Sub-prime – the death of financial reporting or a failure of investigative journalism?

Interim paper

Paul Lashmar, September 2008

Summary
August 9, 2007 - "The day the world changed", according to Adam Applegarth, then chief executive of Northern Rock. Share prices fell sharply as banks curbed lending to each other and the European Central Bank (ECB) injected £65bn of liquidity into the European banking system. It is the day when it first became clear that the UK and other economies were heading into a major crisis. To the UK media, government and public it came as a surprise.

Why did the UK mass media provide no warning prior to 2007 and little warning before August 2007 that conditions existed for a major economic crisis?

It appears that UK journalists failed to identify:

- the inherent structural weaknesses in the United States sub-prime market
- how heavily exposed UK financial institutions had become to complex derivatives with dubious asset value
- And the potential risk of both to the UK economy.

Initial research for the project suggests that evidence of underlying problems in the US sub-prime market were obvious and compelling long before August 2007 and that proper media expertise and investigation would have raised issues of major concern. Yet little inquiry has been made as to why the media failed to warn of an economic downturn that may be the most serious, depending on which source one chooses, for the last, seven, 17, 30 or 60 years.

Financial journalism should play a vital role in the maintenance of a healthy economy through its oversight and perceptive reporting. But despite its importance, financial journalism has received very little scrutiny from academic researchers. As Professor Bob Franklin of Cardiff University has noted, "Academic writing in this area … is as rare as hen's teeth." (Franklin, 2008)

There has been no discussion of the UK media's role in the credit crisis as there is no inquiry, instigated by government or relevant regulatory body, into the events leading up to crisis. Some of the regulators and financial institutions are carrying out internal reviews. But there is no public forum for inquiry, either general or specific, about the media's role (or lack of one) into those events.

This paper is an interim report on a project that is intended to examine through detailed empirical analysis why the UK media failed to warn of the sub-prime market problems,

the determinants of that failure within the wider media. It will make recommendations for changes.

At this stage of research the key issue to establish is whether proactive journalism could have reasonably been expected to uncover the intrinsic problems of the sub-prime market or whether global financial mechanism are now too opaque for the media to monitor effectively.

This paper was given at the "End of Journalism? Technology, Education and Ethics Conference." University of Bedfordshire 17-18 October 2008.

Paul Lashmar is an investigative journalist who has covered many of the major stories of the last 30 years. Paul has been on the staff on The Independent, *World in Action* and The Observer. A former UK Press Awards *"Reporter of the Year"*, he is now freelance, working for many news organisations and also as a TV Producer, consultant, author and journalism trainer. He has also produced a number of programmes for BBC's *Timewatch* and Channel 4's *Dispatches* series and is the author of three books.
Paul is a part time lecturer on MA and BA journalism courses at University College Falmouth and BA Journalism at Solent University. He is an adviser to the Centre for Investigative Journalism.

Mr King said that there was not "much evidence" that the US sub-prime crisis is spreading to the UK and other loan markets:
"If you ask the fundamental question, 'are we seeing signs of bad loans arising?' Clearly we are in the US sub-prime mortgage market. But I don't think there is much evidence of major damage to loan performance in other markets."
"So far what we've seen is not a threat to the financial system either in the US or Germany, let alone in the UK. It's not an international financial crisis," King added.
(Mervyn King, Governor of the Bank of England, August 8, 2007)

Mayhem on the Markets: Fearful investors turn and run from a spiralling crisis: As the sub-prime mortgage crisis intensified last week, markets around the world were shaken to their foundations. Heather Stewart and Alex Brett report on a week when confidence collapsed (Headline in The Observer, August 12 2007)

"We all sat by there and watched it happen. After the fact, everybody is explaining in elegant detail what went wrong, but I didn't read anything about that before it was going on." Peter Bernstein, US market historian (Wolf 2008)

Context

As the western economies recovered from the 2001 slump, banks, major financial institutions and companies found it easier and easier to borrow 'cheap' money on the international lending markets. But within a few weeks prior to August 9, 2007 the capital lending market went from highly active to all but frozen, causing a global liquidity crisis.

The prime determinant was a crash in the US housing market, itself triggered by a collapse in the sector known as the sub-prime retail home lending market. The full impact of the resulting liquidity crisis only began to be fully realised in the UK in August 2007 when the Northern Rock bank ran into trouble, unable to raise any short term capital. Northern Rock's aggressive business model required access to short-term large-scale borrowing on the capital lending markets. By early September 2007, Northern Rock was forced to ask the Bank of England for emergency funding and was eventually taken into public ownership. The UK economy has been in difficulties since.

Sub-prime lending describes the practice of making loans to borrowers who do not qualify for standard market interest rates as they are perceived as being of greater than normal risk. The risks can include a poor credit history, poor employment record, existing large debts, size of down-payment available and income. These borrowers are usually charged a higher than standard rate of interest. Sub-prime is lucrative for the retail lending industry if the default level remains relatively low. Sub-prime can apply to a range of loans including housing, cars and credit cards. The ease of borrowing combined with a rising housing market led to extensive fraud in the US market.

US sub-prime debt is the basic building block for a number of highly complex financial vehicles called derivatives. The most prominent are known as *Collateralised Debt Obligations* (CDOs). CDOs are a type of securitised debt - as setback security and structured credit product. The rating agencies like Standard & Poor, Moodys and Fitch were rating aspects of these CDOs as high as AAA+ suggesting they were a low risk investment. By taking risk and repackaging it, financial institutions were able to put a huge amount of cash lending into the system. The vast amount of cash available for lending in turn made it very easy for house buyers to borrow, and in turn fuelled the boom in house prices.

CDOs puzzled the mass media. 'Much bought in recent years, they are little understood', Jeremy Warner of the *Independent* observed of credit derivatives in September 2004. "But if you thought credit derivatives were complicated enough, try getting your head around their near relation - *collateralised debt obligations*, or CDOs. These are packaged portfolios of credit risk made up from an array of different loans and bonds, sliced and diced into a supposedly easily digestible form." (Warner, 2004)

Between 2001 and 2006 financial institutions around the world acquired an estimated US $2 trillion worth of US CDOs, according to the US research firm Celent. In 2004 the

figure was estimated US $157bn but by 2007 it had soared to US$486 billion according to figures released by the US industry body SIFMA in 2008.

Hard evidence of problems in the market began to emerge long before summer 2007. Significantly the percentage of US sub-prime home loans defaulting had grown rapidly from 2005. By October 2007 approximately 16% of sub-prime loans with adjustable rate mortgages (ARM) were 90 days delinquent or in foreclosure proceedings, roughly triple the 2005 rate. (Bernanke, 2007 and 2008).

Anecdotal evidence suggests that the financial industry subscribed en masse to the notion that the US houses prices would keep rising. They did not expect US sub-prime mortgaged home-owners would just walk away from their high interest mortgaged homes when prices fell.

Warnings

An initial search through the Lexis Nexus database has not yet revealed any journalist providing a serious warning about the dangers of CDOs before 2007. There is a certain amount of discussion but the general tone of UK financial journalists was broadly supportive of the financial sector and, on the occasions when specifically identified, the expanding use of derivatives and securitisation. Articles that do touch on issues of US sub-prime debt and derivatives, even expressing a concern, convey the air of business as usual with no hint of a growing bubble of debt that was going to have to burst.

Some senior financial journalists now writing in retrospect refer to their own pre-2007 articles on sub-prime or derivatives. In *"The Crunch: The Scandal of Northern Rock and Escalating Credit Crisis"* Alex Brummer (Business Journalist of the Year2006) tells how in 2002, as the Daily Mail's newly appointed New York correspondent, he became aware of the potential dangers of securitisation during a dinner party with some senior Wall Street figures.

In his Mail column in 24 April 2002 he said that since the collapse of Enron, the New York markets have lived in fear that there are other companies whose published accounts and profits could be a fiction.

> *"Now Federal Reserve chairman Alan Greenspan is opening up a new front. He believes regulators need to take a much closer look at the nature of government backing for mortgage groups Fannie Mae and Freddie Mac, where trading risks may be seriously underestimated."*

Observing that in the case of the mortgage agencies, the risks were less than transparent Brummer continued:

> *"Greenspan believes that because Fannie Mae and Freddie Mac which repackage mortgage-backed loans are perceived as having the support of the US government, investors may not be applying 'risk controls to manage derivatives exposure'.*

> *"The agencies claim that the development of a lively secondary market in mortgage-backed debt has brought down borrowing costs and improved home ownership.*
>
> *"Greenspan and other critics fear, however, that size, complexity and lack of transparency could cloak risks for investors, taxpayers and the whole financial system if they ran into difficulty.*
>
> *"The warnings have some relevance to Britain. A number of our lenders, including Northern Rock, have been repackaging mortgage debt in the American markets to raise funds and keep the cost of loans lower. It is a great business idea, but one where caution is called for."*

This is a perceptive column and resonates because it identifies some of the names that were to become very familiar in the 2007/2008 credit crunch. The last line implies cautious support, rather than constituting a warning.

In October 2002 Alex Brummer also pointed out in the Daily Mail that Europe was surprisingly heavily exposed to the post Enron and WorldCom fall out. Again his words echo down the years.

> *"Securitisation of debt has proved to be a little like pass the parcel. When the music stopped, an unexpectedly large amount of the WorldCom, Tyco, and Enron dross ended up in the hands of the European financial groups."*

Despite the potential clues in these two items Brummer does not seem to pick up the themes again until the 2007 crisis. An initial check of Alex Brummer's articles suggests he did not write anything crticial about sub-prime before March 2007 or CDOs before June 2007.

Initial but not comprehensive research for this project has not yet found evidence that any major UK financial journalist gave an accurate or perceptive warning of the dangers facing the global economy, or campaign on this serious issue prior to summer 2007. The author would welcome any examples uncovered by other researchers.

Yet a literature review for this paper shows that major figures in the City and FSA were talking about CDOs being 'toxic' as early as 2002. One of those publicly warning of the problem at this period was the US financial guru Warren Buffet who described derivatives, of which CDOs are a class, as financial weapons of mass destruction. (Warner, 2004)

Perhaps one of the most percipient of the UK commentators has been Ann Pettifor, an economist who wrote, unheeded in a Guardian column on the Aug 29, 2006 just after the Israeli invasion of Lebanon:

> *".... as in another corner of the global economic forest, many thousands of miles from Beirut, an upheaval is looming, in the suburbs of Los Angeles and Florida - one that will directly impact on Britain's economy.*

> *I refer, of course, to what some are suggesting may be the biggest housing slump in 40 years - the fall in US house-building programmes and house prices. The evidence is irrefutable: an increase in vacancies in newly built properties in the US, a rise in rents as people who cannot afford to buy a home move instead into rented property, and a recent (August 2 2006) Bloomberg report by Daniel Taub that defaults on California homes were "up by 67.2% from a year earlier, and up 10.5% from the first quarter".*
>
> *Falling prices are making debts loom larger, making it harder to sell homes and pay off mortgages, and so homeowners are defaulting on loans. While these losses are personal, they could pretty soon mount up and help precipitate the US and therefore the global economy into recession. Some commentators believe there is a 70% chance of such a recession."*

And this key paragraph:

> *"It is belatedly dawning on US politicians, officials and regulators that unregulated, easy credit may have hit the buffers of high, real interest rates, set effectively by the invisible hand of the market; that the housing bubble may be bursting, and that the chances of controlling the rate of its deflation to guarantee a "soft landing" for the rest of us is highly unlikely." (Pettifor, 2006).*

An important UK industry comment pre-dating 2007 came from Harsha Patel, co-head of credit at Investec Asset Management, in an FT piece in August 2006. She observed: *"Collateralised debt obligations (CDOs), pools of bonds with varying levels of risk, could well prove unstable if a 'credit event' hit the markets. CDOs can sustain one or two big names going under but more than that is a problem,"* said Ms Patel. *"The whole structure of CDOs would look less compelling and we could see some unwinding of deals."* (Davis: 2006)

One of the most startlingly facts to emerge after the event is how many UK financial institutions had quietly moved away from classic assets to highly complex securitized debt vehicles, encouraged by apparent high returns. This was only revealed by a series of massive *'write-offs'* in institutions like HSBC and Barclays.

This project will need to ascertain how knowledgeable the UK media was of the implications of developments in the financial markets and whether they understood the scale of leverage that was being employed.

The media's role

The classic definition of the role of the mass media situated in a pluralist liberal democracy is that of the *fourth estate*, the guardians of the public interest. (Carlyle 1841). This role applies to the economy as readily as it does any other public sphere.

In this model, financial journalists and economics correspondents of the mass media report the economy and international financial markets perceptively for the audience at

large. There are sections of nearly every national newspaper and major media organizations devoted to covering the economy and markets.

In tension with the fourth estate role, journalism also operates with a range of other pressures mostly of a commercial nature.

Gillian Doyle examined the difference between the news selection of financial journalists in the mainstream media and the specialist financial media. (Doyle, 2006)

She found that: *"Desirable though it is that news coverage should facilitate informed public engagement with important issues of the day, there is relatively little evidence to suggest that the ways in which economic and financial developments are reported do, in fact engender widespread and in-depth comprehension."* (ibid)

She pointed out that financial news stories in the mainstream media are often picked for their entertainment value, involving celebrity or household names, as much as than their political and economic importance to the audience.

In the more specialised areas of the media, like the Financial Times which is devoted almost entirely to an economic view of the world, the audience is smaller, selective and has higher expectations. This audience largely consists of investors and business people. This group of readers, listeners and viewers expect expertise to be provided as part of that specialised function, and not as entertainment.

Introspection

The credit crisis has coincided with a heated debate within the UK media about the quality of contemporary journalism. The debate was triggered by the publication of *Flat Earth News* by the experienced journalist Nick Davies. He proposed that journalists in much of the media were under such tight commercial pressures that they were no longer delivering quality journalism. Davies popularised the term 'churnalism' to describe news desks in the UK media where story quantity was far more important than quality.

"Working in the news factory, without time to check, without a chance to go out and make contacts and find leads, reporters are reduced to churnalism." (Davies, 2008)

What has made Davies argument particularly telling is that he worked with researchers at Cardiff University who produced supporting empirical evidence. Researchers interviewed many journalists as part of their research. The health editor of the Times, the highly experienced and regarded Nigel Hawkes, is quoted saying, *"We are churning stories today, not writing them. Almost everything is recycled from another source……Specialist writing is much easier, because the work if done by agencies and/or writers of press releases. Actually knowing enough to identify the stories is no longer important. The work has been deskilled."* After publication many working journalists also supported Davies's proposition citing lack of resources and time to conduct thorough journalism in the organisations where they are employed.

Most editors in the UK media though, have rounded on Davies and denied that the quality of journalism in their organisations is falling.

Despite the failure to warn in advance of credit crisis, the media is lacking any sort of introspection about its own role in the events prior to August 2007. A search of Lexis Nexus and other databases has located just one critique on the role of media in the credit crunch.

That one exception came from the former BBC economics editor Evan Davis who said in July 2008 that journalists could have done more to warn the public about the credit crunch that has triggered the current housing price crash. Speaking at the Radio Festival in Glasgow, Davis said: *"I do ask whether we did our best to warn people of impending problems during the upswing of the (economic) cycle."* (Davis, 2008)

By 2005 it was clear that the usual housing market cycle should have already moved into a downturn. At this point some commentators even suggested that the cyclical model was outmoded.

Evan Davis raised an interesting point but what he does not address is more significant. It was not that the housing market took a long time to go from boom to bust. It was that the media failed to identify the reasons why it took so long. It can now been seen that the housing market upswing was extended by easy credit, and overheated, off the back of complex financial engineering. But at the time the media neither discerned nor warned of this.

It is fair to say the media were not alone. Peter Bernstein a market historian based in New York has candidly admitted that, despite all his decades of experience, he did not see this crisis coming*: "But when the shock began to hit in the sub-prime area, nobody seemed to be prepared for it and the contagion spread rapidly."*

Significantly he added: *"There's another strange thing about this: the number of people who warned that something bad was going on of this nature was very small. We all sat by there and watched it happen. After the fact, everybody is explaining in elegant detail what went wrong, but I didn't read anything about that before it was going on. I had no sense of foreboding about it at all."* (Wolf 2008)

Reporting of the credit crunch has been largely reactive, after the event. Initial research suggests that a small number of UK journalists began to realise there was a problem in the early months of 2007 when it was clear that the HSBC bank was going to have to write down its profit because of its heavy exposure to US sub-prime debt. It did this on 5 March 2007 and the write down was £11bn.

Anecdotal evidence suggests UK financial journalists were as swept up by the excitement of the bubble as everyone else and failed to either exercise professional distance or take a longer term view before the bubble burst. It is arguable that UK financial journalists

should have thoroughly investigated CDOs and the US sub-prime lending long before 2007. But there is also a complicating argument in that the composition of CDOs was hard to uncover.

In one unattributable interview for this proposal a highly regarded UK financial investigative journalist made this comment: *"What is different to Enron and WorldCom is that their problems were in the company accounts if you knew where to look. The composition of CDOs were known to a handful of people in the owning company and do not appear in company accounts. This was a story that was impossible to crack without whistleblowers."* (Anon 2008)

One anonymous semi-whistleblower did emerge. By January 2007 journalists within the *Financial Times* did seem to becoming aware of underlying problems in the lending market. FT's markets editor, Gillian Tett, took the unusual step of printing extracts which she described as a *'chilling read'* from an email she had received from an anonymous banker. *"I don't think there has ever been a time in history when such a large proportion of the riskiest credit assets have been owned by such financially weak institutions….with very limited capacity to withstand adverse credit events and market downturns."* Pointing out the CDOs were often nine times leveraged the banker went on: *"This means every Euro1m of CDO bonds (acquired) is effectively supported by less than Euros20,000 of end investors' capital – a 2% decline in the CDO paper wipes out the capital supporting it. The degree of leverage at work...is quite frankly frightening."*

What is now known is that the sub-prime market was essentially dysfunctional. Many blame the former chairman of the US Federal Reserve, Alan Greenspan for his feather light regulation and history of bail outs with taxpayer's money. (Soros, 2008: Morris 2008). Greenspan blames the sub-prime market crisis, not on the US mortgage lenders, but on criminals at the retail broker level (Greenspan 2007). He says that many brokers were engaged in mortgage fraud and both brokers and borrowers were inflating salaries to raise large mortgages.

An investigation by the *Miami Herald* in July 2008 has supported the notion of the criminalization of US mortgage broking. Mortgage broking in Florida is unlicensed and the *Herald* revealed some 5,306 people with criminal histories became loan originators during the peak of sub-prime lending - a rate of nearly two a day. Worse, those include 2,201 who had committed financial crimes, such as fraud, money laundering and grand theft.

As of autumn 2008 it looks as though we are destined for a full recession in the UK, US or even more widely. The economic downturn has been attributed to a combination of factors including the crash of the US housing market, rises in the cost of basic food commodities and oil, the overheating of the Indian economy and problems with the Chinese market. However, this project intends to concentrate on the core problems of the sub-prime market and securitized debt.

According to Ben Laurence in the *Sunday Times* (20 July 2008) major international financial institutions have written off some $400bn worth of debt. The question remains of who holds the other estimated $1600bn of CDOs and what is their real value? This unknown will have a major impact on how deep the credit crunch will now run. The evidence suggests the financial world and everyone involved in it have been caught up in classic bubble and that no one wanted to be seen as a doom-monger.

Existing academic framework.

In one of the few academic commentaries on the 'lobby effect' on financial journalism Aeron Davis argued that *"Corporate sources are likely to have considerable success in their attempts to influence business news producers."* This is because business journalism is "highly dependent on information and advertising subsidies" and because the needs of sources, advertisers and consumers are closely linked. (Davis 2000: 82). Davis suggests that a *"Financial Elite Discourse Network"* has grown up (Ibid: 85) He asserts that *"in effect, business news has been captured by financial elites…journalists are highly dependent on the goodwill of city elites in their roles as sources, advertisers and consumers.*

They must therefore abide by the unsaid 'rules' of financial reporting in order to maintain their access to the city's 'elite discourse network'" (ibid: 89)

The consequences, Davis outlines, are
* Exclusion of non-financial elites from the production and consumption of business news texts.
* Financial news shaped to needs of corporate elites.
* Development of an unchallenged business consensus.

In short, our understanding of business and financial issues through journalism is likely to be limited by the shaping and framing work of the public relations operations of powerful corporations.

Financial Journalism is relatively untouched by academic research. There are a few exceptions. Gillian Doyle in *Journalism* in 2006 examined why financial journalists had been caught by surprise by the Enron scandal in 2001. (Doyle, 2006) She concluded *"... the way in which the commercial sector is organised (with in-depth analysis generally confined to specialist media whose audiences are already financially literate) means that the task of facilitating a sound public grasp over the significance of financial and economic news development is largely being ignored."*

There is a research project being currently undertaken into financial journalism is a joint project launched in 2007 and headed by Dr Damian Tambini of the LSE looking into the changes occurring to financial journalism. He described it as investigating *"...the ethical and professional issues raised in the new environment. The project will conduct a detailed study of the changing practices of financial journalism, and the changing habits*

of financial information users (different types of investors). Based on fieldwork research, we plan to compare London, New York and Hong Kong as major financial markets."

For the full research project I will be looking at a range of questions including the following key points:

- Did the UK media fail in their traditional *fourth estate* role to independently monitor the economy and identify, and report appropriately, on potentially major structural problems in the US and UK financial markets?

- Did the UK media provide an acceptable level of financial reporting as a purely service function of their relationship with the audience?

- Did the UK's major media fail to apply appropriate investigative techniques and resources to major financial trends and policies?

- Do financial journalists tend to be supportive of the market and avoid major contrarian positions?
- Are the financial press too dependent on advertising revenue to take positions that contradict the dominant market view?
- Did the fact that sub-prime market/CDO reporting falls across several demarcated areas of the financial media result in the media's failure to report on the phenomena in an appropriate and timely manner?
- Are financial journalists properly trained? There is no formal in-house financial training for reporters. Unlike many other specialisms there are few university training course for financial journalists.
- Are the mechanisms of the globalised financial markets now so complex and secretive that it is virtually impossible for journalists to investigate and identify major trends?
- If it transpired that the markets are now so secret and complex that the media cannot effectively provide oversight, given that the regulators manifestly failed, what are the public policy implications?

References

Anon (2008): Unattributable conversation with leading financial journalist with Paul Lashmar. (30 May 2008).

Bernanke, Bernard S (2007): The recent financial turmoil and its Economic and Policy Consequences. New York. New York (17- Oct 2007)

Bernanke, Bernard S (2007): The Sub-prime Mortgage Market. Chicago. Illinois (13 July 2007)

Bernanke, Bernard S (2008): Financial Markets, the Economic Outlook, and Monetary Policy. Washington DC (10 Jan 2008)

Brummer, Alex (2002a) Fears for Fannie & Freddie DAILY MAIL (London) April 24, 2002

Brummer, Alex (2002b) US fallout lands on Europe DAILY MAIL (London), October 5, 2002

Brummer, Alex (2008) "The Crunch: The Scandal of Northern Rock and Escalating Credit Crisis" RH Books, London, pub, 2008

Carlyle, Thomas (1841): On Heroes and Hero Worship privately published 1841.

Davis, Aeron (2000) 'Public relations, business news and the reproduction of corporate elite power' *Journalism*, Vol. 1, No. 3, pp. 282-304

Davis, Evan (2008) Interviewed by Jeremy Vine at the Radio Festival, Glasgow, 2 July 2008.

Davies, Nick (2008) Flat Earth News: An Award-winning Reporter Exposes Falsehood, Distortion and Propaganda in the Global Media London: Chatto and Windus (7 Feb 2008) ISBN-10: 0701181451

Davis, Phil (2008) Hedge fund failures rising sharply, as assets under management reach record levels, liquidation rates are accelerating. FT (14 August 2006).

Doyle, Gillian (2006) Financial news journalism: A post-Enron analysis of approached towards economic and financial news production in the UK. *Journalism* Vol. 7, ch 4, pp. 433-452.

Franklin, Professor Bob in email to Paul Lashmar (30 July 2008)

Greenspan, Alan (2007) In conversation with Howard Davies at the LSE at part of the Hay on Wye series. (October 2007)

Hubbard, J.T.W. (1977) Business News in the post-Watergate era, Columbia Journalism Review Mar/Apr 1977, Vol. 15, issue 6 pp 80-88.

Lashmar, Paul (2008) Sub prime – a crisis in journalism? London. Press Gazette. 18 July 2008

Loeb, Gerald M (1966) Flaws in financial reporting Columbia Journalism Review, Spring 1966, Vol. 5, issue 1, pp 37-39.

Morris, Charles R. (2008) The Trillion Dollar Meltdown. Public Affairs,
New York. ISBN978-1-58648-563-4

Pettifor, Ann (2006) The bucks stop there: Bad news for beneficiaries of Britain's property bubble: the US's heroic debtor-spenders may have finally run out of puff, (London) The Guardian August 29, 2006

Soros, George (2008) The New Paradigm for Financial Markets. Public Affairs, New York. ISBN 978-1-58648-683-9

Warner, Jeremy (2004) Outlook: Russian Dolls, the Independent (22 October 2004)

Welles, Chris (1973)The bleak wasteland of financial journalism, Columbia Journalism Review: Jul/Aug 1973, Vol. 12, issue 2 pp 40-49.

Wolf, Marcus (2008) Global Markets. BBC Radio 4 Analysis programme. (17 July 2008)