OFFICE OF FAIR TRADING

Review of the Impact of the Financial Services and Markets Act 2000 on Competition

Stage 1: Sifting Methodology

Prepared for the Office of Fair Trading by OXERA

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1 Executive Summary

1.1 The Office of Fair Trading (OFT) is currently undertaking a *Review of the Impact of the Financial Services and Markets Act 2000 on Competition in the Financial Services Sector*. This Review consists of three stages.

- **Stage 1** involves the design of a 'sifting' methodology, which allows identification of the key areas where the Financial Services and Markets Act 2000 (FSMA) is likely to have, or has had, a significant impact on competition.
- **Stage 2** involves the application of the sifting methodology to all activities and markets to which the FSMA applies, resulting in a list of areas where the FSMA might have a significant impact on competition.
- In **Stage 3** the OFT will consider whether any areas identified in Stage 2 should be subject to a more in-depth market investigation.

1.2 This report presents the output of Stage 1, for which the OFT has engaged OXERA. The first two stages of the FSMA Competition Review are intended to identify and prioritise areas that most warrant further study—ie, those where the competition impact of the FSMA might be greatest. Thus, the sifting methodology outlined in this report does not aim to apply a detailed competition analysis to each market covered by the FSMA. Instead, it takes a high-level approach in order to direct attention to the most significant areas.

1.3 To focus the scope of the Competition Review, OXERA has formed three high-level questions:

Q1: Does the FSMA unduly distort the competitive structure in particular markets?

Q2: Does the FSMA unduly reduce the dimensions of competition in particular markets?

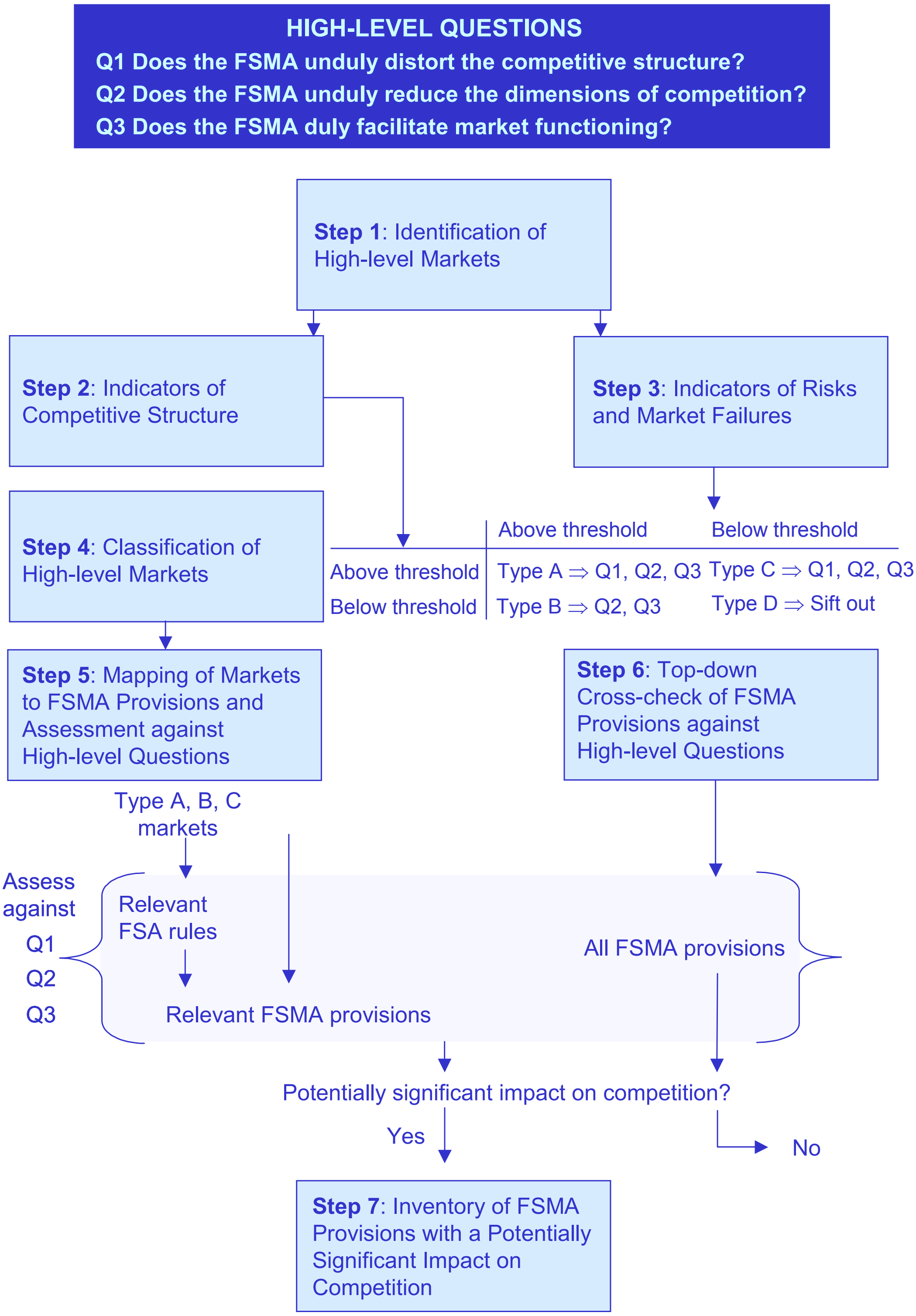
Q3: Does the FSMA duly facilitate market functioning in particular markets?

1.4 While Questions 1 and 2 are concerned with the *negative* impacts of regulation on competition, Question 3 also relates to the *positive* impacts, which are likely to be significant—since one of the primary reasons for regulating financial services is to make these markets function more effectively in the first place—and should therefore also be highlighted in the FSMA Competition Review.

1.5 The terms 'duly' and 'unduly', included in Questions 1 to 3, are intended here to emphasise that the competition impact of regulation is always assessed *relative to the risks and market failures* that the regulation is designed to address. The Competition Review is *not* concerned with competition effects *per se*, but with the question of whether regulation strikes the right balance between addressing risks and market failures, on the one hand, and facilitating/preserving competition, on the other.

1.6 The sifting methodology consists of seven steps and is a hybrid of a top-down and bottom-up approach. The figure below gives a schematic overview of the whole sifting process.

FIGURE1.1- STYLISED ILLUSTRATION OF THE SIFTING METHODOLOGY



1.7 The basic structure of the methodology is as follows.

- The **high-level questions**, Q1 to Q3, specified above, guide the Review.
- **Step 1** identifies the high-level markets to which the FSMA applies.
- **Step 2** classifies each high-level market according to a range of indicators of the competitive structure in that market (leading to a binary classification). These indicators are market concentration; entry barriers; economies of scale/network effects; vertical integration; countervailing buyer or supplier power; switching costs; and geographical scope of competition.
- **Step 3** classifies each high-level market according to a range of indicators of risks and market failures in that market (also leading to a binary classification). These indicators are operational risk; financial/default risk; systemic risk; negative externalities; asymmetric information (non-transparent product offerings); asymmetric information (non-transparent quality or performance); and public goods. The underlying assumption is that these risks and market failures are the main rationale behind the regulation of financial services markets in general, and the four regulatory objectives that the FSMA sets out for the FSA in particular (ie, market confidence, public awareness, the protection of consumers, and the reduction of financial crime).
- **Step 4** combines the classifications of Steps 2 and 3 for each high-level market (leading to four market types: Types A to D). This determines which high-level questions are of relevance to each market. (Type D markets are discarded at this stage.)
- **Step 5** identifies the relevant regulations applicable to each high-level market, beginning with the relevant FSA rules and guidance, but ultimately mapping them onto the relevant FSMA provisions. The FSMA provisions are assessed against the relevant high-level questions (Q1 to Q3, depending on market type). It is important to note that the objective of the Review is *not* to assess the competition effects of the FSA rules. The FSA rules are only analysed at a relatively high level; first, to identify the relevant FSMA provision giving rise to any particular set of FSA rules; and second, to gain an understanding of how the FSMA provisions may in practice have impacted on competition through the FSA rules (as opposed to having a direct effect on competition).
- **Step 6** is a top-down cross-check in which all parts and sections of the FSMA are assessed against each of the high-level questions.
- **Step 7** creates an inventory of FSMA provisions that have a potentially significant impact on competition. This inventory is the combined result

of the assessments in Steps 5 and 6. Each FSMA provision included in this inventory will have relevant information attached to it, which comes from Steps 1 to 6 of the analysis.

1.8 The inventory thus identifies all the areas where the FSMA potentially has a significant impact on competition, and contains relevant information on the relative importance of each impact. Step 7 will also give a tentative ranking or prioritisation of potentially problematic areas, based on the information obtained in Steps 1 to 6 and a number of relevant ranking criteria. This allows the OFT to identify areas where a more in-depth market investigation may be valuable.

1.9 This report also contains two case studies to illustrate the application of the sifting methodology. Two high-level markets have been selected for this illustration—the provision and management of retail investment funds, and the provision of infrastructure for clearing and settlement of securities trades. The case studies do not represent the final assessment of the high-level market concerned. The full application of the methodology to these markets will be undertaken in Stage 2 of the Review, when further information will be collected and industry experts consulted to complete the analysis.

1.10 Based in part on these two case studies, the final section in this report assesses the effectiveness of the sifting methodology. OXERA's conclusion is that the seven-step approach is indeed effective. It allows for a full assessment of the regulatory framework—ie, the FSMA itself, and, where relevant, its secondary legislation and the FSA rules and guidance—and the effects of the FSMA on competition in all of the markets to which it applies. At the same time, the sift is sufficiently strict to narrow down the Review to the most significant areas, and, ultimately, to allow prioritisation of potentially problematic areas, thus enabling the OFT to decide whether to undertake further investigation.

2 INTRODUCTION: STAGE 1 OF THE FSMA COMPETITION REVIEW

2.1 This report is the output of Stage 1 of the *Review of the Impact of the Financial Services and Markets Act 2000 on Competition in the Financial Services Sector*, for which the Office of Fair Trading (OFT) has engaged OXERA.

2.2 The Financial Services and Markets Act 2000 (hereinafter the FSMA) came into force in December 2001 and created a new regulatory regime for the UK financial services industry. It established the Financial Services Authority (FSA) as the single, statutory regulator, responsible for supervising the activities of a broad range of financial services institutions.

2.3 In response to the Cruickshank Review on competition in UK banking,[1] the government committed itself to review the impact of the FSMA on competition two years after the Act came into force. This FSMA Competition Review is now being undertaken by the OFT, and forms part of a broader two-year review of the Act, initiated by HM Treasury, which is also addressing issues such as the functioning of certain practices of the institutions created by the FSMA—the FSA and the Financial Ombudsman Scheme (FOS)—and the boundary of regulation specified by the FSMA.

2.4 Under the FSMA (Part X, Chapter III), the OFT has an obligation to keep the FSA's rules and practices under competition scrutiny—ie, to assess whether there is any 'significantly adverse effect on competition'.[2] The FSMA Competition Review is not intended to duplicate or overlap this existing role of the OFT. First, the Review focuses on the effects of the FSMA itself, rather

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[1] In its interim report, the Cruickshank Review raised the issue of regulation versus competition, at the time when the Financial Services and Markets Bill was going through the House of Commons. Cruickshank, D. (1999), 'Competition and Regulation in Financial Services: Striking the Right Balance', July.

[2] This part of the FSMA also creates a role for the Competition Commission and the Treasury in the competition scrutiny process. Part XVIII, Chapter II of the FSMA contains similar competition scrutiny provisions in relation to recognised investment exchanges and recognised clearing houses. The OFT also has regulatory powers in consumer credit markets under the Consumer Credit Act 1974—these markets fall outside the scope of the FSMA (except for Sections 203 and 204 of the FSMA, which grant the OFT powers to prohibit or restrict firms from carrying out consumer credit business).

than the FSA's rules or practices.[3] Second, the scrutiny under Part X of the FSMA will often be concerned with specific rules and practices, whereas the current Competition Review will consider the effect of the FSMA's regulatory framework as a whole.

2.5 The OFT has decided to carry out the Competition Review in three stages.

- Stage 1, the subject of this report, involves the design of a 'sifting' methodology, which allows identification of the key areas where the FSMA is likely to have, or has had, a significant impact on competition.
- Stage 2 involves the application of the sifting methodology to all relevant activities and markets to which the FSMA applies, resulting in a list of areas where the FSMA might have a significant impact on competition.
- In Stage 3 the OFT will consider whether any areas identified in Stage 2 should be subject to a more in-depth market investigation.

2.6 The first two stages of the Review are intended to identify and prioritise areas that most warrant further study—ie, those where the competition impact of the FSMA might be greatest. Thus, the sifting methodology outlined in this report does not aim to apply a detailed competition analysis to each market covered by the FSMA. Instead, it takes a high-level approach in order to direct attention to the areas that are likely to be most significant.

2.7 This report is structured as follows.

- the next section identifies three high-level questions to be addressed throughout the FSMA Competition Review, and explains the objectives and structure of the sifting methodology;
- the sections thereafter describe each of the seven steps of the sifting methodology designed during Stage 1 of the Review;
- the subsequent sections present two case studies which illustrate how the methodology can be applied to specific markets (retail investment funds, and the provision of clearing and settlement infrastructure);
- finally, the concluding section contains an assessment of the effectiveness of the sifting methodology.

[3] As explained below, the FSA rules and practices will also be taken into account in this Review. However, where these turn out to be of importance, the aim will be to map them onto the relevant provisions in the FSMA.

3 OBJECTIVES AND STRUCTURE OF THE SIFTING METHODOLOGY

High-level questions to be addressed in the FSMA Competition Review

3.1 The remit to review the impact of the FSMA on competition is potentially very wide. Any regulatory framework can affect competition in a myriad of ways. The FSMA, together with the large body of secondary legislation and FSA rules, is no exception. Furthermore, the concept of competition can have different dimensions and meanings,[4] and the assessment of the impact of regulation depends on which dimensions of competition are being considered.
To focus the scope of the Competition Review, OXERA has defined the following three high-level questions:

Q1 Does the FSMA unduly distort the competitive structure in particular markets?

Q2 Does the FSMA unduly reduce the dimensions of competition in particular markets?

Q3 Does the FSMA duly facilitate market functioning in particular markets?

Figure 3.1 illustrates the issues that would be addressed in each of these three questions.

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[4] See, for example, Vickers, J. (1995), 'Concepts of Competition', *Oxford Economic Papers*, **47**, 1–23.

FIGURE 3.1: THREE HIGH-LEVEL QUESTIONS FOR THE FSMA COMPETITION REVIEW

Q1 Does the FSMA unduly distort competitive structure?

- does it restrict entry?
- does it affect vertical or horizontal structure?
- does it increase firms' cost base?

Q2 Does the FSMA unduly reduce the dimensions of competition?

- does it impose restrictions on product offerings?
- does it impose behavioural restrictions?
- does it reduce innovation?

Q3 Does the FSMA duly facilitate market functioning?

- does it protect consumers and promote market confidence?
- does it provide information to consumers?
- does it deal with monopoly power?

3.2 These three high-level questions will function as a beacon in the entire sifting process in Stages 1 and 2. If, at the end of Stage 2, a satisfactory and well-supported answer can be given to each of these three questions, this will contribute significantly to meeting the objectives of the FSMA Competition Review.

Two aspects of the high-level questions are worth pointing out here.

- While Questions 1 and 2 are concerned with *negative* impacts of regulation on competition, Question 3 is also related to *positive* impacts on competition. Such positive impacts are likely to be significant—since one of the primary reasons for regulating financial services is to make these markets function in the first place—and should therefore also be highlighted in the FSMA Competition Review.
- The terms 'duly' and 'unduly', included in Questions 1 to 3, are intended here to emphasise that the competition impact of regulation is always assessed *relative to the risks and market failures* that the regulation is designed to address.[5] In other words, the Competition Review is *not* concerned with competition effects *per se*—otherwise, the whole authorisation regime under the FSMA might, for example, be labelled anti-competitive, as, by definition, it restricts entry. The Review is concerned with the question of whether regulation strikes the right

balance between, on the one hand, addressing risks and market failures and, on the other, facilitating/preserving competition.

3.3 In this respect, it is of relevance that the FSMA (Section 2(2)) sets out four regulatory objectives for the FSA:

- market confidence;
- public awareness;
- the protection of consumers; and
- the reduction of financial crime.

Thus, promoting or maintaining competition is not a primary objective for the FSA.

3.4 However, the FSMA (Section 2(3)) does state that the FSA, when discharging its general functions, 'must have regard to' the following factors, among others:

- the desirability of facilitating innovation in connection with regulated activities;
- the need to minimise the adverse effects on competition that may arise from anything done in the discharge of those functions; and
- the desirability of facilitating competition between those who are subject to any form of regulation by the FSA.

Thus, the inherent question of striking the right balance between addressing risks and market failures, on the one hand, and facilitating/preserving competition, on the other, is recognised explicitly in the FSMA.

Objectives of the sifting methodology

3.5 The sifting methodology developed in Stage 1 has a number of basic objectives that need to be considered.

3.6 First, the sifting methodology needs to be effective, in that it allows the identification of any potentially significant impacts on competition, while excluding the relatively less significant impacts. The seven-step approach developed in this report achieves this objective by imposing strict filters at various points in these steps, thus allowing the Review to focus on the most relevant areas for the FSMA Competition Review.

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[5] It is recognised that 'duly' and 'unduly' can often be highly charged concepts when used in a legal framework.

3.7 Second, the methodology also needs to be practical. For this reason, it considers affected markets at a relatively aggregated level, and relies on a limited number of key competition, risk and market failure indicators for each of these markets (see the description of Steps 1 to 3 below). Hence, the application of the sifting methodology is not as detailed as other competition or market investigations undertaken by the OFT (a detailed investigation may fall within the scope of Stage 3 of the Review). In addition, the methodology is such that, to a large extent, the Review can rely on data that is either in the public domain or can be obtained in a relatively straightforward way from market participants (FSA, trade associations, and companies).

3.8 Third, the methodology is designed to focus on *effects of regulation on competition* (in line with the high-level questions described above). It does *not* seek to undertake a full cost–benefit analysis (CBA) of the regulation in each market.[6] Such a CBA would also address aspects such as the regulator's costs, compliance costs, distributional effects, and any benefits of regulation other than facilitating competition,[7] which may not be directly related to competition as such. Nonetheless, the methodology developed here—looking at competition, risks, market failures and regulation in specific markets—could in principle also be of use for any full CBA.

3.9 Fourth, as discussed above, the objective of the methodology is to focus on the competition effects of the FSMA, and not of the FSA's rules or relevant secondary legislation. However, the FSMA sets out only a range of relatively high-level (yet detailed) *principles* for the regulatory framework—in particular, the setting up of, and conferring of powers to, the FSA as the sector regulator. These principles in the FSMA will often have only indirect impacts on competition in the various financial services markets. One important exception is the area of authorisation, where the FSMA provides for very detailed principles that have a direct effect on competition. In most other areas, the main direct impacts on competition are likely to arise through the more detailed FSA rules and guidance. In turn, many of the FSA's rules and decisions will be driven by specific issues arising in the different financial services markets. For these reasons, a 'pure' top-down approach that starts from the FSMA itself would not be the most effective way of assessing the effects on competition. In other words, the various parts and sections of the FSMA cannot be analysed in

[6] The FSA is seeking separate advice on CBA as part of HM Treasury's wider two-year review of the FSMA.
[7] See, for example, Alfon, I. and Andrews, P. (1999), 'Cost-benefit Analysis in Financial Regulation: How to do it and How it Adds Value', FSA Occasional Paper Series 3, July.

isolation; they can only be analysed in the context of the specific FSA rules to which they give rise and the markets they affect. In other words, some high-level consideration of the FSA rules and guidance is necessary to gain an understanding of how the FSMA has affected competition. The sifting methodology therefore comprises a 'hybrid' that combines a top-down with a bottom-up approach, as further described below.

3.10 Fifth, a number of financial services markets have in recent years been subject to a competition review by the FSA, the government or the European Commission. These include banking services,[8] fund management and brokerage services,[9] the distribution of investment and pension products,[10] and clearing and settlement.[11] The scope of these investigations differs from the FSMA Competition Review. In particular, the Review is concerned with the impact of legislation on competition rather than the degree of competition *per se* in a particular market. However, any available economic analyses of competition, risks/market failures, and regulation in these other investigations will be used directly for the current Review, so as to avoid duplication of effort.

3.11 Sixth, the sifting methodology needs to take into account the fact that UK financial services regulation is in part driven by EU legislation (the EC Treaty, Directives, and other regulations). Thus, particularly in Step 7, the methodology will also signal whether, and to what extent, any of the FSMA provisions identified as having an effect on competition are driven by EU rules.

3.12 Finally, once applied in Stage 2, the sifting methodology will not yet lead to definite conclusions on whether the FSMA has made a significant impact on competition. Rather, the output from this stage will be the identification of a number of areas where the FSMA *potentially* has a significant impact. This forms the basis upon which the OFT can decide whether to undertake a more

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[8] See Cruickshank, D. (2000), 'Competition in UK Banking: A Report to the Chancellor of the Exchequer', March; and Competition Commission (2002), 'The Supply of Banking Services by Clearing Banks to Small and Medium-sized Enterprises', Cm 5319, March.

[9] See FSA (2003), 'Bundled Brokerage and Soft Commission Arrangements', Consultation Paper 176, April; and the accompanying OXERA report, OXERA (2003), 'An Assessment of Soft Commission Arrangements and Bundled Brokerage Services in the UK', report for the FSA, April.

[10] See FSA (2003), 'Reforming Polarisation: Removing Barriers to Choice', FSA Consultation Paper 166.

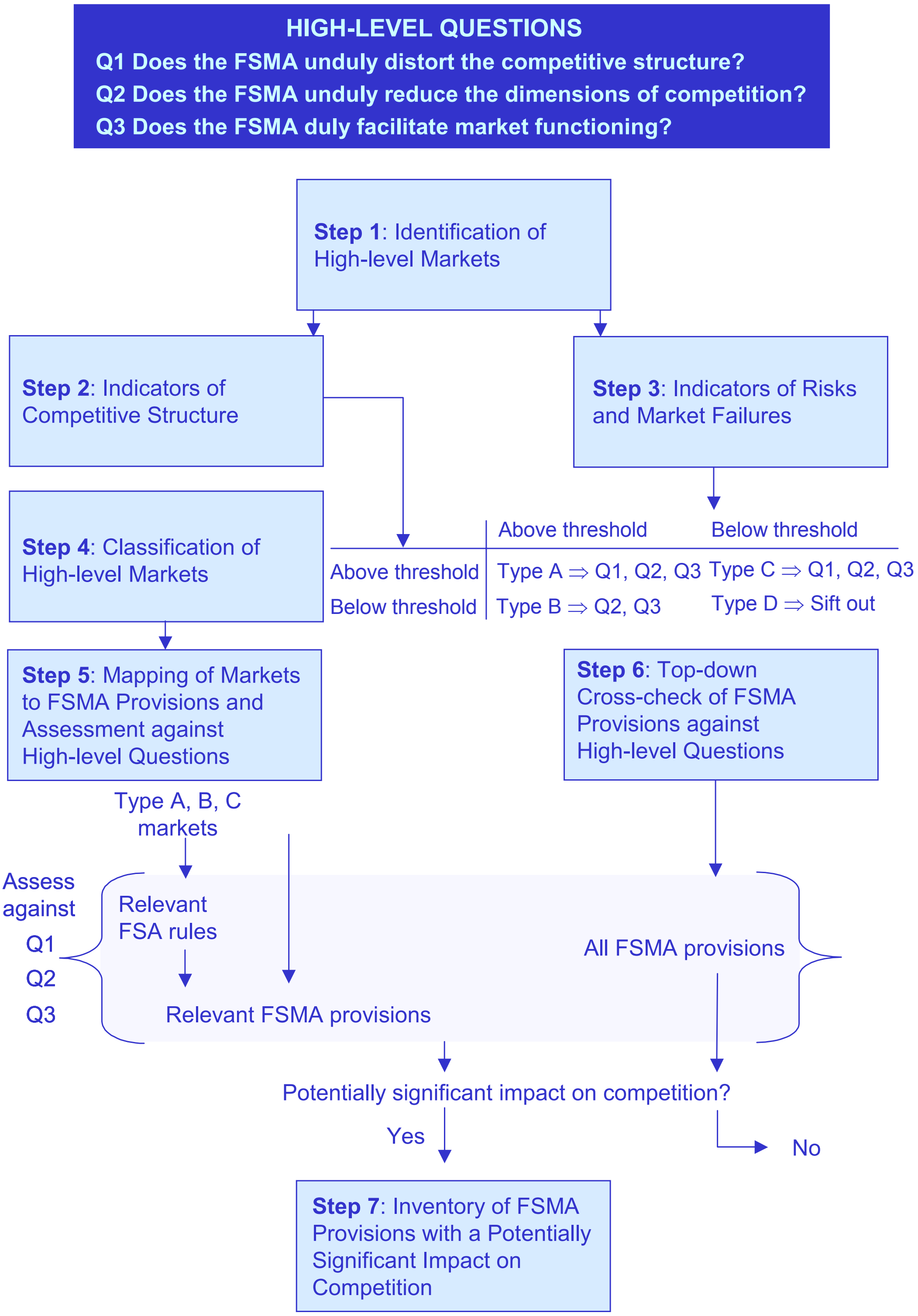
[11] See European Commission (2002), 'Commission Communication on Clearing and Settlement: Summary of Responses', December.

in-depth investigation into any of these areas, which would be done in Stage 3. Only at the end of Stage 3 will definite conclusions be drawn.

Structure of the seven-step sifting methodology

3.13 The sifting methodology consists of seven steps. They are described in more detail in the next sections of this report. Figure 3.2 shown gives a schematic overview of the whole sifting process. When going through the remainder of this report, the reader may refer back to Figure 3.2 to see where each step fits into the overall methodology.

FIGURE 3.2: STYLISED ILLUSTRATION OF THE SITTING METHODLOGY



3.14 The basic structure of the methodology is as follows.

- The **high-level questions**, Q1 to Q3, specified above, guide the Review.
- **Step 1** identifies the high-level markets to which the FSMA applies.
- **Step 2** classifies each high-level market according to a range of indicators of the competitive structure in that market (leading to a binary classification).
- **Step 3** classifies each high-level market according to a range of indicators of risks and market failures in that market (also leading to a binary classification).
- **Step 4** combines the classifications of Steps 2 and 3 for each high-level market (leading to four market types: Types A to D). This determines which high-level questions are of relevance to each market (Type D markets are discarded at this stage).
- **Step 5** identifies the relevant regulations applicable to each high-level market, beginning with FSA rules and guidance but ultimately mapping them onto the relevant FSMA provisions. The FSMA provisions are assessed against the relevant high-level questions (Q1 to Q3, depending on market type).
- **Step 6** is a top-down cross-check in which all parts and sections of the FSMA are assessed against each of the high-level questions.
- **Step 7** creates an inventory of FSMA provisions that have a potentially significant impact on competition. This inventory is the combined result of the assessments in Steps 5 and 6. Each FSMA provision included in this inventory will have relevant information attached to it, which comes from Steps 1 to 6 of the analysis.

3.15 The inventory thus identifies all the areas where the FSMA potentially has a significant impact on competition, and contains relevant information on the relative importance of each impact. Step 7 will also give a provisional ranking or prioritisation of potentially problematic areas, based on the information obtained in Steps 1 to 6 and a number of relevant ranking criteria. This allows the OFT to identify areas where a more in-depth market investigation may be required.

4 STEP 1: IDENTIFICATION OF HIGH-LEVEL MARKETS

4.1 The first step of the sifting methodology is to identify the high-level markets that will be covered in the Review. This classification process is based on the following principles.

4.2 *FSMA coverage*—in principle, the Review needs to include all the markets to which the FSMA applies. OXERA's selection is in part guided by the Regulated Activities Order 2001. Section 19(1) of the FSMA, known as the 'general prohibition', states that 'no person may carry on a regulated activity in the United Kingdom, or purport to do so, unless he is (a) an authorised person; or (b) an exempt person'. The Regulated Activities Order is a statutory instrument under the FSMA that specifies the financial services that are currently subject to regulation. The selection does not take into account the increase in scope of the FSMA to include mortgage providers and insurance intermediaries from October 2004 and January 2005, respectively.

4.3 *Markets outside FSMA coverage*—the Review excludes certain markets which might also be considered financial services but which fall outside the scope of the FSMA (for example, consumer credit business, money transmission and payment systems).

4.4 *Economic markets*—the term 'market', as used in this report, is defined from an economics/competition policy perspective rather than a financial services perspective. In other words, there can be a market for any good or service for which there are suppliers and customers who transact with each other. In contrast, in financial services regulation, the term 'market' often refers to specific trading markets (eg, equity and derivatives markets), rather than to the market for brokerage services or for the provision of trading infrastructure, for example.

4.5 *Distinction from 'relevant' markets*—on the other hand, the classification of high-level markets here does not necessarily correspond to the process of defining 'relevant markets' in competition policy investigations. Relevant markets are usually defined for the purpose of assessing specific competition problems, which can be an extremely complex exercise leading to quite precisely delineated markets.[12] For practical reasons, the high-level markets

[12] See OFT (1999), 'Market Definition', Competition Act 1998 Mini Guides, 403, March.

identified in Step 1 are generally less refined. More specific relevant markets might be identified during Stage 3 of the FSMA Competition Review, where more detailed market investigations may be undertaken.

4.6 *Demand- and supply-side perspective*—the FSMA applies across a range of markets, products and business activities, often without a clear-cut distinction between them. The high-level markets in Step 1 are primarily identified from the perspective of demand- and supply-side substitution, following common practice in competition policy (albeit without a formal market definition exercise, as explained above). In other words, if, from the consumer's perspective, two services appear to be reasonably substitutable, they would be included in the same high-level market, even though they may be provided by different types of firm.[13] Likewise, if suppliers appear able to switch relatively easily between two activities, or if the supply conditions for two activities seem reasonably similar, they would also be included in the same high-level market.[14]

4.7 *Activity perspective*—in some cases, high-level markets are grouped according to the nature of the activities undertaken, rather than from a demand or supply perspective—in particular, where these activities have some economic characteristics in common. This is mainly for practical purposes.[15]

4.8 *Type of customer*—often, the competition and risk/market failure characteristics of a market depend on the degree to which customers are sophisticated and well informed. Therefore, to take this into account, many high-level markets are split between institutional or large business customers (who may be considered 'well informed'), and retail/private or small business customers (who may be considered 'less well informed').

4.9 *Vertical layers*—in most high-level markets there are various vertical layers in the supply chain, which may involve different types of activity or supplier. In some cases, different layers are included in the same market (although each

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[13] For example, collective investment schemes and investment trusts may be considered as similar by consumers, even though the way they are provided, and indeed the way they are regulated, differs substantially (see the first case study in this report).
[14] For example, investment banking consists of a range of services, but most investment banks will normally offer several of these services. This means that supply conditions (eg, the number of providers) will not differ significantly between these services.
[15] An example of this is the provision of clearing and settlement infrastructure—see the second case study in this report.

layer would still be addressed explicitly in the assessment[16]). In other cases the vertical distinction is so clear-cut that separate high-level markets are identified.

4.10 *Regulatory differences*—some high-level markets may include two or more activities that are covered by different sets of regulations. This does not affect the classification of the markets as such, but rather would be picked up in Step 5 as a potential distortive effect on competition in these markets.[17]

4.11 *Geographic dimension*—many markets will be national (UK-wide) from both a demand- and a supply-side perspective, but some markets may be international. This does not affect the classification of high-level markets in Step 1, but rather would be picked up when assessing the competitive structure indicators of each market in Step 2.

4.12 The above are guiding principles only. In practice, the separation of markets may not always be clear-cut and there may be overlaps between some markets. Also, the classification is flexible. When assessing a particular high-level market during Stage 2, it may well be concluded that there is good reason to split this market into smaller sub-markets—for example, because the competition or risk and market failure indicators in Steps 2 and 3 point to markedly different conclusions.

4.13 Table 4.1 lists the high-level markets classified by OXERA according to the above considerations.

[16] For example, in the case study on retail investment funds included in this report, several vertically related activities in that high-level market are discussed explicitly in the assessment of the various indicators.

[17] The management and provision of retail investment funds is an example—see the first case study in this report.

TABLE 4.1: PRELIMINARY LIST OF HIGH-LEVEL MARKETS TO BE ASSESSED IN STAGE 2 OF THE FSMA COMPETITION REVIEW

High-level market
Deposit-taking services offered to private consumers and small and medium business enterprises
Deposit-taking services offered to large business customers
Provision of investment and pension advice to retail customers
Provision of investment advice to institutional customers
Investment banking services
Provision and management of retail investment funds
Fund management services offered to institutional clients
Provision and management of hedge funds
Brokerage services offered to retail customers
Brokerage services offered to institutional customers
Provision of trading infrastructure
Provision of clearing and settlement infrastructure
Provision of custody services
Provision of general insurance services to private consumers and small and medium business enterprises (except life assurance)
Provision of life assurance services to private consumers
Provision of insurance services to large business customers
Provision of wholesale insurance services

5 STEP 2: INDICATORS OF THE COMPETITIVE STRUCTURE OF THE MARKET

Focus of the indicators in Step 2

5.1 Step 2 of the sifting methodology concerns indicators of the competitive structure of each of the high-level markets identified under Step 1. The emphasis in Step 2 is on *structural* characteristics of markets, rather than behavioural or performance characteristics, for four reasons.

- Focusing on structural market characteristics is an effective means of identifying *prima facie* whether a particular market is likely to give rise to competition concerns. This enhances the workability of the sifting methodology.
- Data on structural market characteristics is usually more readily available than that on market behaviour or performance, thereby making Step 2 more practical.
- There is a logical, and relevant, distinction between structural indicators, on the one hand, and risk and market failure indicators, on the other. Both can give rise to an unsatisfactory market outcome, but for essentially different reasons.[18] Structural indicators are therefore informative in themselves.In contrast, market behaviour and performance indicators, which would normally also form part of a full competition assessment, can be closely linked with other market failures, making it difficult to attribute a specific unsatisfactory market outcome to one or the other.[19] The sifting methodology would therefore be less effective if Step 2 also focused on market behaviour and performance, as opposed to structure only.
- Finally, a structure-based sift in Step 2 will be useful at later stages in the Competition Review. For example, when assessing policy options or recommendations in specific markets, Step 2 will indicate whether such

[18] For example, a market outcome in which firms charge exploitative prices to consumers may be due to structural characteristics of the market (eg, high entry barriers) or to one of the inherent market failures assessed under Step 3 (eg, asymmetric information). There is therefore a logical distinction to be made (although in some cases both these factors may play a role simultaneously).

[19] For example, product differentiation is an indicator of market conduct. However, observing product differentiation in a certain high-level market still provides little indication about whether such conduct reflects a structural competition problem or an inherent market failure. It therefore does not allow for a clear-cut distinction and, hence, is of limited use for this stage of the sifting process.

policies ought to be directed more at market structure or more at specific risks/market failures.

5.2 The objective of Step 2 is to classify each high-level market according to the likelihood that the structure of that market gives rise to competition concerns. A binary classification is used—markets are either 'above' or 'below' the threshold that gives rise to such concerns (see further below). This broad approach is necessary in order for the sifting methodology to be effective.

5.3 Importantly, a classification 'below' the threshold for concerns does *not* mean that the market in question is granted a clean bill of health from a competition perspective. Indeed, markets classified in this way are not necessarily moved outside the scope of the Review; they may still be assessed during subsequent steps (depending on how they are classified in terms of risks and market failures in Step 3[20]). The main difference between markets 'above' and 'below' the threshold lies in the specific high-level questions that are asked in these subsequent stages. In particular, for markets 'above' the threshold, high-level question 1 ('Does the FSMA unduly restrict competitive structure?') will be of crucial relevance, while for markets 'below' the threshold, this question will be less relevant. This is further explained in the section describing Step 4.

5.4 Finally, given that the OFT's Review of the FSMA is backward-looking to some extent—ie, it is taking place a few years after enactment of the FSMA—many of the competition indicators in Step 2 may already reflect the impact (if any) of the FSMA itself, or the precursor regulation applied in that market. For example, if the number of firms in a market were restricted due to regulatory barriers to entry, this would be reflected in the current level of market concentration. In other words, Step 2 considers structural market indicators *in the presence of regulation*. In contrast, the significance of risk and market failure indicators in Step 3 is primarily assessed *in the absence of regulation*, as further explained in the next section of this report.

[20] As explained in the section describing Step 4 of the sifting methodology, high-level markets that are classified as 'below' the threshold as regards competition indicators would still be reviewed in detail if their risk/market failure classification is 'above' the critical level in Step 3—this market would be classified as Type B (see further below).

Specific structural indicators assessed in Step 2

5.5 Step 2 considers seven indicators of the competitive structure of the market. The indicators are all relatively straightforward and are regularly used in competition policy to delineate the relevant market or to assess market power. In principle, this list could easily be extended to include more indicators, but this might affect the workability of the sifting methodology; moreover, OXERA considers that, between them, the seven cover most of the relevant aspects of market structure.

5.6 The rating of the indicators will necessarily rely to a large extent on the researchers' own assessment of market structure and market dynamics. Some indicators can be quantified (subject to data availability), while others are more qualitative in nature. However, even for the qualitative indicators, the ratings should be based on as much robust evidence as possible.[21] These indicators are often interrelated (eg, large economies of scale and high switching costs usually mean high entry barriers).

5.7 A number of data sources are available to conduct the structural competition assessment, including industry reports or market research studies, information provided by trade associations, and the databases maintained by the FSA itself. These data sources are also useful for the assessment of risk and market failure indicators in Step 3.

5.8 Table 5.1 on the following page provides a detailed overview of the structural competition indicators, including their relevance, the criteria used for rating them as 'high', 'medium' or 'low', and possible data sources. The combination of indicator ratings for each market will inform its classification as 'above' or 'below' the threshold for significant competition impacts. This is further explained in the sub-section following Table 5.1.

[21] For example, the level of entry barriers is often assessed in a qualitative way ('high' or 'low'), but quantitative indicators, such as the number of actual entrants, can be informative in the assessment.

Table 5.1: Step 2—Indicators of the competitive structure of the market

Indicator	Relevance	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Market concentration	High concentration likely to indicate market where competition concerns (market power or lack of effective competition) may arise	Can be measured through market share of largest player or through Herfindahl concentration index (HHI)[1]	'High'—if largest firm has more than 40–50% of the market; or HHI >1,800 'Medium'—if largest firm has more than 25%; or HHI >1,000 'Low'—if HHI <1,000[2] Number of small players in the market may also be informative	Market-share data (or close proxies, such as relative size of companies) can often be found in one of the following sources: industry reports; regulatory reports; FSA data; trade associations; company reports
Entry barriers	High entry barriers likely to indicate market where competition concerns (market power or lack of effective competition) may arise	More qualitative indicator, but can be informed by quantitative evidence such as actual number of entrants. Distinction is often made between absolute and strategic barriers.[3] Regulatory barriers may also be of relevance but are assessed in more detail in Step 5 Some of the indicators below are also of relevance to assessment of entry barriers (economies of scale/network effects, vertical integration and switching costs)	Essentially, qualitative assessment of whether barriers are 'high', 'medium' or 'low' 'High'—eg, if little or no actual entry in the past few years, high economies of scale or network effects, and high switching costs. 'Low'—eg, if many firms have entered and exited the market in the past few years, economies of scale are limited, and switching costs are low	Industry reports; regulatory reports; FSA data; trade associations; company reports; interviews with market experts; own assessment of market structure and dynamics

Notes: [1] The HHI is the sum of the squares of each firm's market share. For example, in a market with five firms that each have a share of the 20%, the HHI would be 400 + 400 + 400 + 400 + 400 = 2,000. The HHI ranges between 0 (very large number of very small firms) and 10,000 (one firm with 100%). [2] These thresholds are to some extent subjective, but are consistent with thresholds commonly used in competition law. Thus, the 40–50% market share roughly corresponds to the threshold often used for findings of dominance, while the 25% corresponds to the threshold commonly used to assess whether a practice has an 'appreciable effect' on competition. See OFT (1999), 'Assessment of Market Power', OFT 415, September, Section 2. The HHI values are the same as those used in the US Horizontal Merger Guidelines to denote, respectively, highly concentrated markets (>1,800), moderate concentrated markets (between 1,000 and 1,800) and unconcentrated markets (<1,000). See US Department of Justice and Federal Trade Commission (1992), 'Horizontal Merger Guidelines', April (revised in April 1997). [3] This assessment would be made in line with the OFT's guidance on entry barriers described in OFT (1999), 'Assessment of Market Power', OFT 415, September, Section 5.

Table 5.1: Step 2—Indicators of the competitive structure of the market (cont'd)

Indicator	Relevance	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Economies of scale/network effects	Strong economies of scale or network effects may give rise to naturally concentrated markets	Economies of scale arise when fixed costs are important and firms with higher output can achieve lower unit costs. In the extreme, only one firm can efficiently supply the market (natural monopoly) Network effects arise if the attractiveness of a service to a user strongly depends (positively) on the number of other users.[1] These may also give rise to concentrated or monopolistic markets (through 'tipping effects')	Essentially, qualitative assessment of whether scale or network effects are 'high', 'medium' or 'low', but quantitative indicators can be informative In principle, scale effects can be quantified by relating the minimum efficient scale (MES) to total market size. This depends on data availability. If the MES is so high as to leave room in the market for only a few firms, scale effects are rated as high The strength of network effects can be assessed by analysing the degree of tipping in the past or in similar markets elsewhere	Industry reports; regulatory reports; company reports; interviews with market experts; own assessment of market structure and dynamics; assessment of similar markets in other countries

Indicator	Relevance	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Vertical integration	Upstream or downstream integration may give rise to, or exacerbate, competition concerns	Vertical integration in the value chain, whether upstream or downstream, may affect competition. It may constitute a barrier to entry for non-integrated firms, or it may facilitate leveraging of market power from one part of the chain to another	Essentially, qualitative assessment of whether structural problems due to vertical integration are 'high', 'medium' or 'low', but quantitative indicators can be informative One indicator is the proportion of firms in the market that are vertically integrated However, whether this actually affects firms' behaviour also needs to be assessed. For example, if some providers in the market are vertically integrated, but are organised in separate units and deal with independent players, the impact of vertical integration on the competitive structure of the market might be rated 'medium'[2]	Industry reports; regulatory reports; FSA data; trade associations; company reports; interviews with market experts; own assessment of market structure and dynamics

Notes: [1] For example, the more market participants use a certain trading platform to deal in a specific security, the more that platform is likely to attract other market participants. [2] Financial services firms are often active in many different markets, but sometimes their different businesses may function quite separately or at arm's length in practice.

Table 5.1: Step 2—Indicators of the competitive structure of the market (cont'd)

Indicator	Relevance	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Countervailing buyer or supplier power	Strong (large, sophisticated, well-informed) buyers or suppliers in the chain may mitigate competition concerns	Depends mainly on degree of market concentration or size of players upstream or downstream, and on frequency of transactions[1] Buyer power is likely to be rated differently, depending on whether institutional or retail customers are involved. The former are likely to have greater buyer power. There may also be a difference in power between small and large customers (both within institutional customers and within retail customers) Buyer power may also be influenced by asymmetric information (see the risk and market failure indicators under Step 3)[2]	First, assess market concentration upstream and downstream, using the same quantitative indicators as above. Then undertake qualitative assessment of other factors: institutional versus retail; ability to discriminate between large and small customers; frequency of transactions; asymmetric information (informed by analysis under Step 3) Strong buyer power gives 'low' (not problematic) rating; weak buyer power gives 'high' (problematic) rating	Industry reports; regulatory reports; FSA data; trade associations; company reports; interviews with market experts; own assessment of market structure and dynamics

Indicator	Relevance	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Switching costs	High switching costs may give rise to, or exacerbate, competition concerns	Potential switching costs to be assessed include transaction, search, contractual and learning costs.[3] Actual switching levels also provide insight	The significance of switching costs and the degree of actual switching can, in principle, be quantified; in practice, assessment is more likely to be qualitative 'High'—eg, in markets where product offerings/characteristics are non-transparent (which is also informed by market failure analysis under Step 3) and consumers hardly ever switch 'Low'—eg, if product offerings are reasonably transparent, consumers are well informed and switching occurs regularly	Industry reports; regulatory reports; FSA data; trade associations; company reports; interviews with market experts; own assessment of market structure and dynamics

Notes: [1] If transactions between buyer and seller occur frequently, the buyer is more likely to be able to exercise buyer power than if transactions are one-off or infrequent.
[2] When there are considerable information asymmetries between sellers and buyers, even larger buyers may not be able to exercise their bargaining power effectively.
[3] A useful categorisation of switching costs is provided in OFT (2003), 'Switching Costs', Economic Discussion Paper 5, April.

Table 5.1: Step 2—Indicators of the competitive structure of the market (cont'd)

Indicator	Relevance	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Geographic scope	Some markets may be international in nature, which means market structure is more likely to be competitive	Depends on degree to which market participants have cross-border operations; UK consumers use providers located abroad (demand substitution); UK suppliers compete with foreign suppliers for UK or foreign consumers; and foreign providers can easily enter UK market (supply-side substitution)[1] The degree of international competition depends in part on the regulatory entry barriers, which are assessed in more detail in Step 5	Largely qualitative assessment of degree of international competition (strong competition gives 'low' rating; weak competition gives 'high' rating) 'Low' (not problematic)—eg, in a market where there is a high number of overseas providers or where customers regularly put their business out for tender to global providers 'High' (problematic)—eg, if competition is between domestic firms only (including subsidiaries of foreign firms that have set up business in the UK)	Industry reports; regulatory reports; FSA data; trade associations; company reports; interviews with market experts; own assessment of market structure and dynamics; assessment of similar markets in other countries

Notes: [1] Supply-side substitution is a more immediate form of international competition. In contrast, foreign firms can also enter the UK market by setting up a subsidiary (indeed, many firms operating in the UK financial services industry are foreign-owned), but this does not necessarily make the geographical scope of the market international.

Classification of markets according to competitive structure in Step 2

5.10 The above indicator ratings are used to classify each market as being either:

- 'above' the threshold that potentially gives rise to structural competition concerns; or
- 'below' this threshold.

5.11 The classification will be based on a balanced, overall assessment of the seven structural indicators discussed above. OXERA considers that this classification needs to be largely subjective, following a set of basic criteria as laid out below, rather than devising a complicated algorithm to transform the seven indicator scores into the two categories.

5.12 The basic criteria include the following.

- The two most important indicators of competitive structure are market concentration and entry barriers.
- The other five indicators are of secondary importance, but have a significant impact on the scope for market power (vertical integration, countervailing power, and geographical scope), or may have a direct impact on market concentration and entry barriers (economies of scale/network effects, and switching costs).
- If the score is 'high' for both market concentration and entry barriers, or if one of these two indicators is 'high' and the other 'medium', the market in question would be classified as 'above' the threshold.
- If both market concentration and entry barriers have a score of 'low', or one is 'low' and the other 'medium', the market would be classified as 'below' the threshold (unless any of the other five indicators points to a markedly different conclusion).
- For all other cases (ie, where both market concentration and entry barriers have a 'medium' score, or one is 'high' and the other 'low'), the classification would depend on the other five indicators. These will need to be assessed on a case-by-case basis.

6 STEP 3: INDICATORS OF RISKS AND MARKET FAILURES

Focus of the indicators in Step 3

6.1 Step 3 of the sifting methodology involves assessing a range of indicators of risks and market failures—other than market power—for each of the high-level markets identified in Step 1.[22] Most financial services markets and activities are characterised by some risks and market failures. OXERA recognises that there may be different rationales for regulation of financial services markets and that the objectives of the FSMA and other rules may go further than correcting market failures as such. Nevertheless, the working assumption for the economic analysis in Step 3 is that risks and market failures are likely to constitute the primary rationale for such regulation. Indeed, the four primary objectives for the FSA, as set out in FSMA (Section 2(2))—market confidence, public awareness, protection of customers, and reduction of financial crime—can each be directly linked to market failures.

6.2 The significance of each of these risks and market failures is a matter of degree and will vary across markets. The challenge for any regulatory system is to intervene at a level that is proportionate to the specific risks and market failures—indeed, Section 2(3) of the FSMA establishes this principle of proportionality.

6.3 Step 3 aims to rate the significance of risks and failures, and subsequently to classify each market as 'above' or 'below' the threshold level of significance (see further below). As in Step 2, this broad approach in Step 3 is necessary in order for the sifting methodology to be effective.
It is important to set out what Step 3 does and does *not* aim to do.

- The objective of rating risks and market failures in Step 3 is *not* to assess whether FSMA regulation is proportionate as such (this is beyond the scope of the Competition Review).[23]

[22] Monopoly or market power is also a form of market failure. However, it is addressed separately in Step 2 of the sifting methodology.
[23] As explained in the second section of this report, the aim of the FSMA Competition Review is not to undertake a full CBA of regulation (although the methodology developed here may also be of use in any CBA).

- Step 3 does not lead (as yet) to any conclusions regarding the effects of regulation on competition (this is mainly assessed in Step 5).

- The objective of Step 3 is to obtain clearer insight into the reasons for regulation, which in turn makes it easier to identify areas where regulation is likely to have had an impact on competition (ie, those areas where risks and market failures are significant are more likely to have been subjected to regulation).

- The analysis in Step 3 also allows for a more structured and informed assessment of the appropriate trade-off between regulating for risks and market failures, on the one hand, and competition, on the other, during subsequent stages of the Review (in particular, Step 5 and any in-depth investigations during Stage 3).

6.4 Therefore, the classification in Step 3 does not yet draw any conclusions regarding effects on competition. Markets classified as 'below' the critical risk/market failure level are not necessarily excluded from the Review; they may still be assessed during Step 5 (depending on how they are classified in Step 2). The classification into 'above' or 'below' the critical level has implications for which high-level questions will be addressed for each market (as further explained in Step 4).

Specific risk and market failure indicators assessed in Step 3

6.5 Table 6.1 lists the risk and market failure indicators covered in Step 3, including their rating criteria and possible data sources. In contrast with the competition indicators in Step 2, the indicators in Step 3 relate to characteristics of the market *in the absence of regulation*. This allows an assessment of the need for regulation in the first place.[24]

6.5 It should be noted that, from an economics perspective, risks *per se* are not necessarily a cause for concern. The presence of a certain risk only justifies regulatory intervention if it is accompanied by the presence of a market failure. In theory, many risks can be appropriately accounted for in decision-making and pricing processes.

[24] If risks and market failures were assessed in the presence of FSMA regulation, and this regulation were effectively designed and implemented, the analysis would, incorrectly, conclude that risks and market failures are limited.

However, this requires consumers to be well informed. Asymmetric information between suppliers and consumers makes it difficult for the market mechanism to incorporate risk factors. Market failures, such as externalities and public goods, also make it difficult for risk to be appropriately priced. Regulation is warranted where markets fail to deal with risks; it is therefore the combined existence of risks and market failures that is important.

TABLE 6.1: STEP 3 – INDICATORS OF RISKS AND MARKET FAILURES

Indicator	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Operational risk	Markets where customers are at significant risk of losing their funds from any operational failures of providers. Operational risk ranges from unintentional human errors to intentional or fraudulent misappropriation of customer funds. It also covers counterparty risk in trading markets	Essentially, qualitative assessment of whether operational risks are 'high', 'medium' or 'low' Quantitative indicators can be informative, including number of past actual failures or complaints; actual costs in past instances of failures (ie, amount of losses and which market participants bore those losses); and expenditure on prevention/insurance. These need to be related to total market/customer size (ie, size and frequency of transactions) Also depends on associated market failures—in particular, asymmetric information (can risk be priced?)	Industry reports; regulatory reports; FSA/FOS/FSCS data; trade associations; interviews with market experts; own assessment of market characteristics and dynamics

Indicator	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Financial/default risk	Markets where the default of financial services providers exposes customers to the risk of significant financial losses	Essentially, qualitative assessment of whether financial/default risks are 'high', 'medium' or 'low' Quantitative indicators can be informative, including number of past actual defaults; actual costs in past instances (eg, amount of funds lost by consumers or compensation received by consumers); expenditure on prevention/insurance. These need to be related to total market/customer size (ie, size and frequency of transactions) Also depends on associated market failures, in particular asymmetric information (can risk be priced?)	Industry reports; regulatory reports; FSA/FOS/FSCS data; trade associations; interviews with market experts; own assessment of market characteristics and dynamics

Indicator	Economic characteristics	Rating criteria (‘high’ is problematic; ‘low’ not problematic)	Possible data sources
Systemic risk	Markets characterised by ‘contagion’ effects, where the failure of one provider triggers further failures and potentially destabilises the financial system (an extreme form of negative externality—see below)	Likely to be a very small probability of a very large detriment Essentially qualitative assessment of whether systemic risks (in both probability and size) are ‘high’, ‘medium’ or ‘low’ Informed by quantitative indicators, such as level and riskiness of own positions, and qualitative indicators such as the nature of the business, the structure of assets and liabilities; and degree of links between firms in the industry (in particular, with respect to financial positions)	Industry reports; regulatory reports; company reports; academic literature; own assessment of market characteristics and dynamics

TABLE 6.1: STEP 3 – INDICATORS OF RISKS AND MARKET FAILURES (CONT'D)

Indicator	**Economic characteristics**	**Rating criteria ('high' is problematic; 'low' not problematic)**	**Possible data sources**
Negative externalities	This is a market failure whereby an action by one player affects the actions by other players, without the first player taking this effect into account. For example, an act in bad faith or a failure by one provider may affect consumer confidence in the market as a whole. In the extreme, negative externalities give rise to systemic risk (see above)	Similar to systemic risk; but qualitative evidence such as consumer confidence can also be relevant Rating also depends on total value of any potential detriment	Industry reports; regulatory reports; academic literature; interviews with market experts; own assessment of market characteristics and dynamics
Asymmetric information: non-transparent product offerings	Markets where product offerings are non-transparent or very diverse, and consumers are not informed This is more likely to occur in final consumer markets as opposed to institutional markets. There may also be differences between large and small customers	Essentially, qualitative assessment 'High'—eg, if number and variation of products offered is high, and consumers are relatively unsophisticated 'Low'—eg, if consumers are well-informed and transact on a regular basis (even if product variation is high) Retail versus institutional customers may be used as first proxy for 'high' and 'low', respectively	Industry reports; regulatory reports; trade associations; interviews with market experts; own assessment of market characteristics and dynamics

Indicator	Economic characteristics	Rating criteria ('high' is problematic; 'low' not problematic)	Possible data sources
Asymmetric information: non-transparent quality or performance of product or providers	This is different from the above asymmetric information problem, and may arise even where customers are more sophisticated Such asymmetric information may exacerbate the incentive misalignment between providers and customers, and may, in the extreme case, prevent the market from functioning[1]	Essentially, qualitative assessment Depends on specific market characteristics 'High'—eg, if product performance/quality is difficult to distinguish from other factors that affect the service received by consumers (ie, other factors, such as market conditions, can be 'blamed' for bad performance)	Industry reports; regulatory reports; academic literature; trade associations; interviews with market experts; own assessment of market characteristics and dynamics
Public goods	A good or service where, once provided, consumers cannot be excluded from consuming it. This may prevent providers from charging for the good, and hence it may not be provided at all	Essentially qualitative assessment 'High'—for example, if public good characteristic is so strong that government intervention is required (eg, government protection against systemic risk) 'Medium'—for example, if public good problem can be solved by industry itself (eg, mutually owned clearing house to deal with systemic risk) 'Low'—if there are limited public good characteristics in the market	Academic literature; own assessment of market characteristics and dynamics

Notes: [1] The classic example of this type of market failure is the market for lemons (used cars). Because consumers cannot distinguish between high-quality cars and lemons, they are only prepared to pay an average price that is below the true price of the high-quality cars. As a result, sellers will withdraw their high-quality cars from the market, leaving only lemons. See Akerlof, G. (1970), 'The Market for Lemons: Quality Uncertainty and the Market Mechanism', *The Quarterly Journal of Economics*, **84**, 488–500.

Classification of markets according to risks and market failures in Step 3

6.6 All the risks and market failures listed above must be (and are) taken into account in financial services regulation. In that respect, it is not possible to draw a line between important and non-important indicators—regulation cannot ignore any of these. However, for the sifting methodology to be effective, it needs to distinguish those markets where regulation is more likely to have an effect on competition. Therefore, the key criteria for classifying markets into two categories will be:

- *'above' the critical level*—markets in which risks and market failures are such that it is likely that a relatively high degree of regulatory intervention has occurred, and hence competition is likely to have been affected;
- *'below' the critical level*—markets in which risks and market failures are such that it is likely that a relatively low degree of regulatory intervention has occurred, and hence competition is less likely to have been affected.

6.7 This classification is not entirely clear-cut, but it does provide relevant guidance on where regulation is more likely to affect or have affected competition. As with the competitive structure indicators in Step 2, this classification will be largely subjective, based on the researchers' own assessment of market dynamics and taking into account the following considerations.

6.8 First, financial/default risk, systemic risk and asymmetric information (both types) are indicators associated with the classification of 'above' the critical level, since they are likely to have led to a high degree of regulatory intervention (and hence are likely to have had a potentially high impact on competition). If one of these indicators is 'high', the market in question would therefore be classified as 'above' the critical level.

6.9 Second, operational risk and negative externalities (other than those implying systemic risk) are indicators associated with the category 'below' the critical level, since they are likely to have led to a lower degree of regulatory intervention (and hence are less likely to have had an impact on competition). None of these indicators would by itself lead to a classification 'above' the critical level, even if rated 'high'. However, this also depends on the other indicators. For example, operational risk combined with significant informational asymmetries in the market is likely to have led to a high degree of regulation.

6.10 Finally, public good is a market failure that, in theory, may require a high degree of government intervention (in the extreme, the good is provided by the government itself). However, financial services regulation rarely addresses explicitly the issue of public goods. This indicator is therefore associated with the category 'below' the critical level, which means that, even if the public good indicator were rated 'high', the classification of the market in question would still depend on the other indicators.

6.11 The assumptions about the likelihood of the degree of regulatory intervention may sometimes turn out to be incorrect. Even if the indicator ratings point to a lower degree of intervention (and hence a lower impact on competition), the *actual* degree of intervention may be very high (in which case, a Type II error would arise). Alternatively, if the indicators point to a high degree of intervention, the actual degree may in fact be low (a Type I error).[25] The sifting methodology would still pick up such Type I and Type II errors in two situations:

- where the high-level market concerned were classified as 'above' the critical competition structure level in Step 2—in this case, regulation in the market concerned would still be assessed in full against all three high-level questions (see further in Step 4);
- for Type II errors, if the regulation were reflected in the generic provisions of the FSMA—in this case, the regulatory impact on competition could still be picked up in the top-down cross-check in Step 6.

[25] A Type I error occurs when the researcher rejects a hypothesis that is actually true. A Type II error occurs when the researcher accepts a hypothesis that is actually false.

7 STEP 4: CLASSIFICATION OF HIGH-LEVEL MARKETS

7.1 Combining the results of Steps 2 and 3 leads to a classification of high-level markets into four types, as illustrated in Table 7.1. This classification determines which of the high-level questions will be addressed for the market concerned in Step 5, as also indicated in the table.

TABLE 7.1: CLASSIFICATION OF HIGH-LEVEL MARKETS, AND HIGH-LEVEL QUESTIONS TO BE ADDRESSED FOR EACH TYPE

	Risk and market failures (Step 3)	
Competitive structure (Step 2)	***'Above' critical threshold***	***'Below' critical threshold***
'Above' critical threshold	Type A ⇒ Q1, Q2, Q3	Type C ⇒ Q1, Q2, Q3
'Below' critical threshold	Type B ⇒ Q2, Q3	Type D ⇒ sift out

The logic behind this part of the sifting process can be explained as follows:

7.3 First, for high-level markets where the competitive structure is such that it is likely that competition issues may arise, the Review needs to address all three high-level questions (ie, does the FSMA distort competitive structure, reduce dimensions of competition, or facilitate market functioning?).
This is the case regardless of whether risks/market failures are 'above' or 'below' the critical threshold. Hence, for both market types A and C, all three high-level questions will be assessed during Step 5. However, the distinction between Type A and Type C is likely to influence the conclusions of this assessment—it is therefore a meaningful distinction for this stage in the sifting process.[26]

7.4 Second, for high-level markets where the competitive structure does not give cause for concern, high-level question 1 is relatively less important—ie, any effects of the FSMA on market structure are likely to have only a limited impact on competition.[27] Therefore, only high-level questions 2 and 3 are addressed for Type B markets.

[26] For example, regulatory intervention can be expected to be stronger in Type A markets, and the effects on competition may therefore also be more significant. On the other hand, for Type C markets, one conclusion might be that regulation affects competition in a way that is excessive relative to the risks or market failures that it seeks to address.
[27] In markets where concentration and entry barriers are low at present, the FSMA or its predecessor regulations cannot have had a significantly adverse effect on competitive structure (given that the Review is to some extent 'backward-looking', as explained in Step 2). This is not to say that regulation has not had any effect on competitive structure, just that such

7.5 Third, Type D markets are sifted out of the Review at this stage. These are markets where both the competitive structure indicators and the risk/market failure indicators are below the critical threshold. In principle, adverse regulatory effects on competition could still arise in such markets, but those effects would be relatively minor and can therefore be excluded for the purpose of the FSMA Competition Review.

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effects would be of minor importance in the context of the whole of the FSMA Competition Review.

8 STEP 5: MAPPING OF MARKETS TO FSMA PROVISIONS AND ASSESSMENT AGAINST HIGH-LEVEL QUESTIONS

8.1 Step 5 is a crucial stage of the sifting methodology, and comprises two main activities:

- mapping each high-level market (of Types A, B and C) onto the relevant FSA rules and secondary legislation, and, ultimately, onto the relevant FSMA provisions; and
- assessing these FSMA provisions against the relevant high-level questions.

Identifying the relevant regulation for each high-level market

8.2 Markets can be affected by FSMA provisions, but more often are regulated more directly by specific FSA rules and guidance or secondary legislation. In the latter case, the FSA rules or other secondary legislation would only be examined at a very high level, so as to allow mapping the rules back onto the specific FSMA provisions underlying the rules, and to gain some insight into how the FSMA has affected competition through the FSA rules. In other words, Stage 2 would involve a comprehensive review of the relevant FSA rules and guidance and secondary legislation, but only at a very high level and as an intermediate step, not as an end in itself. This is in line with the objectives described in the first two sections of this report—ie, a review of the impact of the FSMA on competition, and *not* the impact of FSA rules or secondary legislation on competition.

8.3 Identifying the relevant regulation for each high-level market requires desk-based analysis of the FSMA, the statutory instruments, and the FSA Handbook of rules and guidance, as well as in-depth discussions with FSA and industry experts.

Assessment of each FSMA provision against the relevant high-level questions

8.4 Once the relevant FSMA provisions are identified for a specific high-level market, these are all critically assessed against the relevant high-level questions and the issues involved under these questions (see Figure3.1).

This assessment is inherently the most difficult part of the sifting process, since it requires judgements on whether regulation duly or unduly affects competition. The assessment will to a large extent be informed by:

- the analysis and rating of competitive structure and risks/market failures in each market undertaken in Steps 2 and 3 (bearing in mind the relationship between risks/market failures and the four objectives set out in the FSMA—ie, market confidence, public awareness, the protection of consumers, and the reduction of financial crime);
- the researchers' own assessment and understanding of the effects of different types of regulation on competition, in light of the competition and risk/market failure characteristics of each market.

8.5 The assessment will be based on a combination of theoretical and empirical analysis, drawing from economic theory, any available data or existing evidence, and discussions with FSA, industry experts and stakeholders. Some of the criteria that will be considered during the assessment are listed below.[28]

Criteria for assessing regulation against high-level question 1

8.6 When assessing high-level question 1 (does the FSMA unduly distort competitive structure?), the following criteria are of relevance.

- *Restriction of entry*—regulation may restrict entry directly through the authorisation regime, but also indirectly through ongoing capital and other requirements on firms. Here, the criteria for the entry barrier indicator in Step 2 (see Table 5.1 above) are of relevance in assessing the significance of the barriers. As in Step 2, the question is not whether entry is restricted *per se* (under the authorisation regime, it is), but whether such restrictions are significant relative to total market size. If a large number of suppliers compete in the market, this is an indication that the regulatory entry barrier has not had a significant impact. It might, however, be necessary to consider the frequency of entry into (and exit from) the market. For incumbents, authorisation costs may have been sunk decades ago; moreover (as happened in the transition to the FSMA regime), authorisation may have been automatic for existing firms rather than a procedure to be followed.

  Even if regulatory entry barriers are found to be significant, they may still be justified if they address an underlying market failure (in line with the four regulatory objectives set out in the FSMA). Here the risk/market failure indicators in Step 3 are again of relevance (see Table 6.1 above). For example, in a market characterised by high systemic risk, high entry barriers in the form of strict capital or other requirements on firms would not necessarily be considered 'undue'. Step 5 would signal where such situations arise, but it would not yet draw any firm conclusions on whether regulation unduly restricts entry. That would be the scope of a more in-depth investigation in Stage 3.

- *Impact on horizontal or vertical structure*—sometimes regulation imposes (directly or indirectly) a certain horizontal or vertical structure that may not necessarily be the most competitive one. For example, regulation may, either explicitly or implicitly, drive firms towards consolidation horizontally, or it may force firms to separate certain activities vertically.
- *Increase in costs*—by definition, any regulation forces certain compliance costs on the industry. It is not the aim of the FSMA Competition Review to assess whether the costs imposed by regulation are appropriate or proportionate to the risks and market failures in the market concerned.[29] However, compliance and other regulatory costs may sometimes become so high that they constitute a barrier to entry. This is of particular concern if it has a differential impact on smaller and larger firms—the former are disadvantaged by their scale. The FSMA and its accompanying regulations may also have a differential cost impact between existing and new firms—most firms that existed when the FSMA came into force benefited from grandfathering provisions and received an automatic authorisation,[30] and therefore did not have to face the same hurdles as firms that wish to enter now.

Criteria for assessing regulation against high-level question 2

8.7 Firms do not only compete on price but on other dimensions as well, such as product quality, service levels and innovation. The aim of high-level question 2 (does the FSMA unduly reduce the dimensions of competition?) is to assess the effects of the FSMA on these dimensions. The following criteria are of relevance.

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[28] These criteria will also be of relevance to the top-down cross-check in Step 6, as explained in the next section.

[29] However, as noted in the second section of this report, the methodology developed here could, in principle, also be useful for an assessment of regulatory costs.

[30] See Statutory Instrument No. 2636, 'The Financial Services and Markets Act (Transitional Provisions) (Authorised Persons etc) Order 2001'.

- *Restrictions on product offerings*—regulation may restrict the types of product or product characteristics that can be offered. To assess whether these regulations are 'undue' requires, first, a significance test, and second, an assessment of market failures (and the four objectives set out in the FSMA). With regard to the significance test, the extent to which current product variety is sufficiently wide, despite the existing restriction, must be analysed, for example. With regard to the second test, it should be borne in mind that, normally, the objective of such product restrictions is to protect consumers in relation to the asymmetric information market failures (see the section describing Step 3). Whether regulation makes the appropriate trade-off between competition and consumer protection is difficult to determine, but some indication of this can obtained from the analysis in Steps 2 and 3 (the final assessment would have to be made in Stage 3).
- *Behavioural restrictions*—regulation may also impose other behavioural restrictions on firms that affect the dimensions of competition. The assessment of these will be based on the same types of criteria as identified above under restrictions of product offerings.
- *Impact on innovation*—regulation can have an impact on innovation. Innovation, in this respect, is broadly defined, and includes relatively minor improvements in product or service quality, but also the introduction of completely new products and services, and improvements in production/service technologies. This impact will be difficult to analyse since it requires assumptions regarding the counterfactual: how much innovation would have occurred in the absence of the existing regulation? Some qualitative indications may be obtained by considering current levels of innovation in the high-level market in question.[31]

Criteria for assessing regulation against high-level question 3

8.8 When assessing high-level question 3 (does the FSMA duly facilitate market functioning?), the following criteria are of relevance.

- *Consumer protection and market confidence*—as discussed in the first two sections of this report, the most significant impact of financial regulation will often be to allow markets to function in the first place—ie, by protecting consumers and promoting market confidence, in line with the regulatory objectives set out in the FSMA. This impact will also be identified in the Competition Review.

[31] Current levels of innovation are not assessed under Step 2 because this step focuses on structural competition indicators, whereas innovation is a behavioural indicator.

- *Information to consumers*—likewise, regulation may reduce the asymmetric information problem by providing (or facilitating the provision of) information to consumers. This may also have the effect of improving market functioning, or of facilitating competition by reducing switching costs. The Review will also seek to identify instances where regulation could do more than at present to improve market functioning and provide information.
- *Dealing with market power*—efficient market functioning can be distorted by monopoly or market power. Many such distortions can be dealt with under competition law where such law is applicable (for example, where a position of market power is abused). However, where market power is pervasive—for example, because the market concerned is characterised by strong economies of scale or network effects (see the section describing Step 2) and therefore tends towards natural monopoly—reliance on competition law alone may not always be sufficiently effective.

8.9 As noted earlier, the assessment in Step 5 will not yet lead to definite conclusions on whether the FSMA has made a significant impact on competition. Rather, it will identify areas where the FSMA *potentially* has such an impact. This forms the basis on which the OFT can decide whether to undertake a more in-depth investigation into any of these areas, which would form Stage 3.

9 STEP 6: TOP-DOWN CROSS-CHECK OF FSMA PROVISIONS AGAINST HIGH-LEVEL QUESTIONS

9.1 To ensure that the approach has comprehensively identified all relevant aspects of the FSMA and to examine the consequences of those aspects of the FSMA that the approach has not already captured, Steps 1 to 5 will be complemented with a top-down cross-check in Step 6. This top-down analysis starts with the constituent parts of the legislation. The FSMA is organised into 30 Parts, with a total of 433 Sections (see Table 9.1 on following page). In addition, the FSMA has 22 Schedules.

TABLE 9.1: STRUCTURE OF THE FSMA

Part	Title
I	The Regulator
II	Regulated and Prohibited Activities
III	Authorisation and Exemption
IV	Permission to Carry on Regulated Activities
V	Performance of Regulated Activities
VI	Official Listing
VII	Control of Business Transfers
VIII	Penalties for Market Abuse
IX	Hearings and Appeals
X	Rules and Guidance
XI	Information Gathering and Investigations
XII	Control over Authorised Persons
XIII	Incoming Firms: Intervention by Authority
XIV	Disciplinary Measures
XV	The Financial Services Compensation Scheme
XVI	The Ombudsman Scheme
XVII	Collective Investment Schemes
XVIII	Recognised Investment Exchanges and Clearing Houses
XIX	Lloyd's
XX	Provision of Financial Services by Members of the Professions
XXI	Mutual Societies
XXII	Auditors and Actuaries
XXIII	Public Record, Disclosure of Information and Co-operation
XXIV	Insolvency
XXV	Injunctions and Restitution
XXVI	Notices
XXVII	Offences
XXVIII	Miscellaneous
XXIX	Interpretation
XXX	Supplemental
Schedule 1 to 22	Including: The Financial Services Authority (1); Regulated Activities (2); EEA Passport Rights (3); The Financial Services and Markets Tribunal (13); Role of Competition Commission (14); and Prohibitions and Restrictions Imposed by the Office of Fair Trading (16).

9.2 In Step 6, each Part, Section and Schedule will be assessed against the three high-level questions identified in this report. The criteria for this assessment are similar to the criteria for Step 5 (see the previous section). The difference is that, in Step 5, the questions are addressed in the context of specific high-level markets, whereas Step 6 takes a generic approach. There may be overlap between the two steps (which follows from the nature of the cross-check).

9.3 Step 6 will also include a discussion of the *generic* competition effects of some of the provisions in the FSMA which may not be picked up in the bottom-up approach in Steps 1 to 5 (or only for some specific high-level markets). These provisions include:

- the powers given to the FSA;
- the authorisation regime;
- the FOS; and
- the FSCS.

10 STEP 7: INVENTORY OF FSMA PROVISIONS WHICH POTENTIALLY HAVE A SIGNIFICANT IMPACT ON COMPETITION

10.1 Steps 1 to 6 would result in an inventory of specific FSMA rules that may have an impact on competition and are therefore of relevance to the OFT Review. In addition, the methodology would already have generated a list of more specific issues and markets for each of those FSMA provisions.

10.2 Thus, the main output of Step 7 will be in the format illustrated in Table 10.1. The first two columns will identify the relevant provisions and the markets affected (which in some cases may be multiple or all markets). The third column contains a brief description of the competition impact, which will follow from the analysis carried out in previous steps. This column will also signal where:

- it is not clear-cut whether regulation strikes the right balance between competition and addressing market failures (here, the competition impacts are clearly qualified as *potential*);
- the actual impact of competition is likely to come more directly from FSA rules than from FSMA provisions (bearing in mind that it is not the objective of this Review to assess the competition effects of FSA rules); or
- the FSMA provision concerned is driven by EU legislation (in which case, the problems identified may not be attributable to, or solvable under, the FSMA).

TABLE 10.1: ILLUSTRATION OF THE INVENTORY OF FSMA PROVISIONS WITH A POTENTIALLY SIGNIFICANT EFFECT ON COMPETITION

Provision	**Affected high-level markets**	**Description of impact**
Part [..]	All markets	Duly facilitates market functioning through [..]
Part [..], Section [..]	Market [..] and market [..]	Potentially distorts competitive structure by [..] But trade-off with market failure [..] On balance, seems to have [due/undue] impact
Part [..], Sections [..], [..] and [..]	Market [..]	Potentially reduces dimensions of competition by [..] But main impact from FSA regulation rather than FSMA, and hence beyond the scope of this Review
Part [..], Section [..]	Market [..] and market [..]	Potentially distorts competitive structure by [..] But driven by EU legislation

10.3 In addition, an attempt will be made in Step 7 to prioritise the potential competition problems identified in the sifting process along two lines:

- First, a tentative ranking of the FSMA provisions in the inventory will be made. In this exercise, a relatively higher ranking will be given to those FSMA provisions that, all other things being equal:
  - affect a higher number of markets;
  - affect a higher number of Type A markets;
  - have competition effects that have been identified as potentially serious in the sifting process; and/or
  - are not directly driven by EU legislation.[32]

- Second, each of the high-level market types analysed (ie, Type A, B and C) will be given a tentative, internal ranking or categorisation, based on the indicator ratings in Steps 2 and 3.

[32] The reason for this last criterion is that any competition effects arising from FSMA provisions that are directly driven by EU legislation will be more difficult to address by the UK government.

10.4 At the end of Step 7 (which is the end of Stage 2 of the Competition Review), the inventory of FSMA provisions, together with the tentative rankings of the FSMA provisions and of the high-level markets, will provide a basis for the OFT to decide whether an in-depth market investigation into any of these areas would be appropriate (in Stage 3).

11 CASE STUDY 1: PROVISION AND MANAGEMENT OF RETAIL INVESTMENT FUNDS

11.1 This case study illustrates the application of the sifting methodology using the example of the high-level market for retail investment funds. It has been undertaken in order to illustrate how the methodology can be applied in practice and to test the effectiveness of the sifting methodology. The case study does not represent the final assessment of the high-level market concerned. The full application of the methodology will be undertaken in Stage 2 of the Review, when further information will be collected and industry experts consulted to complete the analysis.

Description of the high-level market (Step 1)

11.2 Investment funds are collective investments which pool the monies of many investors to create larger investment portfolios. For their money, investors receive units or other types of participation in these funds. By pooling investors' money into a fund that invests in securities on their behalf, investors benefit from economies of scale. They also obtain diversification of risks that they might not have been able to achieve through their own investments.

11.3 Different types of investment fund can be identified:

- *unit trusts*—investment funds established by unit trust managers in the form of trusts to manage a portfolio of securities on behalf of investors;
- *open-ended investment companies* (OEICs)—corporate funds set up as special purpose vehicles with an exclusive objective of investing funds in securities to the benefit of their investors. Since 2001, these have become known as 'investment companies with variable capital' (ICVCs).

11.4 The FSMA refers to these investment funds as collective investment schemes (CISs), and makes the establishment and operation of a CIS a regulated activity. Unit trusts and ICVCs are both open-ended funds—ie, funds whose capital can normally be increased or decreased by their managing body (unit trust manager or ICVC directors) through repurchase or issue of units or shares.

11.5 A third type of collective investment can be identified—*investment trusts*—which are closed-ended investment companies that issue shares to investors and invest the proceeds in a portfolio of securities of other companies. Unlike open-ended CISs, the number of shares a trust issues, and therefore the capitalisation of the trust, are fixed from the start. Investment trusts are not covered by the FSMA, but instead fall under company law and stock-exchange listing rules. However, from the investor's perspective, they are similar in nature and objectives to CISs, and might therefore be classified as being in the same market. In addition, investment trusts are often managed by fund management groups that also manage open-ended CISs.

11.6 For the purposes of this case study, the definition of what constitutes the relevant high-level market could be extended to cover *unit-linked life funds*. Despite being an insurance product, they contain a strong investment element (similar to other pooled investments) and are often marketed as such. Unit-linked life funds are provided by life assurance companies, and do not fall under FSMA regulation of CISs.

11.7 Life funds are generally marketed to private investors, but units or shares in unit trusts, ICVCs and investment trusts are often held by institutional investors as well. This case study focuses only on retail investment funds. Institutional fund management services are classified in a separate high-level market (see Table 4.1 above). However, the fact that retail funds also serve institutional investors has implications for some of the competitive indicators, as discussed below.

11.8 This market comprises several vertically related activities, namely provision, management and distribution of retail investment funds. Investment funds are managed by fund managers. Fund management can be internal to the provider of the fund (eg, a unit trust company may employ a person to make day-to-day decisions about what shares and other investments to buy and sell); it can be external but conducted within the same group as the fund operator (eg, an investment trust may belong to a wider fund management group and delegate fund management to another subsidiary of the group); or management can be fully outsourced and carried out by an external, independent fund manager (eg, a life assurance company may employ an external fund management firm to manage the investment portfolio). Retail investment funds are distributed to the general public in various ways. For example, retail investors can either buy units or shares directly from the fund operator (eg, via the Internet), from the operator's sales force or tied agents, or from intermediaries such as independent financial advisers (IFAs), discount brokers or fund supermarkets.

Competition indicators for retail investment funds (Step 2)

MARKET CONCENTRATION: 'LOW'

11.9 According to statistics of the Investment Management Association (IMA), the total value of investment funds managed in the UK is around £233 billion (November 2003). This includes unit trusts and ICVCs of both retail and institutional investors. Sales figures suggest that about 60% of the funds are sold to retail investors. There are 1,930 different funds, just over half of which are ICVCs.

11.10 The funds are operated by a total of 128 fund management companies. As reported in Table 11.1, the ten largest companies account for 45% of the market in terms of funds under management. Fidelity Investments is the largest fund management company, with a market share of approximately 9%. Using data on market shares for all 128 companies, the HHI is 308. This means that the market for unit trusts and ICVCs is unconcentrated.

TABLE 11.1: MARKET SHARE OF TOP 10 FUND MANAGEMENT COMPANIES (UNIT TRUSTS, ICVCS)

Company	**Funds under management (£ billion)**	**Market share (%)**
Fidelity Investments	21.2	9.1
Threadneedle Investments	12.0	5.1
Scottish Widows Unit Trusts Managers	11.7	5.0
Invesco Perpetual	11.3	4.8
Legal & General Unit Trust Managers Ltd	10.5	4.5
M&G Group	9.1	3.9
Schroder Investments Ltd	8.9	3.8
Halifax Investment Fund Managers Ltd	8.0	3.4
Gartmore Investment Management Plc	6.8	2.9
SLTM	6.3	2.7
Whole market total	**233.4**	**100%**

Source: IMA, November 2003; OXERA calculations.

11.11 A similar conclusion is reached in relation to the other types of investment fund. For example, statistics of the Association of Investment Trust Companies (AITC) show that there are a total of 358 investment trusts (October 2003). The largest of these (Foreign & Colonial Investment Trust, which is managed by Foreign & Colonial Management Ltd) has a market share of only about 7% in terms of total investment trust assets.[33]

ENTRY BARRIERS: 'LOW/MEDIUM'

11.12 Regulatory requirements (eg, fund authorisation, permission to carry out fund management activities or capital requirements) may constitute barriers to entry, but the high number of companies in the market indicates that these may not be so significant as to result in a concentrated market. There are also non-regulatory barriers to entry. For example, fund managers need to have expertise in specific areas, and past performance and reputation are also important factors in determining the success of companies in the market. These factors may constitute barriers to entry, in particular to new entrants without expertise in the field. However, there has been some entry into the market, if mainly from firms that are already well established in the USA and elsewhere.

ECONOMIES OF SCALE/NETWORK EFFECTS: 'LOW/MEDIUM'

11.13 There appear to be some economies of scale in the industry, as evidenced by recent consolidations. These were partly driven by the need to expand the pool of available resources, develop efficient distribution systems, and widen the search for new customers from different regions.[34] Some of the recent mergers were not only between fund management firms but also involved banking and insurance companies. On the other hand, while it is difficult to estimate the importance of economies-of-scale effects, the number of funds and fund management companies in the market suggests that such effects are relatively small when compared with the total market size.

VERTICAL INTEGRATION: 'LOW/MEDIUM'

11.14 Fund management companies often belong to banking, securities or insurance groups, but the UK market (unlike many Continental European markets) is also characterised by a large number of independent firms that are not linked to a

[33] See Mintel (2003), 'Collective Investments', August.
[34] See International Financial Services London (2003), 'Fund Management', City Business Series, May.

broader financial services group.[35] As mentioned above, there may be a separation of fund provision and management activities. However, the co-existence of different structures in the market suggests that funds where provision and management are not integrated compete effectively with those where these functions are integrated.

11.15 A similar argument applies to the potential integration with the fund distribution channels. Financial intermediaries (eg, IFAs) are the main distribution channel for CISs, with a market share of 45% of gross sales in 2002. This channel co-exists with distribution via a sales force or tied agents (29%), direct sales by fund operators (11%), and other channels of distribution.[36] Since the different distribution channels compete with each other, there should be no significant concerns about anti-competitive effects. However, the distribution of investment products has been subject to considerable scrutiny by the FSA, and new rules have recently been put forward in this respect.[37] This will be examined separately (in Stage 2 of the research) as part of the analysis of the high-level market for investment and pension advice to retail customers.

COUNTERVAILING BUYER/SUPPLIER POWER: 'HIGH' (PROBLEMATIC)

11.16 Retail investment funds are bought by a large number of small, often poorly informed retail investors; therefore, buyer power is likely to be limited in this market. Buyer power may be more effective if larger institutional investors also invest in the funds, thus partly protecting retail investors as well.

SWITCHING COSTS: 'MEDIUM'

11.17 Investors have more than 2,000 different investment funds to choose from (including investment trusts and life funds). Switching may be impeded by investors' inability to distinguish between the characteristics of different funds (see below for a discussion of the asymmetric information in the market). Also, investors incur a cost when switching. For example, the switching costs for unit trusts are largely determined by the bid–offer spread, which is typically between 5% and 6%, although some funds (eg, tracker funds) charge less and additional discounts may be available when purchasing funds from a fund supermarket or discount broker.[38]

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[35] See IMA (2002), 'Fund Management Survey 2002'.
[36] See Mintel (2003), op. cit.
[37] See FSA (2003), 'Reforming Polarisation—Removing Barriers to Choice', FSA Consultation Paper 166.
[38] Source: FSA website.

11.18 Switching is made somewhat easier by the considerable amount of advertising for investment funds, which also gives an indication of the importance of competitive pressures in the market.[39] The publication of league tables of past performance of funds is likely to have reduced switching costs. Also, investors may hold units in multiple funds; instead of switching their investments between funds, they can invest new capital in a new fund in addition to those they already hold. The indicator is therefore rated as 'medium'.

GEOGRAPHIC SCOPE: 'MEDIUM'

11.19 UK retail investment funds and fund management companies also face competition from abroad. UK funds are marketed abroad, and overseas funds are sold to UK customers. Similarly, many UK fund managers are part of an international group, compete with fund managers overseas, or face competition from fund managers that are already established in the UK or may enter the UK market. However, while fund provision and management are international in scope, the main distribution channels for investment funds (eg, IFAs) are largely domestic.

OVERALL CLASSIFICATION FROM COMPETITION INDICATORS: 'BELOW' CRITICAL LEVEL

11.20 Table 11.2 summarises the competition indicators for the retail investment fund market. Overall, this market does not give rise to structural competition concerns: concentration is 'low' and entry barriers are not significant (although some of the other indicators—in particular, the lack of buyer power and the high switching costs—potentially give greater cause for concern). On balance, the market is therefore categorised as falling 'below' the critical competition threshold.

[39] Advertising activities in the industry are examined in Mintel (2003), op. cit.

TABLE 11.2: SUMMARY OF COMPETITIVE STRUCTURE INDICATORS IN THE PROVISION AND MANAGEMENT OF RETAIL INVESTMENT FUNDS

	Low (unproblematic)	**Medium**	**High (problematic)**
Market concentration	✓		
Entry barriers	✓	✓	
Economies of scale/network effects	✓	✓	
Vertical integration	✓	✓	
Buyer/supplier power			✓
Switching costs		✓	
Geographic scope		✓	

Risk and market failure indicators for retail investment funds (Step 3)

OPERATIONAL RISK: 'HIGH'

11.21 Operational risks arise from problems in the fund management process. These include breaches of fund guidelines (eg, violations of investment restrictions set out in the contractual fund rules), misdealing (eg, errors in issuing orders to brokers), valuation errors (eg, mistakes in the net asset value (NAV) calculations of funds), settlement problems, subscription/redemption mistakes, or indeed fraudulent misappropriation of funds. The likelihood of these risks occurring and their impact in terms of losses have been examined by OXERA (2001) and Biais et al. (2003).[40] Notably, these studies show that the distribution of losses is markedly skewed—there are numerous small-loss events, along with a few very large losses.

FINANCIAL/DEFAULT RISK: 'HIGH'

11.22 Investors may be exposed to loss if a fund management company defaults. If investor funds are not clearly segregated from the funds of the company, all creditors of the company may have a claim against investor funds in an insolvency. In that case, the investors simply become creditors of the company in receivership or liquidation. It is for this reason that regulations normally require fund assets to be segregated and entrusted for safekeeping with a

[40] See Franks, J., Mayer, C. and OXERA (2001), 'Risks and Regulation in European Asset Management: Is there a Role for Capital Requirements?', report for the European Asset Management Association; and Biais, B., Casamatta, C. and Rochet, J.C. (2003), 'Operational Risk and Capital Requirements in the European Fund Industry', report for the Fédération Européenne des Fonds et Sociétés d'Investissement.

depositary or trustee. Although there have not been any notable defaults in recent years, the risk of losses could be significant in the absence of regulations.

SYSTEMIC RISK: 'LOW'

11.23 Systemic risks are not significant. Unlike in the banking sector, where a bulk of funding comes from potentially volatile short-term deposits, fund management companies have a higher proportion of long-term funding. They also have marketable assets, which means that, in contrast to banks, the value of companies in liquidation may differ little from their value on a going-concern basis. If a fund manager fails and investor funds are held separately from the firm's own assets, funds under management can be transferred at a low cost from one manager to another. Moreover, fund managers do not usually take positions on their own account, so that links between firms are limited. There is therefore little reason to believe that the financial collapse of one fund manager should have repercussions elsewhere.[41]

NEGATIVE EXTERNALITIES: 'MEDIUM'

11.24 Externalities in the context of the retail investment fund industry relate mainly to firm reputation and investor confidence. For example, slack, negligence or fraud of one fund management firm may reduce the firm's own reputation if revealed to the market. However, such behaviour is also likely to affect the reputation of other fund managers and reduce investors' confidence in the market at large. Most likely, an individual firm will not take into account the impact of reduced reputation of all its competitors and loss of investor confidence when making the decision to behave in a certain way.

11.25 It is difficult to assess the severity of the externality problem in the market. On the one hand, problems are not as severe as, for example, in the banking industry or in clearing and settlement (discussed in the next section), where externalities are associated with systemic failures. On the other hand, any significant decline in investor confidence in the market could have detrimental effects, which explains why maintaining confidence is one of the primary objectives of regulation. The externality problem has therefore been classified as 'medium'.

[41] See Franks, Mayer and OXERA (2001), op. cit.

ASYMMETRIC INFORMATION (OFFERINGS): 'HIGH'

11.26 The main source of market failure in the retail fund market is asymmetric information between providers and customers. Both types of asymmetry that are distinguished in Step 3 are present—ie, non-transparent product offerings and non-transparent performance/quality.

11.27 With regard to the first type, unlike more sophisticated institutional investors, which regularly engage in financial transactions, a large proportion of retail investors may have considerable difficulties in choosing among the many types of fund on offer, with a wide spread of performance and complex fee structures, and they may be imperfectly informed about the investment product they ultimately buy.

11.28 The lack of information or knowledge on the part of retail investors is evident when considering the strong dependence on expert advice when buying investment products. Consumer research by Mintel indicates that most investors would turn to their bank or building society for investment advice rather than rely solely on their own assessment.[42] In addition, 46% of respondents to a Mintel survey had used an IFA as an information source, with IFAs also being the main distribution channel for people investing in investment funds. Further evidence is available from FSA research into information/education problems of retail investors.[43]

ASYMMETRIC INFORMATION (PERFORMANCE/QUALITY): 'HIGH'

11.29 Informational problems on the part of retail investors equally apply to the performance and quality of fund providers and managers. For example, investors are unlikely to know about, or be able to evaluate, the financial risks taken by the fund management company, the care the company takes in managing the fund and processing transactions, and the likelihood of fraud being perpetrated. They also find it difficult in general to assess the relative performance of their fund, despite the information disclosed by funds on a regular basis.[44]

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[42] See Mintel (2003), op. cit.

[43] See, for example, FSA (2003), 'Standardisation of Past Performance', a report on consumer research carried out on behalf of the FSA by The Research Business International Ltd, FSA Consumer Research Paper 21; and FSA (2000), 'Informed Decisions?—How Consumers use Key Features: A Synthesis of Research on the Use of Product Information at the Point of Sale', FSA Consumer Research Paper 5.

[44] For a discussion of the difficulties of consumers in interpreting fund performance information, see FSA (2003), 'Standardisation of Past Performance', a report on consumer research carried

PUBLIC GOODS: 'HIGH'

11.30 The potential public goods problem in the market relates to information. Once information is available, others may use it at zero cost and no individual can prevent others from using that information. This feature gives information the characteristics of a public good. Individual investors have incentives to obtain information about, and monitor, the behaviour of firms, but the incentives are inadequate. Collection of information is a costly process, and the benefits of any individual's monitoring may accrue more widely to others. This may result in a free-riding problem, where individuals seek to free-ride and rely on the efforts of others. This problem may reinforce information asymmetries that exist in the market.

11.31 Although important in theory, it is difficult to assess the importance of the problem in practice. What is clear is that retail investors cannot be expected individually to collect and process information in order to monitor effectively the performance of funds and the behaviour of fund managers. In many cases, they need to rely on the regulator to carry out these functions. The public goods indicator has therefore been classified as 'high'.

OVERALL CLASSIFICATION FROM RISK/MARKET FAILURE INDICATORS: 'ABOVE' CRITICAL LEVEL

11.32 The inherent characteristics of the retail fund market raise significant concerns about investor protection and investor confidence in the system. This explains the high level of regulatory intervention in the market. Overall, the risk/market failure indicators, summarised in Table 11.3, suggest that the retail investment fund market should be classified as being 'above' the critical level—ie, risks and market failures are significant, and a high degree of regulatory intervention is observed in practice.

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TABLE 11.3: SUMMARY OF RISK/MARKET FAILURE INDICATORS FOR RETAIL INVESTMENT FUNDS

	Low	Medium	High
Operational risk			✓
Financial/default risk			✓
Systemic risk	✓		
Negative externalities		✓	
Asymmetric information (offerings)			✓
Asymmetric information (performance/quality)			✓
Public goods			✓

Assessment of competition effects of regulatory framework for retail investment funds (Steps 4 and 5)

CLASSIFICATION OF THE RETAIL INVESTMENT FUND MARKET (STEP 4)

11.33 The discussion under Steps 2 and 3 of the sifting methodology suggests that the market for retail investment funds should be classified as one in which:

- structural competition problems are relatively small, but
- concerns about risks and market failures are significant.

  This means that the market is of Type B, as defined in Step 4. The relevant high-level questions to be addressed when examining the competition impact of the FSMA in the market are therefore:

- **Q2:** Does the FSMA unduly distort dimensions of competition in the market, for example, by imposing unnecessary restrictions on product offerings, restricting behaviour or reducing innovation?
- **Q3:** Does the FSMA duly facilitate market functioning, for example, by protecting retail investors, improving their information about risks and therefore promoting investor confidence?

11.34 The high-level question about the possible adverse impacts of the FSMA on the competitive structure of the retail investment fund market (Q1) can be discarded, as it has been established that, despite the existence of regulation, this particular market is not characterised by significant structural competition problems.

11.35 This is not to say that the current regulatory regime has had no impact at all on market structure. Indeed, authorisation rules, capital requirements and the general compliance burden are important and may have raised entry barriers for retail fund management companies at the margin. However, any structural impacts in this and other Type B markets are arguably not sufficiently important to raise structural competition concerns, and the sifting methodology (in particular, Step 2) has been designed to exclude such concerns at this stage.

OVERVIEW OF THE REGULATORY FRAMEWORK FOR RETAIL INVESTMENT FUNDS

11.36 Establishing or operating CISs, and managing investments, are regulated activities under the FSMA, as specified in more detail in the Regulated Activities Order 2001. Fund management companies are therefore required to seek authorisation from the FSA. Like other investment firms, they are also subject to the rule-making powers of the FSA and need to comply with the general rules the FSA makes in relation to financial resources, training, management arrangements and conduct of business, to name but a few of the main areas where the FSA sets regulatory standards for fund managers and other authorised firms.

11.37 However, CISs are the only financial products in the UK that are subject to specific product regulation under the FSMA. Part XVII of the FSMA deals with CISs. It contains the definition of CIS (Sections 235 to 237)[45] and gives the FSA direct powers to make rules for unit trusts (Sections 247 and 248). The FSMA also provides for the Treasury to make regulations for ICVCs (Section 262). These regulations are implemented in secondary legislation (the Open-ended Investment Companies Regulations 2001). They establish the corporate code for ICVCs and give the FSA powers to make rules for ICVCs.

11.38 Retail investment funds are also subject to product regulation at the European level through the Directive on Undertakings in Collective Investments in Transferable Securities (UCITS Directive).[46] This Directive is, except for certain provisions, a minimum harmonisation Directive, setting basic standards for all Member States' schemes that meet its criteria. The FSMA implements key provisions of the UCITS Directive in UK law. Whereas the UCITS Directive applies to retail funds only, the FSMA does not distinguish between different types of investor in funds. Similarly, FSA rules on CISs apply to retail and institutional investment funds.

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[45] The Collective Investment Schemes Order 2001 contains further details on which type of scheme constitutes a CIS.
[46] Council Directive No85/611/EEC as amended.

11.39 The FSA rules on unit trusts and ICVCs are contained in the CIS Sourcebook of the FSA Handbook of rules and guidance. An analysis of FSA rules is beyond the scope of this research, but, broadly speaking, the Sourcebook contains rules in relation to the following main areas.[47]

- *Regulation of operators*—fund operators, as well as the depositaries or trustees of funds, are regulated to ensure that the firms behave with integrity and treat customers fairly. Also, conflicts of interest in the operation of the fund must be managed in investors' interests.
- *Custody and oversight*—there must be an independent depositary or trustee to safekeep fund assets, and independent monitoring of the fund operator.
- *Operating characteristics*—investors must have a right to redeem units at a price based on the NAV; funds should be valued regularly in line with the detailed pricing rules; and investors must have rights proportionate to the proceeds of the fund's investments. Fund charges to investors are governed by specific conditions.
- *Investments and borrowing*—fund investments are subject to clearly defined investment restrictions. There is a limited ability to borrow (up to 10% of the fund).
- *Information and investor engagement*—there must be appropriate disclosure about the fund before the point of sale and regularly thereafter, and specific rules apply—for example, to the fund prospectus. Investors must have the right to determine fundamental matters concerning the operation of the fund.

11.40 These rules relate to unit trusts and ICVCs. The CIS Sourcebook does not cover investment trusts; neither does the FSMA. As mentioned above, investment trusts are subject to company law. They are also subject to stock-exchange listing rules. Similarly, the Sourcebook does not apply to unit-linked life funds, which may also be considered to be in the same market as CISs. Life funds are an insurance product. While the providers of life funds are regulated (eg, they must comply with prudential regulation of insurance companies and conduct-of-business rules), the funds themselves are not subject to specific FSA product regulation.

11.41 Retail investors investing in any type of fund are, however, covered by the Financial Services Compensation Scheme (as provided for in Part XV of the FSMA, with detailed rules contained in the FSA Handbook on 'Compensation'),

[47] The summary is largely based on the discussion of CIS foundations contained in FSA (2003), 'The CIS Sourcebook—A New Approach', FSA Consultation Paper 185.

and the Financial Ombudsman Service (as provided for in Part XVI of the FSMA, with detailed rules contained in the FSA Handbook on 'Complaints').

ASSESSMENT OF COMPETITION EFFECTS OF RELEVANT FSMA PROVISIONS (STEP 5)

11.42 In relation to high-level question 2, there are elements in the regulatory framework for retail investment funds that have the potential to reduce the dimensions of competition in the market.

- The FSMA definition of collective investments covers only unit trusts and ICVCs. Correspondingly, FSA product regulation is restricted to these funds and excludes investment trusts and unit-linked life funds. For example, while unit trusts and ICVCs are subject to investment and borrowing restrictions, investment trusts have more flexibility in their investment decisions and have extensive abilities to borrow, subject to the approval of the trust's board of directors.
- CIS regulation distinguishes between unit trusts and ICVCs. Although the main rules in the CIS Sourcebook equally apply to unit trusts and ICVCs, there remain some differences in the regulatory treatment of the two types of fund—for example, in relation to charges and performance fees and to available classes of units or shares. The FSMA itself also distinguishes, at least formally, between the two types of fund—ie, FSA rule-making powers on unit trusts are dealt with in primary legislation, whereas secondary legislation deals with ICVCs.
- Restrictive product regulation for CISs may potentially have negative impacts on product offerings and product innovation and, ultimately, on investor choice. For example, investment restrictions may reduce flexibility and prohibit fund managers from implementing investment strategies that could deliver higher returns for investors. Similarly, the requirement to redeem units at all reasonable times could limit investment opportunities and increase costs for those investors who would be willing to accept less immediate access to their money.

11.43 These rules are detailed in the CIS Sourcebook, but the FSMA gives the FSA specific powers in relation to unit trust schemes to make rules for 'restricting or regulating the investment and borrowing powers exercisable in relation to the scheme' and for 'the issue and redemption of the units under the scheme'. These powers are extended to ICVCs in the Open-ended Investment Companies Regulations 2001.

11.44 There is an inherent regulatory trade-off—while lighter product regulation has considerable benefits from a competition point of view, it may fail to provide investors with adequate protection and consequently jeopardise investor confidence in CISs. Hence, the third competition impact mentioned above is not 'undue' *per se*; it should be seen in light of the market failures that regulation is seeking to address.

11.45 The FSA has recognised that the current regime may not strike the optimal balance and has therefore put forward proposals for reforming the regulation of CISs.[48] Under the proposed new regime, retail investors will have access to a wider range of investment opportunities and product features through better information about the progress of their investments and through the easing of some restraints on fund managers to allow greater flexibility in the design and operation of funds. These proposals mainly apply to non-UCITS, given the constraints imposed by the UCITS Directive on UK retail fund regulations. In addition, under the new proposals, the unit trust and ICVC rules would be more closely aligned.

11.46 Furthermore, the proposals envisage a new category of non-retail schemes, restricted to investment by institutional and expert investors only. These would be subject to lighter product regulation than retail schemes, reflecting the fact that the investors in them can be expected to have greater expertise and experience than the majority of retail investors. These proposals taken together are likely to increase investor choice and have other positive competition effects, such as facilitating competition and a level playing-field between unit trusts and ICVCs.

11.47 Turning to high-level question 3, the FSMA (as well as the FSA rules and statutory instruments that implement the legislation) contains provisions that have important positive impacts on competition in the retail investment fund market. Any provision that significantly contributes to improving investor protection and promoting investor confidence can broadly be interpreted as facilitating the operation of the market. For example, the FSA rules governing conduct of business, training and integrity of authorised persons are, among other rules, aimed at protecting investors.

11.48 These rules mainly stem from the FSMA provision which gives the FSA its general rule-making powers. They apply to fund management companies as they do to other authorised firms. Since the FSA rules are not the focus of this

[48] FSA (2003), 'The CIS Sourcebook—A New Approach', FSA Consultation Paper 185.

Review, and since the generic FSMA provision applies to all markets to be examined in Stage 2 of the Review, this is not discussed further.

11.49 FSMA itself does, however, contain some more specific provisions which are likely to have positive impacts on the functioning of the market. For example, the FSMA clearly separates the functions of unit trust management and asset safekeeping by an independent trustee (Section 242). This provision is one of the most fundamental means of protecting investors against the risk of losses. The FSMA also contains provisions that improve disclosure and hence reduce the informational problems in the market to some extent (eg, Sections 238 and 247). More generally, and not specific to CISs, the FSMA sets out the provisions which give retail investors access to dispute resolution (through the FOS) and to compensation in the event of loss (through the FSCS).

Conclusion: list of relevant FSMA provisions with a potentially significant impact on competition in the retail investment fund market (Step 7)

11.50 As a result of the previous illustrative analysis, the following FSMA provisions have been identified as having a potentially significant impact on competition in the retail investment fund market. The final assessment of provisions would be undertaken in Stage 2 of the Review. All identified provisions would then be added to the full list of FSMA provisions with competition effects that would be collated as Step 7 of the sifting methodology.

11.51 Step 6, the top-down cross-check, will not be specific to any of the high-level markets and is therefore not addressed as part of the two case studies presented here. However, it is likely that some of the generic issues identified in the case study on investment funds would also be picked up in Step 6—for example, the FSMA provision which gives the FSA its general rule-making powers or the provisions which establish the FOS and the FSCS.

11.52 It should be noted that the two case studies in this report (investment funds and clearing and settlement) are different from other markets because there are specific FSMA provisions dealing with these markets.

FSMA PROVISIONS WHICH POTENTIALLY REDUCE DIMENSIONS OF COMPETITION

- Part XVII, Sections 235 to 237—product regulation applies to unit trusts and ICVCs but not to comparable products (ie, investment trusts and unit-linked life funds). This asymmetry in regulation may distort competition between these products.
- Part XVII, Sections 247, 248 and 262—FSA rule-making powers differ for unit trusts and ICVCs (at least formally); although FSA rules for these categories may be more closely aligned in forthcoming regulation.
- Part XVII, Section 247—the FSA can impose prescriptive rules on unit trusts (eg, restrictions on investment and borrowing powers). Section 6 of the Open-ended Investment Companies Regulations 2001, made under the power of FSMA (Section 262), extends this provision to ICVCs. This may reduce consumer choice, but also reduces market failures. In addition, proposed new rules would increase consumer choice.

FSMA PROVISIONS WHICH POTENTIALLY FACILITATE MARKET FUNCTIONING

- Part XVII—market functioning is facilitated by various provisions in Part XVII that promote investor protection and confidence (without unduly distorting dimensions of competition), including the FSMA requirement to separate management and trustee functions and the provisions that promote information disclosure.
- Part XV—establishment of the FSCS promotes market confidence and hence market functioning;
- Part XVI—establishment of the FOS promotes market confidence and hence market functioning.

12 CASE STUDY 2: PROVISION OF CLEARING AND SETTLEMENT INFRASTRUCTURE

12.1 This case study uses the provision of clearing and settlement infrastructure as a second example of how the sifting methodology can be applied in practice. As with the first case study on retail investment funds, it is included in this report for illustrative purposes only. In Stage 2 of the Review, further evidence will need to be gathered to support the analysis and finalise the assessment.

Description of the high-level market (Step 1)

12.2 This high-level market covers the clearing and settlement of trades on securities markets. In particular, these include the following.

- *Clearing of equity trades by a central counterparty (CCP)*—a CCP stands between the two parties that have agreed a trade, acting as buyer to all sellers and as seller to all buyers. It also usually engages in risk management (through margin requirements), and netting, which is the offsetting of positions or obligations by trading partners. After netting, transactions are ready for settlement. CCPs have only recently been introduced into European equity markets. LCH Equityclear is the CCP on the London Stock Exchange and virt-x. It was set up as a partnership between the London Clearing House (LCH), CREST and the London Stock Exchange. In December 2003, LCH completed its merger with Clearnet, the CCP on the Euronext exchanges, forming LCH.Clearnet.[49]
- *Clearing role on derivatives markets*—the role of a clearing house in derivatives markets is also one of a CCP, although with a relatively greater emphasis on risk management through margin requirements on trading parties, in order to secure the timely performance of contracts. In principle, derivatives exchanges can undertake their own clearing functions, but in practice most exchanges make use of a clearing house. In the UK, LCH.Clearnet is the clearing house for the Euronext.life derivatives exchange, the International Petroleum Exchange, the London Metal Exchange, and a number of over-the-counter (OTC) derivatives markets.

[49] The merger between LCH and Clearnet was approved by the OFT in August 2003. Euronext is the result of a merger in 2001 between the Paris, Brussels and Amsterdam Stock Exchanges; it also took over the Portuguese Stock Exchange.

- *Settlement of equity trades by a central securities depository (CSD)*—settlement refers to the completion of a transaction, whereby the seller transfers securities to the buyer and the buyer transfers money to the seller. Settlement of equity trades mostly takes place electronically via book entries in CSDs. Custody refers to the safekeeping and administration of securities in those CSDs. Many securities are now effectively held in electronic form in CSDs, although most investors still use custodian banks as intermediaries rather than having an account directly in the CSD. Custodian services are discussed as a separate high-level market (see Table 4.1 above). CREST is the CSD for UK-issued (and Irish) shares. In 2002, it merged with Euroclear, which controls the national CSDs in France, Belgium and the Netherlands, as well as 'international CSD', Euroclear International, which has traditionally settled cross-border bond trades but is also increasingly moving into equity settlement.

12.3 Hence, the main relevant players in this market are LCH.Clearnet and CREST. They are currently the only two clearing houses recognised under the FSMA. Their clearing and settlement activities do not compete with each other and therefore do not form a market as such. However, they have some economic characteristics in common, as discussed below, which is why they are considered as being within the same high-level market.

Competition indicators in clearing and settlement (Step 2)

MARKET CONCENTRATION: 'HIGH'

12.4 Market concentration is very high, since both LCH.Clearnet and CREST are basically monopolies in their respective activities. Hence the HHI would have the maximum of value of 10,000.
There is some potential for competition 'for the market' between clearing houses. An example is the competing offer made last year by Eurex Clearing (owned by Deutsche Börse and the Swiss Stock Exchange) to become the CCP on the London Stock Exchange. This was at the time of the merger discussions between LCH and Clearnet. In the end, the London Stock Exchange decided to stay with LCH Equityclear.

12.5 In principle, exchanges could also have multiple CCPs, thereby giving customers choice. However, this arrangement is likely to be less efficient because of lost scale and network effects (see also below), and at present only the virt-x exchange has two different (though interlinked) CCPs on its trading platform: LCH and x-clear (a Swiss CCP).

12.6 There is also some potential for competition between CSDs for cross-border settlement and holding of securities. This is facilitated through electronic links between CSDs, which make it possible to create 'shadow' securities (or depository instruments) in one CSD of securities originally issued in other CSDs. However, this form of competition seems unlikely to become significant in the short term, in part because of the remaining cost differences between domestic and cross-border settlement and holding.[50]

ENTRY BARRIERS: 'HIGH'

12.7 Entry barriers are high in this market. This is mainly because both clearing and settlement activities have natural monopoly characteristics—ie, high economies of scale and network effects, as discussed below. Regulatory barriers also play a role (although this is probably limited compared with the role of economies of scale).

ECONOMIES OF SCALE/NETWORK EFFECTS: 'HIGH'

12.8 The market for clearing and settlement services is characterised by significant economies of scale and network effects. For example, efficient transacting requires that securities, buyers and sellers link into the same CSD. Because future buyers and sellers are unknown, and because buyers and sellers want access to the complete set of potential counterparties, efficient transacting also requires that all shares of a particular company and all potential buyers and sellers of that security link into the same CSD.

12.9 Moreover, there are fixed costs associated with holding accounts at CSDs; thus investors or their agents have an economic interest in holding their complete portfolio of electronic shares within the same CSD. The combination of a single CSD holding all the shares of a particular firm, and investors (or their agents) wanting to hold their portfolios in a single CSD, therefore produces a market structure in which there is a single CSD that will tend to hold all the shares owned by (and traded between) a large number of investors who invest within

[50] See, for example, Niels, G., Barnes, F. and Dijk, R. van (2003), 'Unclear and Unsettled: The Debate on Competition and Regulation in Clearing and Settlement of Securities Trades', *European Competition Law Review*, **24,** 634–9.

the limits of that CSD. In other words, the market has natural monopoly characteristics.

12.10 Similar economies of scale and network effects apply to CCPs. In particular, the more trades that are cleared by the same CCP, the greater the potential for netting efficiencies. The strength of these effects can be illustrated by the history of the National Securities Clearing Corporation (the CCP in the USA, and now part of the Depository Trust & Clearing Corporation). In the 1970s, there was not a single system, but rather a number of competing systems, with consumers having a choice of where to clear and settle. However, over time, all clearing business tipped towards this CCP, which then gradually took over the other US systems.[51]

VERTICAL INTEGRATION: 'MEDIUM'

12.11 Vertical integration has not been a major issue in the UK because both the LCH and CREST are mutual firms, owned by their users, and vertically separate from the exchanges on which they operate.[52] This contrasts strongly with other markets, in particular Germany, where the stock exchange, CCP and CSD form part of the same 'vertical silo', owned by Deutsche Börse. Such vertical silos raise potential competition concerns, as witnessed by the European Commission's investigation into Deutsche Börse.[53]

12.12 However, the recent mergers between CREST and Euroclear, and LCH and Clearnet, have given rise to some potential concerns regarding vertical integration. Euroclear is very active in the downstream market of asset servicing and custody services, which has led to complaints by other custodian banks.[54] It also owns almost 10% of LCH.Clearnet. Clearnet, on the other hand, is largely owned by the Euronext exchange, which will own 41.5% of the LCH.Clearnet combination (although it only has 24.5% of the voting rights).
This indicator is therefore rated as 'medium'.

[51] See Niels, Barnes, and Dijk (2003), op. cit.

[52] The exchanges are also among the users that own the systems, but this relationship is not sufficiently strong to be considered vertical integration for the purpose of economic analysis.

[53] Niels, Barnes, and Dijk (2003), op. cit.

[54] See 'Not so Fair and Clear', news story 940, March 25th 2003, available at *www.globalcustody.net*; and B.N.P. Paribas (2002), 'Clearing and Settlement in the European Union: Main Policy Issues and Future Challenges', a paper submitted to the European Commission.

COUNTERVAILING BUYER/SUPPLIER POWER: 'LOW' (UNPROBLEMATIC)

12.13 Both LCH.Clearnet and CREST are owned by their direct users, including both exchanges upstream and brokerage firms and other intermediaries downstream. In principle, exchanges could perform their own clearing functions, but this self-provision is unlikely to impose a significant competitive constraint.

12.14 Nevertheless, there is a mutual dependence between the exchange, on the one hand, and the clearing house and CSD, on the other. Thus, they seem to have relatively similar bargaining positions in relation to each other. Furthermore, the downstream users (and owners) of LCH and CREST are often large and well-informed financial services firms. Therefore, this indicator is rated as 'low' (which means relatively unproblematic in this respect).

SWITCHING COSTS: 'HIGH'

12.15 Market parties that trade on an exchange for which LCH is the clearing house must also deal with LCH as the CCP. Exchanges themselves might switch to using another clearing house, but the costs involved are very high.

12.16 With regard to settlement, securities issued into CREST must ultimately be held in that CSD. Larger intermediaries could, in principle, move their UK securities holdings to another CSD via an electronic link, creating a 'shadow' security in the host CSD. However, such cross-border holdings tend to be much more expensive than domestic holdings:

- first, the security would have to be moved to the other CSD, which involves a cross-border settlement charge. CREST charges at least five times more for cross-border settlements than for domestic (intra-system) ones (other CSDs may charge a larger differential);
- second, the holding of the securities in another system incurs higher ongoing custody charges (for example, domestic holdings in CREST are free, but holding foreign depository instruments in CREST incurs a charge). Hence, the cost of such switching is 'high'.

GEOGRAPHIC SCOPE: 'MEDIUM'

12.17 As described above, both LCH and CREST face some (limited) competitive threat from overseas clearing and settlement systems. More importantly, the market for the provision of clearing and settlement infrastructure is becoming more international (pan-European) in nature. The recent mergers between

CREST and Euroclear, and LCH and Clearnet, are clear illustrations of this consolidation. One result is that CREST and Euroclear already offer 'domestic' settlement charges for cross-border transactions between the various national CSDs that are now controlled by the new entity.

OVERALL CLASSIFICATION FROM COMPETITION INDICATORS: 'ABOVE' CRITICAL LEVEL

12.18 Table 12.1 summarises the structural competition indicators for the clearing and settlement market. The high concentration of the market, explained by high entry barriers, economies of scale and network effects, and high switching costs, suggests that this market should be classified as being 'above' the critical competition threshold.

TABLE 12.1: SUMMARY OF COMPETITIVE STRUCTURE INDICATORS IN CLEARING AND SETTLEMENT

	Low (unproblematic)	**Medium**	**High (problematic)**
Market concentration			✓
Entry barriers			✓
Economies of scale/network effects			✓
Vertical integration		✓	
Buyer/supplier power	✓		
Switching costs			✓
Geographical scope		✓	

Risk and market failure indicators in clearing and settlement (Step 3)

OPERATIONAL RISK: 'HIGH'

12.19 Operational risk occurs when customers are at significant risk of losing their funds from operational failures of the financial services providers—in this case LCH.Clearnet and CREST. Operational errors on the part of the service provider could lead to default, and, if severe enough, precipitate a systemic event (see below).

12.20 As has been noted, risk management is the main task of a clearing house, but the effectiveness of any risk-management procedure is only as good as its implementation by management. Since risk concentration at a clearing house is considerably greater than for any individual member, the repercussions of poor management are also greater.[55] The situation is exacerbated when:

- market participants do not have the right incentives to monitor risk taken on by the clearing house; or
- there is a presumption that the authorities will step in, should there be a severe failure (this moral-hazard argument is discussed further below); or
- the clearing house clears many products in many markets, leading to operational complications.

12.21 CSDs are also subject to operational risk, particularly as cross-border transactions increase. Systems are not always designed to interoperate, and, in any case, there are still several processes that are not yet automated.[56]

FINANCIAL/DEFAULT RISK: 'HIGH'

12.22 Financial or default risk arises where the default of financial services providers exposes customers to the risk of significant financial losses. For example, when a market participant cannot meet the margin calls on its position and subsequently defaults. When this happens, the clearing house is left with uncollateralised positions. It will close out these positions as efficiently as possible and transfer any customer positions to other market participants. Any losses will then be met according to the rules of the clearing house, through, for example, pre-funded guarantee funds, insurance or recourse to shareholder funds. In most cases, customers do not suffer losses.

12.23 For the clearing house actually to *default* and cause losses for customers, the existing mechanisms for covering the losses caused by the original default must either be insufficient or poorly defined. CCP failures are rare, but they do occur, as demonstrated by the events in Paris (1973), Kuala Lumpur (1983) and Hong Kong (1987). In all three cases, either the incentives to take on and manage risk were not efficiently aligned between the clearing house and the members, or the allocation of risk and subsequent losses was opaque.[57] In other words, failure was due, at least in part, to operational error.

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[55] Hills, B., Rule, D., Parkinson S. and Young, C. (1999), 'Central Counterparty Clearing Houses and Financial Stability', *Financial Stability Review,* Bank of England, June.
[56] See, for example, Giovannini Group (2003), 'Second Report on EU Clearing and Settlement Arrangements'.
[57] Hills et al. (1999), op. cit.

12.24 Part of the problem in the Hong Kong case was the separation between the clearing house and guarantee fund. There was therefore an asymmetry of information and risk, with the clearing house responsible for monitoring positions but not exposed to any losses. The guarantee fund was exposed to losses, but reliant upon the clearing house for risk monitoring. Traders not exposed to the guarantee fund had no incentive to monitor the risk-management practices of the clearing house, and may themselves have taken on too much risk.[58] Fear that the scale of the losses would exceed the total reserves of the guarantee fund prompted the government to prepare a rescue package, much of which was required to meet defaulters' positions.[59]

12.25 Clearing houses usually operate protection mechanisms to ensure that exposure to members does not build up over time. Crucial to this is the ability to close out a defaulting member's position as quickly as possible. Clearing houses manage this by:

- requiring the posting of an initial margin, sufficient to cover all but the most extreme price movements (usually over a single day);
- daily monitoring and marking-to-market of positions, and adjustment to margin requirements accordingly;
- the ability to make intra-day margin calls when necessary.

12.26 In addition, clearing houses may specify their membership requirements to include a certain level of creditworthiness. They may also require margin payments to be made gross (rather than net across a member's positions), thus encouraging members to collect margin payments more expeditiously from their own customers.

12.27 A CSD is not exposed to financial risk since its transactions are completed on a 'delivery versus payment' basis; hence, the CSD is not exposed to the risk of financial default of one party to the transaction. If a counterparty does fail, the transaction simply does not occur. The other counterparty may experience losses if, for example, the market has moved unfavourably and the same transaction will now cost more, but this is a separate issue, classified as operational risk.

[58] Hills et al. (1999), op. cit.
[59] Hills et al. (1999), op. cit.

SYSTEMIC RISK: 'HIGH'

12.28 Systemic risk arises in the context of clearing and settlement arrangements when:
"the failure of one system or participant in a system to meet its required obligations threatens the capacity of other participants or financial institutions to meet their obligations. Such contagion could cause significant liquidity or credit problems and, as a result, might threaten the stability of the financial system as a whole"[60]

12.29 Systemic risk is of particular relevance to the CCPs, given their role as counterparty to every transaction. This section therefore concentrates on the level of systemic risk embodied in CCPs.

12.30 At a systemic level, a CCP's exposure to risk and risk management is a significant concern because of the interrelated credit, market, liquidity, operational and legal risks that exist, and because the value of transactions is almost always very large, if of short duration.[61]

12.31 There are two ways in which a CCP may contribute to a systemic collapse: indirectly contributing to systemic failure by transmitting problems in one market to another; or, and more severely, the failure of a CCP itself could directly cause disruption in a great many markets, potentially beyond the immediate membership of the CCP.[62] As the business of the CCPs has grown, so the potential impact of a failure has also increased. In addition, as the global system becomes more consolidated and concentrated, the 'contagion risk phenomenon' is likely to become more problematic.[63]

12.32 A further issue at the systemic level is that, where an entity such as a CCP is deemed systemically important, it may be perceived as 'too big to fail'. Governments and central banks may send out signals that they would be concerned about failure of such an institution and the potential for systemic risks that arise; hence, there may be an expectation that a failing clearing house, for example, would be bailed out. This creates moral-hazard problems, distorting participants' behaviour—they may take on more risks than they would

[60] The Giovannini Group (2003), 'Second Report on EU Clearing and Settlement Arrangements'.
[61] Group of Thirty (2003), 'Global Clearing and Settlement: A Plan of Action'.
[62] Knott, R. and Mills, A. (2002), 'Modelling Risk in Central Counterparty Clearing Houses—A Review', *Financial Stability Review,* Bank of England, December.
[63] Group of Thirty (2003), op. cit.

otherwise.[64] A further moral hazard is that, with lower counterparty risk, market participants using a CCP may be encouraged to trade more and to establish larger positions, increasing the potential risks to the CCP.[65]

12.33 CSDs embody a different sort of systemic risk. Like failure at a clearing house, failure at a CSD could suspend trading across many markets for some time. In this sense, a CSD does embody systemic risk. However, the positions taken by market participants in the settlement process are much smaller (short-term) overall, which means the severity of the systemic risk is lower than in the case of clearing houses.

NEGATIVE EXTERNALITIES: 'HIGH'

12.34 The main negative externality relates to systemic risk. This is particularly acute in the clearing market since it is such a concentrated activity and because of the central role of the clearing house/CCP in many market transactions.

ASYMMETRIC INFORMATION (OFFERINGS): 'LOW'

12.35 Market failure as a result of asymmetric information is unlikely to be significant in clearing and settlement. The players in these markets are all sophisticated institutional firms, and their requirements from clearing and settlement facilities are well understood.

ASYMMETRIC INFORMATION (PERFORMANCE/QUALITY): 'MEDIUM'

12.36 There is the possibility of market failure in clearing, resulting, in particular, from asymmetric information due to non-transparent performance. This can occur when those exposed to the risk level of the CCP are unable to satisfy themselves as how that risk is being managed. The problem is exacerbated if those who are exposed to risk are not part of the risk-management process. This problem may be mitigated by the fact that the market players are all sophisticated institutions which are keen to safeguard their positions on behalf of themselves and their clients.

PUBLIC GOODS: 'MEDIUM'

12.37 The potential public goods problem in the market relates to the prevention of systemic risk and ensuring confidence in the system. There may be insufficient

[64] The Giovannini Group (2003), op. cit.
[65] Knott and Mills (2002), op. cit.

incentives on any single market participant to invest in measures to limit systemic risk as the benefits will be expropriated by all. This is the free-riding problem. The status of recognised clearing houses as regulatory bodies themselves is indicative that the market cannot be relied upon to supply this public good by itself.

12.38 However, the market is concentrated and the participants are all sophisticated intermediaries with an individual and a collective interest in ensuring the integrity of the system. This aids coordination within the market, so as to ensure good monitoring. The market failure may be limited to an extent by mechanisms within clearing houses and settlement agencies to evaluate the status of members and to align the interests of those who take on risk and those who would suffer loss in the event of default.

OVERALL CLASSIFICATION FROM RISK/MARKET FAILURE INDICATORS: 'ABOVE' CRITICAL LEVEL

12.39 The characteristics of the clearing and settlement market raise significant concerns, particularly with respect to the systemic implications of failures in the market. Overall, the risk/market failure indicators, summarised in Table 12.2, suggest that the clearing and settlement market should be classified as being 'above' the critical level—ie, risks and market failures are significant, and a high degree of regulatory intervention is likely to be required.

TABLE 12.2: SUMMARY OF RISK/MARKET FAILURE INDICATORS

	Low (unproblematic)	**Medium**	**High (problematic)**
Operational risk			✓
Financial/default risk			✓
Systemic risk			✓
Negative externalities			✓
Asymmetric information (offerings)	✓		
Asymmetric information (performance/quality)		✓	
Public goods		✓	

12.40 It is interesting to note, however, that many of the functions of regulation in this market have been taken on by the market itself. The mutual structure of clearing houses and CSDs aligns the interest of the owners with the interests of the users, which means that there is more incentive to control and manage risk effectively. In addition, in many respects, clearing houses and CSDs, as 'recognised bodies' (see below), take on the role of a regulator. This means that the impact of government regulation—and the FSMA, in particular—may be relatively limited compared with the degree of risks and market failures involved. This is further assessed below.

Assessment of competition effects of the FSMA on clearing and settlement (Step 4 and 5)

CLASSIFICATION OF THE CLEARING AND SETTLEMENT MARKET (STEP 4)

12.41 The discussion under Steps 2 and 3 of the sifting methodology suggests that the market for clearing and settlement should be classified as one in which:

- structural competition problems are potentially significant;
- concerns about risks and market failures are severe.

12.42 This means the market is of Type A, as defined in Step 4. The relevant questions to be addressed when examining the impact of the FSMA on competition in the market are therefore:

- **Q1:** Does the FSMA unduly distort the competitive structure?
- **Q2:** Does the FSMA unduly reduce dimensions of competition in the market?
- **Q3:** Does the FSMA duly facilitate market functioning?

OVERVIEW OF THE REGULATORY FRAMEWORK FOR CLEARING AND SETTLEMENT

12.43 Two different regulatory regimes are relevant here. Clearing houses (and investment exchanges) can choose to become recognised under the recognised body regime. This means that they do not have to seek FSA authorisation. However, CSDs and clearing houses are not compelled to become recognised, but may opt instead for authorisation under the FSMA as a firm (either a broker dealer or a service company) and fall under the authorised body regime.[66]

12.44 The main difference between these two regimes is that recognised bodies have certain regulatory functions that establish rules governing the conduct of their members or participants, and are required to monitor and enforce compliance

[66] FSA (2000), 'The FSA's Approach to Regulation of the Market Infrastructure', January.

with those rules, subject to rules made by the FSA. This section concentrates on the recognised body regime within the FSMA, as both the relevant UK bodies (LCH and CREST) are recognised.

12.45 CREST is also subject to the Uncertificated Securities Regulations 2001. These regulations set out the legal framework of such a system, alongside the criteria that an operator such as CREST must meet. HM Treasury has the power to approve an operator, although this power may be delegated to a designated agency. The OFT has powers of oversight to ensure that competition is not distorted. These regulations are not considered further in this report.

12.46 Part XVIII of the FSMA deals with recognised investment exchanges and clearing houses. Under the FSMA, recognised investment exchanges and clearing houses are exempt from the need to be authorised, provided they meet certain recognition requirements. The FSMA gives HM Treasury the power to set the requirements that these bodies must meet (Section 286).

12.47 The requirements are designed to ensure that recognised bodies regulate their markets and clearing systems according to appropriate standards, and are set out in secondary legislation: the Recognition Requirements for Investment Exchanges and Clearing Houses Regulations 2001.

12.48 Recognised bodies are exempted by the FSMA from the Chapter I and II prohibitions of the Competition Act 1998. This is because recognised bodies are themselves regulators. However, Section 302 of the FSMA does call for continuous scrutiny by the OFT of regulatory provisions and practices by recognised bodies to assess whether they have, or are intended/likely to have, a significantly adverse effect on competition.

12.49 The FSA guidance on recognised investment exchanges and recognised clearing houses is contained in the Recognised Investment Exchanges and Recognised Clearing Houses Sourcebook of the FSA Handbook. This Sourcebook covers recognition requirements, notification rules of UK recognised bodies, supervision and applications for recognition by UK and overseas bodies.

12.50 The main recognition requirements for investment exchanges are:

- sufficient financial resources for the proper performance of its functions as a recognised exchange;
- the exchange must be a fit and proper person (‘suitability’);
- the systems and controls must be adequate;

- business must be conducted to promote proper protection for investors. This includes arrangements to ensure orderly business (including criteria for access), arrangements to limit market abuse or financial crime, and arrangements to ensure that clearing and settlement transactions can be executed in a timely and secure manner.

12.51 Other recognition requirements relate to disclosure, promotion and maintenance of standards, rules and consultation, discipline and complaints. Recognition requirements for default rules in respect of market contracts are also set out. An overseas applicant does not need to comply with the Recognition Requirements made by HM Treasury. Instead, the FSA may make a recognition order in respect of an overseas applicant, provided that certain requirements are met (as set out in Section 292, Sub-section 3).

- investors must be afforded the same protection as they would be afforded by a recognised body;
- default procedures are in place and adequate;
- the applicant is willing to cooperate with the FSA;
- there are adequate arrangements for cooperation between the FSA and those responsible for supervision in the applicant's territory.

At present, however, there are no such recognised overseas clearing houses in the UK.

ASSESSMENT OF COMPETITION EFFECTS OF THE REGULATORY FRAMEWORK FOR CLEARING AND SETTLEMENT (STEP 5)

12.52 The impact of the FSMA on competition in the market for clearing and settlement is not as direct as it may be in other markets, since the FSMA provides a framework for self-regulation. The incentives to maintain orderly markets and manage risk are increased by the mutual structure of LCH and CREST, since the interests of the owners are also the interests of the users.

12.53 In relation to high-level question 1, the FSMA provides the framework for regulation of the clearing and settlement market—the Recognition Requirements themselves are specified by HM Treasury. These requirements may restrict entry by imposing extensive requirements; however, the monopoly and network externality characteristics of the market itself appear to be more significant entry barriers. There is an efficiency argument for consolidation of these functions. In other words, the Recognition Requirements probably do not distort the market and create monopoly problems beyond those that exist due to the underlying cost structure and nature of the market. Most, if not all, of the negative aspects of market structure (eg, market concentration, high barriers to entry) stem from the natural, underlying, economic characteristics of the activity itself, rather than any direct or indirect regulation of that activity by the FSMA.

12.53 In relation to high-level question 2, it is unlikely that regulation has had a major negative effect on the dimensions of competition, especially given the self-regulatory structure among mutuals. The (current) mutual status of these monopoly activities is likely to mitigate some of the negative consequences that might be expected to arise from the market power of these organisations. For example, the lack of incentives for innovation ought to be counteracted to some extent since the owners and users alike stand to benefit (although the pace of innovation may be slowed if consensus is required).

12.54 Perhaps more importantly under these circumstances is whether the FSMA structure promotes regulation to facilitate or enhance competition, given the underlying natural monopoly characteristics of this activity—the subject of high-level question 3.

12.55 Turning to high-level question 3, the Recognition Requirements have some regard to access to clearing and settlement facilities, but the objective is to ensure that the business conducted by the facility is undertaken in an orderly manner, in order to afford proper protection of investors (Part I, Section 4 and Part III, Section 19 of the Recognition Requirements). There are no requirements to provide access (even where an access seeker may meet membership requirements) and no guidance as to pricing.

12.56 However, the FSMA itself contains a provision to address some aspects of potential anti-competitive effects of subsidiary regulations made indirectly under the FSMA, which are relevant to the self-regulatory nature of recognised bodies. Section 302 of the Act states:

if regulatory practices have, or are intended or likely to have, the effect of requiring or encouraging exploitation of the strength of a market position they are to be taken … to have an adverse effect on competition

Where an anti-competitive effect is found (in the first instance, by the OFT), the FSMA gives powers to the Treasury to oblige the FSA to take action.

12.57 Thus, the FSMA provides a mechanism that, in theory, can address a situation whereby regulations (including regulatory practices) made by third parties that unnecessarily reinforce their market power can be overturned, albeit after a convoluted process. Whether this has been effective can only be determined by looking at how the OFT and others have behaved in relation to the regulatory practices of the recognised bodies.

12.58 In addition, given the findings of significant market structure problems and potential competition problems caused by the underlying economic characteristics of the activity itself, the FSMA has *not* resulted in regulation that successfully negates these underlying competition problems. Such intervention might be possible in theory, but whether it would deliver net benefits would depend on the detailed nature of the underlying problems and the actual detriment, if any, being caused by those problems.

12.59 Moreover, having identified that the FSMA does not itself directly address this issue, the impact (or lack thereof) of the FSMA will depend on the subsequent behaviour of other bodies (eg, the OFT, HM Treasury) and the precise legal boundaries of what the FSA is allowed to do and what, if anything, it actually has done. Given the discretionary nature of the potential intervention, this can only be established by further, detailed analysis.

12.60 Overall, the results of the sifting process have identified:

- that there are significant competition problems in this market; and
- that these problems are not likely to be *caused* by the FSMA, but are a feature of the underlying economics of the relevant activities.

12.61 However, there is a possibility that the FSMA does not create the appropriate framework to intervene optimally in order to address the underlying *natural* competition issues. This could only be established through a much more in-depth analysis of the detailed primary, secondary and self- regulation (or lack thereof) made under the FSMA.

Conclusion: list of FSMA provisions with significant impact on competition in clearing and settlement (Step 7)

12.60 The above illustration allows the identification of the following FSMA provisions as having a potentially significant impact on competition in clearing and settlement. In Stage 2 of the Review, these would be revisited in a final assessment and then added to the full list of FSMA provisions with potential competition effects that would be collated as Step 7 of the sifting methodology. As already noted above, Step 6, the top-down cross-check, will not be specific to any of the high-level markets, and is not addressed as part of either of the two case studies presented in this report. In addition, and as already noted, the two case studies are different from other markets because there are specific FSMA provisions dealing with the markets in the case studies.

FSMA PROVISIONS WHICH POTENTIALLY DISTORT THE COMPETITIVE STRUCTURE

12.61 The Recognition Requirements do create a barrier to entry, but not one considered to be extremely onerous, given the nature of the market that an entrant may be considering entering.
The competitive structure is driven to a greater extent by the underlying economics of the market, which tends to suggest that consolidation is the most efficient way of providing services. This is not to say that there is no competition—indeed, some custodian banks have been setting up facilities for in-house clearing and settlement. This possibility is, however, dependent on both parties to the transaction being customers of the custodian bank, and when the securities are held in an 'omnibus' account at the CSD.[67]

FSMA PROVISIONS WHICH POTENTIALLY REDUCE DIMENSIONS OF COMPETITION

12.62 The dimensions of competition are always of concern in network markets with monopoly characteristics. In particular, potential concerns might be the absence in the FSMA of specific access and pricing regulation to ensure that *users* have equal and non-discriminatory access and pay competitive prices.
A secondary concern, in the context of this report, might be the extent to which clearing and settlement institutions globally are able to hold accounts in each other's systems. A further concern is pressure to innovate in a market that has monopoly characteristics.

12.63 It is hard to conceive of an entrant challenging either of the incumbents in the short to medium term, given the complexity of the systems and the network effects. That said, the market is open for an incumbent foreign institution to attempt entry. Current incumbents therefore have an incentive to stay ahead and invest in innovative solutions. Together with the structure of the market as self-regulated mutuals, this tends to suggest that there may be few reasons for any concern that innovation is at a sub-optimal level in this market.

[67] The Giovannini Group (2003), op. cit.

- Part XVIII, Sections 293 to 300—provisions relating to supervision of recognised bodies, including notification requirements, modification or waiver of rules, the FSA's authority to give directions and revoking recognition.
- Part XVIII, Sections 302 to 310—this chapter provides for competition scrutiny of recognised bodies, and defines practices that are likely to have an adverse effect on competition. Duties are placed upon the OFT as well as powers to investigate and report to the Competition Commission on any significantly adverse effects on competition of these bodies' rules, guidance and practices, or exploitation of a market position. The Competition Commission may report to the Treasury, which can then act through the FSA to bring about appropriate changes.[68]
- Part XVIII, Section 286—this provision gives HM Treasury the power to make regulations setting out Recognition Requirements. These provide safeguards for investors, including the orderly functioning of the market so as to afford proper protection to investors.

12.64 However, as discussed above, the question arises of whether the FSMA sufficiently promotes a regulatory framework that facilitates and enhances competition given the underlying natural monopoly characteristics of clearing and settlement.

[68] Explanatory Notes to FSMA 2000.

13 CONCLUSION: EFFECTIVENESS OF THE SIFTING METHODOLOGY

13.1 At each stage of the sifting methodology, the focus of the FSMA Competition Review is narrowed down further, as can be seen from the description in the previous sections. Below is a brief summary of the various sifts that take place at each stage. The formation of the three high-level questions focuses the Review on the most significant potential competition effects of regulation—ie, the effect on competitive structure, the effect of the dimensions of competition, and the facilitating of market functioning.

- Step 1 focuses the Review on a number of high-level markets to which the FSMA applies. Thus, the focus is on particular relevant markets that might be delineated for the purpose of specific competition investigations. This is to enhance the effectiveness of the sift (problems in specific market segments may still be addressed in Stage 3 of the Review).

- Step 2 focuses on seven indicators of competitive structure for each high-level market, rather than on conduct or performance indicators. This is also to enhance the effectiveness of the sift. Furthermore, these indicators lead to a binary classification of high-level markets, 'above' or 'below' the critical level. Markets 'below' the critical level may still be addressed in subsequent steps of the Review (depending on the risk/market failure classification).

- Step 3 classifies each high-level market according to various indicators of risk and market failures, again leading to a binary classification of 'above' or 'below' the critical level. Markets 'below' the critical level may still be addressed in subsequent steps of the Review (depending on the competitive structure classification).

- Step 4 determines which high-level questions are addressed for each high-level market. In particular, the first question (effects of regulation on competitive structure) is not addressed for Type B markets (competitive structure indicators 'below' the critical threshold; risk/market failure indicators 'above' the critical level). Type D markets (both competition and risk/market failure indicators 'below' the critical threshold) are discarded completely at this stage.

- In Step 5, all relevant regulations for each high-level market are assessed against the high-level questions. While this assessment also covers secondary legislation and the FSA rules and guidance, the focus is ultimately on the FSMA itself. The FSA rules and secondary legislation are only reviewed at a very high level; first, to identify the relevant FSMA provision giving rise to any particular set of FSA rules; and second, to gain an understanding of how the FSMA provisions may in practice have impacted on competition through the FSA rules (as opposed to having a direct effect on competition).

- Step 6 assesses all FSMA provisions against the high-level questions. It is therefore not so much a sifting stage but a top-down cross-check of competition effects.

- Finally, Step 7 leads to an inventory of all FSMA provisions identified in the previous steps as having a potentially significant effect on competition. In addition, a tentative ranking of problematic areas is presented.

13.2 There is the potential drawback that the sift identifies only a selection of areas, potentially resulting in the exclusion of areas where regulation may have had a competition impact. For example, if the competition sift in Step 2 classifies a particular market as 'below' the critical threshold, high-level question 1 concerning the impact of regulation on the competitive structure of the market will be discarded. Thus, none of the rules or provisions that affect structure will be listed in the final inventory in Step 7 (as in the case of retail investment funds in Case Study 1, for example).

13.3 However, since it is the objective of the sift to identify only a narrow set of areas where the FSMA may have an impact on competition, such an approach seems appropriate. The sifting does not provide an *absolute* evaluation of whether regulation has had an impact; rather, it provides a *relative* evaluation by identifying and ranking areas according to the probability that regulation might have had a significant impact on the competitive dynamics of a market. Moreover, the methodology is sufficiently flexible (ie, by adjusting the sifting criteria) for it to be applied such that more (or less) potentially important areas can be identified and included if necessary.

13.4 A related issue is that the methodology may pick up provisions in the inventory that are not important in practice. As noted above, the objective is to identify

provisions with a *potentially* significant impact on competition and to rank these according to their likely importance. The final assessment is the subject of Stage 3 of the Review. The proposed sifting methodology seeks to ensure that Stage 3 focuses only on areas where significant impacts are most likely to be identified, taking account of the limited resources available to conduct a detailed market investigation in
Stage 3.

13.5 Application of the sifting methodology is research-intensive. For example, a significant amount of data needs to be collected in order to determine the structural characteristics of each high-level market under consideration. Also, some data is inherently difficult to obtain or indeed non-existent, such as that required to assess the severity of risks or market failures in a particular market. However, these problems can be mitigated by discussions with the FSA or industry experts, and by drawing from judgements based on economic theory and existing studies. Expert advice and theoretical analysis also helps in assessing the likely competition impact of a specific regulation.

13.6 Overall, the conclusion is that the seven-step approach is indeed effective. It allows for a full assessment of the regulatory framework—ie, the FSMA itself, and where relevant, its secondary legislation and the FSA rules and guidance—and the effects of the FSMA on competition in all of the markets to which it applies. At the same time, the sift is sufficiently strict to narrow down the Review to the most significant areas, and, ultimately, to allow a prioritisation of potentially problematic areas, based on which the OFT can decide whether to undertake further investigation.