

Written evidence submitted to 'The Future of Banking Commission' relating to three of their areas of investigation:

Appropriate Structure of the Banking System, Competition and Provision of Suitable Products for Consumers

Revised 09 March 2010

Submitted by

Dr Luke Garrod Professor Bruce Lyons* Dr Minyan Zhu

ESRC Centre for Competition Policy, University of East Anglia, Norwich, NR4 7TJ

* Contact author: b.lyons@uea.ac.uk





In this evidence, we address areas 3 (Appropriate structure of the banking system), 5 (Competition) and 8 (Provision of suitable products to consumers) of investigation. Our most directly consumer-related responses relate to area 8. Our evidence includes an extract from recently published work and preliminary results from current research being conducted in the CCP.

Appropriate structure of the banking system

The crisis has brought about a sharp increase in the concentration of banking both in the UK and elsewhere. This much is clear, but it is difficult to find good data on market shares by markets that are relevant for consumers and competition analysis. This is problematic because different banks often have very large market shares of specific activities (e.g. lending to SMEs in Scotland). In order to provide some perspective, however, we have used published data on aggregate UK assets to calculate very broad market shares. Our preliminary calculations (see Appendix) suggest that there has been a major increase in UK bank concentration during the crisis. For example, the share of the largest five banks by UK assets increased by over a third between 2007 and 2008. We have no such ready measure of a second important dimension of structure relating to the range of retail and investment activities undertaken by these banks.

The following extract includes some suggestions for appropriate regulation, incentives and restructuring such that competition encourages banker energies to be more naturally guided into satisfying customer needs and are not diverted into excessively risky activities.

Extract from Lyons (2009) pp 32-34

"...in the United States, we have seen the consolidation of: Bank of America, Countrywide, and Merrill Lynch; JP Morgan, Washington Mutual and Bear Stearns; Wells Fargo and Wachovia. In the United Kingdom: Lloyds TSB and HBoS; Santander and Bradford & Bingley; Nationwide and Dunfermline; while Northern Rock has been the only conventional nationalization. Internationally, Lehman assets were picked up by Barclays (United Kingdom and United States) and Nomura (Asia). No one can seriously claim that this change in banking market structure has been due to the natural market forces that should rightly shape an efficient market structure.

In the medium term, major revisions of bank regulation are necessary so that banks can compete as private firms with balanced incentives. Financial markets are not unique in having special features that require a specific regulatory framework to align competition and welfare. For example, some industries (e.g. infrastructure networks distributing electricity, water, or rail services) are subject to such strong

¹ The merger of Lloyds and HBOS created a balanced duopoly in SME banking in Scotland, with the other duopolist being the crippled and near-nationalized RBS (see #158-9 of the OFT's *Anticipated acquisition by Lloyds TSB plc of HBOS plc: Report to the Secretary of State for Business Enterprise and Regulatory Reform*, (24 October 2008), available at http://www.oft.gov.uk/shared oft/press release attachments/LLloydstsb.pdf).

² These provisional calculations have been compiled rapidly to frame this response. We have included retail, investment and property banking activities. The relevance of accounting asset measurement may have been affected by the crisis.

³ Nationwide was paid £1.6 billion by the government to take over Dunfermline. Both were building societies.

economies of scale that they are natural monopolies and so require a specialist regulator to control maximum prices; but banks do not have such strong scale or network economies to make them anywhere near natural monopolies.

A more relevant example is pharmaceuticals, for which there are powerful health and safety reasons to regulate new drugs. In late 1950s Europe, this regulation was entirely insufficient, with the result that thalidomide was prescribed to pregnant women. The resultant tragedy brought about a new and necessary regulatory approval regime, subject to which pharmaceutical companies can compete with each other. It is essential that the current crisis should similarly bring about more effective and appropriate financial regulation while still encouraging beneficial competition and innovation.

An international regulatory system already existed pre-crisis with a view to setting minimum standards for banks and so to channelling competition into appropriate behaviour. This took the form of the agreement known as Basel II, which has three "pillars:" minimum capital requirements, regulatory supervision, and risk disclosure to facilitate market discipline.⁵ Clearly, the application of this framework has proved inadequate in the face of complex financial innovations and distorted incentives.

The following elements of regulation are additional to a necessary review of the standard components of Basel II.⁶ First, incentives given to individuals within banks must not be one-sided (i.e. paying bonuses for short-term profit with no downside for long-term losses). Recent European debate has been side-tracked into crude proposals to limit the scale of bonuses, whereas it is their incentive effect that is crucial.

Second, while credit default swaps and other elements of diversification and insurance must be allowed as prudent trading activities, they should not be traded by banks multiple times as bets on future prices or defaults. Liquid markets also need to be created to get genuine prices for all supposedly safe assets.

⁴ It has to be acknowledged that the nature of pharmaceuticals customers, particularly national health authorities and price regulators, creates a tangle through which competition policy must operate in most countries; *see* Stephen Davies & Bruce Lyons *Mergers and Merger Remedies in the EU*, EDWARD ELGAR, Ch. 8 and 9 (2007) for a discussion of competition and merger control in pharmaceuticals markets.

⁵ Basel II was agreed in 2004 and modified in 2005, so in principle it should have been up-to-date with modern banking. There are lessons to be learned about regulatory complexity and delegated responsibilities.

⁶ A core element of these standard components is Tier 1 asset requirements. These should be strengthened and made less pro-cyclical (the current fixed ratios mean that, in a recession, capital gets written off, which means loans must be reduced, which deepens recession). Also, the value of assets at risk needs to take account of apparently improbable severe crises (sometimes known as the "fat tails" problem in the distribution of returns). Consideration might also be given to limiting loan sizes relative to asset value, if this can be shown to contribute to asset price bubbles. For more macroeconomic suggestions, *see* Mathias Dewatripont, Xavier Freixas, & Richard Portes [eds.] *Macroeconomic Stability and Financial Regulation: Key Issues for the G20*, CEPR, (2009).

⁷ This distinction between diversifying risk and simply betting on markets is often confused. A related confusion is over investment banking which in recent years has been increasingly associated with trading activities (as distinct from project funding). There are good reasons to join retail and traditional investment banking and to trade securities *for the specific purpose* of diversifying risk. However, given the necessity of taxpayer bailouts of failing banks, there are very good reasons to separate huge trading (i.e. betting) activities which certainly do not justify being underwritten by the

Third, banks should be charged ex ante (i.e. before they get into a mess) for the explicit (and implicit) guarantees they receive from government, and the size of these charges should reflect the risk profile chosen by each particular bank, including the amount of debt financing relative to its equity base.⁸

Fourth, idiosyncratic assets, collateralized debt obligations ("CDOs"), and other complex or opaque financial innovations might be required to pass regulatory scrutiny and receive positive approval from a regulatory body, and not from a credit rating agency which is beholden to issuers for fees and supplementary services.⁹ Credit ratings could be privatized at a later date once an appropriate regulatory regime is established.

Finally, and arguably most important, a credible bankruptcy regime must be established for banks so that contagion is contained. This is likely to require preemptive action by a monitoring central bank (and not the daily regulator which may be reluctant to admit that it has failed to keep the bank on track).

In conclusion, the banking system combines the two explosive characteristics of contagious failures and universal need by every other business. This combination means that major banks cannot be allowed to fail. The risk this entails and the recklessness it encourages mean that tough prudential regulation is essential. This is all the more important because recent bailouts only reinforce the moral hazard.

However, it is important to regulate appropriately so as not to stifle competition and innovation. This requires targeting regulation clearly at the problems (e.g. externalities, distorted incentives) and not a knee-jerk political response against the wrong target (e.g. competition, securities to diversify risks). With appropriate regulation and the standard tools of competition policy in place, competition among private banks can be left to work to the benefit of efficient businesses and consumers. The appropriate regulatory framework is necessary to align competition and welfare, bringing sustainably low prices for banking services and safe, innovative product development.

Finally, there is no reason why a government should not use their 'bailout' stakes in banks to restructure them into less contagion-prone (probably smaller) institutions. In Europe, the Commission is likely to use its state aid powers to require some degree of restructuring, but it remains to be seen whether this will be designed

taxpayer but which seem to have grown to dominate "investment banking." This should be the context for the reintroduction of an appropriately modified Glass-Steagall Act.

⁸ Viral Acharya & Julian Franks, Capital budgeting at banks: the role of government guarantees, OXERA AGENDA (February 2009) argue that government guarantees of bank survival have driven the cost of debt finance down to risk-free levels, which has encouraged excessive leverage.

⁹ Unfortunately, banks cannot be trusted to assess their own strategic risks. Paul Moore, former head of group regulatory risk at HBOS was dismissed (with a reputed £0.5m gagging payment) for pointing out in 2003 and 2004 that the bank was taking on too much risk in relation to excessive growth in lending (evidence to the House of Commons Treasury Committee; February 10, 2009). It is unlikely that this overruling of risk managers was unique to HBOS or to concern over lending growth. The Icelandic bank Kaupthing, Singer & Friedlander dismissed its heads of both risk and compliance when they complained about risky practices (Channel 4 News, February 24, 2009). In both the HBOS and Kaupthing cases, the concerns were also reported to the FSA (the U.K. financial regulator) but neither bank was reprimanded. In 2003, Ron den Braber warned his bosses at RBS that their models were underestimating risk (FINANCIAL TIMES, March 10, 2009). Other similar, sometimes anonymous, stories have been reported in newspapers in relation to excessive risks in the trading of complex derivatives (e.g. SUNDAY TIMES, February 22, 2009). The systemic problem is a failure to balance upside risk with the downside.

as an ad hoc punishment or a genuine attempt to redress properly identified problems."

Since this extract was written last year, more has become known about the European Commission's required restructuring of RBS and Lloyds/HBOS. Certain assets will have to be sold, including parts of the branch networks. However, both banks will be left with larger market shares than they had before making the huge strategic mistakes (including foolish mergers) that broke them and so required such massive bailouts.

Competition

Banks are special. Poorer members of society keep a relatively large proportion of their wealth in banks and could lose their life savings in a bank failure. A very rational anxiety would lead them to withdraw savings at short notice if they sensed even a small possibility of failure. Deposit insurance is therefore a standard policy both to protect consumers and to prevent bank runs (though this proved insufficient to assure many depositors during the Northern Rock crisis in September 2007). Furthermore, banks are strongly interconnected due to the fluctuations inherent in customer deposit and spending activities. Efficiency requires interbank lending to cover such fluctuations and the Bank of England stands as lender of last resort if necessary.

Further counterparty risks between banks are associated with asset trading activities, including ever more complex asset backed securities and CDOs. It is still not clear the extent to which contagion in the recent crisis was due to counterparty risk (i.e. if bank A goes bust that erodes the capital base of bank B – or at least markets fear that it will) and to what extent it was due to highly correlated strategies (e.g. bank A was seen to be making short-term profits out of trading sub-prime mortgage-backed securities so bank B copied it – and both were hit when the bubble burst). Either way, fear of systemic collapse led to State sponsored bailouts in the form of loan guarantees, capital injections, toxic asset 'insurance', cheap credit and asset purchases.

How is this 'specialness' affected by competition?¹⁰ It is sometimes claimed that competition undermines the stability of the banking system. The argument has several variants but is generally on the following lines. Competition reduces profits and so the 'charter value' of a bank, and this means it has less to lose by adopting risky strategies – the upside is big profits and the downside is a loss that might eliminate the modest value of the bank (and necessitate a bailout). However, a bank with market power will also set higher loan rates. This raises the costs and so risk of failure of borrowers. This further encourages borrowers to take risks. Thus, there is no unambiguous theoretical link between competition and instability (Boyd and de Nicolo, 2005).

The empirical link is equally fragile. Keeley (1990) provides evidence linking bank failures to the enhanced competition following deregulation of US banks in the 1980s; but Jayaratne and Strahan (1998) use a larger sample to show that loan losses fell over a similar period. Other studies find that larger banks are more diversified and so have less variable income streams. In interpreting the evidence, it is important to note that most studies are based on the US experience, and US bank structure is much

¹⁰ A useful review of the academic literature is provided by Carletti and Hartmann (2001).

more fragmented and regional than in the UK. Much of the evidence also relates to the situation before the major trading innovations and increased leverage seen in the last 10-20 years. More recent and wider based evidence does not support the view that competition undermines stability. Nicolo et al (2004) find for a large crosssection of countries that: a) large conglomerate banks by 2000 were adopting higher levels of risk taking than smaller, specialist banks; and b) highly concentrated banking systems exhibited higher systemic risk than less concentrated sectors. evidence for Group of Ten (2001) shows that returns for large and complex banks grew increasingly correlated 1988-99, suggesting increasing interdependencies and/or convergence of business models. Banks have used the cushion afforded to them by market power to adopt riskier strategies, including high leverage and proprietary trading, such that their risk of failure (or of needing to be bailed out) is not reduced.

We conclude that there is no robust link between competition and instability. Stability depends on the effectiveness of regulation, the degree of interconnectedness between banks and the diversity of strategies they adopt. In particular, the stability of an appropriately regulated banking system will benefit from the range of competing business models that can be offered only in a competitive market structure.

Provision of suitable products to consumers

Consumers rarely switch bank accounts. In a survey of some 1,500 consumers conducted by the Centre for Competition Policy, Chang and Waddams (2008) found that only 4% had ever switched current accounts, compared with over 20% for car insurance, mobile phones and electricity. In fact, the propensity to switch bank accounts was the lowest of eight products investigated, despite having the highest expected gain/average bill ratio. This lack of switching encourages banks to make tempting offers to first-time account holders (e.g. students) in the knowledge that most will stay locked in and vulnerable to exploitation. The following suggestions aim both directly to improve the effective choice of the right product for consumers, and indirectly also to increase the degree of effective competition between banks.

Comparisons of financial products can be aided by requiring firms to provide consumers with better information regarding their products and their substitutes. 11 The majority of consumers of financial services are poorly informed about the terms and conditions of such services, despite strict regulations on banks to provide information to their customers regarding the services supplied to them. ¹² This is because the information provided is usually discarded by consumers because it either takes up too much time to digest or it is written in a language that is incomprehensible to them. 13 Consumers' ability to compare services can be enhanced by requiring regulation of information provision to include simple representations of important information that enables consumers to process it quickly.¹⁴

¹¹ See Garrod et al (2008) for a discussion regarding the merits of a number of potential remedies that attempt to improve markets for consumers.

¹² Cruickshank (2000) finds that just under half of respondents of a Treasury survey said they had "no idea" about the fees for their bank's additional financial services. OFT (2004) found that 3 of 4 credit cardholders, from a representative sample of 1,890, did not know what APR applies to their card. OFT (2008) found that about 70 per cent of consumers who have taken out a credit card in the last three years did not shop around at all.

See BRE and NCC Report (2007).

¹⁴ For example, Bertrand and Morse (2010) consider how borrowers of high-cost payday loans are affected by simple graphical information of the likelihood of repaying the loan over a given period and

Improvements can also be made to existing information provisions to help comparisons between products. For example, the annual percentage rate (APR), a measure of the overall cost of credit, assists consumers to consider the cost of credit across products. However, some studies have shown that APR may not provide consumers with like-for-like comparisons as providers use different methods to calculate interest charges. This means that two different cards with the same APR that are used in a similar manner could charge significantly different levels of interest. Such complications could be overcome by standardising the way providers calculate interest.

A more restrictive intervention to improve consumer decisions may be to limit the number of products available in the market. Evidence from psychology suggests that a great variety of products can complicate some decisions so people avoid making choices altogether, even when there are acceptable options available. ¹⁶ Although limiting the number of products has the ability to reduce the complexity of consumer decisions, this may mean that consumers are less able to purchase a product that suits their preferences. Therefore, such an intervention should only be used when consumers cannot compare and switch between products easily and have failed to respond to other less restrictive interventions.

Competition can also be strengthened by providing lenders with information regarding consumers' ability to repay loans. ¹⁷ In the absence of such a mechanism, a consumer's current bank is likely to be better informed about the consumer's ability to repay than its rivals, so it can offer lower interest rates to a credit worthy consumer than its rivals. Since rivals' interest rates would be based on average costs of supply, such offers would only attract less creditworthy consumers. This may make such offers unprofitable, which in turn can reduce the incentive of the informed lender to offer low interest rates to a credit worthy consumer. If all firms have access to information regarding the creditworthiness of consumers, however, all firms are able to offer interest rates related to the cost of supplying a specific consumer. This will increase competition and reduce the cost of credit for consumers.

24 February 2010

how the cost of payday loans compares to other forms of borrowing. They show that such information reduces the take-up of high-cost payday loans by about 10 percent.

¹⁵ See OFT (2004) and Which? press release 'Which? launches super-complaint on credit card interest charges' 1 April 2007 available at: www.which.co.uk

¹⁶ Iyengar and Lepper (2000), Iyengar et al (forthcoming), Choi et al (2007).

¹⁷ See Mester (1997), Klapper (2004), Avery *et al* (2004) and Baron and Staten (2000).

Appendix: Provisional Asset Shares of Banks in the UK

Table 1: Broad Market Shares

Specialisation	Market	Share by	Total Ass	ets (%)*
	2005	2006	2007	2008
Commercial	14.4	11.4	15.0	18.0
Commercial	7.6	6.7	5.6	13.6
Commercial	11.4	9.8	8.5	-
Investment	7.5	7.1	9.0	13.1
Commercial	8.5	8.0	7.0	9.9
Investment	4.3	3.7	4.6	8.6
Commercial	6.1	6.1	7.0	8.5
Investment	4.2	4.7	7.1	8.0
Investment	7.2	7.2	5.9	4.6
Commercial	6.5	4.9	3.8	3.9
Commercial	7.9	6.3	4.4	3.7
Investment	4.4	3.9	3.3	2.8
Commercial	2.0	2.0	1.7	1.4
Commercial	1.0	0.9	0.8	0.8
	Commercial Commercial Investment Commercial Investment Commercial Investment Investment Investment Commercial Investment Commercial Commercial Investment Commercial Investment	Commercial 14.4 Commercial 7.6 Commercial 11.4 Investment 7.5 Commercial 8.5 Investment 4.3 Commercial 6.1 Investment 4.2 Investment 7.2 Commercial 6.5 Commercial 7.9 Investment 4.4 Commercial 2.0	Commercial 2005 2006 Commercial 14.4 11.4 Commercial 7.6 6.7 Commercial 11.4 9.8 Investment 7.5 7.1 Commercial 8.5 8.0 Investment 4.3 3.7 Commercial 6.1 6.1 Investment 4.2 4.7 Investment 7.2 7.2 Commercial 6.5 4.9 Commercial 7.9 6.3 Investment 4.4 3.9 Commercial 2.0 2.0	ZO05 ZO06 ZO07 Commercial 14.4 11.4 15.0 Commercial 7.6 6.7 5.6 Commercial 11.4 9.8 8.5 Investment 7.5 7.1 9.0 Commercial 8.5 8.0 7.0 Investment 4.3 3.7 4.6 Commercial 6.1 6.1 7.0 Investment 4.2 4.7 7.1 Investment 7.2 7.2 5.9 Commercial 6.5 4.9 3.8 Commercial 7.9 6.3 4.4 Investment 4.4 3.9 3.3 Commercial 2.0 2.0 1.7

Sources: BankScope, Annual Reports, Bank of England and own calculation.

Table 2: Concentration of Market Shares

	2005	2006	2007	2008
Share of 5 largest banks in total assets	49.8	43.5	46.6	63.2
Share of 3 largest banks in total assets	34.3	29.2	32.5	44.7
Herfindahl Index	777.8	593.8	662.3	1049.2

^{*}Market share is calculated using bank level total assets divided by total assets of the banking sector. For multinational bank holding companies, total assets of individual banks are assets located in the UK offices obtained from BankScope and annual reports of the companies. Industry total assets are obtained from Bank of England website.

^{**} The large increase in total assets on RBS's balance sheet from 2006-2008 is mainly due to the large increase in the value of derivatives. For the whole RBS group, asset value of derivatives increased from £117bn in 2006 to £277bn in 2007 to £993bn in 2008 while asset value of derivatives traded in the UK offices has increased from £85bn in 2006 to £255bn in 2007 to £569bn in 2008. The increase might reflect the acquisition of ABN AMRO, growth in trading volumes and the effects of interest and exchange rate movements amidst current market conditions. Interest and exchange rate movements had similar effects on Barclays's consolidated balance sheet. The asset value of derivatives increased largely from £248bn in 2007 to £985bn in 2008. Also, on the consolidated balance sheet of HSBC, asset value of derivatives increased from \$188bn in 2007 to \$495bn in 2008. The similar cases are the foreign investment banks which are heavily involved in trading activities. Goldman Sachs International's total trading assets increased from \$501bn in 2007 to \$1071bn in 2008; Credit Suisse International's asset value of derivatives increased from \$279bn in 2007 to \$756bn in 2008; UBS's asset value of derivatives increased from CHF428bn in 2007 to CHF854bn in 2008. On the liability side of the balance sheets, value of derivatives or trading instruments of the above banks also increased accordingly. Proportionately, the increase in value of derivatives is also shown on the balance sheet of relatively more specialised retail banks such as Lloyds TSB (from £9bn in 2007 to £29bn in 2008) and HBOS (from £14bn in 2007 to £51bn in 2008). However the increase in the asset value of derivatives of these two banks has less effect on the increase in total assets since the share of derivatives in total assets is smaller compared to other banks mentioned above.

^{***}Market share in 2008 obtained by adding the market share of HBOS (7.6%) to Lloyds TSB (6.0%).

^{****}Data of total assets located in the UK is not available in 2008 from Barclays Plc's annual report or BankScope. It is estimated using the consolidated total assets of Barclays Plc in 2008 multiplied by the share of total assets located in the UK in 2007 (35%). The total of credit risk concentration in the UK (on-balance sheet terms) is also used to estimate the total assets located in the UK in 2008. Accordingly, the calculated market share of Barclays Plc is 8.1% in 2008.

⁺ Santander purchased the savings business including retail network of B&B in 2008.

References

- Avery, R, Calem, P and Canner, G (2004) 'Credit Report Accuracy and Access to Credit,' *Federal Reserve Bulletin*, Summer Issue, 297-322
- Barron, J and Staten, M (2000) 'The Value of Comprehensive Credit Reports: Lessons from the US Experience,' Credit Research Centre, Georgetown University
- Bertrand, M and Morse, A (2010) 'Information Disclosure, Cognitive Biases and Payday Borrowing' MFI Working Paper No. 2009-07
- Boyd, John H. and Gianni De Nicoló (2005) 'The Theory of Bank Risk Taking and Competition Revisited' *Journal of Finance*, Vol. 60, No. 3, 1329-1343
- BRE and NCC Report (2007) 'Warning: Too Much Information Can Harm,' an interim report by the Better Regulation Executive and National Consumer Council
- Carletti, E and P Hartmann, (2002) 'Competition and stability: what's special about banking?' ECB working paper No.146
- Chang Y T and Waddams C (2008) 'Gain or Pain: Does Consumer Activity Reflect Utility Maximisation?' *CCP Working Paper 08-15* available at CCP website
- Choi, J, Laibson, D, Madrian, B and Metrick, A (2004) 'For Better or For Worse: Default Effects and 401(k) Savings Behaviour,' in Wise, D (eds) *Perspectives in the Economics of Aging*, Chicago: University of Chicago Press
- De Nicoló, Gianni, Philip Bartholomew, Jahanara Zaman, and Mary Zephirin, (2004) 'Bank consolidation, conglomeration and internationalization: Trends and implications for financial risk', *Financial Markets, Institutions and Instruments* 13, 173-217
- Cruickshank, D (2000) 'Review of Banking Services in the UK,' (London: HM Treasury)
- Garrod, L, Hviid, M, Loomes, G and Waddams Price, C (2008) 'Assessing the Effectiveness of Potential Remedies in Consumer Markets' A report for the OFT by the ESRC Centre for Competition Policy, University of East Anglia
- Group of Ten (2001) 'Report on Consolidation of the Financial Sector' BIS, IMF, OECD
- Iyengar, S and Lepper, M (2000) 'When Choice is Demotivating: Can One Desire Too Much of a Good Thing?' *Journal of Personality and Social Psychology*, 79(6), 995-1006
- Iyengar, S, Wei, J and Huberman, M (2008) 'How Much Choice Is Too Much? Determinants of Individual Contributions in 401(k) Retirement Plans,' in Mitchell, O and Utkus, S (eds) *Developments in Decision-Making under Uncertainty: Implications for Retirement Plan Design and Plan Sponsors*, Oxford University Press: Oxford
- Jayaratne and Strahan (1998) 'Entry restrictions, industry evolution and dynamic efficiency: evidence from commercial banking' *Journal of Law and Economics*, XLI, 239-275
- Keeley, M (1990) 'Deposit insurance, risk and market power in banking' *American Economic Review*, 80, 1183-1200
- Klapper, L (1994) 'Development of Credit Reporting around the World,' The World Bank, Development Research Group
- Lyons, B (2009) 'Competition Policy, Bailouts and the Economic Crisis' *Competition Policy International*, Vol.5.2, 25-48

- Mester, L (1997) 'What's the point of credit scoring,' Federal Reserve Bank of Philadelphia Business Review (September-October)
- OFT (2004) 'Credit card survey,' A report prepared for the OFT by FDS International Ltd
- OFT (2008) 'Credit Card Comparisons,' A report by the OFT