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THE COSTS OF FINANCIAL REGULATION

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Thank you very much for inviting me to speak at this important conference. I have been impressed already by both the breadth and the depth of the papers presented.

It is a new experience for me to be talking about the costs of regulation. As a regulator I more often find myself trying to convince a sceptical audience of the benefits of regulation. But it is good to be asked to cover the other side of the cost/benefit equation. The world would be a better place if all regulators were asked more often to focus on the costs that they impose on others. And if I say very little about the benefits of regulation this afternoon that is only because I am sticking to the title of my talk – not because there are no benefits!

I will cover four issues this afternoon. First, the importance that the UK Financial Services Authority attaches to cost benefit analysis. Second, a characterisation of the costs of regulation – direct costs, indirect costs and distortion costs. Third, empirical evidence on the indirect costs of regulation. And fourth, a particular focus on the costs of regulatory capital requirements.

I begin by stressing how seriously the UK Financial Services Authority (FSA) takes its obligation to undertake – and to publish – cost benefit analyses for all of the rules and general guidance that we impose on the financial services industry.

This obligation arises from the Financial Services and Markets Act (FSMA), which is the single piece of legislation that governs the UK FSA. The Act sets out our statutory objectives

to protect consumers, to maintain market confidence, to promote consumer awareness and education, and to reduce the extent to which regulated firms can be used for financial crime.

In discharging our general functions, the Act requires us to have regard to the principle that any burden or restriction that we impose on a regulated firm should be proportionate to the benefits that are expected to result from any such burden or restriction. Moreover, when we propose to make any rules or general guidance we must not only publish the proposed text for consultation, but also accompany this by a cost-benefit analysis, an explanation of the purpose of the proposed rules and general guidance, and an explanation of why we believe that making the proposed rules or general guidance would be compatible with our statutory objectives and with the considerations that the Act requires us to have regard to when pursuing those statutory objectives. These considerations – or the 'principles of good regulation' as we call them – include not only the need for proportionality, but also:

- the need to use our resources in the most efficient and economic way;

- the desirability of facilitating innovation in connection with the activities we regulate;

- the need to minimise any adverse effects on competition that may arise from our actions;

- the desirability of facilitating competition between firms that we regulate;

- the need to take account of the international character of financial services and markets and the desirability of maintaining the competitive position of the United Kingdom in this respect; and

- the importance of having regard to the responsibilities of those who manage regulated firms.

We take these obligations very seriously. For example, over the last five years we have published 200 consultation papers on proposed rules and general guidance, nearly all of which have included a cost-benefit analysis and a detailed statement of why we think that our proposals are compatible with our statutory objectives and with the principles of good regulation. Moreover, having consulted we then publish a feedback statement setting out the points made in response to our consultation, including an analysis of any significant points made on the cost-benefit analysis and on the compatibility statement.

We have also published – and you can find these on our website – our internal guides to policymakers within the FSA on how to undertake a cost-benefit analysis and how to take account of the potential impact of our actions on competition (both Financial Services Authority, 2000); an Occasional Paper on the importance of cost benefit analysis and how we undertake it at the FSA (Alfon and Andrews, 1999); and the papers presented at an FSA-hosted conference on cost benefit analysis (Andrews, 2000).

In undertaking our cost benefit analysis, and in preparing statements of compatibility with our statutory objectives and principles of good regulation, we take a very wide view of potential costs and benefits. We therefore take into account not only the costs imposed on regulated firms, but also the costs and benefits to consumers and a wide range of considerations relating to competition and innovation in the financial services industry, to market structure, and to the impact of our regulation on the availability, the quality and the pricing of financial services.

We have found this emphasis on cost benefit analysis to be an extremely useful tool for enhancing the rigour of our policy making and for promoting an informed debate with the industry, consumers and other stakeholders about our proposed rules and general guidance. We have also argued strongly that a similar emphasis on consultation and on cost-benefit analysis should be applied to the development of EU Directives.

As part of our cost benefit analyses, we have also commissioned external research on a number of key issues in order to draw upon a wide range of expert resources, to undertake an in-depth analysis of these issues, and to generate unbiased results through the use of independent research. Again, our general approach is then to publish the studies so that it is clear what our proposals are based on and so that there is every opportunity for interested parties to discuss and to comment upon this independent research. For example, we have published comprehensive studies of the cost benefit analysis of the regulation of mortgages and of polarisation; and we have published 21 consumer research papers. And we are now keen to embark on a series of "ex post" cost benefit analyses, to see whether the rules and guidance we have introduced have in practice had the impact - in terms of both costs and benefits – that we expected.

I consider next what we mean by the 'costs of financial regulation'. Broadly speaking, there are three such costs.

First, there are the 'direct' costs of paying for the financial services regulator – or regulators as the case may be. This should be relatively easy to calculate, at least where regulators are open and transparent about their costs. This is certainly the case in the UK, where we consult in advance before we charge any fees to the industry, where we are funded entirely by those that we regulate, and where our costs are entirely transparent from our Annual Report. But the direct costs of regulation may not be so clear in countries where there are multiple financial services regulators, where these regulators are less than fully open and transparent about their costs, and where some of the regulation is undertaken by organisations that also have non-regulatory functions. For example, where banking supervision is undertaken by central banks it is not always easy to separate out the costs of this activity from the other activities that the central bank may perform. And cross-country comparison is difficult for a number of reasons, including differences in the scope of regulation in different countries.

For anyone interested in pursuing this subject further, we publish each year an Annex to our Annual Report that presents information on the direct costs of regulation in a number of

countries. This demonstrates some interesting and sometimes surprising differences in the direct costs of regulation across countries.

Second, there are the 'indirect' costs of regulation, namely the incremental costs of compliance. These are the costs to firms and individuals of activities required by regulators that would not have been undertaken in the absence of regulation. So we are not talking here about the total costs of compliance, but only the additional costs required by the regulator. These incremental costs may include some elements of a firm's compliance staff, management time, systems, training, record-keeping, capital, liquidity and so on.

A crucial requirement in estimating incremental compliance costs is forming a judgement about how the world would look in the absence of regulation – how firms would behave, how the market would evolve and so on. As Alfon and Andrews (1999) explain:

> "One of the features of incremental compliance costs is that they depend on views about the activities that would be undertaken in the absence of regulation. Changes made on the introduction of regulations are not necessarily a wholly reliable guide to this because regulated firms often use the opportunity provided by a consultation on regulatory proposals to review procedures in a wide range of business areas. Moreover, even for an individual regulatory measure, it is unlikely that only a single view about its incremental impact would exist, because many firms may be affected in different ways by the measure."

Thus when assessing the costs of regulation it is important to define a counter-factual against which to make comparisons. This counter-factual is usually the situation that would be expected to arise had the regulation not been implemented. But this presents a significant challenge because the path that firms and markets would have followed in the absence of regulation is inherently unobservable.

This bring me to the third broad type of cost of regulation, namely the 'distortion' cost arising from the way in which regulation may change the nature of markets, may prevent or

discourage firms from entering or using markets, may constitute new markets that would not exist in the absence of regulation, and may therefore have a significant effect on the nature and availability of the products provided by the financial services industry. We are, as a welfare economist might say, very much in the murky world of the third or fourth best here. Although regulation is designed primarily to remove market distortions, or at least to mitigate their adverse consequences, it must also be recognised that regulatory intervention almost inevitably introduces its own distortions. But if the regulation is well designed these distortion costs should be smaller than the benefits that the regulation should bring.

These distortion costs need to be taken into account when assessing the costs of regulatory interventions. For example, there has been considerable discussion of the distortions generated by the first Basel Capital Accord, which in turn was a major driving force behind the work currently under way on a second, more risk-sensitive Accord, even if the first Accord also generated considerable benefits.

Finally, there is one benefit of regulation that is so closely associated with its costs that I would like to mention it here. This is that being regulated may give firms a 'stamp of approval' that they can use to reassure their customers and counterparties. Thus, firms might have to engage in additional expenditure in the absence of regulation in order to persuade their customers and other counterparties of the strength of their internal systems and controls, or of their financial position.

Overall, as we move from direct, to indirect and to the distortion costs of regulation, it is probably the case that these costs - and the benefits - of regulation become not only progressively more difficult to quantify but also potentially of increasing importance. This is not a very comfortable position, if some of the potentially largest costs and benefits are also the most difficult to measure. So it is extremely important here not to fall into the familiar trap of assuming that there is a positive correlation between measurability and importance. The opposite would appear to be the case.

Nevertheless, and despite the difficulties, some researchers have bravely attempted to measure some of the costs of financial services regulation - in particular the indirect costs.

These attempts have taken a number of different forms, the most popular of which have been surveys, case studies and 'estimation by analogy'.

Surveys typically take the form of questionnaires sent to a large number of firms, or structured interviews held with a somewhat smaller number of firms. This provides a relatively large sample, but if the researcher relies entirely on a questionnaire there is a strong likelihood that the firms completing these questionnaires will interpret the questions in different ways and will answer accordingly. Structured interviews may increase consistency, but the cost of undertaking such interviews tends necessarily to reduce the number of firms in the sample.

Case studies take this trade-off one step further by focussing on a very small number of firms (in some cases just one or two), but doing so at a high level of detail and therefore providing scope to test quite rigorously the extent to which regulation has imposed additional costs on a firm.

The 'estimation by analogy' method combines a more theoretical analysis to identify the possible changes that firms might need to make (or have made) in response to regulation with an attempt to cost these changes by comparing them with similar changes resulting from earlier regulatory interventions, or from experience in different areas, where these comparisons have already been subject to some form of costing. So, for example, a regulatory requirement to make additional reports to the regulator, or a requirement on firms to send information to new or existing customers, or a requirement to hold more capital or more liquidity, might all be costed by comparing them with similar requirements imposed in the past or similar requirements imposed on other types of firm. Indeed, many of the cost-benefit analyses that the FSA has undertaken and published have included this method to build up a picture of potential costs. And the process of consultation helps to refine this

approach. So firms may, for example, respond to our consultation by saying that they agree with the identification of the actions they will need to take, but that they disagree with our estimate of how much each of these actions will cost them. Or they might point to consequences of a proposed regulatory intervention that we had not considered and therefore had not attached a cost to.

Each of these methods may in turn be used to assess either the total or the incremental costs of compliance, and to assess either the costs of a single regulation or of a wider group of regulations.

In an interesting survey of some US studies of the indirect costs of bank regulation, Elliehausen (1998) reports that most case studies and surveys looking at a wide range of regulations found total (ie not just incremental) compliance costs in the region of 13% of the non-interest operating expenses of banks, and thus equivalent to around 50% of banks' net income. There were far fewer surveys of the incremental costs of compliance, but these estimated the incremental costs of compliance to be less than a half of the total costs of compliance, and in the surveys referred to in Elliehausen's study the incremental costs of compliance were estimated at between 1% and 6% of banks' non-interest expenses.

Three other general findings also emerge from this survey. The first is that the difference between total and incremental costs of regulation differs widely across different types of regulatory intervention. This is not surprising, since some regulations amount to little more than a restatement of industry good practice, so it would be expected that many firms would already have internal compliance systems in place to meet such regulatory requirements. But in other cases regulations introduce requirements that firms would not have considered in the absence of regulation, for example reporting to the regulator.

The second general finding is that there appear to be strong economies of scale in regulatory costs, especially from fixed start-up costs to meet new regulations. So the costs of regulation tend to fall disproportionately more harshly on smaller firms. This could in turn have a

significant wider impact on competition and innovation if it inhibited the pace of new entry to the financial services industry, or if the introduction of new regulatory initiatives made it difficult for smaller financial services firms to remain in the industry.

The third general finding is that for many US banks the regulations that generate the highest compliance costs are those relating to money laundering, privacy laws and truth in lending. Capital and other prudential requirements come well down the list, or are even not mentioned at all (see American Bankers Association, 2003).

Turning next to the UK, much of the literature has focussed less on the absolute magnitude of the costs of financial services regulation than on the relationship between the direct and indirect costs of regulation. The origins of this can be traced back to Lomax (1987) who asserted – albeit without providing any evidence in support of this – that the cost of implementing the 1986 Financial Services Act (FSA) in the UK would be a direct cost of £20mn and compliance costs of £80mn. This assertion turned into the '4:1 ratio' (of indirect costs relative to the direct costs of regulation) rule of thumb that was subsequently repeated by many other commentators.

Franks, Schaefer and Staunton (1998) provided some evidence to support this rule of thumb. They began with a careful study of the direct costs of securities and investment management regulation in the UK, US and France. They then added to this the results of a survey of 50 UK firms that attempted to measure the incremental costs of compliance. This study found the direct costs of securities regulation in the UK to be 0.3% of firms' net operating expenses, with incremental compliance costs adding another 1.3% of net operating expenses to this. More than 80% of the incremental compliance costs were due to additional compliance staff, systems costs, legal costs and regulatory reporting. In investment management, the 4:1 ratio was repeated, but at a higher absolute level of costs, at roughly 1% of net operating expenses for direct costs and a further 3% of net operating costs accounted for by incremental costs of compliance. And, as in the US studies, the costs of regulation were estimated to be significantly higher for smaller firms than for large firms.

Most recently in the UK, and demonstrating our own commitment to measure as accurately as possible the costs of our own regulation, we commissioned Europe Economics to undertake a major survey of the costs of regulation. They interviewed 50 firms earlier this year asking them a series of questions about the incremental cost of complying with FSA regulation. This was against the counter-factual that firms would continue to trade in their current portfolio of products in the absence of FSA rules and oversight, and that firms and their competitors would be subject only to the general legal framework common to all UK firms. We published this survey last month (Financial Services Authority, 2003).

The main result of this survey was that the sample median of incremental compliance costs was equivalent to 1.6% of the firms' non-regulatory operating costs. Interestingly, this is close to the incremental cost of securities regulation found by Franks, Schaeffer and Staunton (1998) in their earlier study, although it is lower than the results of a survey undertaken last year by the FSA's Practitioner Panel (Financial Services Authority, 2002), in which 50% of firms said that regulation added between 2% and 10% to their operating costs, with the median increase lying somewhere between 5% and 10%.

Returning to the Europe Economics survey, there was a wide range of results across the firms in the sample (see Table 1). And, as in previous studies, these results showed that smaller firms face proportionately higher incremental costs (at a median of 3%, compared with 2% for medium-sized firms and 1% for large firms – see Table 2). And the results showed a wide variation depending on the type of activities undertaken by firms, with generally higher incremental costs for firms engaged in retail sales and advice, and for firms engaged in capital market operations (see Table 3).

I turn finally to the cost of capital.

Banks, at least in the UK and the US, have on average increased significantly their capital ratios over the last 10 years, so that these ratios are generally very strong, and for many banks are well above the minimum requirements set by regulators. And, of course, in the UK and

the US these minimum requirements are themselves usually well above the 8% Basel minimum. In the UK we set individual capital requirements for banks over and above the 8% minimum, to reflect individual bank-specific risks that are not captured, or are not captured adequately, in the 8% minimum Pillar 1 requirement (see Financial Services Authority, 2001, for details of this approach). While in the US most banks are subject to a 10% minimum capital ratio under the well-capitalised banks regime.

It is not entirely clear what has caused this increase in banks' actual capital ratios. In a recent study of US banks, Flannery and Rangan (2002) show that, on average, the total capital ratios of US banks rose from 9.5% in the mid-1980s to 14% in the mid-1990s, and have remained there since then, while tier 1 capital ratios rose similarly form 7.5% to 11%. They find that this increase is partly due to the increased market value of equities, and partly due to the retained earnings of banks growing more rapidly more than their dividend payments and share repurchases. And, particularly in the early 1990s, much of the increase in capital ratios was due to tougher regulatory requirements reflecting the implementation of the 1988 Basel Accord.

However, Flannery and Rangan suggest that the largest contributor to the increase in bank capital ratios has been market forces, as a perceived reduction in the likelihood of government guarantees being available for failed banks, and an increase in the riskiness of banks (as measured by the volatility of asset returns), have in turn increased counterparties' awareness of, and perceived level of, banks' risk of default. So counterparties have demanded that banks become – and remain - more strongly capitalised in order to offer a higher degree of protection against the risk of default. Flannery and Rangan interpret this as market forces having augmented the impact of regulation on banks' capital ratios, with the end result that banks are now holding significantly more capital than the minimum set by regulators.

Our own work (including Richardson and Stephenson, 2000) shows a very similar overall picture to the experience in the US over the last decade or so. Thus on average between 1998

and 2002, UK incorporated banks have maintained a total capital ratio of 13% (size weighted), against a size weighted average of individual capital requirements of 9.2%. On an unweighted basis, the average capital ratio over that period was 36%, and the average individual capital requirement 12.5%. Chart 1 shows the wide range of Individual Capital Requirements set by the FSA for UK-incorporated banks in 2002; and Chart 2 shows the extent to which banks held capital in excess of these minimum regulatory requirements.

We are planning to undertake some structured interviews with banks in order to determine the reasons why they are generally holding capital well in excess of our regulatory requirements. Our preliminary view is that this reflects a number of factors, including the criteria used by rating agencies for granting high credit ratings; an attempt by banks to reduce their costs of funding by demonstrating capital strength; peer group pressure, both domestically and internationally; capital planning (in particular the building up of capital resources during a period of consistently strong economic growth and thereby to provide better protection in the event of a downturn); and the freedom that capital provides to pursue strategic opportunities without having to return to the capital market.

So does this mean that changes in regulatory minimum capital requirements therefore no longer have any impact on banks? No. Minimum regulatory capital requirements provide a clear regulatory intervention point and therefore reduce the flexibility available even to a bank holding substantially higher capital than the minimum. Also, a bank will want to hold some buffer over and above the minimum in order to minimise the possibility of its breaching the regulatory minimum. This is likely to have a more pronounced effect as a bank's capital ratio falls towards the minimum regulatory requirement. For example, Ediz, Michael and Perraudin (1998) show that UK banks have generally sought to increase their capital ratios when they fall to within a percentage point or so of their individual capital requirement.

Some research in progress at the FSA shows that changes in banks' individual capital requirements have a significant impact on these banks' actual capital ratios. There is a positive relationship between changes in individual capital requirements and changes in

actual capital ratios. And this is true both of increases in individual capital requirements (followed by increases in actual capital ratios) and of reductions in individual capital requirements (followed by reductions in actual capital ratios). However, Granger causality tests suggest that both variables are simultaneously determined to some extent – which is not surprising if both the regulator and the bank are taking the same view of the implications of some shift in a bank's business and/or control risks for the regulatory and economic capital ratios that the bank should maintain.

We also find from practical supervisory experience in the UK that, even if a bank holds capital well above the regulatory requirement, a change in a bank's individual capital requirement can have an important signalling effect on the bank (we do not disclose a bank's individual capital requirement to anyone else). This is because the minimum capital ratio set by the regulator can provide a clear indication of the regulator's overall perception of a bank and of the role that capital can play as a means of addressing the risks arising from the bank's business activities and from its ability to manage and control these risks. This signalling mechanism is reinforced because the Individual Capital Requirement set by the FSA, and any changes to it, are communicated clearly by the regulator to both the senior management and the board of directors of a bank.

A further important consideration here is that not all banks hold significantly more capital than is required by the regulator. This is clear from Chart 2. And in the report undertaken for us earlier this year by Europe Economics (Financial Services Authority, 2003), one third of banks said that they would reduce the capital that they held in the absence of regulation. Moreover, for this minority of banks the incremental cost of additional capital required by the regulator was the most important factor driving their incremental costs of compliance. Indeed, looking across all the firms surveyed, the median incremental cost of compliance was 2.6% of non-regulatory operating costs for firms who would reduce capital in the absence of regulation, but only 0.8% of non-regulatory operating costs for firms who would leave their capital unchanged in the absence of regulation. So even if regulatory capital requirements

have an impact on only a minority of firms, the magnitude of this impact on those firms is considerable.

Measuring the cost of holding additional capital is, however, difficult. In some early studies described in the survey article by Elliehausen (1998), Baer (1988) takes the costs of capital to be the additional costs of taxation arising from issuing equity rather than debt finance, which he estimates to have risen in the US from 20 basis points to 45 basis points between 1976 and 1985. Hannan (1989) adds to this taxation cost the difference between the marginal costs of equity and debt funding for a bank, but even this takes the cost of equity capital up to only 50-75 basis points.

The approach we use in our own cost-benefit analysis is to use a much higher figure for the incremental cost of capital. We use the difference between the cost of capital and the risk-free rate of return as our proxy for the incremental cost of capital, which currently gives a figure of 3.5% per annum.

I conclude from all this that however difficult it might be to measure accurately the costs of regulation, it is important to try to do this and to take seriously the various costs created by regulatory intervention. These costs may be large, and they should not be ignored. The benefits of regulation may be even larger than the cost, but this needs to be demonstrated through careful analysis, not simply asserted as an act of faith.

TABLES AND CHARTS

Table 1: Incremental Costs of FSA Compliance as a Percentage of Hypothetical non-Regulatory Operating Costs

Percentage	Number of responses
Negative or 0	2
0-2 per cent	21
2-5 per cent	9
5-10 per cent	5
11-20 per cent	5
Total	42

Source: Financial Services Authority (2003)

Table 2: Incremental Compliance Costs as a Percentage of Hypothetical non-Regulatory Operational Costs: by Firm Size

	Number of firms	Mean (per cent)	Median (per cent)
Small	14	5	3
Medium	14	3	2
Large	14	2	1

Source: Financial Services Authority (2003)

Table 3: Incremental Costs of FSA Compliance as a Percentage of Hypothetical non-Regulatory Operating Costs: Means by Group

Europe Economics Groupings	Number of usable responses	Sample mean (per cent)	Sample median (per cent)
Banking and credit	8	2.6	0.9
Managed investments (both Fund Management and Managing CISs)	12	3.4	1.1
Retail (sales, advice and broking)	7	5.6	2.6
Insurance and pensions	11	2.4	0.8
Capital Market Operations	5	4.7	2.0
Exchanges, counterparties and others	6	2.1	1.5

Source: Financial Services Authority (2003)

Chart 1: Individual Capital Requirements for UK-incorporated banks (2002)

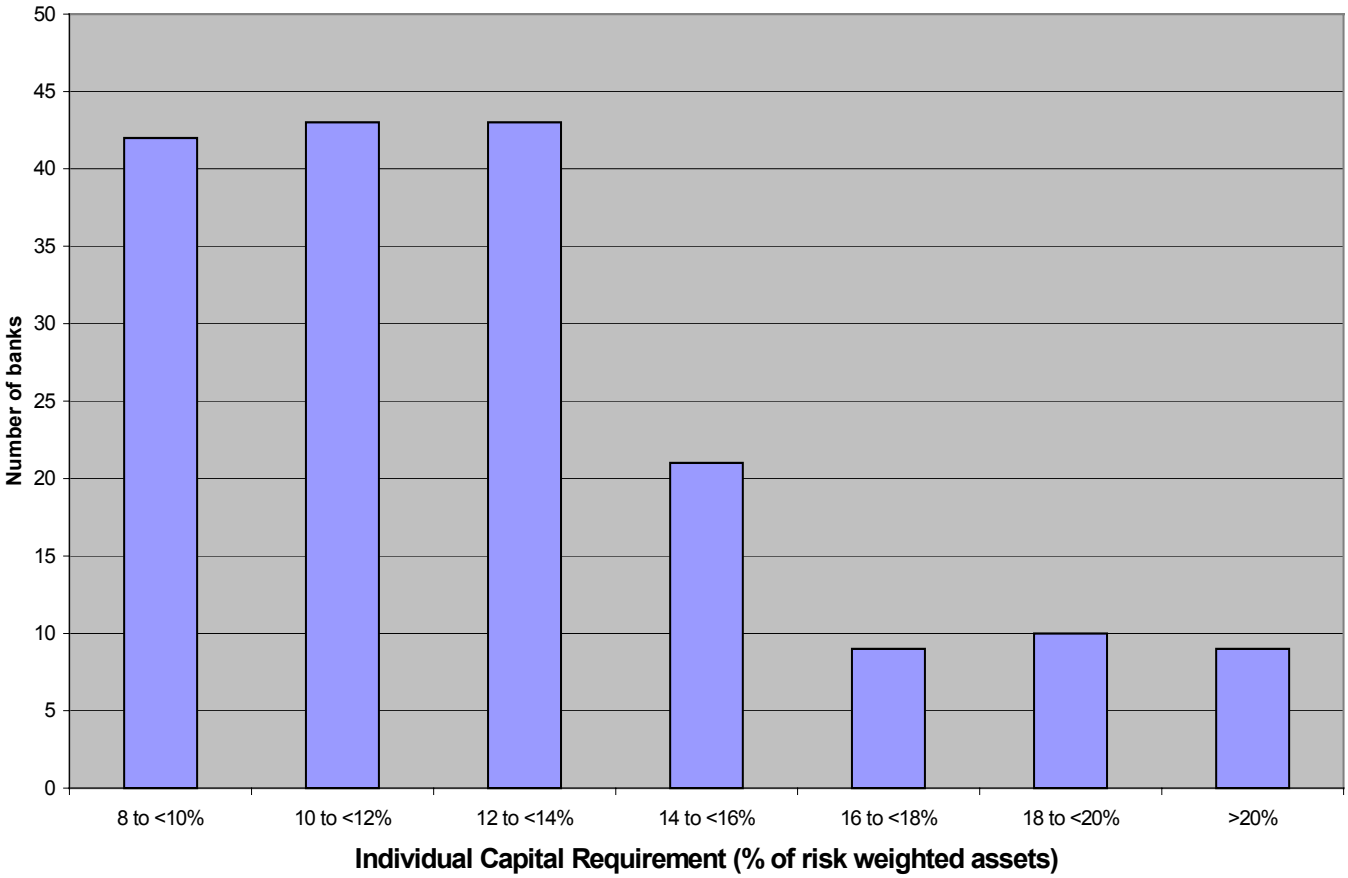
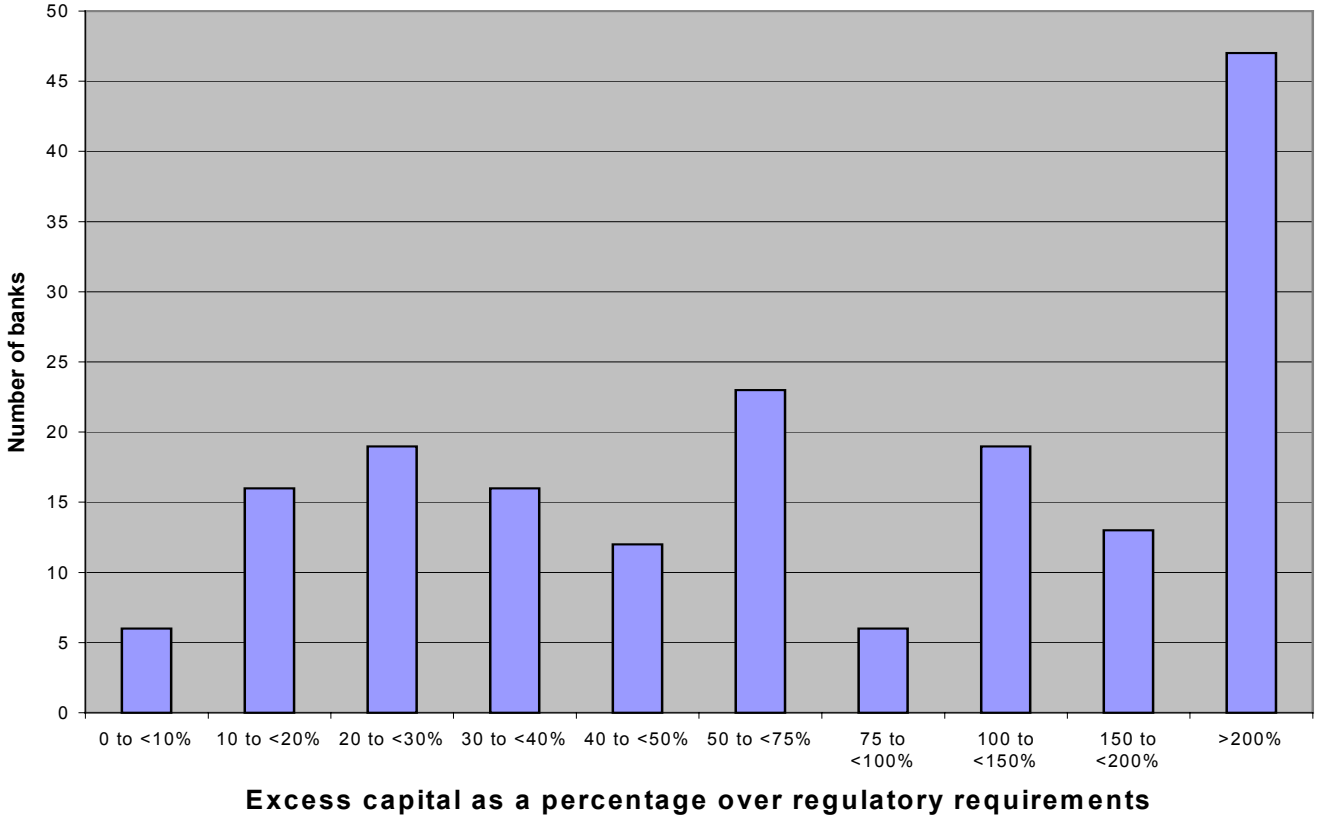


Chart 2: Excess of actual capital held over Individual Capital Requirements for UK-incorporated banks (2002)



BIBLIOGRAPHY

Alfon, I and Andrews, P " Cost-Benefit Analysis in Financial Regulation". Financial Services Authority Occasional Paper 3, September 1999.

American Bankers Association "The Nationwide Bank Compliance Officer Survey". ABA Banking Journal, June 2003.

Andrews, P (ed) "Some cost-benefit issues in financial regulation". Financial Services Authority Occasional Paper 12, October 2000.

Baer, H "Regulatory Burden Handicaps Low-Risk Banking" Federal Reserve Bank of Chicago Fed Letter, January 1988.

Ediz, T, Michael, I and Perruadin, W "The Impact of Capital Requirements on UK Bank Behaviour". Federal Reserve Bank of New York Economic Policy Review, October 1998.

Elliehausen, G "The Cost of Bank Regulation: A Review of the Evidence". Board of Governors of the Federal Reserve System Staff Study 171, April 1998.

Financial Services Authority "Practical Cost-Benefit Analysis for Financial Regulators ". Financial Services Authority, London June 2000.

Financial Services Authority "Making Policy in the FSA: How to take account of Competition". Financial Services Authority, London, July 2000.

Financial Services Authority "Individual Capital Ratios for Banks". Financial Services Authority Policy Statement, July 2001.

Financial Services Authority "Financial Services Practitioner Panel 2002 Survey of the FSA's regulatory performance". Financial Services Authority, November 2002.

Financial Services Authority "Cost of Compliance. A Report by Europe Economics". Financial Services Authority, June 2003.

Flannery, M and Rangan, K "Market Forces at Work in the Banking Industry: Evidence from the Capital Buildup of the 1990s". Social Science Research Network Electronic Library, September 2002.

Franks, J, Schaefer, S and Staunton, M "The direct and compliance cost of financial regulation". Journal of Banking and Finance, 21, 1998, pages 1547-1572.

Hannan, T " The Impact of Bank Regulatory Requirements on Large Corporate Lending". Board of Governors of the Federal Reserve System Finance and Economic Discussion Paper 63, 1989.

Lomax, D "London Markets After the Financial Services Act". Butterworths, London, 1987

Richardson, J and Stephenson, M " Some Aspects of Regulatory Capital". Financial Services Authority Occasional Paper 7, March 2000.