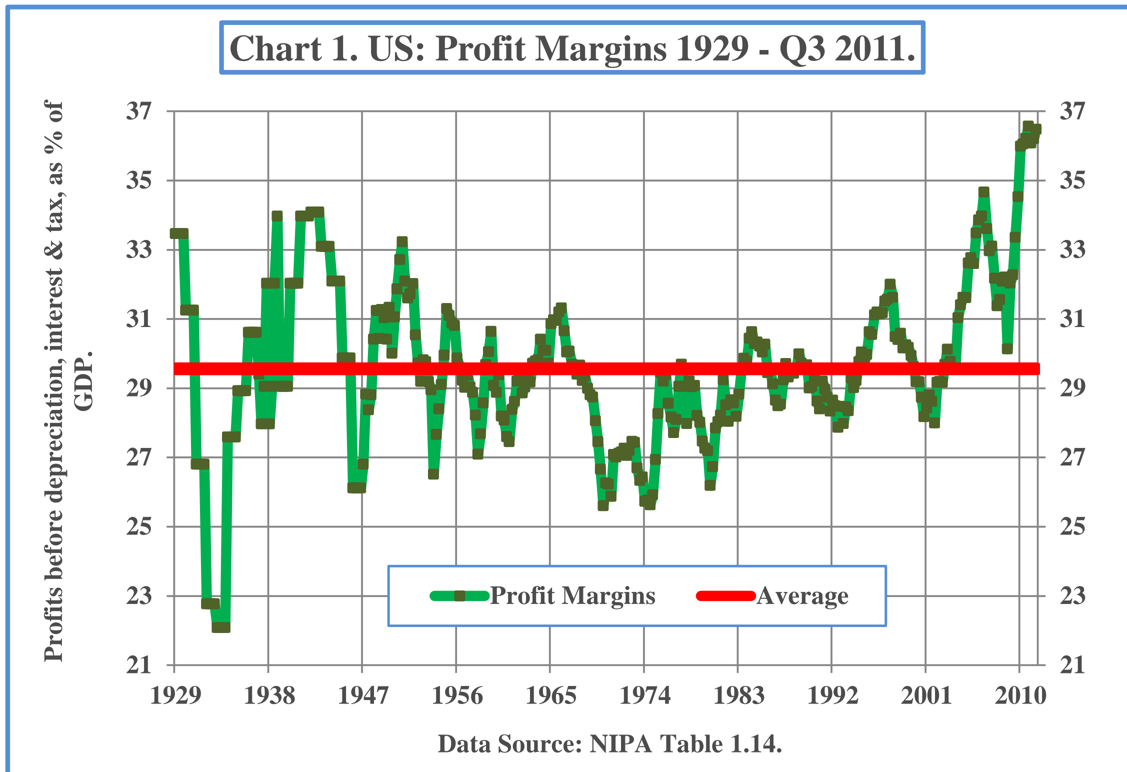
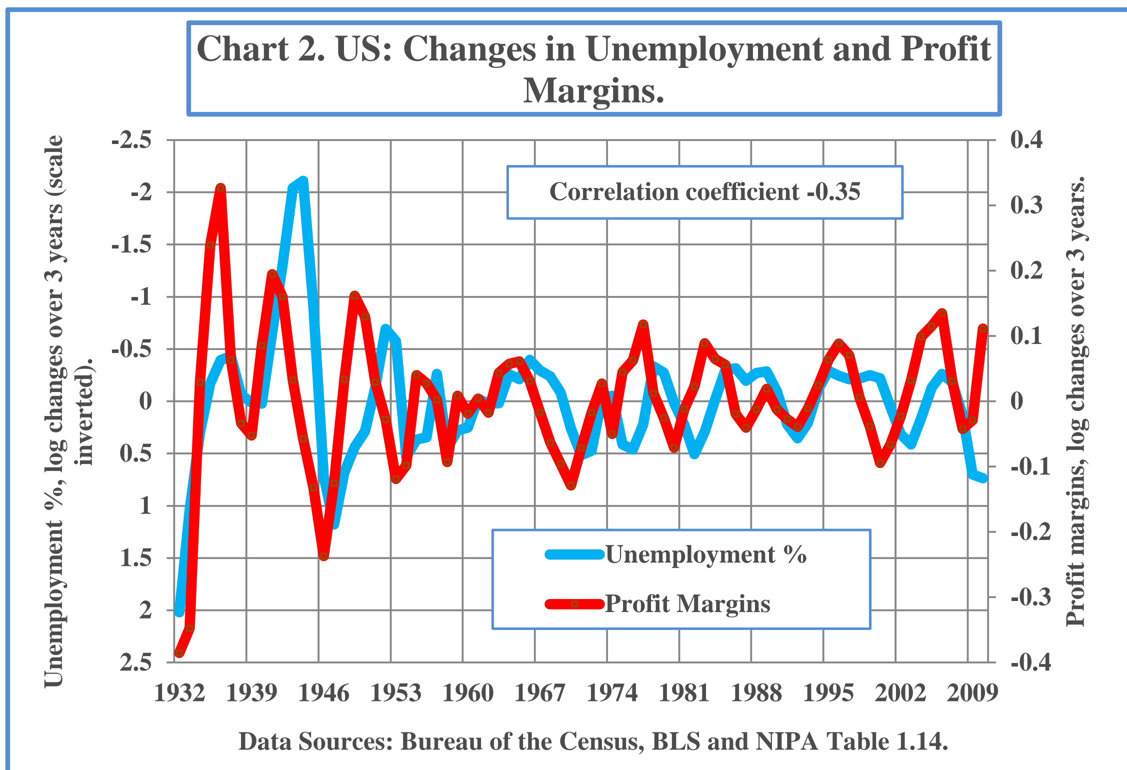
1. The Strange Behaviour of US Margins.



Profit margins in the US are at their widest recorded levels (Chart 1).



In the past margins have tended to widen and narrow with fluctuations in economic output and employment. We illustrate this in Chart 2, by showing the

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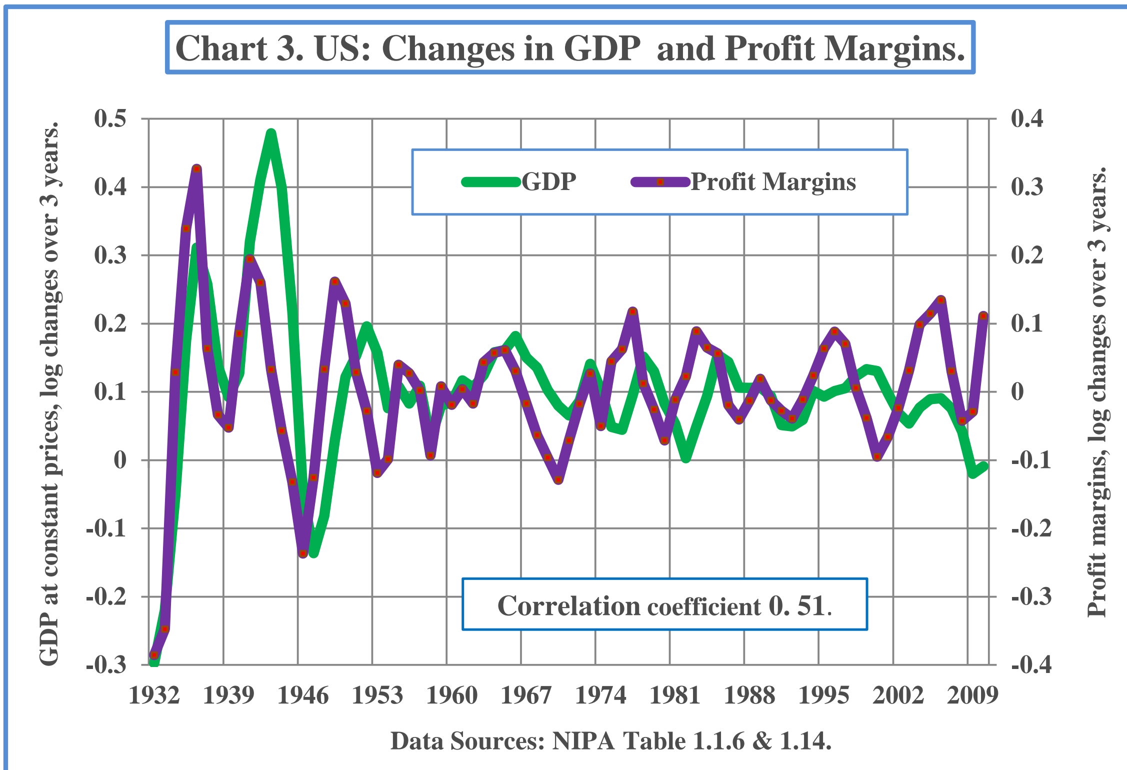
relationship between changes in unemployment and profit margins and in Chart 3, by showing the relationship between changes in real GDP and profits margins.



The recent behaviour of profit margins is unusual in that margins have widened despite the rise in unemployment (Chart 2) or the weakness of the economy (Chart 3).

There has been no precedent in the recorded data for recent experience. The three years from 2007 to 2010 are unique in combining a fall in GDP, measured at constant prices, with a large widening of profit margins. The exceptional nature of this period is underlined by the fact that the rise in profit margins was exceptionally sharp, only having been exceeded twice since 1950.

2. Theory and Evidence.

GDP is a measure of an economy's output, which must also equal the sum of its inhabitants' incomes and expenditure. The income from business output is divided between profits and the compensation of employees. Economic theory, as illustrated by the well-known Cobb-Douglas production function, holds that for mature economies the share going to profits and to labour will be stable. Chart 1 shows that this theory has been supported by the US data on corporate business, whose gross output is equal to 52% of total GDP. On average, 70% of output has gone to employees and 30% to profits. Both corporate output and GDP are measured before capital consumption. Profits are therefore calculated before deductions for depreciation, interest and corporate tax.

Standard statistical tests confirm the impression given by the chart that theory has been supported by the data and that profit margins have been mean reverting around their long-term average level. The only assumption that is needed for the theory to be robust is that additions to either labour or capital will have “diminishing returns to scale” i.e. at any given level of technology, the addition of more workers without any addition of more capital will produce an increase in output potential which is proportionately less than the current output per person employed and that an increase in capital, without the addition of more labour, will also produce a lower increase in output than the proportionate rise in the capital stock.

3. The Threat of High Margins.

This theory does not explain either the variations in profit margins that take place around the average, or what that average should be. Even if we assume that the theory remains robust, and it is difficult to believe that returns do not diminish at the margin, the outlook for profit margins will depend on what has driven them to such high relative levels today and whether this is a temporary phenomenon.

Table 1. Impact on US Profits of a Return to Average Profit Margins.
(Data Source: NIPA Table 1.14.)

	Year to Q3 2011
Output $ bn.	7,803
Compensation of employees $ bn.	4,968
Profits, before depreciation, interest and tax $ bn.	2,835
Profit margins.	36.3%
Average profit margins 1929 - Q3 2011.	29.6%
Profits, before depreciation, interest and tax, at average margins $ bn.	2,307
Capital consumption $ bn.	1,056
Interest etc. $ bn.	287
Profits before tax at average profit margins $ bn.	770
Current profits before tax at average profit margins $	1,492
% by which profits before tax would fall if profit margins were average.	48.4

This is clearly a matter of great potential importance for the stock market. If the current level of profit margins is just a temporary phenomenon, then the outlook for profits is grim. We show in Table 1 that, if profit margins were now at their long-term average, then US profits today before tax would be approximately half their current level.

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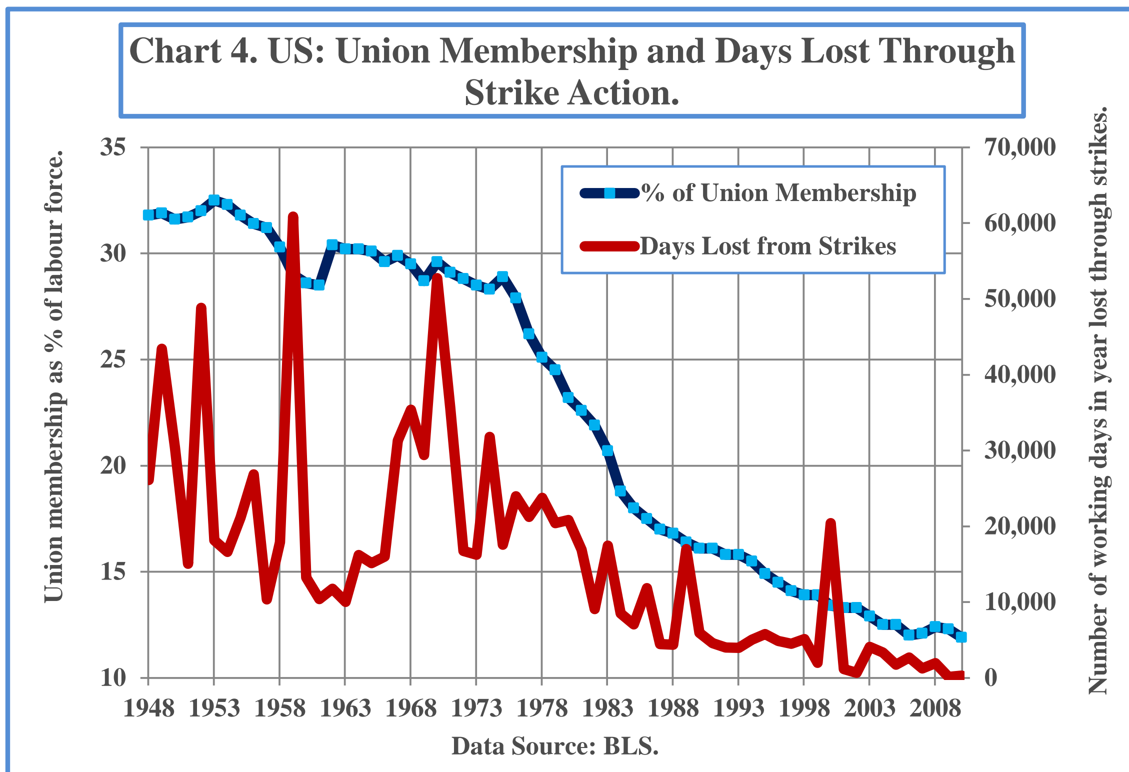
The prospect of such a sharp fall in profits, let alone the level that would be reached if margins fell to below average levels, is clearly one that not only threatens the prosperity of the financial securities' industry, but could be extremely damaging for the economy as a whole. It is therefore important to understand what has caused the odd behaviour of profit margins, both from the viewpoint of investing in shares and for the management of the economy.

There are obviously a large number of possible explanations which could account in whole or in part for the current high level of margins. We consider in the following sections:

(i) Labour's bargaining power.
(ii) The impact of China.
(iii) The change in management remuneration and behaviour.

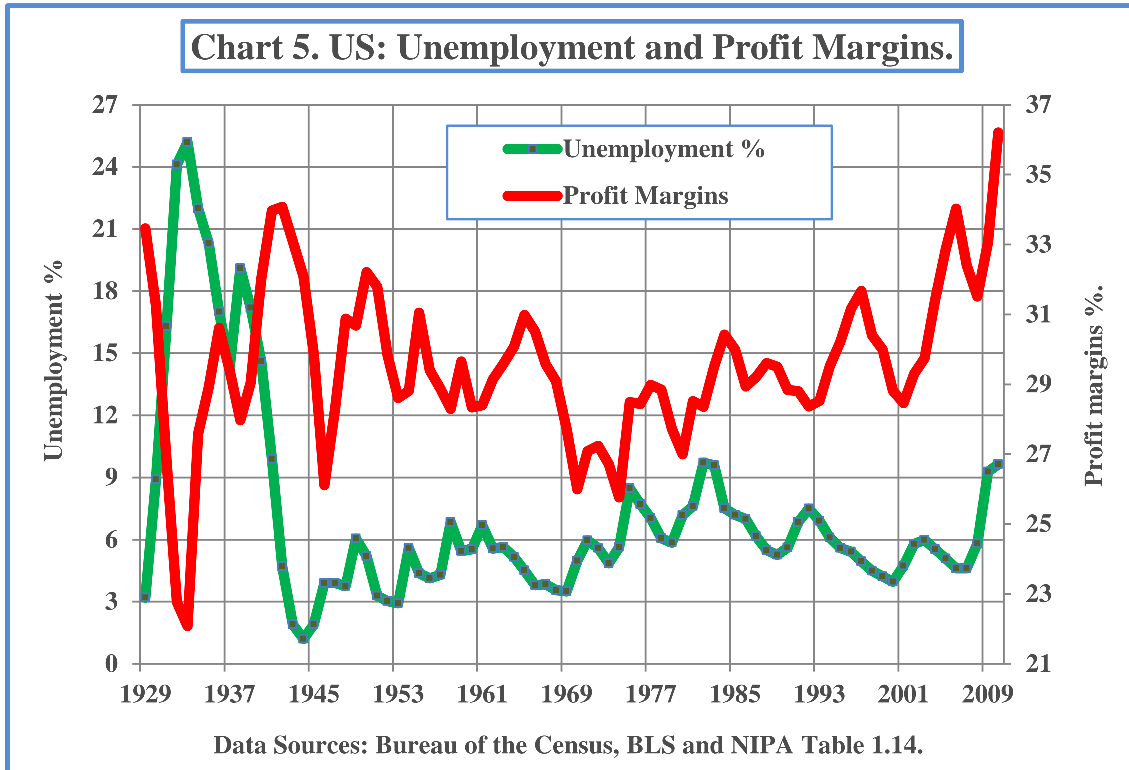
4. Labour's Bargaining Power.



Since the end of World War II there has been a major decline in the power of organised labour and this is often put forward as a reason for the recent rise in the profit share. Chart 4 shows that the influence of unions, measured by their membership or by the incidence of strikes, has fallen steadily since 1948, when the BLS data series start, and thus bears no relationship to the pattern shown in Chart 1, where profit margins were on a declining trend from 1948 to 1974 and then on a rising one.

Not only does the decline in union power fail to match the medium-term rise and fall of profit margins, but there is no apparent reason to assume that it

would affect profit margins. If individual workers received lower pay as union power declines, the expected impact would be to leave the labour share unchanged, while lowering the level of unemployment so that more workers would be employed. However, as Chart 5 shows, unemployment was on a rising trend from 1948 to 1974 when unionisation was declining and profit margins falling; since then margins have risen both when unemployment has risen and when it has fallen.



5. The Impact of China.

It has also been claimed that the entry of China in the late 1970s into the world economy caused the labour share of output to fall. As China had a huge population and little capital, in a fully open economy the impact would have been to increase suddenly the ratio of labour to capital. The result would have been a rise in the profit share in a similar way to the impact that capital destruction in World War II had on Japanese profit margins. As we show in Chart 6, profit margins, for which we have data for the non-financial sector from 1954 onwards, were very high at the end of the war during which around 50% of Japan's capital stock is estimated to have been destroyed, while the population continued to grow. The natural impact was to raise profit margins and encourage heavy capital investment, while bringing down profit margins as the capital stock rose. This duly occurred and could have had an impact on US profit margins up to 1974 as margins in both Japan and the US were on a declining trend over this period. Since then, however, there has clearly been no connection, as Japanese margins have continued to fall while those in the US have risen.

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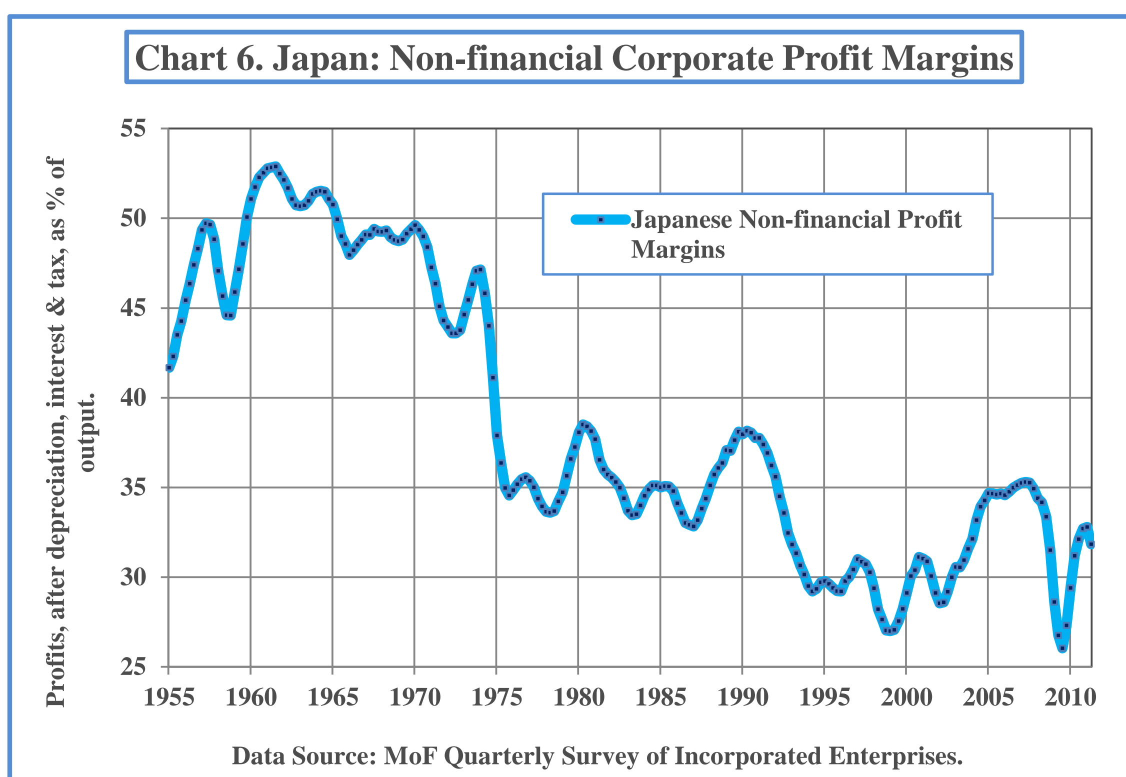
Labour is not free to move from country to country. In this context therefore neither Japan, China nor the US are completely open economies, and the impact of a change in the ratio of capital to income in the world as a whole on profit margins in one country is therefore in doubt; such doubts are reinforced by the apparent lack of relationship between past changes in Japanese and US profit margins. If, however, we assume that the arrival of China did have an impact on US profit margins, then we would have expected a sharp rise in margins in the late 1970s or in the early 1980s followed by a subsequent decline caused by the massive increase in the capital stock that has since been such a feature of the Chinese economy. After the initial fall, the ratio of capital to labour has risen and would have borne down on margins, just as it did in post-War Japan. If these changes had had an impact on US margins, they would therefore have been very different from that actually witnessed, as they have been on a rising rather than a falling trend in recent years.

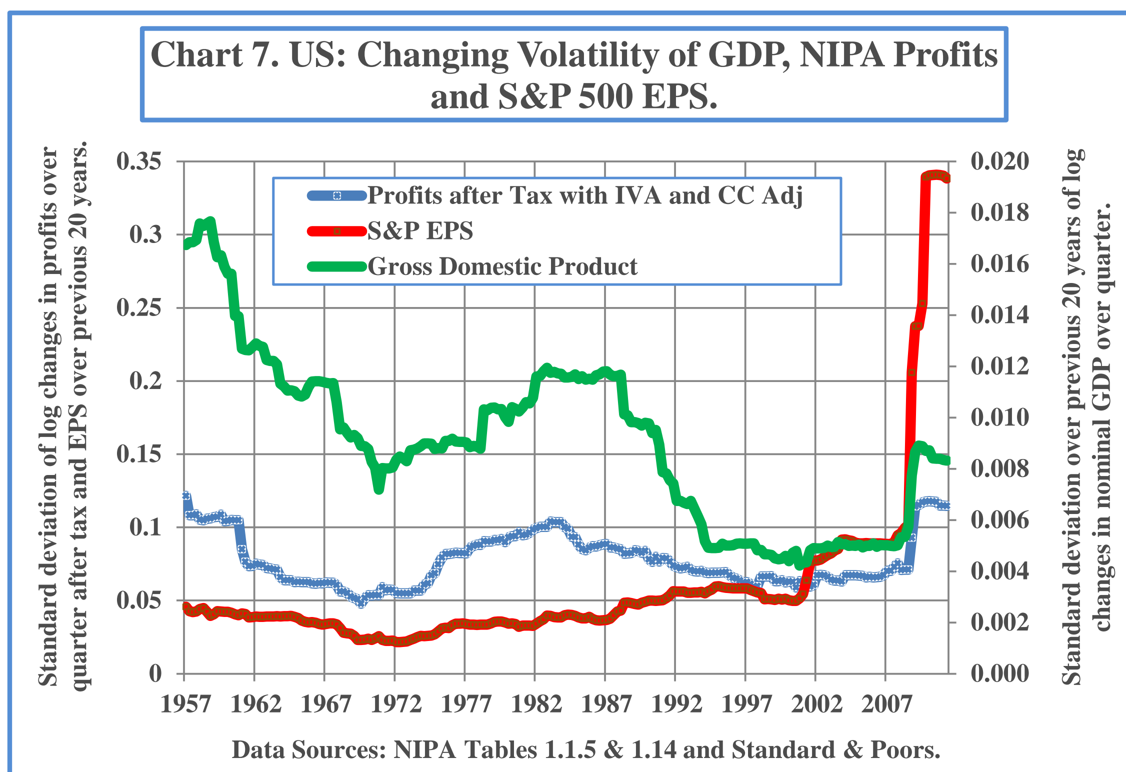


6. Management Behaviour.

Neither the change in union power, nor the arrival of China on the world scene fit with the trend changes that have occurred in US profit margins; nor can they account for the exceptional short-time rise in margins at a time of great economic weakness which has occurred over the past three years.

In our view, a ready explanation both for the rising trend of profit margins over the past two decades and the exceptional oddity of their recent cyclical behaviour lies in the profound change that has occurred in management remuneration. Changes in behaviour are commonly associated with changes in incentives and, over the past two decades, there has been a marked and steadily increasing emphasis on bonuses rather than basic salaries in the total

remuneration of senior management. Chief executives don't expect to hold their jobs for very long. If they are going to get rich, and they want to get rich, they need to do so quickly. Their bonuses usually depend on success, and the usual measures of success are a higher return on equity, a rise in earnings per share or a rise in share prices. All these have much in common. First of all, they are like options, in that success is rewarded without failure being penalised. Secondly, they favour changes which improve profits in the short-term rather than the long.



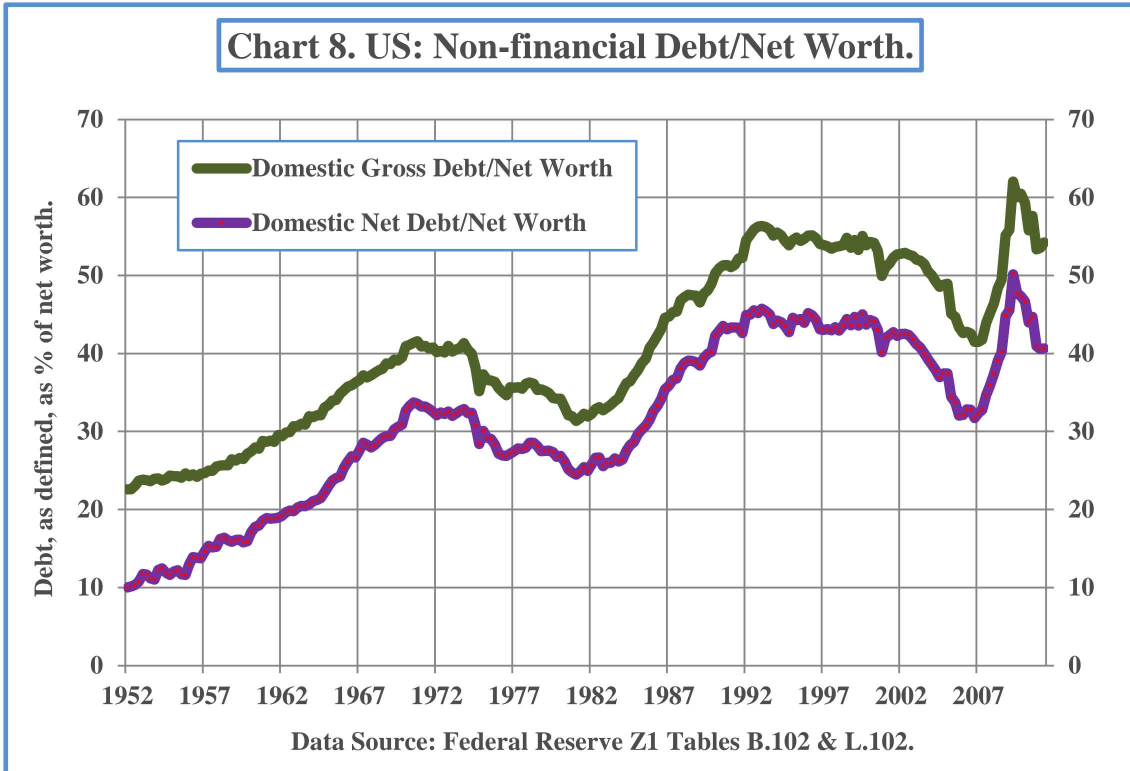
Managers are thus encouraged to take more risks than before, and favour policies aimed at short rather than long-term benefits. The evidence for both of these is clear. Profits have become much more volatile (Chart 7)[1], companies have increased their leverage (Charts 8 and 9) and buy shares (Chart 10) rather than investing in new equipment. Despite the record high levels of profit margins, business investment is currently below its post-War average and even further below the average level of more recent years (Chart 11).

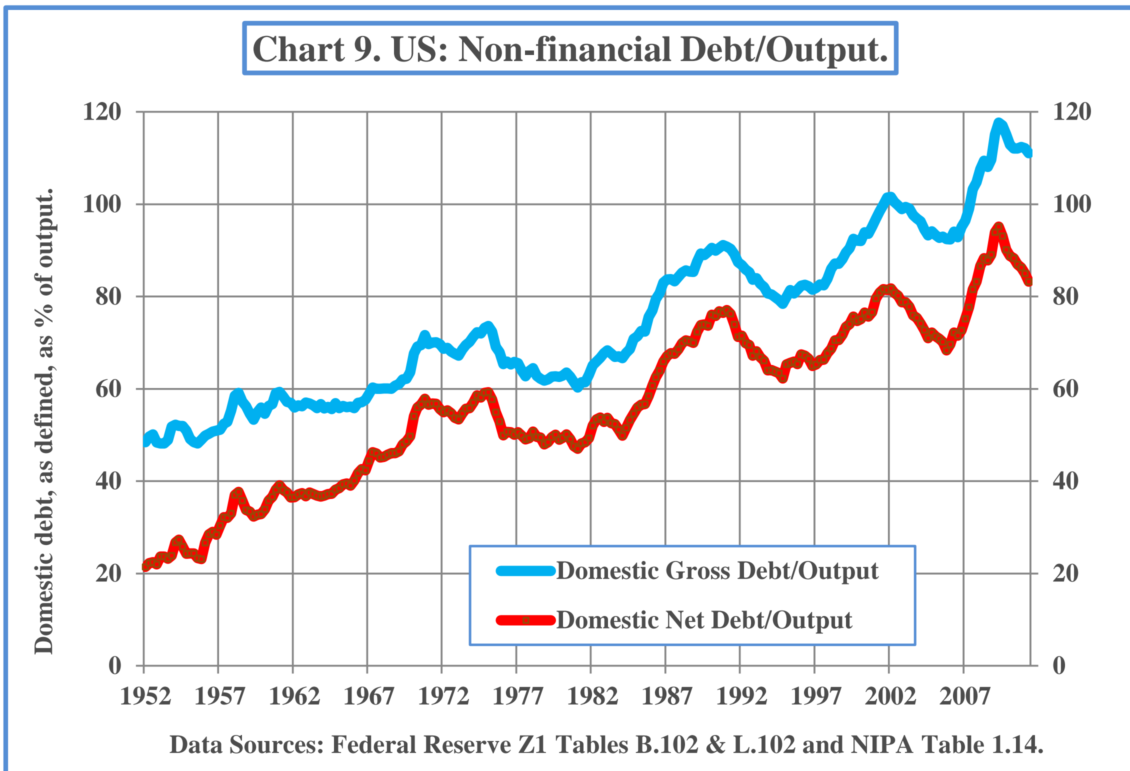
Managements' determination to keep profits up in the short-term encourages sacking people rather than cutting prices, which fits with the exceptional behaviour of profit margins in the last three years.

Investment is also discouraged by the absurd target levels which company managements announce for their return on equity. The long-term real return on

[1] As Chart 7 shows, GDP has become less volatile, both in real and nominal terms, but this has not been reflected in company profits as shown in the national accounts due to rising leverage. The EPS of listed companies used to be less volatile than profits in the national accounts, either because of smoothing or because large companies' profits were really less volatile. This changed around 1997, with the gap narrowing from around 1987. Recently profits as published by companies have become far more volatile than those in the national accounts.

corporate equity has been mean reverting at around 5.5% to 6% p.a., while it is common for companies to declare that they have target returns of 15%.





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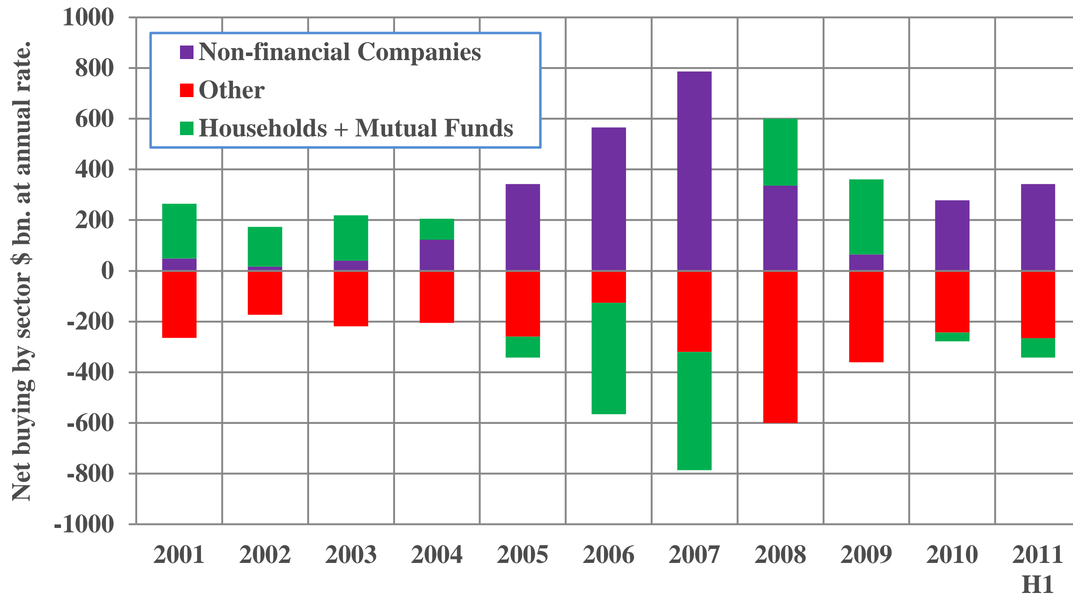

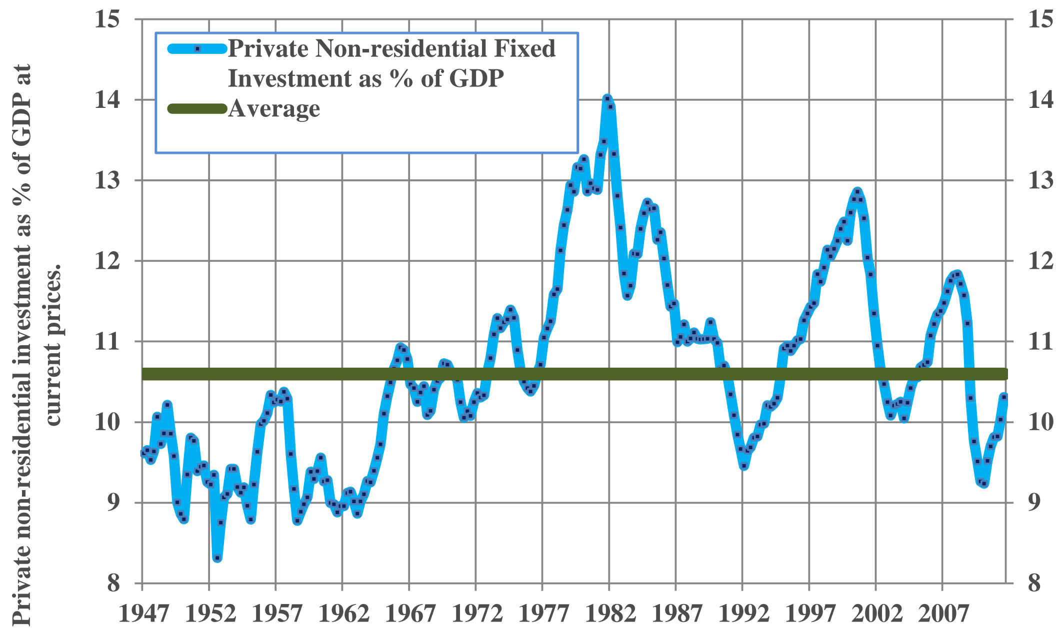

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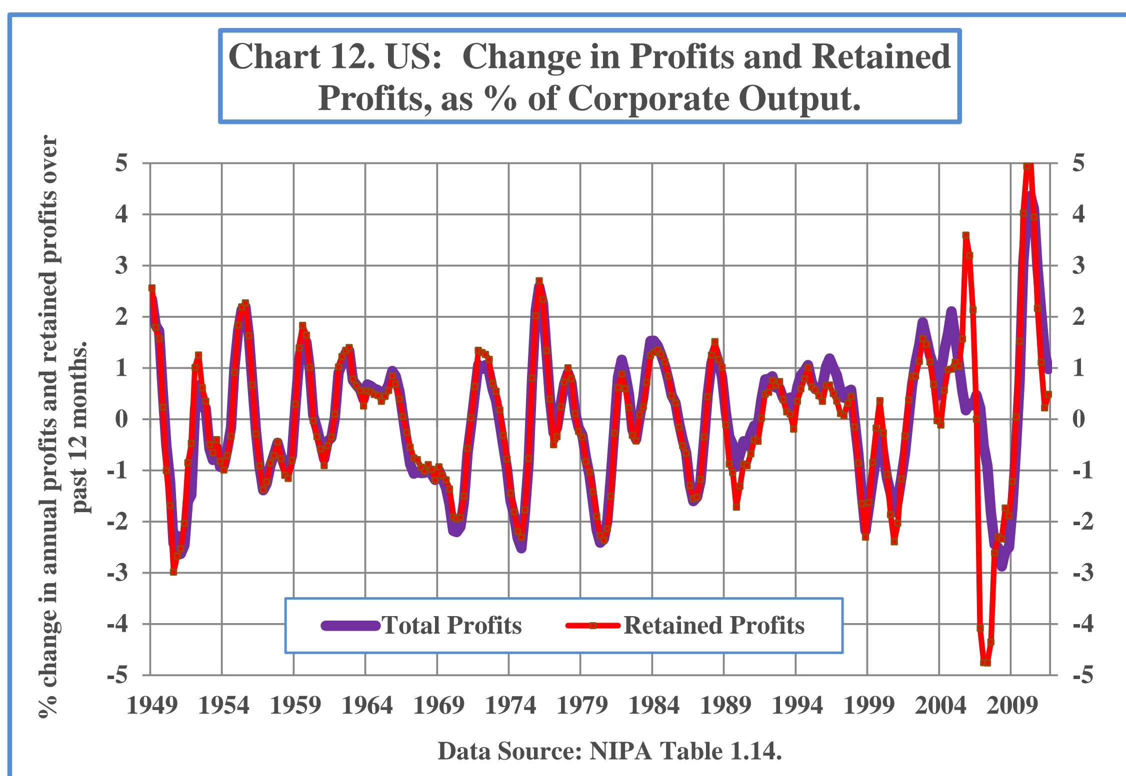
7. Modern Management - a Key Barrier to Economic Recovery.

Company management has become a major obstacle to economic recovery.

Fiscal deficits are running at over 10% of GDP in the US and UK, and at over 8% in Japan. These are unsustainable and must be brought down to near zero. As a matter of identity there must be an equal fall in the cash surpluses of the other sectors of the economy. As the household sectors of the Anglophone economies have such poor balance sheets and low savings' rates, a signficant deterioration in the cash flows are neither likely, nor desirable. The burden must therefore fall on the overseas and business sectors. Barring an improbable swing from a large deficit to a large surplus in their current account balances, this means that the business sector must bear a large part of the burden through a fall in its cash flow.



This can only be achieved by some combination of rising investment or falling retained profits. Without changes in the pay-out ratio, dividends will move with profits, so the usual pattern is for profits in total to fall by a similar proportion to the fall in retained profits (Chart 12).

For any given fall in corporate cash flow the greater the rise in investment the less will be fall in profits. History suggests that a severe fall in profits will make a rise in investment improbable, and this is illustrated by the dramatic falls in profit margins, investment and output that occurred in the 1930s. Happily there is no apparent relationship between either the level or the change in profit margins throught the post-War period, when changes in margins were much less precipitous (Chart 13 and Table 2).

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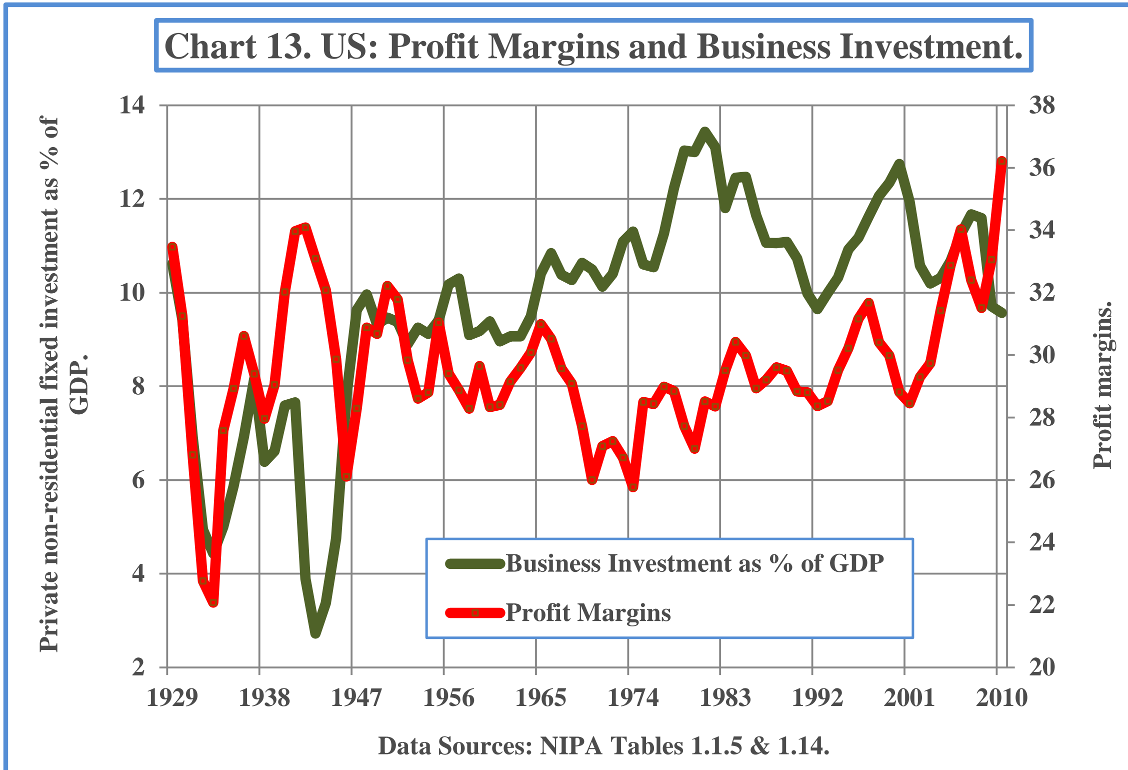

Table 2. Correlations between Annual Log Changes in US Profit Margins and Business Investment.
(Data Sources: NIPA Tables 1.1.5 & 1.14.)

	Levels	Log Changes over Year
1929 - 2010	0.014	0.15
1947 - 2010	-0.13	0.05
1929 - 1969	0.11	0.21
1970 - 2010	-0.199	-0.21
1929 - 1939	0.84	0.77

8. How Will Margins Narrow?

Whether looking just at the US or G5 countries in total, sustained economic recovery almost certainly requires that the international trade balance must improve, business investment rise and corporate profit margins narrow, in terms of their proportions of GDP.[2]

We have shown in the previous section that there is no reason to assume that business investment cannot rise while profit margins narrow, provided that the change in the latter is not too rapid. We have also pointed out that the rebalancing of the economy involved with improving trade balances will, for any given rate of growth, require a higher ratio of investment to GDP. Both of these

[2] For a more detailed account of the need for profit margins to narrow see Report No. 383 "Narrower Profit Margins are Essential for Growth." 6th July, 2011.

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changes can make an important contribution to recovery, but they leave open the key issue as to how profit margins will narrow.

We see two possible paths, a relatively benign one in which weak growth and continued competitive pressure brings margins down slowly and one in which there is a sharp fall produced by another severe recession.

The former would not only be much better in the short-term but as it is compatible with rising investment, provides a much surer foundation for sustained growth over the longer term. If we are fortunate and another sharp recession is avoided, the impact of sustained fierce competition from slow growth is likely to have a number of interesting features.

(i) Companies which put gaining market share above the maintenance of high profit margins are likely to prosper and vice versa. Amazon is often pointed out as an example of a company that can already be seen to be prospering from this approach. It is no accident that, with one shareholder owning enough shares to determine the company's strategy, the company seems to have avoided the curse of the bonus culture, whereby incentives designed to encourage the success of a company in the short-term are likely in practice to damage it over a longer time period.

(ii) Cultures, such as those of Japan, which are less infected by the bonus culture and the absurdity of excessive target returns on equity, are likely to have companies which spend more on investment and research than the majority of Anglophone companies. As they increase their international investments and win market share outside their domestic economy, this could cause another marked change in management fashion. Two decades ago Japanese management was seen as superior to Western management, because of its assumed concern with long-term planning and market share. This reversed with the decline in Japanese growth, and could well return as the damage done to growth by the bonus culture becomes increasing understood.

(iii) It is possible that we will be relatively lucky and that a revulsion against the bonus culture will take place either because the damage it is doing to the economy will be increasingly recognised or, more likely, because of social tensions to which it is giving rise. The two can of course reinforce one another.

(iv) Fund managers moved by fashion or logic – we leave the choice to our readers, who include many fund managers – will increasingly value companies which increase output despite the weak growth of the economy and will recognise that, even if this is achieved at the short-term expense of profit margins, the strategy will improve the companies' long-term prospects.

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If success and failure are the results of random swings rather than skill, then bonuses will increase the returns to management without any increase in returns to shareholders. As fund managers, along with managements in general, will benefit from this, those who vote at shareholder meetings will be inherently biased against the reform of the present malaise.

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9. **Conclusions**.

- The current high level of profit margins is an aberration which is extremely unlikely to last.

- It is probably the result of the bonus culture which has changed the incentives and thus the behaviour of management.

- The current dominant view, typically held by remuneration consultants, is that shareholders benefit from high pay levels for senior executives. These are heavily geared to fashionable measures of performance such as shareholder returns, the return on equity and changes in EPS.

- The short-term impact of this has probably benefitted shareholders in so far as it has pushed up profit margins, but has had a damaging impact on the economy.

- If we are correct in expecting profit margins to fall back, there will be no longer term benefit, just the damage to the economy.

- If, as seems overwhelmingly likely, much of the fluctuations in those metrics which are used to measure success are random, then the longer term impact will be to increase management remuneration either at the expense of shareholders or of other employees.

- If we are lucky, a change in remuneration fashion will be combined with slow growth and fierce competition, which will allow narrowing profit margins to be combined with rising business investment.

- If we are unlucky, the distortions produced by the bonus culture will only be broken by another severe recession.

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