Quarterly CPD

2010 Quarter 3

Question 1 Hedge accounting in the financial crisis
Now that the financial events of late 2008 and 2009 recede into history, we can perhaps take a more considered view of what worked under severe stress and what didn't work. Hedge accounting seems to have fallen into the former category, of things that worked.

Volatilities of many markets soared at the height of the crisis. Take an example of a USD 100m 5-year interest rate swap to convert floating rate debt to fixed starting in January 2008 when 5-year swap rates were at 4%. If hedge accounting had not been used, the mark-to-market values and the Income Statement values would have been as shown in the table below. It can be seen that the P&L impact, without hedge accounting, could have been close to 10% of the value of the swap.

5 yr USD 100m IRS @ 4%   Values in US 000's

	Jan-08	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09
Market Values	0	-3272	784	-70	-7,800	-7689	-5,454	-6383	-5,706
Impact on P&L		-3,272	4,056	-854	-7,730	111	2,235	-929	677
Market Rate	4.0%	3.3%	3.9%	3.9%	2.0%	1.9%	2.2%	1.9%	1.8%

Source: Reval SaaS

Which of the following saw their price volatility increase by the most at the height of the financial crisis?

(a) G7 currencies
(b) G7 interest rates
(c) Gold
(d) Wheat
(e) Coffee
(f) Don't know

Answer
The right answer is (b) G7 interest rates

Volatility changes are shown by the table below. The increases in volatility are straight arithmetical increases rather than proportional rates of increase, and show the huge increases over a short time period. The potential for such large sudden increases reinforces the circumspection that should be applied to risk measures such as Value at Risk.

Although oil shows the largest arithmetical increase, G7 interest rates show the largest proportional increase of 162%!

	G7 Currencies	G7 Interest Rates	Gold	Oil	Wheat	Coffee
Sep-08	11.3%	10.3%	23.4%	34.7%	47.7%	34.1%
Jan-09	18.0%	27.0%	32.0%	65.1%	53.5%	45.3%
Vol Increase	6.7%	16.7%	8.6%	30.4%	5.8%	11.2%

Source: Bloomberg 2 yr historical volatilities

Hedge Accounting: Coming of age in the global financial crisis, by Blaik Wilson, Reval, 24th May 2010
http://www.reval.com/knowledgesource/Pages/whitepapers.aspx

Question 2 Convertible Bonds

Over the last decade one of the biggest trends in corporate financing has been the increase in corporate debt coupled with using the funds raised for share buy-backs. This, arguably, was driven by the desire to operate at the lowest weighted average cost of capital (WACC) and therefore to maximise corporate value. The theoretical underpinning of this was the work by Modigliani and Miller. They argued that at relatively low debt levels WACC could be reduced by raising tax-shielded debt rather than equity. At these low debt levels, there was a small increase in equity risk as leverage rose, but this was more than offset by the lower after-tax cost of the extra debt. As debt levels rise, the marginal increase in equity cost becomes larger as equity investors become more concerned about levels of leverage until this marginal increase in the risk, and therefore the cost of equity outweighs the gain from switching to tax-shielded debt. Beyond this point WACC starts to rise as debt increases.

In the last couple of years, the equity market has reappraised the point at which investors become concerned that companies are overgeared. High debt levels have become less attractive and companies are expected to reduce their gearing over the next few years.

In the last year the convertible bond market has seen a renaissance since its virtual closure at the height of the financial crisis – along with all other financial markets. Arcelor Mittal and Sainsbury's, are among many companies to have accessed the market recently.

Which of the following best explains the renaissance of the convertibles market?

(a) since the markets have calmed, the trend to gear up in order to buyback shares is continuing
(b) companies are attempting to hedge their bets by issuing an instrument which is neither debt nor equity, but a mixture of both
(c) companies are effectively issuing equity, but the issue is deferred until maturity of the bond
(d) companies are just trying to issue low-coupon debt and offering future equity is just a way to achieve that
(e) don't know

Answer

The right answer is (c) companies are effectively issuing equity, but the issue is deferred until maturity of the bond.

Investors have to be persuaded to invest, their expected return must justify their investment. Therefore the overall return that they expect to receive over the life of the investment must bear comparison with alternative investments. So the reduced coupon is unlikely to be the end of the story – if investors don't see a substantial extra return from the equity conversion why should they accept less than the market return on debt?
The reduction in coupon will be set at a level to offset any option premium that they may have paid for the embedded call option to buy shares at a future time at a known price. So the investors are very likely to be equity investors, rather than debt investors – as is normally the case for convertibles.

Regarding answer (a), it is unlikely that the market perception regarding "acceptable" levels of gearing will return to pre-crisis levels at any time soon! The trend to increase gearing generally is almost certainly over. Answer (b) asserts that convertibles are neither equity nor debt. Debt investors are unlikely to be attracted because of the low coupon; equity investors have traditionally been the main buyers, so they must appeal on an equity basis. Answer (d) does seem attractive logic, with a simple flaw; achieving a low coupon for 3 – 5 years might seem a good idea, but the higher cost equity will be in place for the long term – unless, of course, share buy-backs return to fashion!

The Treasurer, July / August 2010 Converting to Convertibles by Graham Buck pp20-22 (http://www.treasurers.org/node/6065)

Question 3. Contrarian Investing
There is a school of thought that successful investing is based on in-depth study of investment bank research every six months, finding the consensus trading strategies – and then do the opposite.

Earlier this year an FT team followed this advice and invested in a range of assets including US, Spanish and Japanese Government debt. There was investment in yen, as the 'experts' predicted its fall, while the euro was sold to go against the predicted strengthening.

Which of these contrarian investments generated the highest returns for the investor?

(a) short euro and long yen, both against the US dollar, both *against* prevailing consensus advice
(b) investment in US government debt *against* prevailing consensus advice
(c) investment in Spanish government debt *against* prevailing consensus advice
(d) investment in Japanese government debt *against* prevailing consensus advice
(e) don't know

Answer

The right answer is (a) short euro and long yen, both against the US dollar, both against prevailing consensus advice

These investments yielded a return of 20%. Investment in US government debt, against prevailing advice, returned 'only'10% while returns from Japanese government debt also reached double figures.
The only one of the four above to conform to the expert opinion was Spanish government debt – which lost 16%.

FT Lex July 5th 2010
http://www.ft.com/cms/s/3/d5976b8e-883e-11df-a4e7-00144feabdc0.html

Question 4. Convergence in Accounting Rules

The world's two key accounting bodies, the Financial Accounting Standards Board in the US and the International Accounting Standards Board, which represents most of the rest of world, were set a target by the Group of 20 industrialised nations to converge their rules by June 2011. At first this appeared to be an achievable target, given that there was widespread agreement on many issues, such as the Repo 105 transactions used by Lehman Brothers which were allowed in the US but not permitted under IASB regulations.

However since the deadline was set, there appear to be potential problems, not least in the area of mark to market of assets and liabilities. Sometimes the use of mark-to-market values, when there is a liquid market, makes sense. However, when there is not a liquid market, then the resulting numbers can be misleading and increase apparent volatility.

Under a revised workplan it is hoped that by focussing on the core issues, some form of agreement might be reached by the deadline.

A study by PwC has found that most investors do not want an increase in the use of mark-to-market values. What has been the reaction of FASB and IASB?

(a) both IASB and FASB want to extend the use of mark-to-market, they agree on this
(b) FASB wants to extend mark-to-market, IASB wants to limit its use
(c) Both IASB and FASB want to limit the use of mark-to-market, they agree on this
(d) Don't know

Answer
The right answer is (c) FASB wants to extend mark-to-market, IASB wants to limit its use

The hope is that at least the parties can achieve a measure of comparability – as opposed to convergence – by the deadline, according to Bob Herz, Chairman of the FASB.

FT Lex, Accounting Rules, June 27 2010, http://www.ft.com/cms/s/3/4b92173e-8214-11df-938f-00144feabdc0.html

FT Accounting bodies revise workplan, June 25th 2010, http://www.ft.com/cms/s/0/5bb026aa-7fdb-11df-91b4-00144feabdc0.html

Question 5. Pension corridor

The accounting standard relating to pension schemes, IAS19, is under review. Changes have been proposed in an Exposure Draft entitled Defined Plans, open for consultation until September 6th 2010.

One of the key revisions concerns the removal of the ‘corridor’ option.

In the context of accounting for assets and liabilities associated with a pension scheme, what is the ‘corridor’ option?

(a) it is the option to exclude all actuarial gains and losses from the financial statements
(b) it is the option to exclude all actuarial gains and losses from the income statement provided those gains or losses do not exceed 10%. Gains and losses over 10% must be included.
(c) it is the option to include only a proportion of any gains and losses that exceed 10% of value.
(d) It is the option to vary the proportion the percentage gain or loss beyond which gains and losses must be included in the income statement.
(e) Don’t know

Answer
The right answer is (c) it is the option to include only a proportion of any gains and losses that exceed 10% of value.

The ‘corridor’ option is intended to remove some volatility from company’s income statements. After all, the intention is to estimate the ability to meet liabilities in many years’ time so the short-term vagaries of markets should not be allowed to distract from those long-term objectives. But the issue is a complex one, as shown in Peter Elwin’s article on pension liabilities, Fairies and Crocodiles in the June edition of The Treasurer. Volatility does exist – the problem is how to communicate a changing situation.

Extract from IAS 19:
92 In measuring its defined benefit liability in accordance with paragraph 54, an entity shall, subject to paragraph 58A, recognise a portion (as specified in paragraph 93) of its actuarial gains and losses as income or expense if the net cumulative unrecognised actuarial gains and losses at the end of the previous reporting period exceeded the greater of:
(a) 10% of the present value of the defined benefit obligation at that date (before deducting plan assets); and
(b) 10% of the fair value of any plan assets at that date.

These limits shall be calculated and applied separately for each defined benefit plan.

The Treasurer June 2010, Technical Update by Martin O’Donovan p 15,
http://www.treasurers.org/node/5976
and

The Treasurer June 2010, Fairies and Crocodiles by Peter Elwin, pp34-5, http://www.treasurers.org/node/5985

Question 6 Own Credit

A further consultation has been launched by IASB, concerning Own Credit. This is the term used to describe the change in value of the firm's liabilities when its credit risk changes. As the required return on a financial liability increases, for example as credit risk increases, then the value of that financial liability must fall. Under some circumstances this change in value is included in the income statement.

Investors generally are said to find this situation confusing and counterintuitive. So the IASB has proposed changes to ensure that, while the impact of the firm's own creditworthiness will no longer create volatility in the Income Statement the value change will still be shown elsewhere within the financial statements.

Overspender PLC is a UK company that reports under IASB and includes any change in value of financial liabilities (not derivatives) into the Income Statement. Recently the firm has suffered a decline in financial performance and has seen its creditworthiness suffer.

What is likely to be the impact on Overspender of this decline in creditworthiness?

(a) Yield on its debt increases, value falls – reduction in value of a liability is a gain, so profits improve.
(b) Yield on its debt increases, value falls – reduction in value of a liability is a gain, so creditworthiness is restored!
(c) Overspender's share price rises as a result of the credit downgrade – in anticipation of an increase in apparent profitability when the fall in debt value is included in the income statement.
(d) A reduction in creditworthiness results in – an improvement in income therefore an improvement in creditworthiness!
(e) I agree with investors' reported views – this is confusing and counterintuitive!

Answer

The right answer is …. Well I think it is (e) I agree with investors' reported views – this is confusing and counterintuitive!

Taking a more serious assessment the answer might be (a) 'Yield on its debt increases, value falls – reduction in value of a liability is a gain, so profits improve'. This is the result that seems counterintuitive under current accounting rules. Whether a borrower can actually realise this gain on its liability is questionable. It may be possible to buy in a proportion of the loan or bond issue –but it can be tricky to persuade 100% of lenders to sell out. Furthermore, any new borrowings raised will presumably be at the higher yield. The result would then be that any benefits captured would go to the lenders via their higher return rather than to the company. Perhaps, then, the only exception is when the higher yielding debt is converted to equity?

The IASB's exposure draft (http://www.ifrs.org/NR/rdonlyres/B72D8EB9-64D0-4766-9EEE-3A27EE2A9617/0/EDFairValueOptionforFinancialLiabilities_WEBSITE.pdf) was open for comment until July 2010.
The ACT's response can be seen at http://www.treasurers.org/node/6150

The Treasurer, Technical Update, June 2010 by Martin O'Donovan p15
http://www.treasurers.org/node/5976