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<< Hedge Accounting During the Crisis:

What worked, what didn't, and what happens next

By Blaik Wilson, Solutions Consultant, Reval

ABSTRACT Hedge accounting was not immune to the challenges of the global financial crisis (GFC). Organisations that had achieved hedge accounting easily in the past began to fail the criteria laid out in IAS 39 and FAS 133. What were the root causes of these failures? Why were some organisations better prepared than others? With markets getting jittery again from the debt crisis in Europe, this paper shares the failures and successes during the GFC so companies can better prepare for the challenges of the future.

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INTRODUCTION

This paper highlights some of the key areas where organisations have had issues meeting hedge accounting criteria laid out in accounting standard IAS 39 (under IFRS) or FAS 133 (under US GAAP). Many recent failures have been a direct consequence of the global financial crisis and the emerging debt crisis in Europe. Generally, they can provide companies with some valuable lessons on the processes and controls required to overcome all market conditions. This paper also considers the likely consequences on the road to recovery in the 'new normal' of restricted credit and high margins.

MOST COMMON SOURCE OF RESTATEMENTS

All hedge relationships must be documented at inception including identifying the hedge, hedged item, risk management policy and methodology for testing effectiveness. For the standard setters, documentation has always been a cornerstone of hedge accounting because it provides a framework to assess compliance with the criteria of the standard. It must be done at inception so that companies cannot manipulate future profits or losses arising on the hedge, to suit their financial reporting objectives. It is also the easiest element of hedge accounting criteria to audit and by far the most common source of failure and audit restatements.

Why do companies often fail? Hedge documentation is relatively easy to audit - it cannot be clouded by the complexities that at times surround hedging programmes, fair values or effectiveness testing. The standard requires that every hedge relationship must have specific documentation in place and when an auditor asks to see 10 randomly selected samples of that documentation, a company must be able to provide it. If they cannot, hedge accounting criteria is not met, and any associated journal entries must be reversed. The documentation must also be complete. If you can produce the documentation but it does not mention (say) the hedged item, or a prospective effectiveness test, then again all subsequent journal entries must be reversed and a company often must go back and mark to market the derivative instrument.

Many organisations have recognized how critical this part of the process is by implementing hedge documentation 'templates' for each standard hedge accounting scenario. The documentation templates have been well considered to meet all generic documentation criteria and often have been approved by audit in advance. The benefit of this approach is that the likelihood of documentation being missing or incomplete is significantly reduced. Many organisations provide even greater security by building an automated documentation process using specialized hedge accounting software.

FLEXILBLE HEDGE DOCUMENTATION

One of the implications of the financial crisis was that it often highlighted poorly documented hedge relationships in which the wording used was too specific to cater to a changing market environment. Most typically, this was around the documentation of the underlying hedged item. For example, many documented a specific funding programme such as "commercial paper" as the floating interest rate risk being hedged. During the crisis, when the commercial paper market dried up and companies reverted to longer term floating rate facilities, the hedge documentation no longer applied. The hedge relationship needed to be de-designated and accumulated fair value taken against profit. Those companies that used very general language in documenting hedged items had more flexibility to change tactics yet maintain their existing hedge relationships, thereby avoiding such P&L volatility. An example of the type of text applied by these organisations is shown below:

Template: Using Interest Rate Swaps to hedge Floating Interest Rate Risk

Risk Management Objective: To protect against adverse movements in floating interest rates.

Hedging Strategy: Using Pay Fixed, Receive Floating Interest Rate Swaps, the Group locks in the interest expense of the group.

Etc.

Note that application of very generic language that can be applied to all transactions of this type following this strategy.

Another example where flexible documentation paid off during the financial crisis was around the timing of currency exposures. For those who documented currency exposures occurring within a wide period (say quarterly), the many delays in customer receipts or internal working capital restraints could be managed without breaking an existing hedge relationship. For those who designated very specific events (e.g., sale to customer A, purchase on 17 November 2008, etc.), any change in the nature of timing of that event or a customer default resulted in the hedge relationship being de-designated.

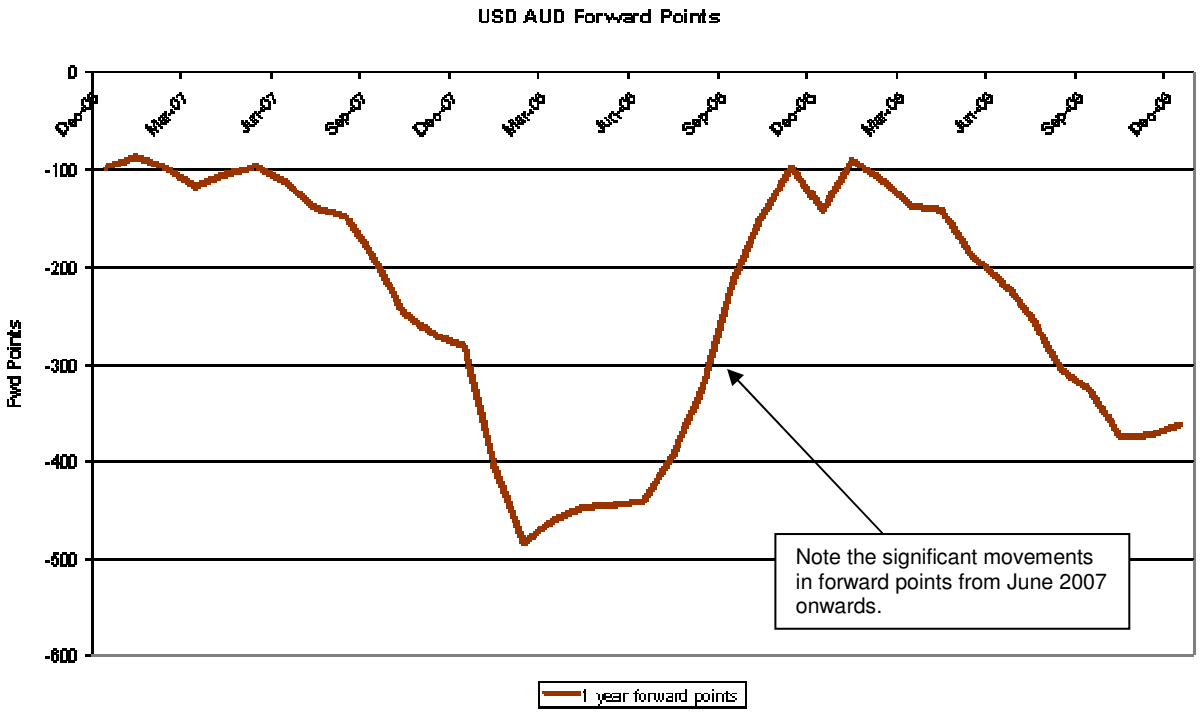
However, the uncertainty of the timing meant that many forecasted exposures previously assessed as being 'highly probable" no longer met that test. In these circumstances, all related hedge relationships had to be de-designated and any deferred fair values usually taken directly to P&L. For those hedge relationships now deemed "overhedged" (but not failing the effectiveness test), companies saw further P&L volatility. Conversely, those hedge relationships that were "underhedged" saw little or no impact to P&L, illustrating the asymmetry around the cash flow hedge accounting model.

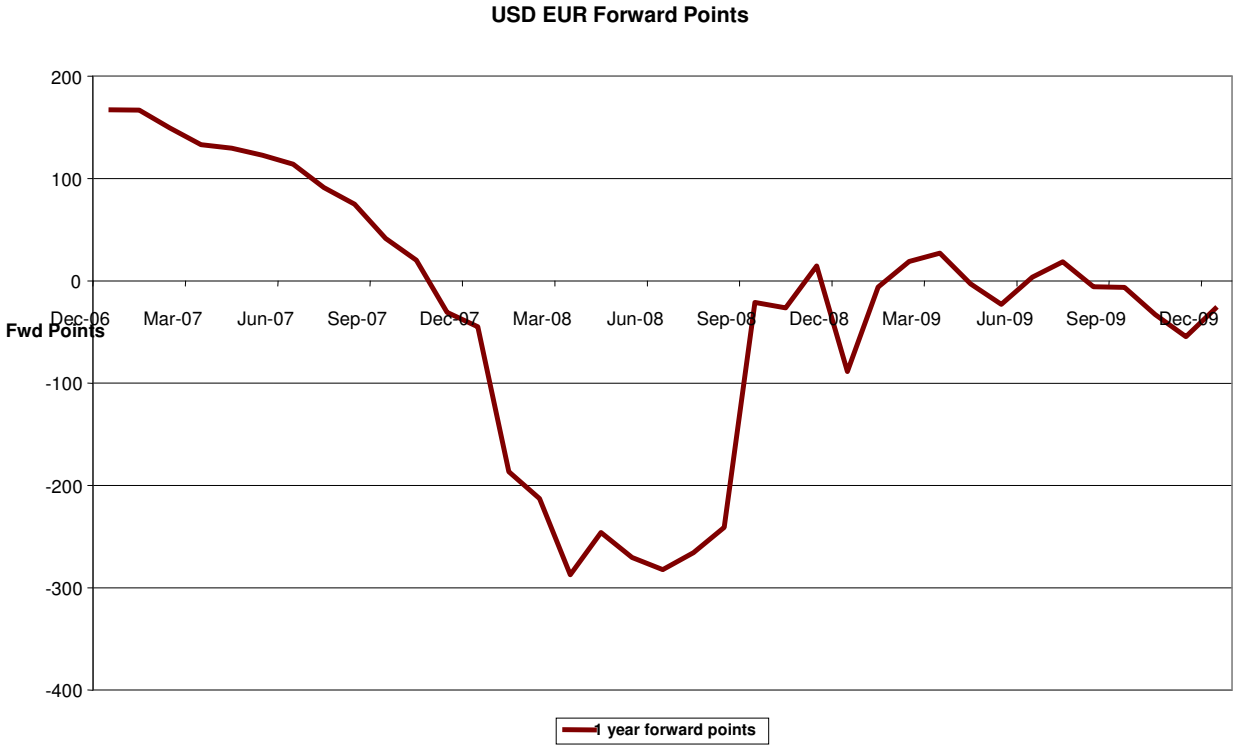
UNEXPECTED VOLATILITY FROM "EXCLUDED COMPONENTS"

Some organisations experienced significant uncertainty around the timing of currency exposures – particularly if those exposures were very long-dated, e.g.,large infrastructure projects or capital expenditure programs. Such organisations recognized upfront that timing of currency exposures could be an issue for hedge accounting purposes. They could even result in effectiveness failures or not meeting the "highly probable" test.

To avoid this risk, these companies designated the hedging instrument exclusive of forward points, thereby not needing to cater to the timing of the forecasted hedged item within its effectiveness testing. This has been considered a sound, conservative approach to managing expected accounting outcomes given the nature of the underlying exposure and hedging strategy.

However, the increased market volatility that occurred globally during the financial crisis, and is now emerging in Europe, caused significant P&L impacts that many did not anticipate when these hedging strategies were first put into place. Forward points moved considerably as federal reserves reduced their cash rates at different speeds and at different timing. If forward points were excluded from the hedge relationships, this caused significant P&L volatility, much greater than the gentle "amortisation effect" many anticipated. The chart below shows the movements in the one-year forward points in the USD/EUR and USD/AUD currency pairs over the last two years. Note the extreme movements over relatively short periods of time, causing large P&L swings between reporting periods.





Source: Reval SaaS

Many companies have since implemented stress testing analysis of forward point movements into their board reporting so management are more prepared for these P&L outcomes. The analysis must be careful to consider not only spot currency rate movements, but also movements in yield curves and the corresponding impact to forward points – see example below:

	MARK TO MARKET VALUES - IN 000's				
Scenario	**Current NPV**	**Scenario NPV**	**NPV Change**	**P&L Change**	**Equity Change**
Spot Mvmt + 10%	823	-4,492	-5,315	-257	-5,058
Spot Mvmt +- 10%	823	7,319	6,496	314	6,182
1% Convergence in Yield Curve	823	1,914	1,091	1,091	0
1% Divergence in Yield Curves	823	-267	-1,091	-1,091	0

Source: Reval SaaS

Note that majority of the spot movement is shown to impact only Equity on an effective cash flow hedge. However, if only yield curves move, all fair value movements would be reflected in the Profit and Loss.

Another commonly excluded component of the hedging instrument is time value on options. IFRS reporters must exclude this portion to achieve effective hedge relationships given the latest IASB guidance. The increased market volatility highlighted earlier caused time value on option-based derivatives to vary significantly. Consequently, organisations with significant option strategies making up their hedging portfolio experienced a lot of P&L volatility. This is particularly exasperating for those that use vanilla option products in which worst case outcomes are defined upfront and notionals are in line with underlying exposures – many such organisations ask why such a conservative hedging policy should experience P&L volatility when compared to a strict "forwards/swaps only" policy. The fact that IAS 39 tends to encourage non-option based hedging strategies continues to be a frustration for many treasurers as a result .

To manage this volatility, companies have employed similar stress testing methods as with forward points highlighted above. An example is shown below where both prices and volatilities have been stressed to observe all drivers of fair values:

	MARK TO MARKET VALUES - IN 000's				
Scenario	**Current NPV**	**Scenario NPV**	**NPV Change**	**P&L Change**	**Equity Change**
Spot Mvmt + 10%	450,848	118,528	-332,320	-332,320	0
Spot Mvmt - 10%	450,848	1,256,687	805,839	-63,445	869,285
Volatility + 10%	450,848	502,514	51,667	51,667	0
Volatility - 10%	450,848	399,228	-51,619	-51,619	0

Source: Reval SaaS

Note that once an option goes 'in-the-money', the intrinsic value is deferred to equity. However, if only volatilities move, all fair value movements would be reflected in the Profit and Loss (as time value).

LESSONS AND EXPECTATIONS FOR THE FUTURE

These challenges to hedge accounting highlighted the need to apply best practice processes specifically around ensuring flexible hedge documentation, which should meet many different potential scenarios and still be specific enough to meet the documentation criteria in the accounting standard. Organisations that applied robust effectiveness testing methodologies, such as regression testing, were best placed to overcome the short term market volatility. A good example of this is shown below, where for identical reporting periods, the regression methodology has met standard effectiveness criteria where the dollar offset test failed:

	Hedge Instrument			Hedged Value of Hedged Item					Total Net Periodic Earnings
Period	Entire FMV	Periodic Change	Cumulative Change	MTR	Periodic Change	Cumulative Change	DOLLAR OFFSET TEST	Pass/ Fail?	
31/12/2007	10,220,024			-519,077,563					
31/03/2008	27,204,096	33,625,936	27,204,096	-535,801,946	-34,266,250	-26,057,327	104%	Pass	-640,314.00
30/06/2008	5,024,998	-22,179,099	5,024,998	-512,508,799	23,293,147	-2,764,180	182%	Fail	-22,179,098.91
30/09/2008	16,264,093	11,239,095	16,264,093	-522,494,080	-9,985,281	-12,749,461	128%	Fail	11,239,095.11
31/12/2008	35,273,732	19,009,639	35,273,732	-543,639,761	-21,145,681	-33,895,142	104%	Pass	-2,136,041.76
31/03/2009	35,540,199	266,467	35,540,199	-542,351,536	1,288,224	-32,606,918	109%	Pass	1,554,691.55
30/06/2009	31,120,197	-4,420,002	31,120,197	-537,447,289	4,904,247	-27,702,670	112%	Pass	484,245.32
30/09/2009	32,605,986	1,485,789	32,605,986	-538,184,927	-737,638	-28,440,309	115%	Pass	748,151.21
31/12/2009	30,613,777	-1,992,209	30,613,777	-535,548,637	2,636,290	-25,804,018	119%	Pass	644,081.37
									-10,285,190.11

The dollar offset test fails here at the commencement of the financial crisis due to smaller values and volatile yield curves. This results in significant P&L volatility.

Note the regression result for the identical hedge relationship – all tests pass even in the most volatile times resulting in reduced P&L volatility.

REGRESSION TEST		Total Net Periodic Earnings
R-Squared/Slope/F-Stat/T-Stat	Pass/ Fail?	
0.983 /1.079 /99.000 /-9.950	Pass	259,688.98
0.984 /1.074 /99.000 /-9.950	Pass	1,114,048.01
0.982 /1.073 /99.000 /-9.950	Pass	1,253,813.76
0.987 /1.047 /99.000 /-9.950	Pass	-2,136,041.76
0.993 /1.049 /99.000 /-9.950	Pass	1,554,691.55
0.995 /1.050 /99.000 /-9.950	Pass	484,245.32
0.995 /1.053 /99.000 /-9.950	Pass	748,151.21
0.992 /1.056 /99.000 /-9.950	Pass	644,081.37
		3,922,678.44

Source: Reval SaaS

Note the impact to bottom line P&L numbers between dollar offset (-10.3m) v. regression testing (+3.9m) for where all other elements of the hedge relationship are identical. It is such dramatic benefits illustrated in this example that has encouraged organisations to 'beef up' their effectiveness processes and deploy regression testing methodologies in particular.

Naturally, in instances where the underlying business exposure has disappeared or has been put in severe doubt, many treasurers will look to realize gains or losses on their hedging strategies, and the accounting will reflect that underlying reality.

As economies recover, it will not be easy to predict most market movements with any certainty. However, one would expect that the Federal Reserve will raise interest rates back towards their long-term averages to contain inflationary elements. Treasurers are now considering how this will impact their company's derivative portfolios. Those companies with interest rate swaps locking in floating rate exposures are likely to see positive fair values movement. The flipside is that forecasted funding costs on those facilities will also rise. As legacy facilities are rolled over, credit margins are expected to be larger and the credit costs on new transactions will continue to be significant. This means that many will continue to see challenges in managing their liquidity risk over the medium term.

On the regulatory side, the IASB have started to roll out their three-phased approach replacing IAS 39 with a new standard, IFRS 9. Phase 1, "Classification and Measurement" has already been released and Phase 2 on "Impairment" has been released as an Exposure Draft for comments which will close in June 2010. Phase 3, which governs "Hedge Accounting" is due to release the exposure draft in Q2 2010. The plan is for comments to be taken and reviewed throughout Q2 and Q3 with the eventual standard released towards the end of the year. In the US, the FASB is also looking to replace FAS 133 with a new version – with the expectation that this new standard will be closer to IFRS 9 in accordance with convergence goals. The implications to treasurers and treasury accountants could be significant – early adoption will be encouraged, but mandatory application will not be required until sometime in the future. For those companies just coming to grips with the processes and system requirements of the existing hedge accounting rules, these changes are likely to present new challenges over and above the "new normal".

