EUMAEUS

6 May 2019

Dear Sir Donald,

We write for EUMAEUS, a project dedicated to improving transparency in the accounting and valuation of UK firms. Buckner retired from the Bank of England in January 2018, where he worked on valuation and accounting issues and latterly on the valuation of Equity Release Mortgages (ERMs). Dowd is Professor of Finance and Economics at Durham University.

We have looked at your independent review (hereafter 'Brydon') into the quality and effectiveness of audit, and would like to address one of the main questions raised there in para 81 as follows.

> It is one of the aims of this Review to understand: (a) where there are elements of *ambiguity* between company law and international accounting standards insofar as they may impact on audit; and (b) whether there are any practical actions that could remedy such ambiguity for the benefit of the users of financial statements.

Question 30 asks whether 'a perceived *inconsistency* between company law and accounting standards as regards distributable reserves inhibits auditors from meeting public expectations', and how 'greater clarity' may be achieved. Brydon para 85 mentions a view within the wider profession that company law is *undermined* by International Accounting Standards (IAS).

The purpose of this letter is to set out (and unravel) the confusion between accounting (and actuarial) standards and company law, against the background of our own conceptual framework, modern financial theory.

Modern financial theory

Modern financial theory is not really 'modern', having its origins in the 1950s with the work of Modigliani and Miller and being virtually complete by the 1970s with the seminal work of Black, Scholes and Merton on option pricing. However, 'modern financial theory' is still considered modern by many practitioners in the finance industry, and we shall refer to it as such.

The work of many of the theory's proponents was recognised by the award of multiple Nobel Prizes (including Franco Modigliani in 1985, Merton Miller 1990, Myron Scholes and Robert Merton 1997,[1] and Eugene Fama in 2013).

Two of the central principles of modern financial theory are relevant to capital maintenance. The first is that markets are efficient. Not that markets are *correct*, but rather, as John Cochrane states[2] that 'nobody can reliably tell where markets are going – neither benevolent government bureaucrats, nor crafty hedge-fund managers, nor ivory-tower academics. This is probably the best-tested proposition in all the social sciences.'

[1] His co-writer Fischer Black died in 1995, and so could not receive the prize, which is not awarded posthumously.

[2] Quoted in Buckner 'Taken To The Cleaners', Cobden Centre 2017.

The second principle (proposed by Robert Merton in 1974) is that the equity capital of a firm is economically equivalent to a call option on the company's assets, which is in turn equivalent to ownership of the assets plus a put option struck at the level of debt owed to its creditors. The debt is therefore equivalent to a written option granted to the shareholders: in the event of default, the company's assets are 'put' to the creditors. The Merton model is used extensively by credit specialists and stock analysts to estimate the firm's probability of default, using the amount and maturity profile of the debt, and the estimated volatility of the assets. The concept of default probability is a pillar of the capital maintenance regimes of Basel (for banks) and Solvency II (insurance).

The first principle underlies the concept of capital *available* (also known as capital amount or capital resources), whereas the second underlies the concept of capital *adequacy* (which corresponds to a capital requirement). By analogy with lift safety requirements, we could compare the first principle to a measurement of the weight of goods or people in the lift, and the second to the strength of the lift cables. Just as we cannot assess the safety of the lift without a good estimate of both numbers (weight plus cable strength) so we cannot assess the safety of a firm without a sense of both its net assets or shareholder equity, *and* its probability of default.

International Accounting Standards

The objective of IFRS (International Financial Reporting Standards) is *fair value measurement*. A fair value price is

> ... the price at which an *orderly transaction* to sell the asset or to transfer the liability would take place between *market participants* at the *measurement date* under current market conditions.[3]

IFRS does not define 'fair', but the assumption is that a market participant, i.e. someone who is independent, knowledgeable, able and willing to enter into the transaction, would not be duped into an *unfair* transaction. By definition, current market prices are deemed fair, because a market participant would not be duped into buying at greater than the market price or selling at less.

The principle of marking to the current market price, where available,[4] corresponds to the first principle of financial theory, namely that nobody – including accountants – can reliably tell where market prices are going. Thus, the market price is no worse than any other judgment. It is also objective in the sense that the market price is the same for all participants, and is not easily gamed by the accountant. Market efficiency is the idea that accountants and management *cannot* reliably call or second guess the market valuation. The fair value principle itself is a prescription stating that accountants and management *should* not try to second guess the market, but *should* value assets and liabilities as a disinterested market participant would value them.

IFRS has drawn fierce criticism and complaints by investor groups that IFRS has abandoned the concept of 'prudence'. See e.g. any number of letters to the *Financial Times*,[5] arguing that 'prudent

[3] IFRS 13, para 2.
[4] IFRS has a hierarchy of valuations: level 1 input is current market price if observable, otherwise level 2 input is any price, if observable, that can be used as a proxy for the unobservable price, otherwise level 3 is a mark-to-model price, which is likely to be firm-specific, but should still reflect 'the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk'.
[5] E.g. 'Accountancy can be made to work for investors', from Natasha Landell-Mills and others

accounts help prevent overstatement of profit and capital'. Its detractors argue that when asset prices go up, IFRS allows revaluation to the higher market price, increasing net assets, thereby *overstating* the firm's 'true capital strength'. Such claims implicitly challenge the principle of market efficiency: to overstate is to give a number which is greater than the true number, implying that the accountant can, and should, determine the 'true' value by some other means than the market value.

A related complaint by the same group is that only accumulated realised profits (after accounting for foreseeable losses and liabilities) can legally be distributed to shareholders in the form of dividends. See Brydon 85(b), referring to the view that 'the primacy of company law is undermined by the application of International Accounting Standards'.

We agree that the concept of prudence is absent from International Accounting Standards, but we think rightfully so. Prudence implies a firm-specific judgment, whereas the whole purpose of marking to market is to avoid such judgments. We also believe that prudence should form a part of accounting standards, but that prudence cannot be achieved by fudging market prices in some subjective way. Rather, we should distinguish the amount of capital, which is given by market prices, hence by IFRS, from the adequacy of capital, which is a separate judgment which we will turn to later. Again, by analogy with lifts, it is not for the weighing machine to be over prudent or under prudent about the weight of the lift's content. We need an accurate measurement of the weight in the lift. We should however be *very* prudent concerning the strength of the cables to hold that weight.

We next explain why we disagree with the view that IFRS conflicts in any way with company law.

Company law and capital maintenance

It is recognised in many jurisdictions that the purpose of company law is the protection of creditors. As the EU Second Directive puts it, capital constitutes the creditors' *security*.[6] Capital maintenance rules are intended primarily for the *protection* of creditors (Modern Company Law 2001). 'The doctrine of capital maintenance … is a fundamental principle of company law ... the doctrine emphasizes [that] a fundamental duty of the companies to keep the capital intact *for the safety of the creditors*'.[7]

This purpose is a noble one, but the problem is that the UK legal framework depends on a conception of capital that is not fit for purpose. For there are two entirely different ideas about capital. (1) The first is as a pot of money that a firm keeps on one side for a rainy day. On this conception, capital is an asset. (2) The second is as the difference between total assets and all liabilities other than shareholder equity. On this second conception, capital is a form of liability, given that the balance sheet must balance, i.e. that the total value of assets must necessarily equal to the total value of liabilities (including equity).[8]

[6] Second Company Law Directive on capital, 1976 - 77/91/EEC [1977] OJ L26/1, preamble.
[7] 'The Doctrine of Capital Maintenance and its Statutory Developments: An Analysis', Md. Saidul Islam, The Northern University Journal of Law, Volume IV (2013).
[8] There is a linguistic confusion here in that 'liability' is often used to refer to any liability that is not equity, but that is a linguistic issue only. Clearly if net assets were the value of all assets minus the value of all liabilities, then net assets would always be zero, at least on the assumption that 'balance sheet' means what it suggests. Such a definition of liability is not especially helpful here, however.

The first conception is neatly illustrated by the following passage from Modern Company Law 2001:[9]

> The capital maintenance rules are designed to ensure that the full value of that capital is received and that it is maintained *as a fund within the company* so far as the ordinary risks of business allow and will be made good, or other safeguards provided, before funds are distributed to members. These rules are intended primarily *for the protection of creditors* who (where the company is limited by shares) will normally have no right of recourse other than against the company in a situation where the company fails to discharge its liabilities, and therefore permit a reduction of capital or payment out of capital only under strictly controlled conditions.

The second conception is captured in the International Accounting Standards Board conceptual framework[10]

> 'Under a financial concept of capital, such as invested money or invested purchasing power, *capital is synonymous with the net assets or equity of the entity*'. (Our emphasis).

The two conceptions are not necessarily inconsistent, but they refer to different things. *Share capital* is a definite amount (of cash) raised by a company on the issue of shares, and is in that respect a reserve like a pot or fund. *Shareholder equity* by contrast is the total net assets of the company, equal to the sum of called-up share capital, share premium (the difference between the par value of a company's shares and the total amount a company received for shares recently issued), capital redemption reserve (a statutory, non-distributable reserve following the purchase of a company's own shares, see section 733, Companies Act 2006), and retained earnings (net income left over after the firm has paid out dividends to shareholders).

However, share capital is *not* a fund in the sense that the cash paid by shareholders is held as a pot of cash or 'money' or other risk free assets. As far as we are aware, there is nothing in company law that prohibits the amount of share capital plus any borrowings being totally invested in risky assets. A firm may choose to keep some of its assets in the form of cash or low risk liquid holdings to ensure sufficient liquidity to meet obligations as they become due and payable, but liquidity *provisioning* is not the same as capital *maintenance*. The law is simply that the capital 'subscribed' by shareholders should be regarded as available for use in trading but should not, at least without special safeguards for creditors, be returned to the shareholders.[11]

Thus company law provides for a restriction concerning the 'pot of funds' held by a firm, rather than its net assets. So long as net assets do not fall below the amount of money subscribed – which, if the firm began in Victorian times, and if there were no additional subscriptions, may be very small in nominal terms – then the law is not violated.

We believe this restriction serves no useful purpose. As Rickford et al (2004) argue, 'it is very questionable whether the [restriction] achieves the stated objective of creditor protection in practice and this has been much questioned in recent academic literature … There is no reason why the aggregate amounts of nominal value raised over time (which are an accident of history) should constitute in any way an appropriate amount for a capital reserve'.

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[9] *Modern Company Law: Final Report*, DTI 2001, ch. 10 (link).
[10] *Conceptual Framework for Financial Reporting 2018*, 4.57 59(a):
[11] Companies Act 2006:831 states that a public company may only make a distribution if (i) the amount of its net assets is not less than the aggregate of its called-up share capital and undistributable reserves, and (b) the distribution does not reduce the amount of those assets to less than that aggregate.

> Creditors require, as a matter of sound economic theory, a measure of security which is tailored to the commercial circumstances. In practice major creditors of public companies do contract for this and require no complex and expensive sets of default rules. Financing agreements normally contain their own specific and sophisticated provisions to ensure that measures can be taken well ahead of any insolvency to eliminate or manage creditors' risks. (Company suppliers also typically protect themselves by reservation of title clauses.) Evidence to the UK Review was to the effect that little, if any, importance was attached by such creditors to debtors' actual levels of share capital. For public companies in the modern economy there were far more sophisticated and effective means of protecting creditors. *What mattered to them was the risk of insolvency and the quality and certainty of future cash flows*.[12]

To illustrate their point, consider the following two examples.

Example 1. Two companies A and B have equal net assets. Company A has a significant portion of its assets in zero coupon government bonds. Company B has the same amount in junk bonds paying an appreciable (cash) coupon. Under 'capital maintenance rules' company A cannot recognise the appreciation in value of the zero coupon bond, even though that bond is deemed to have (almost) no default risk, because the profit is not realised as a cash coupon. By contrast, because the junk bond coupon is cash, company B may recognise that cash as a profit, even a distributable profit.

Note that under modern financial theory, the adequacy of capital is measured not by whether changes in net assets are realised or unrealised, but rather by the risk to capital, i.e. default probability. Even though the two companies have the same shareholder equity, the equity of A would certainly be deemed sufficient or adequate by creditors because of the negligible default risk. Creditors might also accept a lower rate of return on the company's debt. But the same amount of equity might not be adequate for creditors of company B, because of the higher risk of the junk bonds. Creditors with a low risk appetite would avoid firm B, whereas creditors with a high risk appetite might offer the firm credit if the promised rate of return compensated for the higher risk of default. As Rickford et al note, what matters to creditors is the risk of insolvency and the *quality* and *certainty* of future cash flows. The question of the aggregate amounts of nominal value raised over time – 'an accident of history' – are of no concern to knowledgeable investors.

It is a common complaint that audits are failing investors because capital includes unrealised as well as realised profits.[13] Brydon s82 states 'The principle of capital maintenance stipulates that directors

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[12] Rickford 2004 p.932. However, even Rickford finds (p921) that the trend towards fair value accounting produces more volatile "bottom line" outcomes which impede stable distribution policies. 'Where asset values are volatile over time and liabilities are to be met over time the accounts may produce deficiencies or surpluses which do not correspond to *the real prospects of solvency* (p938, our emphasis). This statement has it exactly backwards, however. Modern financial theory says that the more volatile the assets, the greater the default risk, hence the greater the risk of insolvency. In our view, the protection of creditors would be best served by recognising the volatility of assets in statutory accounts, and reserving appropriately.

[13] See e.g. Sarasin & Partners submission to the Competition and Markets Authority Statutory Audit Market Study Update Paper 21st January 2019 https://www.sarasinandpartners.com/docs/default-source/esg/sarasin-comment-on-cma-proposals.pdf?sfvrsn=4. 'Audits are failing investors and the public primarily because they are not providing vital assurance that the reported capital and performance in companies is *prudently calculated* (including only realised – *not unrealised* – profits, and accounting for *expected losses*)'. Our response is that omitting the unrealised component of asset valuation is highly subjective, and the valuation would likely differ from firm to firm, depending on the date of acquisition. Accounting for *expected* losses is not an issue of prudence or imprudence as such, but rather of coming to an unbiased view on default probability, however

may not pay dividends other than out of a company's accumulated realised profits,' and s84 notes that 'the BEIS Committee made several recommendations urging Government and the FRC to work together urgently to address issues relating to capital maintenance and the definition of 'realised profits'.'

Yet this complaint is irrelevant to the question of 'prudence', as our second example shows.

Example 2. A company has debt of 90, net assets of 10, and risky assets of 100. The risky asset rises in value to 110, thus with a debt of 90, the equity is now worth 20. The company sells some of the assets for 10 in cash, then distributes the cash, leaving the situation as before, i.e. debt of 90, equity 10.

Since the operation just describes involves realising the assets for cash, it does not violate any restriction on 'unrealised profits'. However, the risk of default may have increased as a result of the increase in asset price – there is a considerable literature suggesting that some illiquid assets, particularly housing, are subject to pronounced long term upswings and downswings. If this claim is true (and we take no view on its veracity) then the risk of default may have increased after the sale, even though the amount of net assets remains unchanged.

We agree with Rickford that the debate is 'pointless',[14] and question the value of the ICAEW's most recent technical guidance on this topic, running to 170 pages.[15] If a dividend is paid in cash, then assume it has been paid either (i) out of cash, (ii) from the sale of safe assets for cash or (iii) from the sale of risky assets for cash. In all three cases, the profit has been realised, either by virtue of being in cash and/or by virtue of realising profits through a sale for cash. If, on the other hand, the dividend is paid in kind, such as by transferring a portion of the risky assets, then the risk has been transferred from the company to the stockholder, and the effect is the same as if the asset had been sold at market for cash.

Thus the whole principle of capital maintenance, as literally interpreted, is futile. If 'capital' means the aggregate nominal value raised over time, then it is difficult to violate the requirement that dividends should not be paid out of capital. If it means net assets, then the principle is either incoherent – how can we pay something 'out of' a liability – or it is trivial. In the latter case, then clearly we cannot pay an unrealised amount to a shareholder in the ordinary way, i.e. by cash or cheque, since the amount has to be realised by a market sale first.

Continuing the analogy with lift safety, the whole debate about capital maintenance is comparable to a prolonged argument about how to measure the weight of people in the lift, involving subtle questions about whether the weighing machine should overstate the weight to increase lift safety, accompanied by 200 page documents considering the effect of carpets, mirrors etc on the weight of the lift. Yet no one involved in the debate considers whether cable strength is of any relevance.

Turning from the letter of the law, its purpose is the protection of creditors. How can the statutory report, and hence the auditors of the statutory report, best fulfil this purpose? We turn to this subject next.

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difficult that might be. Accounting for *unexpected* losses is an issue of capital adequacy, not capital amount, and is irrelevant to the issue of realised or unrealised values.

[14] 'In the UK this debate has manifested itself in pointless semantic arguments about what is required for a profit or loss to be "realised"', Rickford 2004 p979.

[15] TECH 02/17 BL Guidance on realised and distributable profits under the Companies Act 2006

Protecting creditors

As we have argued, creditors – and also shareholders – are concerned with the risk of actual insolvency, i.e. inability to meet obligations when they become due and payable, at which point creditors would take hold of the assets. Creditors are concerned with equity capital as a measure of security, i.e. a loss-absorbing buffer against the risk of the company's asset being turned over to them. Creditors and shareholders are less concerned about the level of risk, and are more concerned that the rewards be commensurate with the risk, and that there is enough information for both parties (shareholders and creditors) to assess not only the amount of capital (i.e. net assets) but the quality of capital. As Mumford and Katz correctly say, 'The ability of creditors to protect their own interests for themselves is greatly helped if they have access to full and accurate information *about the financial health* of the companies which owe them money.[16]

Rickford et al (*ibid*, p 967) suggest taking the fullest possible advantage of disclosure law, 'which does not inhibit business freedom, and general legal standards of business conduct, which can adjust to take account of the balance of the particular case, rather than rigid prohibitions or limits on corporate financing decisions. *To repeat, the law should focus on the core risk at stake – insolvency*' (emphasis ours). We fully agree, although we disagree with the idea that this focus should take the form of some 'solvency test', as proposed by Mumford and Katz (2010), who argue that 'Only cash flow forecasts are sufficient and necessary to define solvency and hence protect creditors'.[17]

The requirement for a solvency test, as formulated above, begs the question of how to assess the *quality* of the anticipated cashflows, as opposed to their *amount*. Returning to example 2, if the assets are a low quality high coupon bond with 10 year maturity, with liabilities funded at a lower coupon, or by debt longer than 10 years, such as pension obligations, then the cashflow projection will meet the solvency test as proposed above. However, the cashflows will be of low quality – there is no assurance that the bond will not default before maturity, and the firm will be unlikely to meet its liabilities to creditors or policyholders. Such a test would not suffice to protect shareholders and creditors, and would also be pointless, because it would almost completely duplicate the process used by the firm's own accountants to determine the value of its assets.

Determining quality is not difficult. The considerations relevant to default risk are now reasonably well understood, although its precise measurement remains elusive. Relevant factors include the maturity structure of assets and obligations, and the certainty and reliability of assumptions used in e.g. the modelling of cashflows. For larger companies, agencies will provide ratings that can be mapped to probability of default. Most auditors have specialists with skills in market and credit risk. The market itself is capable of forming a judgment on the quality of a firm's capital, *so long as it has access to the information that would enable it to do so*.

The desired outcome is therefore not firms or auditors testing for solvency, as such, but rather ensuring that the right information is available for the market (ratings agencies, analysts, regulators) to do so. The objective (of law, of regulation, of audit and accounting standards etc) should not be to prevent insolvency. *Still less* should it be to prevent firms taking on excessive risk that could lead to

[16] 'Making Creditor Protection Effective' Michael J. Mumford and Alan J. Katz, ICAEW 2010 (link), our emphasis.

[17] Following Rickford's recommendation that 'the directors should be required to reach the view that for the reasonably foreseeable future, taking account of the company's expected prospects in the ordinary course of business, it can reasonably be expected to meet its liabilities', *ibid* p979.

insolvency. The objective should be to prevent the failure of any firm whose investors and creditors would have reasonably expected, on the basis of statutory reports and other information made available by the firm's management, that the possibility of failure was remote.

The proper functioning of the financial system depends on successfully aligning investor expectation with future events.

There are many methods in which such an outcome could be achieved, and it is beyond the scope of this letter (and probably of Brydon) to assess such methods in detail. The framework could involve heavy touch regulation, including audit quality assessments of the kind already performed by the Financial Reporting Council, but in more depth and coverage. (Eumaeus is suspicious of regulation, however, because regulation is so easily captured by the industry it regulates.) Or there could be a light or zero touch retrospective regulatory regime. In the event of any unexpected failure, there would then be an investigation commissioned by the relevant Parliamentary Committee, or some other authority, to determine whether (i) relevant information had been deliberately withheld by management or auditors or (ii) the failure to disclose was not deliberate, but reckless, i.e. where management or auditors had genuinely not realised that their business model had a higher risk of failure than the accounts suggested.

Two well-known examples will clarify the distinction between 'deliberate' and 'reckless'. After the HBOS disaster, senior executives claimed that the firm's failure was merely down to circumstance, such as the failure of the Irish economy, the withdrawal of market liquidity and so on. It was just an accident, they claimed. However the Parliamentary report[18] found that the failure was a direct result of the nature of the firm's business and its high-risk strategy.[19] The high risk of the business should have been clear to the firm's management and to its auditors, and therefore should have been clearly signalled to its investors. The failure to do so may not have been deliberate or calculated, but suggests 'wilful blindness' as the report puts it. It was not merely an accident, but as that title of the Parliamentary report affirms, it was 'an accident *waiting to happen*'.

In the case of Carillion, by contrast, the Parliamentary investigation referred to the possibility of 'dishonest concealment' of information in the firm's 2016 annual report,[20] and found that the board 'failed to publish the trustworthy information necessary for investors who relied on public statements to assess the strength of the company.' The firm's auditors were demonstrably aware that recognition of contract revenue was the most significant risk in Carillion's accounts, yet merely described the risk in generic terms, together with generic audit procedures to (supposedly) mitigate that risk.[21] Internal board minutes showed that the board was aware of concerns about aggressive accounting methods and such like.[22]

Distinguishing deliberate actions from merely reckless or careless ones is of course famously difficult, but stringent penalties for carelessness would concentrate the mind. No drunken driver ever intends to

[18] 'An accident waiting to happen: The failure of HBOS', Parliamentary Commission on Banking Standards 2013 (AWH).
[19] See e.g. AWH 30. Excessive losses were the result of HBOS's distinctive loan book, 'including concentration in commercial real estate and leveraged loans, high exposure to single names, a high proportion of non-investment grade or unrated credit and holdings of equity and junior debt instruments. The loan book was therefore *significantly more exposed to the domestic downturn than that of any other large UK corporate banking businesses*'. Our emphasis.
[20] 'Carillion', Business, Energy and Industrial Strategy and Work and Pensions Committees 2018, p.50
[21] *Ibid* p.52
[22] *Ibid* p.42

cause an accident, nonetheless there are severe penalties for drunken driving, and there is evidence that changes in the law have lowered its incidence.

The question is a simple one: was the failure the result of a highly improbable circumstance that no one could have reasonably foreseen? If so, then no one is to blame. Or was it caused by events which could have been foreseen, and if so, was this possibility clearly signalled to investors and other stakeholders? If not, then some person or persons were to blame.

Our view

Brydon aims to understand whether

(i) there are elements of ambiguity between company law and international accounting standards insofar as they may impact on audit;

(ii) company law is undermined by International Accounting Standards;

(iii) auditors are inhibited from meeting public expectations through a perceived inconsistency between company law and accounting standards regarding distributable reserves; and

(iv) there are any practical actions that could benefit of the users of financial statements (e.g. 'greater clarity' on capital maintenance).

Our view is that company law is *not* inconsistent with International Accounting Standards, but there is ambiguity in the way that the letter of the law betrays its spirit, which is to protect creditors, and to protect shareholders from management cheating. The insistence on a narrow and useless conception of 'capital' or of 'distributable reserves' is of no help to creditors, widows or orphans.

We are not suggesting that company law should seek to maintain a 'zero failure' regime. The question instead is whether shareholders have enough information to arrive at an *informed* judgment of the risk and potential returns of an investment. There should be nothing in law to impede risky investments as such.

It is beyond the scope of this letter, and probably of Brydon itself, to set out the sweeping regulatory and legal changes required to ensure that the *reported* risks of failure align with the *actual* risks. However, the Brydon remit asks for practical actions that could benefit the users of financial statements. On this subject, we have the following suggestions:

- In our view, the continuing dispute about capital maintenance results from a deep confusion about what capital actually is. Brydon should begin by a clarifying definition, then recommend ways in which the dispute might be resolved. Eumaeus has attended any number of meetings where that discussion was declared off the agenda. Is the dispute about the amount of firm's capital, or about its quality or adequacy? We need to be clear about this issue.
- Auditors should be encouraged to ensure, as far as possible, that shareholders have the information they need to determine the adequacy of capital. We do not prohibit smoking, but we do require cigarette packets to be covered in blood curdling warnings about the risks involved.
- Firms should be required to report all the major risk factors that might impede the quality of capital. Some firms already do so, but it is doubtful that they capture the whole truth. In our experience firms will often choose to ignore or to understate the most material risks.

- Auditors should be encouraged to determine whether any material risk to capital has been omitted from the financial statements. This task should not be difficult. Given that is easy to identify books with excess or unusual returns, the auditor should by default declare such books high risk, and check that the risk has been communicated clearly in the statements.
- Risks hidden in the maturity structure should not be concealed in the financial statements. Many firms report the structure of debt up to 5 years, with an aggregate of debt longer than 5 years. Yet the sensitivity to debt is (roughly) proportionate to the term! Our research has uncovered some staggering risk sensitivities concealed in this way.
- Material risks should not be concealed in some 'other' category. Carillion's accounts represented an early payment facility as 'other creditors', meaning it was not incorporated in a debt to earnings ratio presented to lenders.[23] Eumaeus has reviewed another firm which reports 'other valuation differences' of nearly £1bn, more than half of its reported capital![24]

We hope this is helpful.

Yours,

Dean Buckner

Kevin Dowd

[23] *Ibid* p.43
[24] See e.g. http://eumaeus.org/wordp/index.php/2018/10/19/past-and-present-tense .