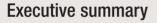
cash management MODELLING

Cause

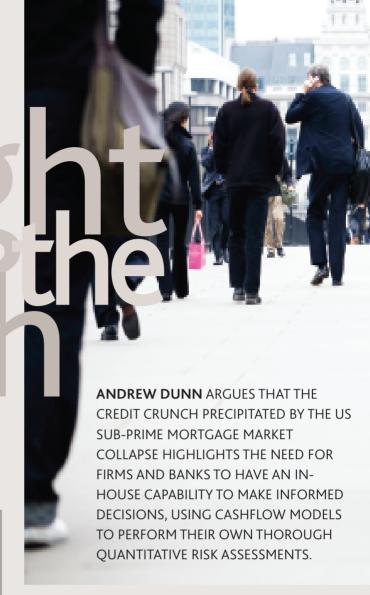


■ In the lemming-like rush to be part of the huge wave of new business, many institutions may have resisted making sober judgments on the merits of transactions. But in reality, do these firms have the resources to make up their own minds, or are they reliant upon the analysis and models of others?

e've all enjoyed the talk about 'ninja' loans to Americans with no income, no job or assets, and watching entertaining footage of US commentators losing it on TV. We look down our sophisticated European noses at those responsible for such transparently crazy lending, as we rubberneck the US sub-prime car crash from a safe distance. Only, the crash is no longer affecting just the other, transatlantic, carriageway of the global economic superhighway. Now, debt and equity markets from New York to Mumbai are in a funk. Maybe the huge ocean of liquidity that has flooded the leveraged acquisition finance market in recent times did cloud the judgment of non-ninja lenders and investors. So now everyone is looking to catch the 'flight to quality'. Unfortunately, there are no budget airlines to take you there - not even to a small 'satellite' airport you've never heard of that is just a long bus ride away in a neighbouring country.

QUANTITATIVE AND QUALITATIVE Vast amounts have been written and said over many years about creditworthiness and how to measure it. Generalising wildly, there are two broad approaches: the quantitative and qualitative.

Until recent years, it was without doubt the qualitative that reigned supreme, with accountants' opinions of historical financial



statements, subjective credit scoring templates, and fashions about measures such as 'debt to EBITDA multiples' adding a veneer of quantitative respectability. But this essentially judgmental approach has been severely tested in recent years by three factors: the application of 'objective' quantitative historical data; the temptation of all that liquidity (the onward and upward business plans with bonuses for writing more and more business); and an easy reliance on the opinions of ratings agencies that have a symbiotic relationship with the parties structuring and selling the deal.

What seems to have fallen out of fashion in the decision-making process has been independent in-house judgment.

I do not wish to dwell here on the 0.00001% probability allegedly ascribed by certain lenders' models to the levels of default now being experienced in the US sub-prime mortgage market. Nor is there space to discuss the validity of applying to credit analysis stochastic techniques that focus on the extremes of the probability distribution, or the curious effects of default definitions that allow regulators to focus attention on a borrower's ability to service interest at 'teaser' rates in the short term, rather than the ability to repay the whole of a long-term financial obligation.

No: I merely observe that many professional investors of other people's money seem to have allowed competition, the quant-guys and the scent of a bonus to stampede them into thinking that, just by slapping on the 'investment-grade' sun lotion kindly supplied by the rating agency and paid for by the bank that created the borrower, they can blithely frolic all day long in the sun-drenched markets, safe in the knowledge that someone else has done the numbers.



EMOTIONAL OR IMITATIVE APPROACH Behavioural economics suggest that markets tend to work most efficiently when a large number of fairly well-informed individuals act independently according to their own private views. Market failures, such as the dotcom boom, often result from a too emotional or imitative approach – the herd instinct reinforced by the perceived informational content of the prior actions of other market participants. If you were looking for a bite to eat in a strange town, you'd be crazy to pop into the deserted Tortoise Tavern rather than the packed-out Last Chance Saloon next door, wouldn't you?

This is nothing new. Charles Mackay wrote over 600 pages on "Extraordinary Popular Delusions and the Madness of Crowds" back in 1841. While his attention was as much on the delusions of alchemy, witchcraft and men's fashions in hair length as on stock market bubbles, man's susceptibility to the actions of others appears deep-rooted.

Those who are natural investors in long-term capital assets adopt the mindset of traders of current assets, willing to underwrite transactions because they believe they can sell. In such circumstances, the soundness of the asset becomes irrelevant and analysis of its underlying soundness superfluous. As a result, big ticket syndications are railroaded through in just three weeks on the basis of market conditions, relationships and the content of a hastily compiled information memoranda, rather than thorough independent analysis.

GOOD OLD EXCEL What is (relatively) new is our ability to develop and use financial models for cashflow-based transactions. These are not the sophisticated black box computer programs of the quant

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heads. Despite apparently seeing your grandma as the target user of its Excel program, Microsoft has even made it possible for ordinary professional investors, bankers and developers to perform millions of simultaneous calculations in the blink of an eye – if you know the magic combination of keys to press (Ctrl-Alt-F9, in case you're wondering).

From the earliest days of computing, such forecasting has traditionally been done by clever, young, self-taught, rocket scientist types. The resultant models have accordingly tended to be closed and complex affairs, impenetrable to the majority of those who rely on such forecasts to make key decisions, hiding both errors and valuable information. So called 'audits' of models do not seem to have added significantly to their perceived reliability.

But the availability of expert training in the rigorous application of flexible, open, structured modelling techniques that focus on providing relevant information to decision-makers has turned the tide for users. These detailed deterministic cashflow forecasts can – if expertly constructed – be understood and used profitably by *any* reasonably numerate individual, provided they have the confidence and inclination to apply some basic concepts and craft. Nonspecialists who have acquired such skills can use cashflow models to perform their own thorough quantitative risk assessments, measuring the impact of uncertainty on key results, in conjunction with independent expert advice on the probability of deviation from a central case.

The process is more tortoise than hare, but inherent within it is the ability to identify and rule out time-wasting activity on those elements of a transaction that do *not* have a material impact. As an example, much fuss was made a few years ago about the risk of a low-inflation environment. Some institutions declined remunerative long-term project finance deals or structured such transactions so as to mitigate a risk whose impact is, by definition, very long, slow, cumulative and susceptible to being reversed very quickly by a brief inflationary spike. Moreover, the probability of 30 years of zero inflation rates every year was probably infinitesimal.

Ensuring that all those involved in the decision-making processes, both before and after deals are closed, have the skills to interpret cashflow models won't guarantee that you'll always make the 'right' decision. But it does mean that your firm should have the independence of view to be less susceptible to the madness of the markets in the future. And you'd rather be a tortoise than a lemming, wouldn't you?

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