Competition impact assessment
Part 2: guidelines
© Crown copyright 2015

You may reuse this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence.

To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/ or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summary</td>
<td>2</td>
</tr>
<tr>
<td>2. Identifying affected markets and establishing a baseline</td>
<td>4</td>
</tr>
<tr>
<td>3. Competition question 1 – will the measure directly or indirectly limit the number or range of suppliers?</td>
<td>9</td>
</tr>
<tr>
<td>4. Competition checklist question 2 – will the measure limit the ability of suppliers to compete?</td>
<td>23</td>
</tr>
<tr>
<td>5. Competition checklist question 3 – will the measure limit suppliers’ incentives to compete vigorously?</td>
<td>32</td>
</tr>
<tr>
<td>6. Competition checklist question 4 – will the measure limit the choices or information available to consumers?</td>
<td>37</td>
</tr>
<tr>
<td>7. Considering alternatives</td>
<td>43</td>
</tr>
<tr>
<td>8. Methodologies</td>
<td>47</td>
</tr>
</tbody>
</table>
1. **Summary**

1.1 Healthy competition between firms in a market can deliver benefits to consumers through lower prices, more choice and innovation and can help increase productivity and growth. This publication aims to help policymakers design proposals\(^1\) that support competition. It does so by providing detail on how to conduct an in-depth assessment of the impact a proposal will have on competition.

1.2 Policymakers should conduct an in-depth competition assessment if their proposals:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Directly or indirectly limit the number or range of suppliers</td>
</tr>
<tr>
<td>2</td>
<td>Limit the ability of suppliers to compete</td>
</tr>
<tr>
<td>3</td>
<td>Limit suppliers’ incentives to compete vigorously</td>
</tr>
<tr>
<td>4</td>
<td>Limit the choices and information available to consumers</td>
</tr>
</tbody>
</table>

1.3 This document provides policymakers and analysts with guidelines in how to conduct an in-depth competition assessment. The document should be read alongside Part 1 which provides an overview of the competition impact assessment process. Policymakers and analysts should refer to the appropriate chapter in this document depending on what competition issue is likely to affect their proposal. The document is structured as follows:\(^2\)

- Chapter 2 addresses how to identify the affected markets and establish a baseline
- Chapter 3 outlines competition checklist question 1 – will the measure directly or indirectly limit the number or range of suppliers?
- Chapter 4 outlines competition checklist question 2 - will the measure limit the ability of suppliers to compete?
- Chapter 5 outlines competition checklist question 3 – will the measure limit suppliers’ incentives to compete vigorously?

---

\(^1\) These guidelines are relevant to different types of government intervention, including regulation, changes in entitlement to services, buying or selling assets, and licencing, franchising and contracting. We use the terms proposal and measure to capture the wide range of interventions to which these guidelines may be relevant.

\(^2\) Chapters 1–7 of the guidelines have been written by the Competition and Markets Authority (CMA). Chapter 8 was written by Sean Ennis, a Senior Economist in the OECD’s Competition Division. We are very grateful for Sean’s support and to others who commented on earlier drafts.
• Chapter 6 outlines competition checklist question 4 – will the measure limit the choices or information available to consumers?

• Chapter 7 considers alternatives

• Chapter 8 outlines methodologies that can be used to assess impact
2. Identifying affected markets and establishing a baseline

2.1 The starting point for any in-depth assessment of the impact a proposal might have on competition should be to look at the product and geographic market affected by the measure. A product market for the purposes of this guidance comprises all those products and/or services which are regarded as interchangeable or substitutable by their consumers. A geographic market comprises the area in which the firms concerned compete in the supply of products or services. Depending upon the circumstances, it could be local, regional, national or international.\(^3\) No formal market definition is needed for a competition impact assessment but it is useful to identify:

- products and geographical areas which are directly impacted by the measure;
- wider product markets which might be indirectly affected;
- wider geographic market which might be indirectly affected; and
- related upstream or downstream markets.

2.2 Developing an understanding of the affected markets can help to determine the likely impact of the proposal, will help to assess whether the proposed measure will have the desired effect (particularly if the aim is to reduce or change patterns of consumption) and will make it easier to identify what information needs to be collected and from whom in order to assess the impact of the proposal.

2.3 It might be the case, for example, that on closer analysis a regulatory proposal actually affects two or more economic markets. The impact of the proposal might be different in these different markets depending on the extent and nature of competition in these markets. If one market were more concentrated than the other, then the impact of a new regulation might potentially lead to a greater reduction in competition in the concentrated market.

2.4 Alternatively, it might be the case that the economic market is wider than those suppliers directly affected by the regulation. As outlined in the hypothetical example below, suppliers in the wider market might act as a source of competitive constraint on suppliers affected by a regulatory

\(^3\) See Market definition: OFT403, adopted by the CMA Board.
proposal. The extent to which affected suppliers could pass on the costs of regulation to consumers may be limited as a result of the competition they face from the wider geographic market.

2.5 Further it may be the case that customers will switch from buying the product or service affected by the measure to alternative products or services which are not affected. Such switching may also affect the extent to which the policy achieves its desired effect. The extent to which they will do so will depend on the willingness and ability of consumers to switch and the willingness and ability of suppliers to increase their production.

The wider product market

2.6 Consideration should be given to whether or not the proposal will affect wider product markets, including those products or services that may be indirectly affected by the measure because consumers or suppliers would substitute to other products in response to the new measure.

New regulation requiring professional towel laundering imposed on hairdressers

Suppose a new regulation was proposed that required all towels used in a hair-dressing salon to be laundered professionally. The proposal would affect hair-dressing salons. The regulation would raise hairdressers' costs directly. Hairdressers would likely respond by raising their prices. Consumers, faced with higher prices in hairdressers' salons, may choose to have their hair cut elsewhere where the regulation did not apply and there was no increase in price. Hairdressers themselves may respond by offering to cut hair at customers' homes or in any other location than a salon.

The wider geographic market

2.7 Policymakers should consider whether the wider geographic market will be affected by the proposal. Geographic markets may be local, regional, national or international. While policies may be limited in their jurisdiction they may have wider effects because of the ability of consumers and suppliers to purchase or supply in a broader geographic area.
New regulation imposed on hairdressers (continued)

Extending the hypothetical example above, the restriction on hairdressers requiring hairdressers to launder towels professionally may be introduced only in England. Customers living near the English borders could switch to having their hair cut in Scotland or Wales to circumvent the effect of the regulation (and higher prices in England). In effect the regulation will lead to a step change in costs and prices leading to a diversion along the borders away from English hairdressers. Policymakers might wish to quantify this effect to see if it makes a material difference to the effectiveness of the regulation they are seeking to introduce.

Related upstream or downstream markets

2.8 When identifying affected markets it is important to consider whether or not there will be knock-on effects in related upstream and downstream markets. In making this assessment, policymakers should identify the supply chain for the product or service affected by the proposed measure.

2.9 In doing so, policymakers will need to consider the effect of their proposals on suppliers of inputs required to produce the affected product and those who distribute, wholesale or retail the affected products. This requires a reasonable understanding of the production process – where policymakers do not have this information, they should use the consultation process to gather it. In general one would expect the supply chain to respond to regulations that increase demand for a product (such as microchips for dog tagging in the example below). The question that is relevant to policymakers is over what time and at what price.

Regulation requiring microchipping dogs

Suppose there were concern about stray dogs, and policymakers wanted to introduce a regulation that would require all dogs to be fitted with microchip identification tags. The aim of the policy is to reduce irresponsible dog ownership. Local authorities and charities can no longer bear the cost of having to treat and care for abandoned dogs. Policymakers have been advised that it would be sensible to allow pet shop owners who have received the relevant training to fit microchips in dogs.
What markets would be affected?

The proposed regulation would have a direct impact on the services provided to dog owners. Vets and pet shop owners would need to undertake training, acquire equipment and fit tags in dogs. The cost of this would likely be borne by dog owners who would need to pay more for dogs and dog ownership. The wider market for ‘companion animals’ might also be affected. The increased cost associated with dog ownership may lead some pet owners to switch to ownership of other pets. Related upstream markets would also be affected by this proposal including:

- UK trainers providing training to vets and pet shop owners
- UK or overseas manufacturers, wholesalers, and retailers of microchips
- UK or overseas manufacturers, wholesalers, and retailers of microchip scanners

What could be the potential competition issues?

The regulation could create a large fixed cost for all vets and pet shop owners who have to provide dog tagging. Fixed costs (those do not vary depending on the number of dogs tagged) could create a barrier to entry and result in dampening of competition in markets for veterinary services and pet supplies. Policymakers would need to assess the impact of these costs relative to likely overall firm revenues after the implementation of the regulatory reform to assess the likely effects.

Related upstream markets will need to expand their capacity in order to respond to the increased demand for microchipping. It would be useful to analyse over what time period existing or new suppliers would be able to respond to the increase in demand. If existing providers would remain capacity constrained and entry is costly, it may be that incumbent upstream suppliers would be able to charge higher amounts for the inputs needed to fit tags.

Policymakers could check with upstream suppliers whether or not they would be able to supply sufficient microchips, training and scanners to meet demand for these inputs. These parties may also be able to provide information on the cost of the inputs and the level of current demand, as well as their estimates of the impact of the regulation on prices, which would allow policymakers to estimate the cost of the proposed regulation.

Establish a baseline

2.10 Once the affected markets have been identified, policymakers will then need to identify the baseline option against which to assess the impact of the proposal. This is often the ‘do nothing’ option considered as the baseline in the wider Impact Assessment.

2.11 To identify this baseline, policymakers should collate information on:
• the characteristics of products and services in the markets affected by the proposed regulation;

• the nature of competition, including whether competition is between relatively standardised products focused on price, or whether competition is focused on product quality and differentiation; and

• basic indicators of the strength of competition/market power.

2.12 For the baseline it is also important to gauge the current state of competition in both directly and indirectly affected markets. The CMA’s guidance on assessment of market power sets out how this can be done.\(^4\) Relevant factors include the ease with which customers can switch between competing products and services and ease with which new suppliers can enter the market (and the history of recent entry).

2.13 Where new markets will be created by measure (such as markets for trading permits) there may be no baseline information and the impact of the proposal may need to be considered from scratch.

3. **Competition question 1 – will the measure directly or indirectly limit the number or range of suppliers?**

3.1 Regulations might reduce competition directly (by placing limits on who can participate in a market) or indirectly (by raising costs and resulting in firms leaving the market or by reducing entry and subsequently enhancing the market power for the firms that remain), which may lead to price increases or a reduction in choice for consumers. A reduction in the number of firms in the market might also increase the risk of collusive behaviour amongst suppliers leading to customers paying higher prices.

3.2 Given the importance of maintaining competitive pressure on existing suppliers, the first question that policymakers should ask when conducting a competition impact assessment is:

**Will the measure directly limit the number or range of suppliers?**

3.3 A proposal might directly limit the number or range of suppliers through:

- the award of exclusive rights to supply;
- procurement from a single supplier or a restricted group of suppliers;
- the creation of a licensing scheme that limits the number of suppliers; and
- the creation of a licensing scheme for quality standards.

**Will the measure award exclusive rights to supply?**

3.4 Exclusive rights to supply exist when an organisation is granted rights by the state to be the sole supplier of goods or services. Historically, suppliers of electricity, natural gas, telecommunications, water, postal services and railways, for example, were granted legal monopoly status – or exclusive rights – to provide the service.

---

5 Market power of suppliers is the ability to profitably increase price, decrease quality, or decrease innovation relative to the levels that would prevail in a competitive market.

6 Whilst a separate consideration to the competition assessment, some regulations, such as requirements to invest in new production methods, will result in a direct cost-driven price increase. This will be particularly likely when the supplier is able to pass on increased costs via a price rise, rather than the costs decreasing the profitability of the firm. A report by the OFT commissioned from RBB Economics shows that the likelihood and extent of cost pass-through by a business differs depending on whether the cost change is firm-specific or industry-wide; the responsiveness of the demand and supply conditions it faces; and the degree of competition between businesses up and down the supply chain. For more information please see a report prepared for the OFT by RBB Economics (2014), *Cost pass-through: theory, measurement, and potential policy implications*. 

---
3.5 Policymakers may consider there is a case for granting exclusive rights to supply goods or services where there are natural monopolies and substantial investments in infrastructure are required that may not otherwise be supplied by the private sector. However, even when there is justification, policymakers should take into account that granting an exclusive right to supply amounts to the establishment of a private monopoly. As a result, the granting of exclusive rights may:

- give the firm market power, allowing it to raise prices of the products over which it has exclusive rights; and

- create an opportunity for the firm to leverage market power in related markets.

3.6 Given that the granting of exclusive rights may lead to monopoly pricing and market power, less restrictive ways to achieve the same objectives should be considered.

3.7 One such alternative is to consider distributing exclusive rights through a competitive bidding process known as ‘competition for the market’. To ensure competition for the market has the desired effect of introducing the threat of competition over time, policymakers should ensure that the length of licences, franchises or contracts is suitable for the market in question. Regular competition for exclusive rights is likely to be beneficial unless there is a requirement for long term investment. Care must also be taken to ensure that the current provider is not placed in an advantageous position relative to others because of its previous experience and other factors relevant to the bidding process.

---

**Exclusive rights to manage the data and communications network to connect smart meters**

The Department of Energy & Climate Change granted Smart Data Communications Company Ltd (DCC) a licence in September 2013 to establish and manage the data communications network connecting smart meters to the business systems of energy suppliers, network operators and other authorised service users of the network.

In order to mitigate the risk that DCC faces no competition it has been granted an exclusive licence, through a competitive tender process, for a fixed term.

---

7 A natural monopoly is a monopoly in an industry in which it is most efficient (involving the lowest long-run average cost) for production to be permanently concentrated in a single firm rather than contested competitively.

8 Another mitigation is to seek to introduce at least some competition or contestability in part of the value chain. For example, competition introduced in the non-domestic water supply.
DCC also operates under an ex-post price control regime whereby Ofgem closely scrutinises costs and revenues to ensure value for money.

3.8 Where exclusive rights are awarded, there may also be a need for further regulation to ensure the monopoly provider does not abuse its market power. In relation to the example above, Ofgem is able to ensure that DCC applies its charging methodology in line with its licence obligations as well as regulating the quality and service levels delivered by DCC.

3.9 Where awarding exclusive rights to supply confer advantages to a vertically integrated provider in downstream markets then policymakers will need to assess the likely impact. The upstream part of the company may, for example, be able to supply inputs to its downstream operations at a lower price than it supplies to its competitors. This would put the vertically integrated company at a competitive advantage with respect to other providers in the downstream market. In extreme cases a dominant position in a market may be conferred. Abuse of a dominant position is an infringement of competition law even where that dominant position is the result of Government action.
Commercial use of public information (CUPI) market study

The OFT’s CUPI market study recommended that public sector information holders (PSIHs) should draw a distinction between the information solely gathered and supplied by the PSIH (‘unrefined’ information) and information that could be competitively supplied (‘refined’ information). The study recommended that refined information should be supplied in a way that would not limit or restrict competition. Issues the OFT identified that raised concern included:

- PSIHS were not defining unrefined and refined information so as to separate the monopoly products from those where there were or could be competition for supply.
- PSIHS were not providing businesses with complete knowledge about the information assets they held that could be considered for commercial use and reuse.
- Negotiations over licence terms and licences could be complex and could impose overly restrictive conditions on businesses that wished to use and reuse unrefined information.
- There could be quality of service issues where there were delays in provision by PSIHS or data provided that was not accurate.
- Some PSIHS did not separately account for costs related to unrefined and refined information and even where they did so some costs were not allocated appropriately. It was possible that prices for unrefined information charged to businesses were recovering some costs that should be attributed to refined information. If this was occurring it would have given the PSIH an undue advantage in the sale of refined information products.

As the diagram below shows, limited access to refined information can restrict the extent that downstream competitors can compete to provide refined products:
Best practice examples, identified at the time of the OFT study

The Environment Agency took a proactive approach to identifying information to be made available for reuse by developing a topic map and amending the terms on which raw data series were offered for reuse.

The Met Office allocated its indirect/common costs using an activity-based costing approach and separated the information for which it is sole supplier to that where it faces competition from businesses.

Source: OFT, The commercial use of public information (CUPI) market study, December 2006

3.10 Where the assessment points to potential distortions in related markets then policymakers might consider steps to mitigate the effect. These include:

- Periodically reviewing special/exclusive rights.
- Separating regulatory powers (for example, granting access to the essential facility and issuing of technical standards) from the task of supplying the goods/services to different operators.  
- Considering whether there is a case for functional or structural separation that would prevent cross subsidy from the activity covered by the

---

10 A UK example of split ownership in practice – Eurotunnel is operated entirely separately from train companies (such as Eurostar) who use the facility.
exclusive rights to downstream markets in which they compete with other providers.\textsuperscript{11}

- If not, consider making the monopoly provider set up an activity-based accounting system that distinguishes between activities relating to the supply of goods or services in the sector for which exclusive or special rights are granted and other activities relating to the supply of goods and services.

- Where an essential input is being made available for reuse to all customers this should be on comparable terms to those that the vertically integrated company provide to their own internal operations.

\textit{Will the measure result in procurement from a single supplier or a restricted group of suppliers?}

3.11 Large public sector organisations, such as prisons, may purchase all of their requirements from a single supplier. They may do so because they consider it is logistically easier to deal with a single supplier who understands their particular requirements and can supply across a number of regions. There may also be benefits resulting from efficiencies in the procurement administration and lower costs from awarding a single contract.

3.12 However, where a proposal would lead to a single supplier gaining a public sector contract, and that single supplier is the sole supplier or one of a few suppliers in the market, then procurement process is akin to the award of an exclusive right to supply and the same competition issues apply. The benefits of restricted procurement processes should be weighed against the loss of competition and choice.

3.13 As with the awarding of exclusive rights to supply, procurement from a single supplier or a restricted group of suppliers should involve a competitive bidding process. Bidding markets are often used in situations where it is known that there will be no competition in the market, and thus no competitive pressure, to ensure that potential suppliers face competitive pressures in bidding for the contracts.

3.14 In order to maximise competitive pressures in bidding for contracts, policymakers should consider whether the design and implementation of commissioning and procurement policies and processes can be designed to encourage bidding. Long and complex bidding processes can create barriers

\textsuperscript{11} Structural unbundling as was seen in Ofcom’s decision to split BT’s wholesale and retail activity into two companies with the creation of BT Openreach.
to entry by increasing the costs of entering public markets and by disproportionately favouring large suppliers and incumbents that will typically have more resource to devote to the bidding process.

3.15 The size of the contract on offer may also limit the number of firms able to bid, and this may itself restrict the number of potential suppliers frequently from managing large contracts, sub-contracts to smaller, and often more specialist, suppliers. In the absence of significant countervailing economies of scale and scope, consideration should be given to disaggregating contracts for different services to encourage the widest possible range of suppliers and avoid incumbency advantages.

3.16 Policymakers advising on policies relating to public procurement who want a more detailed discussion of this topic can read the OFT's report on commissioning and competition in the public sector. An earlier OFT report also provides useful guidance on how to leverage competition to create open and contestable public services markets that incentivise suppliers to increase efficiency, improve quality of service provision and innovate.

Will the measure introduce a licensing scheme that controls market entry through a fixed limit on the number of suppliers?

3.17 In certain sectors such as dentistry, pharmacies and taxis, licensing schemes have been used to limit the number of firms that can operate in the market. The limit may relate to the absolute number of firms that can operate or can be based on population or demand estimates.

3.18 Policymakers may introduce a limit on the number of suppliers because they believe that there is an optimum level of provision in these sectors and too much entry will lead to oversupply, resulting in inefficiency and lack of profitability. As a result, policymakers may set a limit on the number of suppliers or, at the extreme, grant existing suppliers’ rights to veto new entry. Such restrictions would protect incumbents from competitive pressure and are likely to result in less competition and consumers will be faced with less choice. Such restrictions may also be used to limit the supply of goods or services of questionable social value or the externalities they give rise to. In these circumstances policy interventions need to be wary of preserving the position of incumbents who may not be the best or most efficient suppliers.

12 OFT (2011), Commissioning and competition in the public sector (OFT1314).
13 OFT (2004), Assessing the impact of public sector procurement on competition (OFT742a).
Imagine there was a concern about the number of taxis competing in a city. Local residents are concerned about congestion and the taxi trade body has written to your minister expressing concerns that their members are likely to be put out of business because of unfair competition from new taxi firms.

One option would be to introduce a licensing system which places a fixed limit on the number of taxis that are allowed to operate in the city.

The impact of such entry restrictions is likely to be an increase in the price of journeys (assuming there is price competition between taxis) and reduced availability. The regulation of taxi licence numbers creates a high probability that supply will reduce below free entry levels, leading to the development of very high licence values, reflecting the existence of large monopoly rents. Consumers will experience reduced service levels and, in most cases, increased prices.

In addition, evidence suggests that restrictive approaches to taxi licensing taken in many countries, together with resulting upward price pressures, leads consumers to substitute away from the taxi industry or to use unlicensed operators. The taxi drivers that the regulation was intended to protect might still ultimately lose out.


3.19 Policymakers may at times seek to promote suppliers from certain regions or small suppliers by limiting the ability of other types of suppliers to participate in a business activity. The OECD, in its latest competition impact assessment guidance, notes that such restrictions are typically excessive and encourages alternatives to be considered such as direct subsidies and/or tax benefits. However the use of direct subsidies must be done in a way that does not raise state aid concerns. Department for Business, Innovation and Skills (BIS) guidance provides an assessment of whether this poses a problem.

Will the measure introduce a licensing scheme that controls market entry through quality standards?

3.20 Licensing is frequently used as a means of ensuring suppliers have achieved a minimum level of competency or are fit to operate in a particular market. In some professions, such as the legal and accountancy professions, only persons holding certain qualifications are allowed to work in that profession. Restrictions such as this are a form of licensing. While benefits may arise in

---

15 BIS (2015), State aid: the basics.
terms of ensuring a consistent standard of service, licensing schemes that control market entry through quality standards can harm competition.

3.21 Setting quality standards through licences may result in reduced numbers of suppliers or professionals in the market which may help to keep fee levels high. The higher standard of provision may also restrict choices and ultimately result in reduced supply for those consumers with low price and low quality preferences.

3.22 Many licensing schemes are self-funding and the cost of entry is directly linked to the licence fee. The cost of new entry should be considered against the revenues that a new entrant could expect to receive. Should licensing costs be high relative to expected revenues then the cost may create a barrier to entry. Further, depending on market conditions, licensing costs may be passed on to consumers in higher prices.

3.23 Given the potential for licensing systems to restrict choice and create barriers to entry, careful consideration should be given to the pros and cons of introducing a licensing scheme.

### Introduction of licensing scheme for will writers

The Department for Constitutional Affairs (DCA), now part of the Ministry of Justice, in 2009 found problems in will writing services, notably:

- poorly drafted wills provided by will writers with little experience;
- misleading and high pressure (eg home visits) selling practices, especially to vulnerable consumers;
- no indemnity insurance or redress procedures; and
- potential difficulties of tracing wills when a will writing business ceased trading.

Will writing services are best categorised as ‘experience goods’, which means it is difficult for the consumer to evaluate the quality of service provided prior to the purchase.

The DCA considered the introduction of a licensing scheme for will writers. The OFT advised that there were pros and cons of introducing a licensing scheme that needed to be considered:
Pros:

- could ensure that suppliers have received a minimum level of competency improving the quality of will writing;
- could prescribe standards that must be followed by suppliers in the market to prevent pressure selling;
- could introduce a requirement to hold indemnity insurance or have a redress scheme; and
- could prescribe how wills are stored to ensure they can be traced when a will writing business ceases trading.

Cons:

- any regulation limiting the number of will writers would result in “rent creating” barriers to entry which reduce competition by giving licensed will writers market power to charge a price premium;
- limits consumer choice in the segment of the market written by will writers; and
- any licensing costs associated with licensing scheme would be expected to give rise to cost-creating barriers to entry and be passed on to consumers in higher prices.

The OFT advocated a less restrictive alternative comprising a consumer code, consumer education campaigns and reliance on existing consumer protection law which was followed by DCA.

For further discussion see the report prepared for the OFT by London Economics (2010), *Evaluation of OFT Competition Advocacy* (OFT866).

**Will the measure *indirectly* limit the number or range of suppliers?**

3.24 Policymakers undertaking a competition assessment should assess whether the proposals may indirectly limit the number or range of suppliers in a market. A proposal could have this effect if it:

- significantly raises the costs of incumbent firms, causing them to exit the market;
- significantly raises the costs of new suppliers (including small businesses) relative to existing suppliers; and
- significantly raises the costs of some existing suppliers relative to other existing suppliers.
**Will the measure raise the costs of incumbent firms and cause them to exit the market?**

3.25 A proposal may increase the cost of doing business to such a level that it is no longer profitable to compete in the market. Should sufficient numbers of firms leave the market, or should particular competitors leave the market that were an important source of competitive constraint, then the competitive dynamic may change. Gaining an understanding of which types of business (if any) might leave the market will provide insight into the likely changes in the structure of the market and whether there will be a subsequent reduction in competition.

3.26 In order to assess the impact measure will have on competition, policymakers can ask:

- What are the components of the costs that have to be incurred? Are these costs fixed or variable costs?16

- How large are the costs relative to businesses annual sales revenues?

- Will these costs lead businesses to exit the market?

- Which types of businesses are more likely to exit and will there be an ongoing source of competitive constraint in the event of exit?

**Will the measure significantly raise the costs of new suppliers relative to existing suppliers?**

3.27 Policies raising the cost of entry may deter entry. Policymakers should consider the risk that policies raise the costs of all new suppliers relative to existing firms and whether the measure will have a disproportionate impact on entry from small and medium-sized enterprises.

3.28 Existing suppliers can persuade policymakers to exempt them from the impact of new policies, at least for a time. This exemption, even if temporary, may deter new entrants who face higher costs in complying with the measure.

When faced with scarce inputs, such as airport landing slots and radio spectrum, existing suppliers may argue that they should be given preferential access (‘grandfather rights’) or preferential rates for these inputs in contrast to new entrants to the market. In both these cases, new suppliers may face higher costs than existing suppliers and may be deterred from entering the

---

16 If regulations impose high levels of fixed costs these are more likely to represent a barrier to entry than variable costs which vary depending on the scale of production.
market as a result. It is important therefore that regulatory proposals that raise barriers to entry are proportionate and do not unduly serve to protect incumbents.

Accessing taxi customers at a railway station

Imagine your minister had asked you to design a system through which taxis could be given access to pick up consumers from a railway station. It is seen as desirable to have a system that regulates access to this group of consumers in order to prevent long tailbacks on the road leading up to the railway station.

One option would be to grant taxis time slots for picking up customers. Taxis would need a slot for a particular time of day in order to pick up customers at that time. The slots could be allocated using grandfather rights: taxis that used their slots in the previous year could have the right to continue using the slots in the following year (a ‘use it or lose it’ approach).

However, this approach to allocation would create an asymmetry between incumbent taxi drivers and new entrants. Inefficient, high-cost taxis that are already in the market would be protected from competition from new entrants, even though a new low-cost taxi could potentially use the slot more productively. An alternative option could be to limit the number of years for which grandfathering occurs.

Depending on the extent of the cost asymmetry, grandfathered regulations can: deter new entry, dampen new investment by incumbent businesses, allow continuation of inefficient production by older more inefficient firms and lead to higher prices.

3.29 Small businesses can be an important source of dynamic competition in a market. Government regulation and policies usually have a disproportionate impact on small businesses (up to 49 employees) – including micro businesses (up to ten employees) mainly because they have significantly less resources available to cope with regulatory change and ongoing compliance costs. Regulations that are likely to have a disproportionate impact on small firms can potentially cut off an important route of entry and source of competitive constraint.

3.30 Policies may raise the costs of firms wanting to exit the market and this may itself deter new entry. For example, if regulations require large investments in

---

18 The previous administration required a regulatory scrutiny process requires a small and micro-business assessment (SAMBa) to be undertaken to ensure that major new regulatory proposals are designed and implemented so as to mitigate disproportionate burdens. The assumption was that there would be a legislative exemption for small and micro-businesses where a large part of the intended benefits of the measure could be achieved without including them. Where this was not possible the Framework Manual set out other ways the impact on small businesses could be mitigated such as by extending transition periods or temporary exemptions where immediate compliance would harm their business.
specialist equipment to meet quality standards which cannot be recouped on exit from the market then this may deter companies from entering at all.

3.31 In order to determine whether the measure will deter suppliers from entering a market, the costs should be compared with the likely revenues of firms to assess their deterrent effect.

**Will the measure significantly raise the costs of some existing suppliers relative to other existing suppliers?**

3.32 Policies may, deliberately or inadvertently, favour some suppliers over others. For example, a regulation that imposes new technology on firms will favour those firms who have already adopted this technology. Such firms would then face lower costs than their rivals, for example, because they don't need to reconfigure their existing arrangements.

3.33 Similarly, a regulation that specifies a product standard may favour suppliers already meeting that standard over others that are not. This situation may be further exacerbated if one supplier holds intellectual property rights that enable it to achieve the specified product standard. Alternative suppliers may be inhibited from competing by the need to licence the technology from the right holder or innovate around the existing right.

3.34 Policies may also create competition distortions by favouring certain types of business models over others. Policymakers, particularly those overseeing mixed markets where private, voluntary and state owned undertakings compete alongside one another, can consider whether their proposals are ‘competitively neutral’. This means that no firm should have a significant competitive advantage purely as a result of its ownership or control. Conferring advantages as a result of ownership or control may result in some inefficient firms remaining in the market and more efficient firms being unable to grow and innovate effectively. This inefficiency may lead to lower quality and higher prices for consumers and also to lower levels of innovation in the sector than would otherwise have been the case.  

3.35 Key barriers to competitive neutrality include:

- differences in regulation, pension, and tax treatment between public private and voluntary providers; and

---

19 Further information about competitive neutrality can be found in OFT (2010), *Competition in mixed markets: ensuring competitive neutrality* (OFT1242).
incumbency advantages enjoyed by existing firms, such as access to information, pre-qualification and bid criteria, and transition costs.

3.36 Ensuring policies are competitively neutral may also require policymakers to consider whether consumers are afforded the same level of protection regardless of the type of provider they choose.

**Competitive neutrality in higher education**

In a report on the higher education sector in England, the CMA raised concerns that some providers were operating outside the regulatory regime designed to protect students from poor quality. The nature of the higher education experience, namely that students cannot fully appreciate the quality on offer before they choose which university to attend, justifies a market intervention to assure quality.

The CMA was concerned that students would not appreciate that some institutions operated outside the quality assurance regime. Further concerns were raised that institutions operating outside the regulatory framework would not have sufficient incentives to focus on providing students with a quality learning experience.

Source: *An effective regulatory framework for higher education: a policy paper*
4. **Competition checklist question 2 – will the measure limit the ability of suppliers to compete?**

4.1 Competition between suppliers may focus on price, quality, service or innovation. In some circumstances, policymakers may seek to place limits on these parameters. Policies that restrict the means by which suppliers compete with each other can inhibit competition between those suppliers to the detriment of consumers. Regulations may also prevent suppliers from developing new products, carrying out new advertising and marketing initiatives, or using alternative sales channels.

4.2 Policymakers should ask whether proposals limit the ability of suppliers to compete, for example where a measure:

- controls or substantially influences:
  - the price a supplier may charge; and/or
  - the characteristics of the products supplied, for example by setting minimum quality standards;
- limits the sales channels a supplier can use, or the geographic area a supplier may supply in;
- substantially restricts the ability of suppliers to advertise their products; and
- limits the suppliers’ freedom to organise their own production processes or their choice of organisational form.

**Will the measure control or substantially influence the price a supplier may charge?**

4.3 Concern about the price of goods and services may result in a regulation that sets minimum or maximum prices (price floors or ceilings) for particular products or services. The policy objective may be to protect consumers in some respects but there may be significant adverse effects on competition, meaning that in some cases consumers may pay more than they would absent the floor or ceiling.

4.4 Minimum prices (price floors) have sometimes been proposed to ensure that certain quality or safety standards are maintained, or to limit consumption for public health reasons. Whether or not they achieve their social goal, the unintended side effect may be to protect producers from the competitive
process. The price increase may also generate windfall gains for producers/retailers, depending on whether and where there is market power in the supply chain. Unlike an increase in tax, additional consumer spending would go to retailers rather than government. The unintended consequence may be to give retailers an incentive to sell more, rather than less, of the product in question as retailers would gain additional profit for every extra unit they sold.

4.5 If the policy objective is to raise product quality, direct regulation of product quality might be a less restrictive means of delivery, although policymakers should note that some forms of quality regulation can themselves limit competition. If the policy objective is to limit harmful effects from excess consumption, imposing or increasing any duties or taxes payable on a product may help to ensure that suppliers will continue to compete and innovate over the portion of the final purchase price on which they can make a profit.

4.6 On the other side of the spectrum, maximum prices (price ceilings) which are aimed at protecting consumers or purchasers from high prices may act as a focal point for suppliers, with prices drawn to the ceiling, reducing the intensity of price competition between suppliers. The imposition of maximum prices may distort the choice of products supplied, may limit innovation, and may lead to the imposition of hidden charges to circumvent the price ceiling.

Price controls on fruit and vegetables in Greece

In June 2011 the Greek government removed mandated maximum mark-up prices on fresh fruit and vegetables. Research found that abolishing mark-ups led to a significant cut in wholesale prices of previously ‘protected’ products and as a result retail prices also went down. The researchers suggested that mandated mark-ups enabled wholesalers to set their prices very close to the maximum allowed margin. Once this restriction was removed, wholesalers were no longer constrained by the mark-up requirement and this encouraged further competition.

Source: OECD, Evaluation of competitive impacts of government interventions (Paper by C. Genakos, Pantelis Koutroumpis, and Mario Pagliero).

4.7 Price ceilings may be intended to protect consumers from producers with market power but there may be less restrictive means of delivering this objective. Educating consumers and providing sources of comparative information, establishing disclosure requirements and standards for presenting information, or mandating cooling-off periods can be less restrictive alternatives. If a price ceiling is still judged desirable, care should be taken that it is sufficiently flexible to accommodate different business models.
The CMA’s view of price caps in the payday lending sector

In 2015 the CMA concluded its market investigation into the payday lending market. As part of the investigation, it considered the impact of the Financial Conduct Authority’s (FCA) price cap on the features of the market that the CMA had identified as giving rise to competition concerns.

The CMA considered the price cap would lead to some advantages:

- The price cap may have led to some simplification of the products on offer in the market (for example, in relation to late fees and charges), which might have increased the comparability of different payday products, making it easier for customers to identify the best-value loan for their requirement;

- To the extent that the cap – together with the FCA’s enhanced regulation of the payday lending sector more generally – improved the reputation of the sector and offered borrowers additional protection, it may have reduced the risk perceived by customers of switching lender; and

- The level of customer detriment arising from the Adverse Effect on Competition found by the CMA would be reduced as prices were reduced.

However, the CMA did not expect these effects of the cap to be sufficient to address the competition concerns it found. Further competition-enhancing measures were required because:

- Features of the market which limited customers’ responsiveness to prices would be expected to continue to restrict competition between lenders even in the presence of the price cap. For example, the cap was highly unlikely to reduce the perceived urgency underpinning many borrowers’ decisions to take out a payday loan, or remove the uncertainty that many customers face when deciding which lender to borrow from; and

- The cap was also unlikely to mitigate any of the characteristics of the payday lending market which limit the constraint that lenders face from the threat of entry and expansion.

The CMA also identified some potential negative impacts of the price cap on competition

- The cap may have weakened the competitive constraint in the market if, by reducing expected post-entry profitability, the cap reduced the incentive for new lenders to enter and increased the resources and time required by a new entrant to overcome its initial disadvantages and establish itself in the market. Similarly the cap might lead to less efficient lenders leaving the market;
• The cap may also have further dampened price competition between lenders by providing a ‘focal point’ or ‘going rate’ for payday loan pricing. It was possible that lenders priced up to the level of the cap, facilitated by the barriers to entry and expansion in the market; and

• The nature of the cap might affect the relative profitability of different types of product or make it more difficult to structure certain types of products in ways that complied with the structure of the cap which could reduce customer choice and competition.

However, while the CMA acknowledged the possibility that the price cap might become a ‘focal point’ for coordination, it also noted that the significant variation in market shares, efficiency, costs and products offered by different lenders would likely frustrate coordination efforts, particularly if the obstacles to competition the CMA had identified were addressed effectively.

Source: CMA (2015), Payday lending market investigation – Final report

Will the measure control or substantially influence the characteristics of the products supplied?

4.8 Policies may be introduced to safeguard consumers from products that are poor quality, or restrictions set on the nature of the product or service to be supplied. The justification may be that consumers are unable to monitor the quality of products and may suffer harm as a result, or that certain content standards are required by consumers (for example, the provision of information in multiple languages).

4.9 Such policies may restrict the ability of suppliers to compete with each other by differentiating their products, and may prevent informed consumers from purchasing a lower quality, low cost product. Where safety is not an issue and if standards are set above the level that a well-informed consumer would choose, minimum quality levels may have the effect of removing the offer of certain products/services for which there is demand from certain customers, and reducing the choices available to them. For example, a regulation requiring all airlines to provide all passengers with a hot meal on short-haul flights would require 'no-frills' airlines to offer customers hot meals when those customers may prefer a cheaper flight with no hot meal.

4.10 The specification of certain content or quality standards may also increase suppliers’ costs. Higher costs incurred by businesses will typically translate into higher prices paid by consumers and reduction in the variety of products and services available.
Regulating the quality of bottled water

Imagine there was a concern about consumers being misled about the origins of bottled water. A group of consumers have written to your minister expressing their concerns that they purchased bottled water assuming it was mineral water captured straight from the source. But when they read the small print on the bottle they found that they had purchased filtered tap water.

One solution to protect consumers might be to improve the quality of bottled water by regulating so that all firms selling bottled water have to sell directly sourced mineral water. Consumers would not be misled into purchasing lower quality filtered water in the future.

However, the effect of such a regulation would be an eradication of other types of bottled water, including table water and filtered water. Consumers who prefer these lower quality, lower cost options would no longer be able to purchase, resulting in a reduction of consumer welfare. In addition, the market for bottled water might become more concentrated as a result of the regulatory change (with producers of table and filtered water having to leave the market), potentially resulting in remaining bottle water producers having sufficient market power to raise prices.

An alternative to regulating water quality would be to introduce an information remedy which requires producers to clearly indicate the origins of the bottled water.

4.11 In considering the impact on the market of a minimum standard, it is important to take the nature of competition in the market into account. For example, if aspects of the product or service that are decisive for the competitive positioning of operators are harmonised, negative impacts on competition are more likely than with harmonisation of parameters over which operators do not compete. Policymakers should also consider if the standard could inhibit entry, for example by setting minimum interoperability standards which carry high compliance costs for new entrants.

4.12 Hard restrictions on quality may not always be necessary to achieve the desired result. Seller reputation can safeguard quality, particularly where consumers can observe and understand quality and make repeat purchases. Ensuring the supply of information on product quality and safety may be sufficient to allow consumers to make informed decisions at the time of purchase, and requirements to include certain information on labels provide consumers with more information about the competing products on offer.

4.13 Quality standards need not always be set by the government. Industry participants may be able to develop standards themselves through self-regulation. As the standard setters are specialists and have an incentive to reach a solution which minimises regulatory burden on them, this may result in a standard which is more fit for purpose and has less impact on competition. Self-regulation can be a lighter touch way of achieving a solution
but, in some instances, industry may use self-regulation to further their own interests. In these circumstances legislating might be a preferable approach to protect competition – for more detail on this see paragraph 7.11.

4.14 If it is desirable to impose a minimum standard, policymakers should consider carefully what form this should take. Ensuring quality through performance-based standards is preferable to prescriptive standards, and less likely to harm innovation, since suppliers are able to tailor their products to the standard, compete over efficient modes and methods of production, and ultimately provide more choice for consumers. For example, pollution controls on car emission limits are preferable to restrictions on engine capacity limits since they will introduce incentives on producers to develop new technology that minimises pollution.

**Will the measure limit the sales channels a supplier can use, or the geographic area in which a supplier can operate?**

4.15 Some policies may limit how products or services can be supplied, or place restrictions on the area in which they can be supplied. Both of these types of restriction may limit innovation or act as a direct restriction on the number of suppliers in an area, weakening the competitive constraints that existing suppliers face. Such restrictions are likely to be particularly harmful where there is limited inter-brand competition (competition between different manufacturers or different suppliers is weak).^{20}

---

^{20} Government intervention to limit sales channels or areas should further be distinguished from circumstances where suppliers choose to limit sales or distribution channels of their own volition (eg through vertical integration), which is likely to bring efficiency benefits.
US motor vehicle manufacturers

In 2015, staff of the US Federal Trade Commission (FTC) commented in support of proposed amendments to a Michigan law prohibiting motor vehicle manufacturers from selling new motor vehicles to consumers except through independent franchised dealers. The restriction on sales channels was having the effect of preventing a prospective manufacturer from choosing to sell its new product through a direct distribution method that it believed would reduce the costs of distribution and be more responsive to consumer preferences.

Although the amendments were drafted narrowly to cover only the prospective manufacturer’s new product category, the FTC staff recommended more broadly that all restrictions on sales channels for motor vehicles should be removed. Absent public policy considerations, the law should permit manufacturers to choose whether to distribute their products directly, through third parties, or a mixture of both. Distribution methods resulting in higher prices or poorer service to consumers would be weeded out through the process of competition, without the need for government intervention.


4.16 It is rare that a restriction such as government limiting supply channels or areas will be needed to meet policy objectives. The primary justification for the restriction above was to protect independent dealers from the excessive exercise of market power by their suppliers. However, the FTC noted that a narrowly crafted provision to protect franchised dealers from abuse in their franchise relationships could achieve this goal without stifling competition.

Will the measure substantially restrict the ability of suppliers to advertise their products?

4.17 Advertising provides an important means by which suppliers promote their products and by which they differentiate their product from those of their rivals. Restrictions on advertising may limit competition, particularly if they deter new entrants because they would be unable to make consumers aware of their new products.

4.18 Advertising restrictions may be imposed as part of a mechanism to ensure quality or to moderate consumption of goods or services which may be harmful (such as problem gambling and irresponsible lending). Whilst these policy objectives may be worthwhile, consideration should be given to the effect on competition to ensure the restrictions are not overly prohibitive.

4.19 In some cases, industries or professional bodies may support restrictions on advertising as a way of softening competition. Historically, many professions have restricted advertising tightly. Although various arguments were advanced
to support these restrictions, it was widely considered that they restricted competition disproportionately. Advertising of professional services is now generally permitted, subject to limitations in relation to advertising which is held to be misleading or harmful to the reputation of the profession.

4.20 Policymakers should note that restrictions on misleading advertising are generally pro-competitive in that they ensure suppliers compete on equal terms and that consumers are protected from false claims.

4.21 In order to determine what effect an advertising restriction might have on competition, it is useful to understand:

- To what extent are firms dependent on advertising in this ‘window’? Are there other routes to attracting customers and competing to win market share, and what could be the cost implications of investing in alternative routes?

- Would the restriction affect new entrants in particular? Is there any evidence that building market share via advertising in this window is particularly important?

**American opticians**

A US study into opticians advertising restrictions compared cities with advertising restrictions for opticians with those without. The study found that, on average the price of an eye test was 33.6 per cent higher in the most restrictive cities than in the least restrictive cities with no appreciable difference in quality.


Summary, OECD (2004), *Enhancing Beneficial Competition in the Health Professions*.

Will the measure impose restrictions on suppliers’ production processes or choice of organisational form?

4.22 Policies that restrict the production process may have legitimate social objectives such as the protection of employees. Such policies, if they are excessive, may limit the freedom of producers to be inventive and innovative and may reduce the quantity of products that can be supplied. A reduction in quantity supplied may harm consumers as it is likely to lead to a price
increase. This is because demand and supply can be expected to reach a new equilibrium at a higher price.

4.23 Policies may also limit organisational forms. For example, in 2001 the OFT examined competition in the professions and found that where certain professionals (such as accountants) are prevented from organising themselves as public limited companies, or were restricted from forming partnership with other qualified professionals, the regulations limited the freedom of professionals to develop their services in efficient and innovative ways, and inhibited competition between partnerships.\textsuperscript{21}

\textsuperscript{21} OFT (2001) \textit{Competition in the Professions}
5. Competition checklist question 3 – will the measure limit suppliers’ incentives to compete vigorously?

5.1 The essence of competition is that suppliers compete against each other by offering lower prices, better service, or better quality products or services to win customers and market share.

5.2 Occasionally suppliers might decide, implicitly or explicitly, not to compete with each other. Suppliers might agree a common price (or range of prices) for goods or decide not to undercut each other. Alternatively, suppliers might agree not to compete in respect of certain customers or certain products, or agree terms that make it difficult for customers to switch to competing suppliers.

5.3 Government policies and regulations can make it more or less likely that suppliers will enter into and be able to sustain anti-competitive agreements. As a result, the competition assessment asks whether proposals may reduce suppliers' incentives to compete vigorously, for example where a measure:
   - incentivises suppliers to coordinate their behaviour;
   - exempts suppliers from competition law; or
   - introduces or amends an intellectual property regime.

5.4 It may be that a proposal also reduces suppliers’ incentives to compete by increasing the costs to customers of switching between suppliers. This is covered in the following chapter.

Will the measure incentivise suppliers to coordinate their behaviour and thereby dampen competition?

5.5 Policy or regulation can create a situation in which it is in suppliers’ commercial interests to coordinate their activities in an anti-competitive manner. Such policies may be introduced with the aim of helping consumers. For example, in some markets, particularly where the product or service on offer is highly differentiated (such as mobile telephone contracts), customers may find it difficult or costly to compare prices. This difficulty may be resolved by a proposal requiring the publication of prices which aims to reduce search costs and making it easier for consumers to compare alternative offers. In most cases where this is being done to overcome barriers to searching, it should be positive for competition.
5.6 However, there are also possible anti-competitive effects associated with information sharing between competitors. Suppliers may use information on prices, costs, sales or outputs to coordinate behaviour amongst themselves to the detriment of consumers. The publication of prices may lead suppliers to raise their prices to those achieved by others.

5.7 Some seemingly harmless information may also dampen competition. Publication of market share information, or capacity utilisation information, may give suppliers an insight into the competitive constraints faced by their rivals. The table below sets out the broad level of risk presented by categories of commercial information.

5.8 The likelihood of information disclosure and exchange leading to collusion is more likely if there are few suppliers in the market, the product is relatively standardised, and entry barriers are high. It is less likely where the information is made available to consumers publicly and there is no asymmetry between firms and consumers.

5.9 It should be noted that in some circumstances a degree of information exchange (for example, to set a technical standard) may be preferable from a competition perspective than a centrally-mandated standard.

Table 1: Risks of collusion presented by information sharing

<table>
<thead>
<tr>
<th>Higher risk from information being shared</th>
<th>Lower risk from information being shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific information</td>
<td>Aggregated information</td>
</tr>
<tr>
<td>Individualised information</td>
<td>Anonymised information</td>
</tr>
<tr>
<td>Non-public information</td>
<td>Genuinely public information</td>
</tr>
<tr>
<td>Future information/plans</td>
<td>Historic information</td>
</tr>
<tr>
<td>Information will need to be disclosed frequently</td>
<td>Disclosure of information is a one off</td>
</tr>
<tr>
<td>Information is sent directly by competitor</td>
<td>Information is sent by an independent source</td>
</tr>
<tr>
<td>Quantitative information</td>
<td>Qualitative information</td>
</tr>
</tbody>
</table>

5.10 Other types of measures can create incentives for suppliers to coordinate their activities in an anti-competitive manner. For example, policymakers may

---

22 For further details refer to CMA guidelines on *Trade associations, professions and self-regulatory bodies*, OFT408 (2004).
encourage the formation of trade associations, encourage the setting of best practice rules for members or encourage suppliers to coordinate on product design and compatibility. Whilst there may be legitimate reasons for encouraging these types of coordination, an unintended side-effect may be that competitors are better able to exchange commercially sensitive information and collude.

5.11 In addition to sharpening suppliers’ incentives to coordinate their behaviour, policies and regulations may also affect market conditions, which in turn may make collusion more likely and sustainable. To collude effectively, firms must be able to reach an agreement, to detect breaches of the agreement, and to punish firms that breach it. A variety of market characteristics make collusion more likely, for example:

- there are relatively few firms in the market, they are relatively similar, and their cost base is broadly equivalent;
- products are standardised. Fewer variables in terms of design, quality or service make it easier to reach a common pricing scheme;
- there are low switching costs and customers move around in response to price changes;
- fewer products make it easier to coordinate;
- there are frequent, repetitive bids for specific goods; and
- competitors regularly socialise with each other, through personal connections or trade associations.

5.12 Policies which result in or increase the presence of these conditions may increase the likelihood of collusion.

5.13 Whilst not all policies that incentivise suppliers to coordinate their behaviour will result in suppliers breaching competition law, policies that do so are particularly likely to harm competition and consumers. European and UK competition laws prohibit anti-competitive agreements between undertakings, and prohibit dominant undertakings from abusing their market power. The fact that an agreement is sanctioned by government (national or local), or that

---

23 In the UK, anti-competitive agreements and abuses of dominance are prohibited under the Competition Act 1998 (CA98) and (where the conduct may affect trade between EU member states) the Treaty on the Functioning of the European Union (TFEU).

discussion takes place in the presence of government officials, does not necessarily prevent it from falling foul of national or European competition law. The types of measures that raise greater risk of suppliers breaching competition rules are set out in the table below.

<table>
<thead>
<tr>
<th>Are you encouraging suppliers to break competition law?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CA98 almost certainly infringed</strong></td>
</tr>
<tr>
<td>• Government encourages or brokers an agreement between businesses to raise/fix prices or set minimum prices</td>
</tr>
<tr>
<td><strong>Relatively high risk of CA98 being infringed</strong></td>
</tr>
<tr>
<td>• Government acts as a mechanism to co-ordinate the otherwise independent commercial decision-making of businesses through non-mandatory means, effectively substituting individual/unilateral decision-making with a coordination of economic activity (including on price and non-price factors)</td>
</tr>
<tr>
<td>• Government encourages or facilitates the sharing of commercially sensitive information from one business to another (directly or indirectly) including information on individual retailer’s future commercial policies or intentions</td>
</tr>
<tr>
<td><strong>Relatively low risk of CA98 being infringed</strong></td>
</tr>
<tr>
<td>• Government imposes legal requirements that businesses must comply with (although government should consider any potential adverse impact of legislation on competition and seek to mitigate that as far as possible)</td>
</tr>
<tr>
<td>• Government disseminates to a business a public policy message (for example, explaining potential social health and safety benefits of business activities) and invites business to make unilateral commitments to address the concern</td>
</tr>
<tr>
<td>• Government seeks the views of business, for example through a meeting at which businesses make high-level suggestions to inform government policy</td>
</tr>
</tbody>
</table>

**How does the proposal interface with competition law?**

5.14 Policymakers should ensure that their proposals would not require undertakings to act in a way that would infringe EU competition law. Policies that do so may be incompatible with the TFEU, breach the UK’s treaty obligations of sincere cooperation and result in the rules being unenforceable. This has been held to apply to situations where legislation gives regulatory

---

25 EU law would apply in addition to domestic legislation where an agreement may affect trade between EU member states.
effect to prohibited anti-competitive activity, as in the example below. Ensuring the proposal is compatible with TFEU will also help to ensure that competition is maintained. Policymakers concerned about this issue should consult their in-house legal team.

**Italian match manufacturers**

In 1923 Italian national legislation created a professional body for match manufacturers, who in turn established production quotas. As noted elsewhere, quotas may limit the incentives on suppliers to compete with each other. The European Court of Justice ruled that this legislation infringed the Treaty and that the national competition authority had a duty to disapply national legislation that requires or facilitates anti-competitive conduct that infringes what is now Article 101(1) of the TFEU.

Source: Consorzio Industrie Fiammiferi (CIF) v Autorità Garante della Concorrenza e del Mercato, C-198/01.
6. **Competition checklist question 4 – will the measure limit the choices or information available to consumers?**

6.1 Customers have an important part to play in stimulating rivalry between suppliers by making informed decisions which reward those firms that best meet their preferences. Markets work best when both the supply side (the firms) and the demand side (the customers) interact effectively. There is a virtuous circle between the actions of well-informed consumers in the market and competition.

**Figure 1: The virtuous competitive circle**

6.2 Evidence from numerous competition investigations shows that making markets work well not only requires the right supply side conditions, but also requires sufficiently engaged consumers who have the ability to assess, access, and act on information to select the goods or services that offer the best value to influence suppliers. This highlights the crucial role that consumer policy, and other forms of demand side intervention, plays in driving effective markets.

6.3 There are a number of reasons why the demand side of a market might not work well. For example:

---

26 OFT (2010), *What does Behavioural Economics mean for Competition policy?*
• The characteristics of some goods and services may make it difficult for consumers to make informed choices (such as when the product is an ‘experience’ good) such that the value of the product can only be fully appreciated after consumption;

• The characteristics of consumers may mean that they do not have the time or capability to make informed decisions; and

• Actions taken by providers (such as to obfuscate product information), can impede consumers’ ability or willingness to access, assess and act on the available information.

6.4 For example, some financial services are inherently complex or require consumers to make difficult judgements about their future circumstances (for example, knowing what type of mortgage will best suit future circumstances). These complexities can make it difficult for consumers to make the best decisions and, in some cases, can deter consumers from trying altogether.

6.5 Such complexities might result in policymakers considering that a market intervention is needed to help consumers navigate complex products and make more informed decisions. In doing so, policymakers need to ensure that they do not make the functioning of the demand side of the market worse. Such effects may arise if the measure:

• limits ability of consumers to decide from whom they purchase;

• changes the information available to consumers but does not improve their ability to make informed decisions; and/or

• reduces the mobility of consumers by increasing the cost of changing suppliers.

6.6 These considerations are also relevant to policymakers who are introducing proposals with aims other than to improve the functioning of the demand side of a market, but where the proposal has the potential effect of making it more difficult for consumers to find a good deal.

**Will the measure limit the ability of consumers to decide from whom they purchase?**

6.7 Measures that limit the sales channels a supplier can use (as outlined in paragraphs 4.15 and 4.16) may also restrict the suppliers from whom a consumer can purchase. Restrictions of this nature may reflect a concern that it is important that consumers get specialist advice at the point of sale where,
for example, certain health products or complex financial products are being supplied. However, the effect of the regulations may be to protect the traditional businesses from competition and may restrict choice at the point of sale, to the detriment of consumers and potentially public policy objectives. Consumers may not receive the desired price or quality for a service as they are forced to purchase from higher cost suppliers or products that are not their preferred choice.

6.8 For example, regulations may impose rules on what pharmaceutical products can be supplied over the internet. This is to protect consumers so that they obtain advice from the pharmacist when they collect their prescriptions on how to take the medications. However, in certain countries, long-distance pharmacies have proven track records of safe and effective operations and so such restrictions may unduly restrict consumer choice.

6.9 Further, not all products require the provision of specialist advice. For example, in 2013 the European Parliament considered imposing a requirement to sell electronic cigarettes – generally thought to be safer than normal cigarettes – only through pharmacies. Such a restriction in the availability of electronic cigarettes would have impacted on competition between electronic cigarettes and cigarettes. The proposal was rejected by the European Commission as this reduction in competition could have had negative health consequences.

**Will the measure change the information available to consumers but not improve their ability to make informed decisions?**

6.10 Policymakers need to take account of consumers’ behavioural biases if they are to design proposals in a way that does not distort the ability of customers to make well-informed and well-reasoned purchase decisions. Previous OFT work found various behavioural biases on the part of consumers that affect their decision making abilities. Consumers may:

- Face limitations on how much information they can analyse and, when faced with more information than they can analyse, consider only a subset. When prices are presented in parts, consumers may anchor on the first piece of information and discount add-ons.

---

27 The FSA/FCA’s retail distribution review is a good example. Getting rid of a commission funded model implied they were prepared to tolerate reduction in the numbers of financial advisers in the interests of impartial advice.
28 Financial Times website.
29 OFT (2010), Advertising of prices, Market study report (OFT1291).
• Overweigh the present and be too optimistic. Consumers may overestimate how much they will use a good or under-estimate how much it will cost them.

• Be overconfident about their ability to act in the future. For example they may overestimate their propensity to cancel automatically renewed contracts.

6.11 Similarly, research conducted by the Financial Conduct Authority has identified ten behavioural biases that affect consumers in retail financial markets.30

Table 2: Applying behavioural economics to financial markets

<table>
<thead>
<tr>
<th>Our preferences are influenced by emotions and psychological experiences</th>
<th>Rules of thumb can lead to incorrect beliefs</th>
<th>We use decision-making short cuts when assessing available information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Present bias</strong>&lt;br&gt;eg spending on a credit card for immediate gratification</td>
<td><strong>Overconfidence</strong>&lt;br&gt;eg excessive belief in one’s ability to pick winning stocks</td>
<td><strong>Framing, salience and limited attention</strong>&lt;br&gt;eg overestimating the value of a packaged bank account because it is presented in a particularly attractive way</td>
</tr>
<tr>
<td><strong>Reference dependence and loss aversion</strong>&lt;br&gt;eg believing that insurance added on to a base product is cheaper because the base price is much higher</td>
<td><strong>Over-extrapolation</strong>&lt;br&gt;eg extrapolating from just a few years of investment returns to the future</td>
<td><strong>Mental accounting and narrow framing</strong>&lt;br&gt;eg investment decisions may be made asset-by-asset rather than considering the whole investment portfolio</td>
</tr>
<tr>
<td><strong>Regret and other emotions</strong>&lt;br&gt;eg buying insurance for peace of mind</td>
<td><strong>Projection bias</strong>&lt;br&gt;eg taking out a payday loan without considering payment difficulties that might arise in the future</td>
<td><strong>Decision-making rules of thumb</strong>&lt;br&gt;eg investment may be split equally across all the funds in a pension scheme, rather than making a careful allocation decision</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Persuasion and social influence</strong>&lt;br&gt;eg following financial advice because an adviser is likeable</td>
</tr>
</tbody>
</table>

6.12 Consumers’ tendency to frame their decisions with respect to certain reference points means that they often focus on a few headline rates and ignore the additional information about features or charges that is provided to them. As a result, the provision of extra information may lead customers to make poorer decisions by increasing the likelihood that they are made on the basis of incorrect beliefs using rules of thumb.

6.13 A 2007 Better Regulation Executive and National Consumer Council report provides a useful framework for considering whether regulations requiring

30 FCA (2013), *Applying behavioural economics at the Financial Conduct Authority.*
information disclosure will have a positive impact on consumer behaviour and the demand side of the market.

**Recommendations in the Better Regulation Executive and National Consumer Council 2007 report**

Five policy design tests to assess information requirements:

1. Have you defined the behavioural outcomes that you wish to achieve? (What do you want to achieve?)
2. Will information provide a sufficient incentive for consumers to change their behaviour? (Is the information likely to be of value to consumers?)
3. To what extent does the information fit with the wider system and simplify choices for consumers? (Will the information help consumers make choices?)
4. Is the information aligned with business incentives, where this is possible (Will businesses support or oppose what you are trying to achieve?)
5. Have you considered the fit with existing regulated information requirements?


6.14 In addition, it is useful for policymakers to consider whether their proposal will exacerbate behavioural biases and lead to worse outcomes for consumers. For example, a report prepared for the Centre for Competition Policy notes that ‘cooling-off’ periods are often introduced by financial regulators to provide consumers with the opportunity to review and potentially reverse purchasing decisions made when they were in an emotionally ‘hot’ state and hence without adequate reflection.\(^{31}\) However there is the potential for the cooling-off period to trigger even less reflection at the point of sale, leading to outcomes that are possibly worse compared to the situation in which there is no intervention at all.

**Will the measure reduce the mobility of customers by increasing the cost of changing suppliers?**

6.15 Policymakers need to be aware that increasing switching costs might lead to a softening of competition.\(^{32}\) Hence where a measure leads to an increase in

---

32 Paul Klemperer, Oxford University (1991), *Competition when Consumers have Switching Costs: An Overview with Applications to Industrial Organization*, Macroeconomics and International Trade.
switching costs, this might have a negative impact on competition. For example, the government may introduce a new regulation which requires consumers to provide more detailed information when applying for a mortgage. This may raise switching costs and may deter consumers from switching altogether leading to a lessening of competition.

6.16 In some cases switching costs can also arise from behavioural biases. For example, faced with increasingly complex products and increasing constraints on their time, behavioural economics has shown that consumers may choose to make decisions by limiting their search (and therefore not necessarily purchasing the best value package for them), deferring to an intermediary for advice, employing a heuristic technique (‘rule of thumb’), or forgoing the purchase because of the time and effort required to fully research and evaluate the offer. It is important for policymakers in these circumstances to be aware of these difficulties and design policies accordingly.

6.17 Measures that help consumers to make more informed choices and overcome behavioural biases have included requirements to simplify tariff structures or to develop price comparison websites to aid transparency.

6.18 Policymakers should also be aware that while reducing switching costs generally leads to competition benefits there can be cases where interventions to reduce switching costs may not always be welfare enhancing. For example US research studied the impact of policies that nudge consumers towards better decision making by reducing inertia in the health insurance markets. In these markets insurers have less information than consumers about their state of health and so are unable to price all risk characteristics. As a result it is those riskier consumers that take out the more comprehensive health plans, driving up the equilibrium price for these plans. In this situation giving consumers more information on which to make choices actually exacerbated the problem and resulted in still higher prices and a reduction in welfare.

7. Considering alternatives

7.1 Policymakers are advised to consider alternatives should they conclude that their proposal has the potential to significantly distort competition. Ways to mitigate the detrimental impact of specific interventions have been outlined in the previous chapters. This chapter draws these insights together and outlines a range of possible alternatives. The impact of such alternatives can be assessed and compared against the original proposal using some of the methodologies outlined in Chapter 8.

No new intervention

7.2 In some circumstances policymakers may conclude it is not necessary to introduce new regulation. This does not necessarily mean accepting the status quo, and could also involve improving the use, clarity or enforcement of existing regulation. Unless existing regulations have significant impacts on competition and would benefit from replacement or revision, this approach would tend to be most competition-neutral.

7.3 Policymakers may also consider alternatives to the regulatory proposal. Alternatives can be conceptualised as rules based, incentives based, information based and self-regulatory, all existing in a framework of more and less distorting options.

Table 3: Spectrum of interventions

<table>
<thead>
<tr>
<th>Policy objectives</th>
<th>More distorting options</th>
<th>Less distorting options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver natural monopolies</td>
<td>Exclusive permanent rights to supply</td>
<td>Time limited exclusive rights to supply</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Competition for the market (plus economic regulation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ensure competition in downstream markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oversee access to scarce resources</td>
<td>Permanent access to incumbents</td>
<td>Time limited access</td>
</tr>
<tr>
<td></td>
<td>(grandfather rights)</td>
<td>Auction to grant access</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce negative externalities (eg pollution and congestion)</td>
<td>Fixed quota on the number of suppliers</td>
<td>Tradable permits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limiting consumer consumption</td>
<td>Minimum prices</td>
<td>Tax on the product</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information and education</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bringing prices down and/or enhancing international competitiveness</td>
<td>Maximum prices</td>
<td>Subsidy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opening up the market to greater competition</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensuring quality of goods/services or improve business practice</td>
<td>Prescriptive standards</td>
<td>Performance based standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-regulation (but see caveats below)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer awareness (so poor practices are punished through reduced demand)</td>
</tr>
</tbody>
</table>

34 Adapted from the National Audit Office (2014), Using alternatives to regulation to achieve policy objectives (full report).
Incentives based approach

7.4 The government can use economic instruments, such as taxes, subsidies, quotas and permits, vouchers and auctions to incentivise business and citizens to change their behaviour. Often these sorts of systems need regulation to establish the framework. Some forms of economic instruments are more competition-neutral than others.

- **Taxes**: taxes on end-products may be a less distortionary option. For example, a significant element of the final purchase price for alcohol is duty, but suppliers still compete to supply, launch new products, and increase their market share. A rise in taxation may have a less distortionary impact on competition than, for example, a minimum price regulation, and be equally effective if it directly impacts on consumers’ pattern of consumption. However, some taxes may affect small businesses disproportionately and therefore dampen competition by limiting new entry (such as tax exemptions, or differing rates of taxation which are easier for larger businesses to obtain).

- **Subsidies**: the government may choose to subsidise certain industries as a way of (for example) bringing prices down to maintain competitiveness or encourage the uptake of a certain technology. Subsidies may be competition-neutral nationally, if they apply across an industry, but may well be incompatible with EU rules on state aid if they confer an advantage on UK firms relative to those operating elsewhere in the EU.

- **Auctions**: in industries where resources (such as essential infrastructure) are scarce and must be shared by companies in order to provide a service, the government may choose to make control of them subject to auctions or tender processes. This ‘competition for the market’ can ensure that companies are incentivised to offer good terms to secure provision of the service over other suppliers, and can go some way to compensating for a loss of competition ‘in the market’ if the number of suppliers active is necessarily limited. However, it is usually preferable to preserve competition in the market where possible.

- **Ownership**: it may be possible to separate control of a given asset (for example, a natural monopoly wires business) from the operators who use it in the provision of a service (for example, generation and supply). This is may result in better outcomes as the upstream owner has an incentive to ensure efficient use of the asset without favouring a particular downstream firm.
• **Quotas**: quotas are likely to have a negative impact on competition. Maximum quotas will often limit competition as they constitute a capacity constraint; minimum quotas may raise barriers to entry for potential new entrants. Setting up a market for quotas may be one way of ensuring resources are used effectively.

7.5 These approaches can have advantages in principle over a rules based approach if they result in the right incentives being created to change behaviour. However, these approaches can also have disadvantages. It may, for example, be difficult to determine the size of the incentive required to change the behaviour needed among businesses and citizens. Predicting the effects of incentives may be difficult and there is often uncertainty when the effects will occur. As noted above, some types of economic incentive may harm competition as much as would a rule-based regime.

7.6 Particular care should be taken that these types of economic incentives do not contravene the EU rules on state aid that are enforced by the European Commission. BIS have published guidance on state aid and there is a unit at BIS that can provide specialist advice in this area. State aid is considered as any advantage granted by public authorities through state resources on a selective basis to any undertakings that could potentially distort competition and trade in the EU.

7.7 Although the Treaty on the Functioning of the European Union does not include a precise definition of what constitutes state aid, the Commission has stated that it includes: grants, direct subsidies, tax exemptions, preferential interest rates, loans guarantees, provision of goods or services on preferential terms, indemnities against losses, and contracts not open to competitive tendering.

7.8 Policymakers should consult their in-house legal teams as a first step when considering this issue. BIS state aid guidance lists a number of suitable contacts for state aid issues in different areas. Further advice is available from sapt@bis.gsi.gov.uk.

**Information and education**

7.9 As set out in Chapter 6, ensuring customers have the information they need to make purchasing decisions helps competition to work well. In some cases, direct regulation may not be needed if consumers would be able to make better purchasing decisions through easier access to information. For

---

35 Further government guidance on state aid can be found on GOV.UK.
example, the display of health and safety cleanliness standards at restaurants allows consumers to avoid poor quality, while having less impact on the natural process of competition than direct quality regulation. The advantage of this approach is that it offers relative freedom for the consumer and does not restrict the choices available. Instead it provides consumers with the information to help make a more informed decision.

Self-regulation and co-regulation

7.10 An industry or a profession can self-regulate, for example through the use of codes of conduct, customer charters, standards or accreditation. In many cases rules and codes of conduct will be formulated by a trade association, or other industry representatives under their own initiative. In other cases, an industry or profession might self-regulate in response to delivering a stated government objective. Through self-regulation, the industry is solely responsible for monitoring and enforcing members’ compliance. This enforcement can be achieved either first hand, or through other bodies set up by the industry. When a system of co-regulation is in place, there is an element of government monitoring.

7.11 Self-regulation often has benefits in terms of the lower costs it imposes on the industry. The approach may be more informed than government designed regulations if it is designed by industry specialists. However, care should be taken when considering self-regulation as an alternative that it would not be likely to facilitate anti-competitive agreements. Concerns about self-regulation include the greater likelihood of price coordination, coordination to prevent new entry, restrictions on the range of services produced (to the detriment of consumers) and agreements reduce to reduce product and process innovation. Further, unless the governance of self-regulation is very strong, there is a risk that arrangements will suit the interests of the subset of suppliers who design it.
8. Methodologies

8.1 Once it has been decided that an in-depth competition assessment is required then it is useful to consider how the impact of the proposal on competition will be assessed and measured. This assessment can be performed through a combination of qualitative and quantitative methods. In practice, most decisions about which options to prefer are qualitative, that is, not based on quantitative comparisons of options. Relevant data for a quantitative comparison is not always available and, even when available, may not be amenable to analysis. This chapter will lay out techniques of both qualitative and quantitative comparison.

8.2 Qualitative analysis combines facts and economic argumentation to arrive at reasoned judgments about which options to prefer. Quantitative analysis involves careful and rigorous use of numbers to estimates benefits of particular options compared to others. Table 4 shows the pros and cons of qualitative and quantitative methods.

Table 4: Pros and cons of qualitative and quantitative methods

<table>
<thead>
<tr>
<th></th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative methods</td>
<td>Widely understood</td>
<td>Does not identify the numerical impact of the measure (eg impact on price and quantity produced)</td>
</tr>
<tr>
<td></td>
<td>Requires little data</td>
<td>Require more reliance on judgment</td>
</tr>
<tr>
<td></td>
<td>Potentially quick</td>
<td></td>
</tr>
<tr>
<td>Quantitative methods</td>
<td>Requires less need for judgment</td>
<td>Requires data to be available</td>
</tr>
<tr>
<td></td>
<td>Provides estimates of the numerical impact of the measure (eg likely price rises or change to quality)</td>
<td>Requires more technical skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Requires more time</td>
</tr>
</tbody>
</table>

8.3 For particularly significant or controversial issues, quantitative analysis is preferred, when possible. However, the limit on data that is available or time to perform a comparison will often restrict the occasions on which quantitative analysis can be performed. It can also be difficult or impossible to quantify the consumer harm that will arise as a result of a new policy or regulation. So while quantitative analysis can help in selecting regulatory options that have the least restrictive effect on competition, it will often have to be buttressed by qualitative evidence.

8.4 A useful guide to assessing impacts of regulations on competition is the OECD’s Manual for Competition Assessment (OECD (2015)), which has recently been updated to include more detailed guidance on methodologies.
that can be adopted to assess impact and contains many practical examples of how to perform the competition assessment of regulations.\textsuperscript{36}

Qualitative analysis

8.5 Policymakers will wish to be able to demonstrate that they have thought through in a structured way the likely impact of their policies on competition. For this reason argumentation based on economic principles is probably the most common form of qualitative analysis. In addition to the OECD’s specific guidance on assessing impact of measures on competition, it is worth reviewing general guidance on impact assessment such as that contained in HM Treasury’s Green Book.\textsuperscript{37}

8.6 Qualitative analysis that uses “critical thinking” or “informal logic” to select among alternatives will:

- combine economic reasons, evidence and appropriate assumptions to reach conclusions;
- account for the credibility of sources, to ensure that no undue weight is placed on self-interested and biased argument;
- gather information to complete arguments and test plausible hypotheses;
- consider challenges that may be made to conclusions and have appropriate responses; and
- evaluate the quality of arguments about the strengths and weakness of alternative policies.

8.7 Examples of using arguments to compare options can be found in Annex B of the OECD’s Competition Assessment Toolkit: Guidance.

8.8 The starting point of such analysis is to state the overall situation, including the reasons for developing the current proposals and establishing a baseline (as set out in Chapter 2). The analysis then states the objectives of the proposal and sets forth the alternatives, such as those considered in Chapter 7. Each option is analysed, considering its strengths and weaknesses, using any available evidence, including information about the rationale for a regulation, how each given option would achieve that goal and the likely impacts on consumers from each option based on economic principles. The

\textsuperscript{36} OECD Competition Assessment Toolkit.
\textsuperscript{37} HM Treasury, \textit{The Green Book: Appraisal and Evaluation in Central Government}.
analysis can identify assumptions, particularly where the assumptions may be questioned. Finally, a value judgment is made about which option is strongest, weighing the analyses of the options and considering the evidence and reasons, especially economic, to support each option.

8.9 Information that is particularly useful for such analysis can come from comparison of regulations across different jurisdictions. This allows different ways that a policy can be delivered to be identified and draws on research that has already been done to the likely impact on competition. The usefulness of comparisons depends on having common features between the jurisdictions, such as common consumer preferences and responses.³⁸

8.10 Stakeholder consultation may also be a useful way to find out about the likely impact of a proposed measure. Stakeholders may have a good knowledge of the sector and of what alternatives can and cannot be implemented. Consulting with stakeholders can therefore provide a useful mechanism for ensuring that important facts have not been missed and that relevant options have not been ignored. However, companies that benefit or could benefit from a grant of market power via the proposal may be more likely to participate in stakeholder consultations and may also be more likely to argue in favour of an option that gives them market power, to the detriment of the public interest.

Quantitative analysis

8.11 Quantitative assessment is particularly useful for providing a clear line of reasoning to examine whether regulations should be changed and how much public value comes from such changes. Quantitative analysis can be particularly useful as a counterweight to arguments in favour of a regulatory change, which may come from certain stakeholders who would enjoy market power as a result of the regulation.

8.12 Simple methods of providing quantitative estimates often provide results that are comprehensible, testable and transparent. One of the advantages of simple methods is that they are typically easy to explain and consequently more convincing for decision makers than complex methods.³⁹ If simple methods are not available, quantitative estimates will often not be made at all. Given the time constraints often present, this chapter focuses on simple methods for quantification.

³⁸ Common jurisdictions for comparison, depending on the focus of the regulatory framework, may include local authorities, England, Northern Ireland, Scotland, Wales, countries within the European Union, the OECD, and other countries that may be relevant for a particular regulation.

³⁹ Complex econometric methods which estimate the impact of a measure on cost and demand functions underlie more sophisticated analysis.
Two particularly common sources of comparative quantitative information are quantification coming from predictive economic studies of a regulation’s impact and quantification from before and after studies.

Economic studies that predict impacts of regulatory reform based on economic principles can show impact of regulations under consideration. Often such analyses have estimates of impacts on price, cost or other variables of interest. Such studies can provide useful insight should the study have looked at the impact of similar regulatory proposals to those under consideration.  

Before-and-after studies show the impact of a change in regulation, while adjusting or holding constant other factors. The intention of such studies is to identify the impact of a reform on variables of interest, such as price. The OECD in its Competition Impact Assessment Toolkit has produced a database identifying more than 300 research studies of the impact of pro-competitive regulatory reform, the vast majority of which are taken from developed countries that are members of the OECD. This database finds that the average price change from removing a restriction on competition is 19 per cent. This suggests that moving towards more competitive outcomes can reduce prices by up to 19 per cent on average.

Policymakers can use the OECD’s assessment of average price impacts from different types of restriction (as outlined in the table below) as a ‘rule of thumb’ to estimate the price effect of introducing a regulatory restriction that impacts on competition. A rule of thumb is an alternative to a more detailed analysis in specific cases. Rules of thumb may be faster and use available data. These estimates can be used when there is a binding restriction from the regulation. So, for example, a rule that limits the number of taxis to 10,000 in a city is not binding if there are only 3,000 taxis operating in the area. The results, however, should be considered a benchmark, recognising that detailed studies may come up with different results, particularly if there are feasible ways to estimate elasticities and expected changes in variables like price.

The table can be used in the following way. Should a regulatory proposal to establish a licence as a requirement of operation be considered, for example, based on the average price effect from before-and-after empirical studies, a 23 per cent price rise could be anticipated (see the third row in the table

---

[40] The variables that the study cover can depend on the product under consideration. For taxi services, for example, price is not the only variable of importance; quality matters to users, notably based on waiting time and quality of the vehicle. For retail sale of cars, price is again a variable of importance, but reliability of the vehicle may also be of particular importance for some users, with other characteristics of more importance to other users, due to the wide variety of users.
below), assuming that the measure actually has a binding effect on the number of firms in the market.

Table 5: Mean price impact from not imposing a regulatory restriction that impacts on competition

<table>
<thead>
<tr>
<th>Benchmark price change (ρ) (ratio of price change to less competitive price)</th>
<th>Category and sub-category of regulatory restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.20</td>
<td>(A) Limits the number or range of suppliers</td>
</tr>
<tr>
<td>-0.19</td>
<td>1 Grants exclusive rights for a supplier to provide goods or services</td>
</tr>
<tr>
<td>-0.23</td>
<td>2 Establishes a license, permit or authorization process as a requirement of operation</td>
</tr>
<tr>
<td>-0.15</td>
<td>3 Limits the ability of some types of suppliers to provide a good or service</td>
</tr>
<tr>
<td>-0.19</td>
<td>4 Significantly raises cost of entry or exit by a supplier</td>
</tr>
<tr>
<td>-0.12</td>
<td>5 Creates a geographical barrier to the ability of companies to supply goods services or labour, or invest capital</td>
</tr>
<tr>
<td>-0.18</td>
<td>(B) Limits the ability of suppliers to compete</td>
</tr>
<tr>
<td>-0.19</td>
<td>1 Limits sellers’ ability to set the prices for goods or services</td>
</tr>
<tr>
<td>-0.14</td>
<td>2 Limits freedom of suppliers to advertise or market their goods or services</td>
</tr>
<tr>
<td>-0.16</td>
<td>3 Sets standards for product quality that provide an advantage to some suppliers over others or that are above the level that some well-informed customers would choose</td>
</tr>
<tr>
<td>-0.39</td>
<td>4 Significantly raises costs of production for some suppliers relative to others (especially by treating incumbents differently from new entrants)</td>
</tr>
<tr>
<td>-0.20</td>
<td>(C) Reduces the incentive of suppliers to compete</td>
</tr>
<tr>
<td>-0.28</td>
<td>1 Creates a self-regulatory or co-regulatory regime</td>
</tr>
<tr>
<td>-0.10</td>
<td>2 Requires or encourages information on supplier outputs, prices, sales or costs to be published</td>
</tr>
<tr>
<td>-0.25</td>
<td>3 Exempts the activity of a particular industry or group of suppliers from the operation of general competition law</td>
</tr>
<tr>
<td>-0.20</td>
<td>(D) Limits the choices and information available to customers</td>
</tr>
<tr>
<td>-0.32</td>
<td>1 Limits the ability of consumers to decide from whom they purchase</td>
</tr>
<tr>
<td>-0.12</td>
<td>2 Reduces mobility of customers between suppliers of goods or services by increasing the explicit or implicit costs of changing suppliers</td>
</tr>
<tr>
<td>-0.16</td>
<td>3 Fundamentally changes information required by buyers to shop effectively</td>
</tr>
</tbody>
</table>

Source: OECD database of ex post studies of pro-competitive regulatory reform, 2015 version. This table will be updated as the database is updated, with new versions posted on the OECD website.

Measuring consumer harm

8.18 The competitive effects of proposals can often be examined by estimating the likely change from one point on the demand curve for a product to another. Where a proposal has the effect of limiting supply or raising price, an estimate
of the likely consumer harm can be calculated relatively easily. The benefit of estimating the likely consumer harm is that a monetary value (in terms of consumer welfare lost as a result of the regulation) can be allocated to the regulatory proposal. While the estimate will not necessarily reflect consumer harm over time (the dynamic effect of the regulation), the studies summarised in Table 5 would often include results from entry and exit and potential innovations, as they are before and after studies of reforms affecting competition.

8.19 The logic of change in equilibrium approach is captured in Figure 2. Figure 2 shows the impact of moving from a competitive equilibrium ($E_c$) to a restrictive equilibrium ($E_r$). The movement makes price rise from $P_c$ to $P_r$ and quantity decrease from $Q_e$ to $Q_r$. The consumer harm is represented by the joint area of the shaded rectangle and triangle. Even when detailed information is lacking, these areas can be estimated using relatively simple and standardised, default techniques.

Figure 2: Consumer harm from introduction of a restrictive measure

8.20 Policymakers can estimate impacts by measuring the consumer benefit that arises from not introducing a restrictive regulation (and thus conversely the consumer harm that will arise were such a restrictive regulation to be introduced). The OECD has set out a formula than can be utilised to perform this calculation. This requires the policymakers to know the total revenue, the expected price change following the introduction of the regulation (which can be taken from Table 5 above as explained in paragraph 8.27 below) and the elasticity of demand.
\[ \text{CB} = \left( \rho + \frac{1}{2} |\epsilon| \rho^2 \right) R_r \]

Where:

CBs: standard measure of consumer benefit

\( \rho \): percentage change in price related to restriction\(^{41} \)

R: sector revenue

|\( \epsilon |\): absolute value of elasticity of demand

8.21 This formula can be divided into two parts, with the first part \((\rho R r)\) effectively representing the shaded box in Figure 2 and the second part \((\frac{1}{2} |\epsilon| \rho^2 R r)\) approximating the shaded triangle in Figure 2.

8.22 Where the elasticity for the sector is known, this should be used in the calculation. If the elasticity is unknown, the assumption of \(|\epsilon| \approx 2\) can be assumed, for a reasonably typical market with competitors, some consumers willing to cease purchases in response to higher prices and no price regulation, to yield an estimated benefit from not introducing the restriction of:

\[ \text{CB} = (\rho + \rho^2) R_r \]

8.23 Revenues are a valuable measure because they are often readily available and are less commercially sensitive than the two constituent elements of revenues, price and quantity sold.

8.24 The revenues should be those in the market directly affected by the regulation. More distant, but related markets would typically not have their revenue included in the revenue figure. Some judgment must be exercised in determining the bounds of the market for the purpose of the revenue estimate. Suppose revenues are known for a national market, but the measure has only a local effect. The local revenue can be estimated from national revenue, for example by making per capita revenue calculations, per outlet revenue calculations, or calculations per unit of geographic area.

8.25 Revenues are measured in currency units, allowing for the calculation of benefits that arise from not introducing a regulation that restricts competition measured in £s.

\(^{41}\) Note that expected price changes will often be given by ranges of percentage price changes.
A restriction on tyre imports

Imagine you have to assess the impact of a regulation that would introduce a license process to limit the number of authorised importers of automotive tyres to three suppliers. The purpose of this restriction is allegedly to make it easier for the government to ensure high quality of tyres; there is also an alternative of testing tyre durability on special machines for this purpose.

Annual revenue from sales of imported tyres is £1.4 billion. You have searched for but could not find any studies of the elasticity of demand for automotive tyres. To estimate the consumer impact from this regulation, you would therefore review the types of effects from Table 5 and note that price increase from establishing a license process are 23 per cent. So you could then apply the formula above to calculate an annual consumer harm of:

\[
CH = £ (0.23 + 0.23^2) \times 1.4b = £ (0.283) \times 1.4b = £ 396m
\]

8.26 Many studies have been performed that examine the price impact of different types of changes in regulation. The OECD database of outcomes in 200 ex-post studies have been averaged to provide benchmark figures for estimating the value of restrictions in different areas. The benchmarks are listed in Table 5.

8.27 To find the appropriate benchmark, identify the type of restriction that has been identified. For each restriction, the table lists a benchmark effect. If more specific figures are known, for example from sector specific studies, these may be more appropriate than the general benchmark. In absence of appropriate studies, the benchmark serves as a useful first approximation.

8.28 Eliminating competitive restrictions from a regulation often yields price changes but can also impact on output and jobs. Similarly, benefits from not introducing competitive restrictions may be measured in other ways than through price. For example, at times prices are regulated, but the quantity supplied is restricted. This restriction of quantities also harms consumers. A 1 per cent reduction in quantity supplied, even with prices fixed, may harm consumers more than a 1 per cent price increase.\(^{42}\) This is because the 1 per cent price increase will result in those consumers with the lowest marginal benefit from the product stopping their purchases. In contrast, a decline of quantity will not necessarily be allocated to those consumers with the lowest marginal benefit, but could equally likely apply to all consumers, including those with very high personal benefit from consumption.

---

\(^{42}\) This covers cases like price regulation combined with entry limits (taxis), where non-equilibrium outcomes may be enforced via regulation.
8.29 There are other variables that can be used in addition to price and quantity. The best variables to measure will depend on the product, the sector, what matters to consumers, and the available data.

8.30 More technical methods to estimate impacts can be used when very detailed information is available about pricing, firm sales and consumer preferences, allowing for an estimation of the demand curve. Commonly, such detailed data is not immediately available.

8.31 Once benefits and costs have been quantified a cost-benefit analysis can be undertaken. In many cases, benefits and costs provided by proposed measures will occur over years, and the timing of benefits and costs generated by different options may vary. In such cases, discounting is often required to correctly compare proposed options. Discounting can allow for costs and benefits that occur over time to be compared based on societal preferences for receiving benefits earlier, and other factors, such as the opportunity cost of funds and inflation. Where benefits and costs occur over time, selecting the appropriate discount rate can be critical to the selection of the best option. Guidance on how to undertake option appraisal and the choice of the underlying real discount rate to be used has been set out by HM Treasury in the Green Book. It is common in estimates of competitive benefits to truncate the benefits (by limiting the length of time considered, for example, to five years) to account for the imperfect foresight of regulators.

---

43 These sources could have helped to determine the supply curves that would apply in the baseline and under alternative proposals.

44 The standard measure assumes a market elasticity of -2 (or |ε|=2, in a constant elasticity demand function). It is intended to represent a typical product’s elasticity with moderate competition and distant but feasible alternatives. The measure may be made more accurate if further information is available, or if there are reasons to believe the demand is either particularly inelastic, as with electricity or insulin, or particularly elastic, as may be the case with certain basic commodities.

45 For more detailed discussion see section 4.4.3.1 of Volume 3 of the OECD Competition Assessment Toolkit.