

**Annex**

**A Competition Assessment Framework**

**An Operational Guide for Developing Countries**

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Department for International Development  
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## **Foreword**

This Competition Assessment Framework has been developed by DFID's Investment Climate Team, in response to demand arising from competition policy work in some of DFID's partner countries, delivered in association with other donors and development partners.

The Framework is a practical guide to help policy makers in developing countries to identify and focus on the key barriers to competition. These barriers can take many forms – technical, financial, legal and political economy – and may arise from public sector actions as well as private sector ones. They have a range of policy and administrative implications. The Framework may be of interest to others such as NGOs, and donors, who are interested in the state of competition in a country.

The Framework's preparation has been assisted by research in India in 2006-07 on the state of competition in key sectors of the Indian economy, undertaken through a joint project of the Competition Commission of India, DFID and the World Bank (FIAS). The research reports, as well as an earlier draft of the Competition Assessment Framework, were presented and discussed at the National Conference on the State of Competition in the Indian Economy, in New Delhi in March 2007. We have also been able to take account of other work and best practice approaches that are being developed in a number of locations where capacities may be lower than in OECD countries.

We gratefully acknowledge comments on the earlier draft from members of other Teams within DFID, the Office of Fair Trading (UK), the Competition Commission (UK), the Consumer Unity and Trust Society of India (CUTS International), The Energy and Resources Institute (TERI) in New Delhi, a former Commissioner of the Indian MRTP Commission, and staff of the World Bank (FIAS), particularly Dr Rughvir (Shyam) Khemani.

We regard this as a working document and would welcome suggestions for further refinement. Comments should be directed in the first instance to Roger Nellist ([R-Nellist@dfid.gov.uk](mailto:R-Nellist@dfid.gov.uk)), Nick Godfrey ([N-Godfrey@dfid.gov.uk](mailto:N-Godfrey@dfid.gov.uk)) or John Preston ([J-Preston@dfid.gov.uk](mailto:J-Preston@dfid.gov.uk)).

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# 1. Introduction

## ***Why is the Competition Assessment Framework needed?***

Fair competition in markets is crucial for economic and social development, and for reducing poverty. Yet, anti-competitive practices and policies are common, and diminish the opportunities for innovation and growth, and make consumers worse off.

Developing country governments need to identify and address anti-competitive arrangements and practices in both the private and public spheres. This Framework is intended as a convenient and user-friendly introduction to how this task can be approached.

While the Framework is designed for national sector assessments, it could be used also at the sub-national level, such as for individual states in federal countries.

## ***How can it be used?***

The Framework is intended as a flexible diagnostic tool that poses sets of questions that are grouped by theme. The questions begin with the selection of sectors for assessment. This is followed by steps that analyse the state of competition in each sector selected: identifying the markets and competitors, examining the market structure, looking for barriers to entry, looking for anti-competitive conduct, considering vested interests and the principal beneficiaries, and identifying government policies or institutions that limit competition. Because economic conditions, laws and institutions can vary greatly between countries, not all of the questions in the Framework will be applicable in all situations.

A competition assessment should analyse the strength of competition in the relevant market/s, and should identify any factors impeding more effective competition. Key issues are: (i) the structure of the market, (ii) entry barriers and (iii) anti-competitive conduct. Where competition is found to be limited, an estimate should be made of the likely extent of the harm that results from this. An assessment should conclude with a view on whether there are competition problems in the sector that require correction, and if so, what the most appropriate remedies are.

When a decision has been made to undertake a competition assessment of a sector, who should undertake it? This will depend on the nature of existing laws, and the capacity of existing institutions. Those chosen should have the necessary research capacity and should be free to form independent views. If a competition authority has been established, and has appropriate staff available, it might be well placed to undertake the task. In other situations, an economic research institute or a university department might be selected. A process should be established to verify the findings of the assessment, to

enhance its credibility. Some issues raised by the Framework might be sensitive in some contexts, and those carrying out an assessment will need to address any such issues constructively. Officials might have better access to data that is not publicly available, but independent researchers might be better placed to review government policies or to undertake specialised analysis.

Assessing the barriers to competition can be done at varying levels of technical sophistication. This Framework provides a substantive introduction to the subject, especially for developing country policy makers. A more in-depth treatment, as well as actual case reports, can be seen on the websites of the OECD competition authorities listed in Section 5 of this Framework.

## 2. How to select sectors and markets for assessment

Sectors selected for competition assessment should be both important to the economy or consumers, and have characteristics that suggest competition might be limited. Sometimes, a policy decision might already have been made that the state of competition in a particular sector is to be assessed, while in other cases it might be necessary to select sectors for study from a list of possibilities. Where a selection is to be made, the two pertinent questions are:

2.1 Is the sector important to the economy, because:

- a) it makes a significant contribution to national income, or
- b) it has linkages with other sectors/industries as a provider of inputs and services, or
- c) it provides scope for wider gains through innovation, improved distribution and business processes, or
- d) its nature and type gives it importance, such as being a public enterprise or a mixed public/private enterprise, or
- e) it is significant for investment and productivity levels?

(Note: sectors should not be selected if this would duplicate or overlap other studies being conducted through technical assistance programmes.)

2.2 Is the sector important to consumers, because it :

- (a) supplies goods or services that are essential, or that account for a significant part of consumer spending; or
- (b) directly or indirectly affects the quality of life of the people; or
- (c) contributes to the alleviation of poverty?

If the answer to both questions is 'no', the sector should not be considered further. If the answer to either or both questions is 'yes', the possibility of limited competition in the sector could be assessed through the following questions:

2.3 Are there any indications of concern by consumers, or firms, about the prices or availability of the sector's products, or of access to supplies?

(Media reports can be a good source of information on such concerns, as can consumer organisations and trade associations. The records of any government agencies that receive complaints are another possible source.)

2.4 Is there a history of alleged anti-competitive conduct in the sector?

(Anti-competitive patterns of trade often continue for long periods, and patterns of past conduct might indicate possible current problems.)

2.5 Are barriers to entry or expansion by prospective new suppliers high?

(The possibility that new suppliers will enter a market can restrain price increases by the existing suppliers. If new entry is difficult, competition will be weakened. It is sometimes easy for firms to enter a market, but difficult for them to expand sufficiently to act as a constraint on the behaviour of other firms in the market. In addition to natural barriers, the practices of dominant firms, and/or inappropriate government policies and statutes, rules and regulations can retard entry. Entry barriers are considered more fully in section 3.3.)

2.6 Are barriers to the ways firms carry out business high?

(Some factors can limit the ability of firms to compete actively. Barriers could include the policies of trade associations, or government regulations that limit advertising, impose price controls, give preferential treatment to incumbent operators or impose requirements for quality standards that are high vis-à-vis the benchmarks developed by independent assessments. Some firms may be responsible for conduct that limits the ability of other firms to carry on business)

2.7 Does it appear that actual or proposed mergers in the sector are leading to, or might lead to, a significant reduction in the number of substantial suppliers?

(Most mergers do not harm competition, and some benefit consumers through more efficient production that is followed by price reductions.)

However, a decision by an enterprise to take over a competitor can be motivated by a desire to reduce competition. If new entry to the sector is unlikely, increased concentration of ownership can raise competition concerns.)

2.8 Are there strong vested interests that are likely to oppose increased competition in the sector?

(These would primarily be those with strong financial interests in continuation of the present pattern of production and distribution, but could also include others, including the interests of the political party in power.)

2.9 Has there been a long-term pattern of high market concentration in the sector?

(If so, there is a need to identify the reasons for this.)

If the answer to any of the above questions 2.3 to 2.7 is 'yes', a competition assessment might be justified. If the answers to 2.8 and/or 2.9 are also 'yes', the case for an assessment would be even stronger.

An assessment could be a stand-alone study, or part of a broader study, including those conducted by international organisations (such as the national Investment Climate Assessments of the World Bank, and the Investment Policy Reviews of UNCTAD).

The number of sectors that can be assessed will depend on the funding available. It is better to undertake a small number of assessments thoroughly, rather than a larger number sketchily. Assessments should seek to obtain relevant facts through questionnaires, through interaction with market participants, and from secondary sources such as media reports. There could be advantages in grouping studies of similar sectors, such as with network industries where an understanding of network externalities gained in one study might be useful for another study.

As noted in the Introduction, when a decision has been made on the sector/s to be assessed, it will be necessary to decide who is best placed to undertake the research.

**Conclusion required:** Which sector/s merit competition assessment?

### 3. How to analyse competition

Characteristics of competitive industries include a wider range of product

choice, the entry and exit of firms, changes in the ranking of leading firms and in the size of their market shares, and active product development and innovation. Competitive industries are also likely to show pricing that responds to changes in market conditions, such as changes in input costs. An industry does not have to display all of these characteristics to be considered competitive, but the absence of many of them might suggest a lack of competition.

A widely-quoted way to assess the intensity of competition is to recognise that it reflects not only the competition between the current competitors, but also the threat of new entrants, the threat of substitute products being developed, the bargaining power of buyers, and the bargaining power of firms that supply inputs to the market<sup>1</sup>. Most of these factors are directly or indirectly reflected in this Framework.

### **3.1 Identify the relevant markets and the competitors**

When a sector has been selected for assessment, the first step is to identify the relevant 'market/s' in the sector, as a sector could include a number of distinct markets. If so, each of the markets should be examined separately, as the state of competition might vary significantly between them.

#### **3.1.1 What are the relevant markets?**

(A 'market' is a group of products (goods or services) most buyers regard as being reasonably substitutable for each other, taking account of their respective prices and conditions of sale. Markets have geographic limits that depend on the product's value, the cost and availability of transport, and other factors. Markets include wholesale, as well as retail markets. More information on market definition is contained in Appendix A.)

The next step is to identify the existing competitors.

#### **3.1.2 (a) Who are the existing suppliers to the market? (b) Who are the main buyers from each of these suppliers, and what are main products that each purchases from them?**

(The major suppliers should be identified by name. If there are numerous small suppliers they should be grouped appropriately. If the possible competition concern relates to the conduct of the buyers, they should be identified similarly.)

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<sup>1</sup> This briefly summarises the 'five forces of competition' model described by Michael Porter in *Competitive Strategy*, 1980, and later works.

If certain buyers always buy from certain suppliers (or buy certain products from certain suppliers) the market might be less competitive than it appears to be, because, for example, products from different suppliers are not substitutable for others, or because market sharing is taking place. If buyers buy from more than one supplier, or move their purchasing between suppliers, the market is more likely to be competitive.)

3.1.3 Are there any other identifiable firms that could readily enter the market by adjusting their mix of products, or by expanding the geographical area they supply, without any significant new investment?

(If there are such firms, their existence could constrain the behaviour of the incumbents.)

3.1.4 To what extent are imports a realistic alternative for buyers, taking account of any unique features of the products, delivery time, import duties and transport costs?

**Conclusions required:** What are the relevant market/s, and who are the main suppliers (or buyers, if relevant)?

### **3.2 Examine the market structure**

The next step is to examine the structure of the market/s in the sector. This involves identifying the relative importance of the main suppliers in the market.

If a small number of suppliers accounts for a large proportion of supply, the market is said to be highly concentrated. Measures of market concentration are outlined in Appendix A.

Market shares are usually measured by the value of sales, but the quantity of goods sold or the capacity of the suppliers may be relevant also. Publicly available information on market shares can be unhelpful when it does not relate to the relevant markets that have been defined, and this will often be the case. When assessing the size of a market, information should be sought from the major participants (both sellers and buyers), relevant trade associations, consumer organisations and any relevant government agencies.

High concentration does not necessarily indicate high market power and a competition problem, and further issues must be considered.

3.2.1 Have the market shares of the major suppliers (or buyers) been stable

over a long period?

(The level of market concentration and the extent of any changes over time will also be of interest. If there is a single major supplier, this could suggest the possibility of significant entry barriers or of predatory behaviour by that supplier. Other explanations are possible.)

If market shares have been stable, the following questions will assist in forming a view on whether the level of competition might differ from what the market shares alone might suggest.

3.2.2 Has there been much market entry in the past and how successful has it been?

(If there has been little or no entry over an extended period, this might suggest barriers to entry are high, or that prospective entrants fear a predatory response from incumbents. The outcomes of past entry can be significant. Issues of interest are how long the new firms stayed in the market, how successful they were in winning market share and how long it took them to get to a significant size. However, other possibilities for limited market entry must be considered. For example, there might be a natural monopoly, or there might have been no significant growth in the size of the market, or the government might not have granted licences required for entry.)

3.2.3 Does a single buyer, or a small number of large buyers, account for a substantial part of the market?

(If so, the buyers might have bargaining power that could reduce *the ability of the sellers to misuse their market power. This constraint is likely to be greater where a single buyer accounts for a substantial part of an individual firm's sales. For buyers to be able to constrain suppliers, they must have a credible alternative source of supply (including the possibility of self-supply). In some situations state-owned enterprises dominate a sector, and there can be a single buyer or a single seller that is the government itself. Situations of state dominance are often found in sectors such as electricity and water supply.*)

3.2.4 If the concern is with the market behaviour of the buyers, rather than the sellers, does a single seller, or a small number of large sellers account for a substantial part of the trade?

(If so, the market power of the sellers might limit the ability of the buyers to misuse their market power.)

3.2.5 Do the suppliers of any significant inputs needed by the seller/s have high bargaining power?

(If so, this might limit the market power of the seller/s)

A possible market structure that is sometimes found is for there to be high market power on both the buying and selling sides. The outcome of this structure can be indeterminate. Often in such cases the 'economic rents' are shared between the suppliers and buyers, to the disadvantage of end consumers.

**Conclusion required:** Does the market structure suggest that competition might be limited?

### **3.3 Look for barriers to entry**

For a market to remain competitive, it must be possible for new firms to enter, and for existing firms to expand or to leave. If there are barriers that either prevent entry or would delay it considerably, or that would make it costly to enter the market, the existing suppliers might be able to raise prices above the competitive level. Actual entry, or the likelihood of entry, can constrain the market power of incumbent firms. Even if market shares are high, this might not result in prices above competitive levels if new suppliers are likely to enter.

However, for a threat of new entry to provide a significant constraint, it must be likely, sufficient and timely. For entry to be 'likely', it would have to be commercially feasible. For it to be 'sufficient', it would have to be on a scale large enough to cause the incumbent firms to modify their market conduct. Unless possible entry would also be 'timely', that is, achievable within a reasonable time frame, it would not be likely to influence the conduct of the incumbent firms. Prospective new entrants might include foreign firms, and this raises the issue of how the policies that apply to foreign direct investment affect the possibility of competition from this source. If there are gender-based barriers that make it more difficult (or even impossible) for women to enter particular markets, this could significantly reduce the level of competition in those markets.

Barriers to entry may be defined in several ways. One classification includes three categories: natural, strategic and regulatory. Gender barriers might also be an issue in some situations, as might other cultural practices or religious affiliations.

#### **Natural barriers**

Natural barriers result from the resources or technology needed to become a supplier in the market. They could include the existence of large economies

of scale, such as with network industries<sup>2</sup>. Other natural barriers include problems that new entrants would have in obtaining access to technology, raw materials, or distribution channels. Another example is where entry into a market would require large 'sunk costs' (i.e. those that could not be recovered if an entrant subsequently decided to leave the market.)

3.3.1 Are there any natural barriers to entry to the relevant markets, and, if so, what are they?

3.3.2 If there are natural barriers, how do they affect prospective entrants? Do they affect different categories of prospective entrants differently (e.g. established vs. new firms, or domestic vs. foreign firms)?

3.3.3 Does the under-development of transport or other infrastructure in some districts appear to give incumbent firms monopoly status?

If there are significant natural barriers to entry that harm competition, it will be necessary to consider if there are any feasible policy measures that could reduce their impact.

### **Strategic barriers**

Strategic barriers result from actions by existing suppliers that are intended to discourage new entry. They could include:

- creating excess capacity;
- 'bundling and tying' (to force new entrants either to compete for the grouped products or to compete on one product; (However, there might be good reasons for this pattern if it is cheaper to produce the bundled products together than separately.)
- arranging long term exclusive contracts and exclusive supply and distribution agreements; (These might sometimes be justified, but exclusivity makes the market less competitive than otherwise.)
- individually or collectively, acting in ways that indicate the incumbent firm or firms would act in a predatory or aggressive way if new entry took place, such as through price responses.

3.3.4 Does it appear that any major seller/s in the market have excess production capacity that is significantly above market requirements?

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<sup>2</sup> Examples of network industries are telecommunications, natural gas, oil, broadcasting, and electricity distribution. While networks can experience some of the same competition problems as other industries, the characteristics of networks can lead in addition to other problems for competition.

(If significant excess capacity exists, this could reduce the interest of new firms in entering the market.)

3.3.5 Does any major firm in the market have a reputation for aggressive or predatory market behaviour in response to attempts at entry?

(The existence of such a reputation could discourage new entry.)

If the answer to either question is 'yes', strategic barriers could be significant.

### **Regulatory and policy barriers**

Policy and regulatory barriers to entry to particular markets can exist at any level of government, national, state or local. There can be sound public policy reasons for restrictions, such as health and safety concerns, national security, or even short-term 'industrial policy' to develop infant industries or particular geographical districts. (The situation of regulated sectors is discussed later in this section.) However, the rationale for restrictions that limit competition requires objective justification.

3.3.6 Is the sector subject to any policies or regulations that are onerous , costly or time-consuming, or that frequently change, thereby creating 'policy uncertainty'?

(The possibility of achieving the stated objectives of the regulations in ways that are less onerous, costly or time-consuming should be considered.)

**Only proceed to the following questions in this section if the answer to this question is 'yes'.**

3.3.7 If there are any such restrictions, which organisation is responsible for administering them? To what extent are the effects of the restrictions attributable to the government's purpose in applying the restrictions, and to what extent do the effects result from the way in which they are administered?

3.3.8 If there are policies or regulations that are considered to make entry more difficult than seems reasonably necessary, what appears to be their impact on the level of competition in the market?

If there are any regulatory barriers that restrict competition, the harm likely to result from the loss of competition should be compared with the benefits claimed for the existence of the barriers. There should be no feasible alternative ways to achieve the policy goals that would result in lower harm from the loss of competition.

### **Gender-based barriers**

Fair competition implies equal opportunities for all, but, especially in developing countries, women are often disadvantaged in business.

- 3.3.9 (a) Are there any barriers, based on either regulations or custom, that prevent women from commencing business in the relevant market/s and/or expanding an existing business, or that make it difficult for them to do so?
- (b) If so, what effect do these barriers appear to have on competition in the relevant markets?

**Conclusions required:** Are there any significant barriers to entry in the relevant markets? If so, what are their effects on competition? Do any policy-based reasons for these barriers appear justified?

## ***3.4 Ascertain if government policies or institutions limit competition***

### **State-owned enterprises**

Despite extensive privatization in the past two decades, state-owned enterprises are still significant in the economies of many countries. To the extent that these enterprises engage in commercial economic activity, they should do so, as far as possible, on the same terms as other firms. The issue of whether competition in a market is distorted by the existence of a state-owned enterprise requires examination. (A related issue is whether privatized state-owned enterprises were given a preferential position, when the new owners acquired the business, such as the exclusive right to provide long-distance telephone services.)

3.4.1 Do any state-owned enterprise/s operate in the market/s being assessed?
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3.4.2 If so, do the enterprise/s receive any benefit/s or preferential treatment not available to other firms which appear to have the effect of limiting
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competition in the relevant market/s?

(State-owned enterprises sometimes benefit from explicit or implicit subsidies that can make it difficult for existing private firms to compete, and that could discourage the entry of new suppliers.)

3.4.3 If the state-owned enterprise does receive benefits and these appear to limit competition, how significant is the effect?

(Any advantages must have a perceptible effect on the level of competition for concern to be warranted.)

### **Public procurement**

Public procurement can represent a significant part of trade in an economy, and the way in which procurement is undertaken can raise substantial competition issues.

3.4.4 Is any level of government a significant purchaser in the relevant market/s?

(Where a government is a major buyer of the product/s, the way in which it organises its procurement might limit the scope for new competitors to enter the market.)

3.4.5 If the government is a major buyer of the product/s, does it appear that government procurement policies have adequate safeguards for competitive bidding, for transparency and for fairness?

(There could be a negative impact on competition if there is no requirement for a minimum number of tenders, or there is a short time-period for responding to tender notices, or if the criteria for tenders favour existing or larger suppliers.)

3.4.6 If government is a significant purchaser, and its procurement policies lack transparency or fairness, how significant are the effects on competition in the relevant markets?

### **Regulated sectors**

Sector regulation may be needed for economic reasons, when the market structure makes it difficult or impossible for competitive markets to develop, such as with natural monopolies, or where the sector's operations raise significant issues of public policy<sup>3</sup>. Other reasons for sector regulation include providing a mechanism for maintaining necessary technical standards to ensure quality or safety, ensuring access to essential facilities, and to provide processes to encourage efficiency and cost-related pricing.

While there can be sound reasons for regulating particular sectors, the scope of regulations should not go beyond what is needed to achieve the policy objectives. Regulators should seek to promote competition to the extent the nature of the sector and policy objectives make this possible. Over time, technical advances might increase the scope for competition by making it possible to separate competitive from non-competitive markets in the sector.

<p>3.4.7 Are firms in the sector subject to any restrictions on the ways in which they may conduct their business, such as the types of products they may produce, the prices they may charge, or the ways in which they may advertise or otherwise market their output?</p>
<p>3.4.8 Are there limits to the number of firms permitted to enter the market?</p> <p>(There could also be indirect limits to entry, through measures that reserve entry to particular groups, including through affirmative action policies.)</p>
<p>3.4.9 Are there barriers resulting from restrictions on raising project finance?</p>
<p>3.4.10 If there are restrictions on entry to the sector, what is their effect on competition?</p> <p>(If there is a requirement to obtain a licence to enter the sector, competition could be adversely affected if the conditions for obtaining a licence are difficult to fulfil, or involve a high cost, or require a protracted time to comply with.)</p>
<p>3.4.11 If the restrictions appear to harm competition appreciably, how does the extent of this harm compare with any public benefits that might result from the restrictions imposed by the sector regulators?</p> <p>(It will be necessary to weigh the losses and benefits.)</p>

<sup>3</sup> More generally, regulation may be justified where competition cannot be achieved by market forces (as with natural monopolies, where one firm can supply more efficiently than two or more), where competitive markets would not result in an outcome that is considered socially desirable, or where social and private benefits differ significantly (i.e. where there are 'externalities').

## Trade policy and industrial policy

Policies of governments on trade and on industry can have a large impact on the level of competition.

3.4.12 Are there any trade or industrial policies that appreciably restrict competition in the market/s?

(For example, do non-tariff barriers impose quantitative restrictions on, or otherwise limit, the importation of particular categories of products? Are the tariff rates on some products very high, or is extensive and possibly unjustified recourse had to anti-dumping remedies, or do some suppliers benefit from tax concessions while other competitors do not?)

3.4.13 If so, do these policies appear to have adequate justification, taking account of their effects on competition?

**Conclusions required:** Does the operation of state-owned enterprises, or the conduct of public procurement, or sector regulation, or the existence of trade and industrial policies appear to limit the scope for competition? If so, how significant are the effects on the welfare of consumers or on the input costs of producers? How does the extent of the impact on consumers and producers compare with any public benefits likely to result from the operation of any of these government policies?

### **3.5 Consider vested interests**

In many situations there will be stakeholders who are opposed to increased competition in a market. Even if their identity and objectives are widely known, their power and influence should be reflected in the competition assessment. Politics, including funding for political parties from sector interests, may well be involved.

- 3.5.1 (a) Which stakeholders are affected by the level of competition in the relevant market/s?  
(b) What is the nature of their interest?

(Stakeholders' can be of many types including policy makers (at all tiers of government), regulators, influential individuals (such as Members of Parliament and high profile business people), incumbent firms, (including state-owned enterprises), new entrants, foreign firms, civil society organisations, interest groups, consumers, external

stakeholders [i.e. those based outside the country], academic institutions, think tanks and the media. There might be coalitions of interests. The range of stakeholder interests will seldom be spelled out in existing documents on the market, and it is likely to be necessary to consult widely, and to review media articles and other publications.)

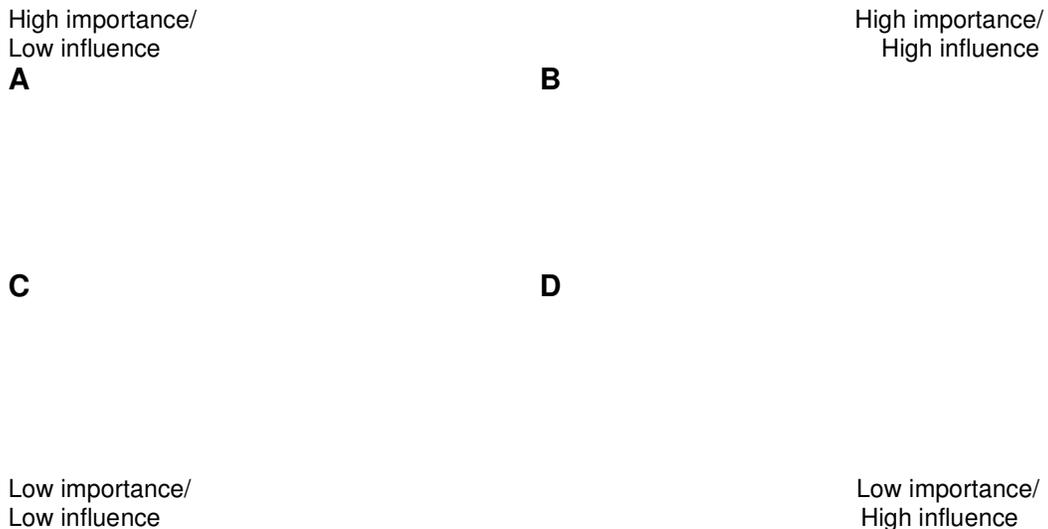
3.5.2 (a) Which stakeholders are likely to favour increased competition in the relevant market/s, and which are likely to oppose it? What are the reasons that opponents and supporters of have for their views, and to what extent are their views justified?

3.5.3 How much power and influence does each stakeholder have on the level of competition in the relevant market/s?

(Vested interest groups might have sufficient influence on the formation of government policies to cause them to be tilted in favour of one group over another. The findings to the answer to this question could be concisely portrayed in a matrix such as that shown below.)

### Importance/Influence Matrix

In this matrix, 'Influence' refers to the power a stakeholder has to affect the level of competition in a market, while 'Importance' refers to the level of priority the researcher feels should be given to satisfying the needs and interests of the stakeholder concerned.



**Conclusions required:** Who are the key stakeholders, what is their position on competition, what is their influence, and how important are their views?

Knowing this will help to provide the basis for a realistic assessment of what will be needed to modify any constraints that exist, and to introduce more effective competition.

### **3.6 Look for signs of anti-competitive conduct by firms**

Several factors help build a picture of the likelihood of anti-competitive practices. None of these factors taken in isolation necessarily means that significant competition problems exist, but viewed together they can point to situations where problems are more likely to occur. Factors that might limit the level of competition in markets can be considered under three headings:

- horizontal. These have effects between firms at the same point of a supply chain in one or more markets (i.e. between competitors);
- vertical. These have effects between firms at different points in the same supply chain (e.g. between manufacturers and retailers);
- other factors. These include factors that are beyond market structures and firm conduct, such as consumer behaviour and information.

The three main types of anti-competitive behaviour are those arising from collusion among competitors, the abuse of dominance by firms with market power, and some mergers and acquisitions. All three can raise horizontal and vertical issues, and they may also be affected by the horizontal and vertical structure of markets or of problems with information, as discussed below.

#### *Firm Conduct: Horizontal issues*

##### **(a) Abuse of dominance**

A dominant firm is one that has sufficient market power to allow it to make price and output decisions without having to take account of the likely reaction of competitors. The existence of dominance is not necessarily harmful, but it is possible for this high market power to be misused. 'Abuse of dominance' describes situations where a dominant firm uses its market power to increase prices above competitive levels, or to prevent smaller competitors from increasing their market shares, or to discourage market entry.

For a firm to have dominance in a market, it needs to have a high market share.

#### **3.6.1 Is market concentration high?**

(Measures of market concentration are outlined in Appendix A. High market concentration can result from a number of causes. Sometimes it can be in the interests of the economy and of consumers (e.g. where the minimum economic scale of production is large relative to the size of the market). However, high market concentration often exists

in situations where there are no such benefits. High market shares can make firms dominant in their market, unless market entry is likely if incumbent firms charged prices above competitive levels.

The abuse of dominance can involve conduct that excludes competitors, and conduct that exploits consumers. Consumers may be exploited if prices are too high, while competitors can be harmed where prices are too low because of predatory pricing. Determining whether prices are too high or too low is not always straightforward and requires careful study.

'Predatory pricing' occurs where a well-funded dominant firm sells its products below cost for a period, with the intention of forcing smaller competitors out of the market, and, when this is achieved, then increasing prices. This tactic might also be used to discourage a firm that is known to be planning to enter the market.

3.6.2 Do prices or profits in the sector appear to be higher than those prevalent in similar markets elsewhere?

(While such comparisons are sometimes helpful, they raise a number of complexities. Expert advice from accountants is likely to be required, and valid comparisons are not always possible. If comparisons are being made with neighbouring countries, it will be necessary to allow for differences in taxes, transport costs, quantities sold per transaction and other quantifiable elements. Differences between countries in the pattern of supply and demand, and differences in government regulations might also be significant.)

While the role of competition policy is to protect the process of competition, and not individual competitors, hurting competitors can hurt consumers in the long run, particularly where there is market dominance. The types of behaviour by dominant firms that may be used to exclude competitors or to exploit consumers include:

- Price discrimination (which sometimes has an efficiency justification where costs of supply differ);
- Discounts where costs of supply are the same;
- Tying and bundling.

3.6.3 Do suppliers require that buyers also purchase a different product, in addition to the one requested?

(This practice is called 'tied selling'. The practice can reduce consumer choice, as consumers might prefer to buy another brand of the tied product, or might be able to buy it on more favourable terms elsewhere. It can also reduce the opportunity for other firms supplying the tied product to compete.)

- High expenditure on activities not directly related to production, such as advertising and research and development.

Usually these activities are pro-competitive, and improve quality and expand demand. However, sometimes they can be used strategically to build brands that competitors cannot challenge, and to raise prices without improving quality, variety or access to the market.

3.6.4 Does advertising in the market concentrate on brand awareness, service and product features, rather than on price?

(If prices seldom or never appear in advertising, it is possible that there might be little or no price competition. Conversely, price transparency can facilitate collusion!)

3.6.5 Are there high actual or perceived switching costs for buyers who wish to change to a substitute product?

(There are many causes of 'switching costs'. Common examples are (a) exit fees that must be paid to an existing supplier for early termination of a contract, (b) the costs of any new equipment needed (e.g. a new razor is usually needed for a switch to a different brand of blade) and, (c) the learning costs involved in mastering the different technology used in another brand of equipment.)

Other types of strategic conduct include building large stocks of spare capacity with which to flood markets in response to entry. Incumbent firms doing this to credibly commit to blocking entry, or they may behave unpredictably or aggressively to build a forbidding reputation.

Sometimes dominance is desirable, or unavoidable, such as where there are large economies of scale, or in markets where there are strong network effects. Often such markets are regulated by agencies established by government, and this leads to the possibility of regulatory capture. Market dominance may also result from past state control or favour.

3.6.6 Are there any indications of regulatory capture by private or publicly owned utilities?

('Regulatory capture' implies that the regulated entities are able to influence the regulator or the government to protect the entity or entities' own interests. Where such influence exists, the regulated entities may use it to diminish the prospect of competition from new suppliers.)

3.6.7 Are there any problems for the distribution of agricultural commodities that result from incomplete reforms of agricultural marketing, or from

other features of the market?

(The number of state-owned or state-sanctioned marketing boards has been greatly reduced by domestic economic liberalisation and international trade negotiations. However, in some cases the reforms have been incomplete, and the removal of the legal monopolies of marketing boards has been followed by private monopolies, often subject to government interference.)

### ***(b) Collusion and cartels***

Competitors sometimes collude to limit the intensity of competition by making agreements to fix prices, to divide the market between themselves, to conduct boycotts of firms that will not co-operate with them, or to rig bids for contracts. Collusive agreements such as these are called cartels. Cartels might involve only domestic firms, or a mix of domestic and international firms, or only international firms<sup>4</sup>.

Cartels usually operate in secret, and their existence can be difficult to establish. Many are never detected. Note that 'tacit collusion' is also possible. Tacit collusion occurs where firms collude without any direct contact, but simply on the basis of their expectations of others' responses to changes in behaviour. This can lead to 'price parallelism'. However, to justify an inference that firms are acting collectively, it is usually necessary to identify also another factor or factors that reinforce/s a conclusion based on parallel prices of competitors.

One of the weaknesses of cartels is that it can be more profitable for a cartel member to cheat on the agreement to make larger sales. For a cartel to survive, it must be possible for such actions to be both detectable and punishable by other parties to the agreement. Despite their vulnerability to 'cheating', some cartels continue to operate for many years.

Factors that make collusion between competitors more likely are:

- market structure: more concentrated markets, less entry, similar costs and cross-ownership links between competitors.
- structure of demand: less buyer power, more stable demand, and regular orders or auctions (especially when the results are published regularly).

#### **3.6.8 If price changes by suppliers tend to follow similar patterns, do there**

<sup>4</sup> The harmful impact of cartels can be large, as the investigation of a number of international cartels has shown. A study of six cartels involving industrial products and raw materials supplied by companies in high income countries showed that they had overcharged consumers in developing countries by up to \$7 billion in the 1990s. Price overcharges ranged from 15 to 45%. (Source: 'Global Economic Prospects 2003', World Bank.)

appear to be any practices that would allow the suppliers to co-ordinate their price changes?

(Examples are price announcements well in advance of the effective date of change, and/or information exchanges between suppliers on issues such as costs. The existence of such 'facilitating practices' can provide a channel for competitors to signal price intentions, without there being any direct communication between them. These practices can blunt competition.)

- Nature of the product: where there is very little differentiation between the products of competitors, such as is the case with commodities.

Factors that can help cartels to continue to operate include situations that enable the cartel members to know of changes in their competitors' prices or quantities sold, and to distinguish those that result from 'cheating' on the cartel from causes such as changes in demand by consumers.

Other influences are:

- Where there are exclusive territories (which reduces competition between retailers for sales of the brand concerned), manufacturers of other brands might be able to take advantage of the resulting price stability to split the market for their own products.
- When several manufacturers sell through a single retailer, the retailer could facilitate collusion.
- Trade Associations sometimes play a facilitating role in collusion.

3.6.9 Do any trade or professional associations appear to have a role in setting prices?

(Trade and professional associations can benefit the wider community, as well as their members. However trade associations sometimes attempt to prevent competitive pricing in their industry. When an industry is subject to price controls, governments often look to the relevant trade or professional association to help coordinate application of the controls. After controls have been removed, the practice of competitors consulting on prices might continue, even if the practice had subsequently become illegal. If proposed price increases are announced by a trade association, this might indicate that the association has a coordinating role in pricing decisions. Sometimes trade associations will exclude from membership otherwise eligible firms that discount their prices.)

3.6.10 Are there any indications of collusion between firms bidding for government procurement contracts?

(Bid-rigging, both for routine supplies and for infrastructure projects, is common in many countries. Government purchases are often large, and bid-rigging can have a high impact on the efficiency of a government's operations, and on its ability to provide services to its people. Where bid-rigging occurs, it means government agencies are able to provide a smaller quantity of services or infrastructure for any given budget.)

### **(c) Mergers**

Where there is a substantial increase in concentration through mergers or acquisitions, dominance or collusion may be more likely. However, if there are low barriers to entry, or countervailing buyer power, the anticompetitive influences arising from increased concentration might be offset.

#### **Firm Conduct: Vertical Issues**

Dominance, collusion and mergers can all generate extra issues when there are vertical restraints within supply chains, that is, between producers, wholesalers or retailers.

3.6.11 Do any suppliers require that resellers not sell below prescribed minimum prices, or that they observe prescribed discount levels?

(If this occurs, buyers are prevented from searching for lower priced sources of supply.)

3.6.12 Are there any other vertical restraints, such as quantity forcing, franchise fees, exclusive dealing or exclusive territories?

(At times there can be justification for some of these practices, and any reduction in competition that results from them must be balanced against any benefits that they provide.)

#### *Other problems of market structure*

3.6.13 Where the products are complex or infrequently purchased, does it

appear that buyers might lack sufficient information to make informed decisions on purchases?

(It is important for buyers to have full information on their intended purchase, including the likely cost over the product's life cycle. An example is that of a computer printer, where it is necessary to know also the price of a toner cartridge, and how long the cartridge will last. If buyers lack sufficient information to make informed choices, competition will be less effective. Such situations might be dealt with by requiring adequate information to be made available to prospective purchasers.)

**Conclusions required:** Does the conduct of the firms in the market suggest either that suppliers are co-ordinating their behaviour, through collusion or tacitly, or that large suppliers with market power are using their dominance in anti-competitive ways? If so, how significant do the effects appear to be?

## 4. Draw conclusions

The conclusions of each of the sections in the Framework should be reviewed, and an overall view formed on the nature of competition in the relevant markets.

If the overall conclusion was that there did not appear to be any significant competition concerns, no further action would be required, other than dissemination of the findings.

If competition was found to be weak, the causes, effects and possible remedies should be assessed through the following questions:

4.1 (a) What effect does weak competition in the market have on the economy?

(b) Who profits from the effects of weak competition, and by how much?

(c) Who loses because of the weak competition, and by how much?

(While exact calculations might not be possible, it is necessary to have an understanding of the likely extent of the harm from weak competition, and the nature of its impact, before concluding whether, and if so, what type of, corrective action is needed.)

4.2 What actions are possible to improve the state of competition?

(Feasible options will be determined by the specific problems identified, and by the nature of national institutions, laws and policies. For example,

if high prices are caused by collusion among suppliers, the available options will depend on whether there is a law under which enforcement action could be taken. If not, generating media interest to increase awareness and to put public pressure on those carrying out the practice might be worth pursuing.

Some examples of possible remedies that might be recommended in appropriate situations are to:

- disseminate information to help consumers make better-informed decisions, taking care to ensure that the right information reaches the right people at the right time and in a usable form;
- encourage individual firms to take corrective action (where the problem appears isolated) or to formulate an industry code of practice (where the problem is widespread);
- amend regulations or policies that unnecessarily limit market entry or that reduce competition between existing suppliers;
- for regulated sectors, amend the applicable regulations or policies to allow increased competition;
- reduce privileges to state-owned enterprises;
- amend public procurement policies;
- amend specific trade or industrial policies;
- promote policies to increase the awareness of competition by business, consumers and government, i.e. develop a 'culture of competition';
- develop a national competition policy;
- introduce or amend competition law, or increase the resources available to the competition authority.)

4.3 Which stakeholders would benefit from the possible corrective actions, and to what extent?

(In proposing corrective action, policy makers will need to take account of the likely impact on vulnerable groups, especially the poor.)

4.4 What is likely to be the effect of the possible corrective actions on key economic variables including investment, productivity, employment, exports and growth?

(Being able to demonstrate likely benefits for the economy should increase the willingness of stakeholders to support the corrective actions required.)

The competition assessment should conclude with recommendations on the steps necessary to remedy any shortcomings found in the state of competition in the sector.

## 5. Sources of further information

Many competition authorities have websites that provide access to extensive information, including market studies and investigations of anti-competitive behaviour. While the sites deal with competition issues in the countries concerned, the principles and methodology often have wide application. Sites with information in English include the following:

- Armenia – State Commission for the Protection of Economic Competition, <http://competitionpolicy.wv.am>.
- Australia – Australian Competition and Consumer Commission, [www.accc.gov.au](http://www.accc.gov.au).
- Barbados - Fair Trading Commission, <http://www.ftc.gov.bb>.
- Canada – Competition Bureau, [www.competitionbureau.gc.ca](http://www.competitionbureau.gc.ca).
- European Commission, [http://ec.europa.eu/comm/competition/index\\_en.html](http://ec.europa.eu/comm/competition/index_en.html).
- Jamaica - Fair Trading Commission, [www.jftc.com](http://www.jftc.com).
- Mexico - Federal Trade Commission, [www.cf.gob.mx/english/](http://www.cf.gob.mx/english/)
- New Zealand – Commerce Commission, [www.comcom.govt.nz](http://www.comcom.govt.nz).
- South Africa – Competition Commission, [www.compcon.co.za](http://www.compcon.co.za).
- United Kingdom:
  - Office of Fair Trading, [www.offt.gov.uk](http://www.offt.gov.uk).
  - Competition Commission, [www.competition-commission.org.uk](http://www.competition-commission.org.uk).
- United States of America:
  - Antitrust Division, Department of Justice, [www.usdoj.gov](http://www.usdoj.gov).
  - Federal Trade Commission, [www.ftc.gov](http://www.ftc.gov).

Several international organisations that are interested in competition policy have informative websites. The principal ones are:

- The OECD, [www.oecd.org](http://www.oecd.org) (then click 'Competition' in 'Economic' section). In addition to an extensive range of documents specifically on competition, the OECD's "Guidelines for Multinational Enterprises" published in October 2001 include a section on competition. The Guidelines may be accessed on: [www.oecd.org/document/28/0,3343,en\\_2649\\_34889\\_2397532\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/28/0,3343,en_2649_34889_2397532_1_1_1_1,00.html). A document on the OECD's POVNET work on pro-poor growth ("Accelerating Pro-poor Growth through support for private sector development" may be viewed on: [http://www.oecd.org/document/12/0,3343,en\\_2649\\_34621\\_36563212\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/12/0,3343,en_2649_34621_36563212_1_1_1_1,00.html).
- The International Competition Network, [www.internationalcompetitionnetwork.org](http://www.internationalcompetitionnetwork.org).
- The United Nations Conference on Trade and Development (UNCTAD): [www.unctad.org/competition](http://www.unctad.org/competition).

- The World Bank, <http://rru.worldbank.org/PapersLinks/Developing-Competition-Policy>. A useful recent World Bank publication that surveys a range of competition issues is *Competition Law & Policy: Challenges in South Asia* (2007) by Mark Dutz and R. Shyam Khemani.
- CUTS International. [www.cuts-ccier.org](http://www.cuts-ccier.org) provides access to some useful CUTS publications, including: 'Competition Law & Policy Made Easy', 'Friends of Competition' and several others. [www.competitionregimes.com](http://www.competitionregimes.com) carries a comprehensive manual of competition laws in about 115 countries..

For a more general discussion of the role of competition policy, see DFID's: "Competition Policy Reform, Growth and Poverty Reduction" paper presented at the Asia Regional Consultative Conference on the Business Environment" 29 November – 1 December 2006 in Bangkok; a guidance note on "How to support competition policy and law (April 2004); and "Key Facts on competition and competition policy". Copies may be requested from the Investment Climate Team, DFID, 1 Palace Street, London SW1E 5HE, United Kingdom. (See Foreword for e-mail addresses.)

## Appendix A - More on Competition

## **1. Why is competition important?**

The contribution competitive markets can make to economic growth and to poverty reduction is increasingly recognised. For example, in 2005, the need for competitive markets was emphasised in flagship publications of the World Bank (*World Development Report 2005*) and the Asian Development Bank (*Asian Development Outlook 2005*).

Trade and investment liberalisation, privatisation and deregulation can significantly increase the level of competition, but they provide no assurance that competition problems will not occur. Many goods and services are not tradable internationally, and anti-competitive behaviour can occur even when there are no formal barriers to trade. As economies deregulate and privatise, the removal of formal barriers should not be followed by re-monopolisation by dominant private enterprises.

There has been widespread adoption of competition law regimes since 1990. As recently as 1989 only 11 developing countries and 20 OECD countries had a competition law. There are now over 100 countries with a competition law, and many others have draft laws in progress. Competition law is still relatively new in much of the world, and is still to be adopted by a substantial number of developing countries.

## **2. Promoting competitiveness through competition**

Domestic competition is an important factor in providing incentives for domestic firms to invest in improving their competitive capabilities. The greater the competition that firms face, the greater is their incentive to gain cost and quality advantages. Evidence shows that there is a positive relationship between competition and efficiency, and between competition and the rate of productivity growth, which in turn is one of the main sources of firm level competitiveness and economic growth in countries. Firms that face strong domestic competition perform best in international markets. This has important implications for efforts to promote greater regional integration, especially in Africa.

## **3. Defining Markets**

'Sector' and 'industry' are terms commonly used to refer to sections of an economy. However, a tighter definition is needed for assessing competition if soundly-based conclusions are to be drawn.

Competition assessments must study the relevant 'market/s'. While a sector or an industry might sometimes be a single market, it would be more usual for a sector to comprise a number of markets, of varying levels of importance.

A market isn't necessarily a particular place. The term refers to the group of goods or services most buyers regard as being close substitutes when relative prices change. If the supplier of a product were to increase its prices by a non-trivial amount, would it retain sufficient customers to make the price rise profitable? The answer to this will depend on whether the customers have any feasible alternatives, taking account of any costs that might be involved in changing suppliers. For example, if smokers were equally happy to use matches or disposable lighters, and the price of matches were to rise appreciably, it is likely that the demand for disposable lighters would increase.

Markets have two key dimensions and both are needed for a complete definition. One is the good or service concerned, (the 'product market'). The other is the geographic extent of the product market within which buyers and sellers can interact (the 'geographic market'). For some products the geographic market could be national (or even wider), while for others a country might contain numerous separate geographic markets.

A straightforward way to define markets is to start with a working definition of what the market might be, and to refine this through discussions with suppliers and customers, and through reviewing relevant literature.

However, some cases are more complex, and, where data and research capacity is available, economic techniques such as elasticity estimation and price correlation studies may be used. A technique that provides a conceptually sound framework, although it is often difficult to apply in practice because of data limitations, is the 'hypothetical monopolist test', generally abbreviated to the 'SSNIP test' ('Small but Significant and Non-transitory Increase in Price') This way in which this test can be applied is described on the websites of many competition authorities. An example from the Canadian competition authority's website can be seen on:

<http://www.competitionbureau.gc.ca/internet/index.cfm?itemID=2185&lg=e>.

#### **4. Market Concentration**

Market concentration reflects the number of firms in the market, and their share of total sales. The reason for looking closely at market concentration is that where a small number of firms account for a substantial proportion of sales, explicit or tacit collusion is more likely. If a single firm has a high market share this might give it market power that could be misused. There are two widely used measures of concentration: concentration ratios and the Herfindahl-Hirschman Index (HHI).

##### ***a) Concentration ratios.***

A commonly used and reasonably informative way to describe market concentration is to calculate the percentage of market turnover that is

accounted for by a small number of the largest firms. In some cases aggregation of the largest four firms is considered appropriate, and the resulting percentage is called the CR4 ratio. Other numbers of firms are used in some situations, such as three or five, which result in the CR3 and CR5 ratios respectively. A limitation of this approach is that it does not allow for differences in the relative importance of the firms.

There are no absolute measures on the level of concentration likely to raise competition concerns. Some competition authorities consider a CR4 of 40% or more to indicate 'oligopoly', that is where the number of suppliers is small enough to make coordinated market behaviour more likely.

When market shares are being examined, what is usually measured is either the value of sales, or the number of units produced. However, in some situations other measures could be appropriate. At times the capacity of the suppliers, or their reserves of a particular commodity, might give a more useful indication of the strength of competition. Sometimes these three measures, (sales value, quantity and capacity), will show similar market shares, but sometimes not. If data is available on two or more of the measures, the one giving the largest market share should be used.

Market shares will normally be from the most recent financial year, but if any significant likely changes are known (such as an increase in the capacity of a significant firm, or the proposed closure of a supplier) this should be allowed for in the calculation.

In smaller economies, a relatively high market concentration might be considered unavoidable where the minimum economic scale of operation in the relevant markets is large in relation to demand. This does not mean that the possibility of anti-competitive behaviour in such markets should be overlooked.

#### **b) The HHI.**

The other main measure is the Herfindahl-Hirschman Index (HHI). Calculating this requires knowledge of the market shares of all suppliers, (although a reasonable approximation is possible if the shares of the significant firms are known). The HHI is calculated by summing the squares of the market share percentages of each supplier. The possible range is from a little above zero (where the market comprises a very large number of only very small suppliers) to 10,000 (where there is a single supplier).

The HHI clearly gives a much higher weighting to larger firms. This is appropriate, as such firms have a greater impact on what happens in their market. The HHI is frequently used when reviewing the likely impact on competition of a proposed merger.

Some competition authorities use a scale such as the following to assess the significance of the HHI. In relation to mergers, some competition authorities make known the extent to which relatively small HHI increases for markets

falling within groups (a) and (b) would be regarded as not likely to raise competition concerns.

(a) An HHI of less than 1000 is low, and there are no concerns about market concentration.

(b) An HHI between 1000 and 1800/2000 is moderate, and competition concerns are not considered likely.

(c) An HHI above 1800/2000 is high, and might raise competition concerns.

An example of use of the HHI by the UK Office of Fair Trading may be viewed on:

[http://www.offt.gov.uk/advice\\_and\\_resources/resource\\_base/Mergers\\_home/mergers\\_fta/mergers\\_fta\\_advice/basf-ag](http://www.offt.gov.uk/advice_and_resources/resource_base/Mergers_home/mergers_fta/mergers_fta_advice/basf-ag).

## **Appendix B - Issues in Particular Sectors**

The selection of sectors meriting study will vary with national priorities. However, there are several major sectors for which competition assessments will often be found to be desirable. This Appendix notes some issues which may arise in the course of assessing competition in these sectors.

## 1. Agriculture

Many concerns by developing countries about competition and agriculture relate to international trade, particularly access to developed country markets and phyto-sanitary requirements. While these issues are of major concern to agricultural exporters, the question of international trade negotiations is beyond the scope of the Competition Assessment Framework.

The protection of domestic producers from import competition is likely to result in higher prices for consumers and for the industries that use agricultural products as inputs. Policies of protection might be based on social priorities such as preserving the livelihood of farmers, or on policies of national self-sufficiency. The introduction and maintenance of such policies requires a careful balancing of interests that might be in conflict. Some government policies may have unintended consequences, reducing the ability of the private sector to compete, and policy switches can de-stabilize the sector.

Apart from the two broad issues noted above, the ability of farmers to compete effectively as suppliers to markets is sometimes restricted by situations such as the following:

a) Contract farming. This is not necessarily either good or bad for farmers, or for competition. The system can be mutually beneficial to the farmer and the company purchasing the output. It can be particularly useful for higher value crops, and can provide farmers with access on reasonable terms to finance, technical information and markets. However, there are sometimes situations where the terms imposed by the buyer are unnecessarily restrictive.

b) Buying agents. There are sometimes situations where farmers have insufficient product market information, or where they are forced by lack of finance or lack of a storage facility to sell their output immediately after harvest. These situations are sometimes exploited by buying agents who offer low farm gate prices. Problems are more likely where farmers have no alternative to a monopoly buyer. It is sometimes possible to reduce such disadvantages faced by farmers by developing channels for providing current market information to them.

c) Buyers' cartels. There have been cases where there is a relatively small number of buyers of the agricultural commodity concerned, and where these firms collude to set prices that disadvantage the producers. One reported example concerned bean growing in Costa Rica (not coffee) where bean processors colluded to fix prices, thereby reducing the incomes of the bean farmers<sup>5</sup>.

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<sup>5</sup> Source: UNCTAD: Phase 1 Report on COMPAL programme

d) Export monopolies. Where these exist, in some situations they might not market the product in ways that maximises the return to the producers. "Marketing boards are widely believed to induce inefficiency in marketing and sluggishness in price discovery", and their existence discouraged private investment in storage and transport<sup>6</sup>. The number of state-owned or state-sanctioned marketing boards has been greatly reduced by domestic economic liberalisation and international trade negotiations. However, in some cases the reforms have been incomplete, and the removal of the legal monopolies of marketing boards has been followed by private monopolies, often subject to government interference.

Agricultural cooperatives sometimes have the negative characteristics of para-statal, but, conversely, sometimes can counter monopolistic tendencies in the market.

## 2. Construction

In recent years many cartels have been identified in the construction industry. Cartels may exist among construction contractors, material suppliers or engineers and architects. The types of bid rigging undertaken by cartels include bid suppression (where some competitors agree not to bid), bid rotation (where the cartel participants agree on which of them will submit the lowest bid) and cover bidding (where one participant agrees to submit a bid that is only modestly higher than that of another, to ensure that the latter obtains the contract, while giving the impression of competitive bidding).

One branch of construction that appears particularly prone to cartel formation is road construction, where there is typically high market concentration for the application of asphalt and cement. Examples of national competition authority action against cartels involved in bid rigging for road construction include Hungary (2005), the Slovak Republic (2006) and the Netherlands (2006).

In the UK, the Office of Fair Trading has taken action against nine flat roofing contractors (2004) and against four suppliers of double glazing (2006). In 2007 the OFT is continuing an investigation that commenced in 2005 into cartels operating in the construction and maintenance of housing, and in commercial and industrial construction, both in the public and private sector.

In 2007 the European Commission fined four companies a total of 992 million euros for cartel activities involving bid rigging for the installation and maintenance of lifts in hospitals, railway stations, shopping centres and commercial buildings. This is the largest fine imposed to date by the EC for cartel activities.

Examples of other types of cartel activity in construction include bridge building (in 2005 the Japanese competition authorities took action against 50

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<sup>6</sup> C. Barrett and E. Mutambatsere, Cornell University, June 2005

participating companies), and wastewater treatment plant construction in Egypt.

A publication of the UK Office of Fair Trading and the Office of Government Commerce, "A guide for public sector procurers of construction", provides useful advice on evaluating tenders. It is available on [www.ogc.gov.uk/documents/CPO144MakingCompetitionWorkForYou.pdf](http://www.ogc.gov.uk/documents/CPO144MakingCompetitionWorkForYou.pdf).

### **3. Distribution**

The impact of distribution costs on the final price of a good is often surprisingly high, and this gives considerable importance to the effectiveness of competition in the provision of distribution services.

The range of activities that are related to the distribution of goods is wide, and the boundaries of the field are not clear-cut. Some of the important activities under this heading are importing, wholesaling and retailing. The physical movement of goods could be included. Factors that might limit competition in parts of the distribution field include the following:

- Bottlenecks and corruption at points of entry for imports (or of exit for exports);
- Poor road conditions (including impassibility in some districts in some seasons);
- Limitations in the availability of road transport services (see 'Goods transport services' below);
- Inadequate rail service capacity;
- Inadequate storage infrastructure, both for general merchandise and for goods requiring specialised facilities, such as for temperature-sensitive cargoes.

### **4. Energy**

There is a strong linkage between economic growth and energy demand, and a lack of energy inputs can constrain development. Increased competition should result in an expansion of services, a higher quality of service, stable prices and increased investment in the sector.

A fundamental issue for the sector is the vast scale of the expenditure needed to construct major indivisible assets such as gas or oil pipelines, large generating stations and electricity transmission networks. The large sunk costs involved in the construction of these assets can impact greatly on the scope for competition.

For electricity, the potential for competition is greatest in generation, with significant scope in distribution. Transmission is widely considered to be a natural monopoly but generators must have fairly priced access to networks.

Similarly, for gas transmission, small and medium sized producers must have fair access to pipelines.

The structure of the electricity market will affect the opportunities and scope for competition. A single buyer model, where the transmission system operator purchases energy from all generators, provides for little competition, especially in supply-constrained networks. A multi-buyer model that enables distribution companies to enter into power purchase agreements directly with particular generators, subject to regulatory approval, is much to be preferred.

The lack of adequate national infrastructure, and weak or non-existent regulators, can create significant barriers to competition. Incumbent operators are often unwilling to give up licences to allow new entrants in distribution; the expansion of services beyond main urban centres needs new operators and service providers. The security and predictability of the regulatory environment is of crucial importance to new investors in the electricity sector.

Regulatory arrangements should encourage new local generation embedded into distribution networks. These can provide considerable benefits including more reliable services, reduced energy losses and lower costs. Normally, competition rules will prohibit the distribution system operator from generating.

Some other issues are:

- Former national monopolies might seek to protect their market position and profits by engaging in anti-competitive practices that make it harder for new entrants to enter the market and compete;
- The vertical integration of existing networks and supply companies could reduce the incentives for new entry;
- A lack of transparency in pricing mechanisms could lead to a lack of trust in the process, or to poorly structured price controls;
- Competition might be distorted by the existence of cross-subsidies between market segments, or by direct subsidies to particular customer categories;
- If regulations impose unnecessarily protracted and costly entry requirements, new suppliers might be discouraged from attempting to enter the market.

A good source of further information on energy markets is the website of the UK Office of Gas and Electricity Markets (OFGEM): [www.ofgem.gov.uk](http://www.ofgem.gov.uk).

## **5. Finance**

Robust financial institutions and diversified capital markets can contribute significantly to the development of a competitive environment.

The finance sector is heavily regulated in most countries, to protect savers and depositors, to reflect the importance of the sector to the operation of the

economy and to minimise the risk of systemic failure. Banks normally require a licence to operate, and they are subject to a number of operational requirements, such as maintaining acceptable capital/asset ratios. The banking regulator is often the central bank, but in some cases is the Ministry of Finance or a specialised agency.

Prudential regulation is of course essential, but it is possible for the regulations that apply to the financial sector to go beyond what is needed for prudential purposes. It is also possible that the high degree of regulation of the sector might encourage practices that appear collusive, and that at times might in fact be collusive.

State-owned banks sometimes adopt practices intended to help certain groups of clients (e.g. rural customers, the poor and SMEs). If not used with care, such practices might both fail to help the target groups and distort competition in the market.

In some situations, the actions of donors who are seeking to rapidly disburse grants might result in inappropriate incentives that distort competition.

In developing countries there is a pressing need for improved access for financial services to small and medium enterprises and to the poor. Innovations such as mobile banking and telephone banking can help to improve this access. It has been the experience of many countries that non-bank financial institutions (NBFIs) are more innovative in developing new services to reach previously unserved groups. The pattern of regulation should therefore recognise the scope for developing this avenue of competition in the provision of financial services.

A study reported in April 2007<sup>7</sup> found that increased competition was one of the significant factors that had led to substantial reductions in real interest rates charged by microfinance institutions between 2000 and 2005.

## **6. Manufacturing**

A number of countries have had policies that restricted competition in their manufacturing sectors. Where this is still the case, the justification for continuing such policies needs to be closely examined and balanced against any adverse impact they have on competition. Some of the types of restrictions that have existed are:

- 3 Industrial licensing, i.e. the need for government approval to commence business;
- 4 The reservation of some activities for the public sector, or for small scale businesses, or for particular groups of the population;
- 5 Quantitative restrictions on imports, and/or high import tariffs.
- 6 Significant recourse to anti-dumping measures.

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<sup>7</sup> CGAP Newsletter 4/2007

- 7 A restrictive policy towards foreign direct investment.
- 8 A difficult business environment, including protracted procedures for opening or closing businesses.

Competition in manufacturing can be affected by the existence of cartels, the frequency of which varies considerably between industries. An industry that is widely acknowledged as being prone to cartel formation is the production of cement. In a speech in South Africa in 2001, a competition expert, Professor Richard Whish of Kings College, London, observed that:

“The only countries in which I had been unable to find the cement cartel is where there is a national state-owned monopoly for cement.”

Factors influencing cartel formation in the cement industry include the small number of producers, the nearly homogenous nature of the product, and the limited scope for competition from imports because of the impact of transport costs on a bulky relatively low value product.

## **7. Telecommunications**

The almost universal pattern until relatively recently years was for telecommunications services to be provided by a state-owned monopoly. Liberalisation and privatization of the industry has brought extensive benefits to users through lower prices and new services.

In addition to the types of competition problems that might arise in any sector, network externalities and the dynamic nature of telecommunications markets can raise further types of competition problems.

Issues that can arise in the process of liberalisation, or after it, include the following:

- In some situations, the incumbent operator retains a role in policy making for the sector, or in sector regulation, creating a conflict of interest.
- The purchasers of privatised telecommunications companies might be given exclusive rights to provide services for a significant period, thereby preventing competition while the rights last.
- The terms on which new entrants are able to inter-connect with the incumbent operator, including the basis for charging for originating or terminating calls, may be a cause of dispute. There may be allegations that the dominant provider is not providing competitors with particular services promptly, or of the required quality.
- Licence fees might be set at different levels for different types of services (e.g. for wireless in local loop services, compared with mobile services) thereby distorting patterns of entry.
- The numbering plan. If telephone numbers are not portable, this can make subscribers less willing to change their service provider. If it is

also necessary for customers of new telecommunications companies to use additional access codes, this might act as a further restraint on the choice of supplier.

- Methods of funding any universal service obligations must be developed.
- Allegations may be made about anti-competitive actions by the dominant provider, including bundling of services and predatory conduct. There might be exclusionary agreements, such as those between the dominant incumbent and mobile handset distributors on the types of SIM cards that will be included in the handsets.
- In some cases local basic services may continue to be cross-subsidised from high charges for long-distance services. (Accounting separation is one means of discovering the extent of any such cross-subsidies; other, more stringent, remedies might be required to eliminate them.)
- The respective roles of the competition authority (where one exists) and the telecommunications regulator might require clarification.

The increasing convergence of electronic communications makes it necessary to consider also the access that prospective service providers have to radio spectrum.

A good source of further information on competition issues in the telecommunications sector is the website of the UK Office of Communications (OFCOM), [www.ofcom.org.uk](http://www.ofcom.org.uk).

## **8. Transport**

Transport is a crucial component of the infrastructure needed to achieve sustained economic development.

### **a) Passenger services**

Where services are subject to licensing based on tenders, the scope for competition can be reduced significantly if the licensing authority bundles a significant proportion of the routes, as this would limit the number of smaller operators who could submit tenders. Barriers to entry could be raised if quality standards were to be imposed at levels that deterred or prevented a significant proportion of current or prospective bus operators from providing their services.

Where services are provided by competing operators, competition can be reduced if the operators directly or indirectly fix prices or share routes.

### **b) Goods transport services**

Road transport is the major method of transporting goods in all countries, with

railways and other transport modes providing substitutes in some situations. As there is usually a large number of small road transport operators, it might be assumed that the market for road transport services for goods would be competitive, particularly as entry is relatively easy (subject to any licensing requirements), and exit is easy. However, there can be impediments to competition.

- Competition might be limited, particularly on the buyers' side, where specialised vehicles are required, such as for petroleum products, refrigerated cargoes and dangerous goods. In many such cases the number of buyers of the transport service might be small.
- There might be unduly restrictive licence requirements for entry.
- Limitations on the ability of operators to undertake back-loading might result in higher charges for users.
- Limitations might exist on the nature of goods that may be carried, or on the maximum distances that may be served (particularly to protect rail operators).

## **Appendix C: Glossary**

**Cartels.** Cartels result from the action of firms that are nominally competitors agreeing to coordinate their price and output decisions, or to limit the geographic markets they will supply, so as to reduce or eliminate competition between them. If the colluding firms account for all of the supply in a market, they can act in a similar way to a monopolist. Historically, the formation of cartels was encouraged by some governments in some sectors, but this is now unusual. Where competition laws exist cartels are normally illegal, leading to secrecy in their operations and their existence. This makes it difficult for competition authorities to establish the existence of a cartel, and to obtain evidence sufficient to permit enforcement action. While many cartels are unstable, because of the incentives they may provide for members to cheat on their undertakings, some have lasted for many years. In recent years there has been justified publicity about the harmful effects of large international cartels on developing countries, but it should not be overlooked that domestic cartels are also a substantial problem in most countries.

**Competition.** Competition in trade is the process of rivalry between sellers who are seeking to make sales to earn profits. While a seller's motive is of course self-interest, the existence of competitive markets is mostly of considerable benefit to society, because they result in the nation's resources being used in the most productive ways, and because firms have incentives to reduce prices, to improve the quality of products and to innovate. This makes higher rates of economic growth possible.

**Competition Authority.** This is a body established by the government to enforce its competition law. Except in the case of mergers and acquisition proposals, a competition authority acts after a competition problem is drawn to its attention, and it does not normally monitor the performance of markets or endeavour to shape them, other than through allowing the forces of competition to operate (in contrast to sector regulators).

**Contestability.** A market is contestable if new entry is likely were the existing supplier/s to increase prices above competitive levels. Where a market is contestable, the pricing decisions by the incumbent suppliers might be at competitive levels, even if a single supplier accounted for most of the supply, because the incumbents would expect new suppliers to enter the market if prices were higher than this. For contestability to exist there must be low barriers to entry and exit.

**Dominance.** An enterprise is dominant in a market if it has sufficient market power to allow it to make decisions on prices or levels of output without having to take account of the likely response of competitors. The abuse of a dominant position is a key type of anti-competitive behaviour of concern to competition authorities.

**Enterprise.** An enterprise, or 'firm', is the business unit that is operating in a market. The term includes all legal forms of ownership, including limited liability companies (both those listed on the stock exchange and those in which the shares are privately held), partnerships, joint ventures, sole traders and state-owned trading entities.

**Market.** This key concept in the analysis of competition (discussed more fully in Appendix B(1) above), refers to the extent to which it is reasonably possible for sellers and buyers to interact to undertake transactions. A market might be confined to a specific locality, but most markets are much wider in extent. A market is defined in terms of both the product (this being a good or service for which there are no close substitutes) and the geographical extent of the area within which buyers and sellers interact. A 'sector' or 'industry' is less likely to be a single market than a collection of several markets, and the pattern of competition might differ considerably between markets in a sector. A '**relevant market**' is one that is of concern and that will be assessed in an analysis of competition.

**Market power.** The ability of a firm to change the market price of a good or service without having to take account of the likely response of existing or potential competitors. A firm with market power has the ability to undertake unilateral anti-competitive activities.

**Mergers and acquisitions.** These are of interest for competition analysis where they bring two or more firms that were formerly competitors under common control, thereby increasing market concentration. It is the increase in concentration that is of interest for competition analysis, and distinctions between mergers, acquisitions and other forms of economic concentration are not important from this perspective. Competition laws usually define economic concentration broadly, to include all of the ways in which it may be accomplished. Mergers and acquisitions that involve firms in unrelated markets are of much less concern, and seldom raise competition problems.

**Monopoly.** A strict definition is the situation of a single seller in a market. However, the term is often used to describe situations where a supplier has a high degree of market power, even though there might be other suppliers to the market. (A situation of a single buyer is called a 'monoposony'.)

**Natural monopoly.** A situation where the long run marginal cost of production (i.e. the cost of producing another unit) is falling. This means that a single firm can produce any given quantity at a lower unit cost than could two or more firms. Regulation is normally used to allow efficient production to take place, while controlling the prices that may be charged or the profit that the monopoly supplier may earn.

**Oligopoly.** This is a market structure in which a small number of firms account for most of the supply in that market. Because the number of firms is small, each is likely to know how its competitors would react to changes in prices or output by any firm in the market. The effect can be to blunt competition, because the firms are likely to see an advantage in acting more as monopolist would.

**Predatory pricing.** This is a form of abuse of dominance where a dominant firm sells a product at a low price (usually below cost) with the aim of forcing smaller competitors out of the market, or of creating a barrier to entry. The

dominant firm must have sufficient resources to fund the period of low pricing if the tactic is to be effective. If its action is successful, and the competitors are eliminated, the predator will then increase its prices to recoup the losses from the period of low pricing, and to make a higher profit.

**Products.** This term is used to include both goods and services.

**Regulators.** Sector regulators are created by governments to monitor the conduct of firms in sectors in which competitive markets are not able to operate because of features such as the existence of natural monopolies. The regulators may have a wide range of responsibilities including setting technical standards for equipment and quality of service, and administering profit or price caps.

**Regulatory capture.** This is where a regulatory agency becomes dominated by the industry that it was created to regulate.

**Rent.** Two meanings must be distinguished. The everyday meaning is the amount paid to a landlord for the right to use a building, piece of land or other asset. 'Economic rent', however, is a measure of market power. It is the difference between what is needed to allow a factor of production (i.e. land, labour or capital) to continue in its present use and what is actually paid.

'**Rent seeking**' means trying to receive more without producing more. An example of rent seeking is where the suppliers to a market form a cartel with the intention of raising prices. The revenue above the competitive price level is economic 'rent'.

**Sunk Costs.** These are costs that have been incurred, and that cannot be recovered to any significant extent. Their significance is that, when business people are acting rationally, sunk costs should not influence decisions affecting the future. An example is a factory building that was so specialised that it could not be used for any purpose other than making the product it was designed for. If there were a permanent large fall in the demand for that product, and the only other use of the building was the sale of re-usable materials it contained as scrap, the costs incurred in constructing the building would be irrelevant to decisions on the future use of the site.

**Tacit collusion.** This occurs where firms 'collude' without any direct contact, simply on the basis of their expectations of how their competitors will respond to any changes in their behaviour in the market.