Testing which proposed regulations need "competition-proofing"

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Abstract

When assessing the likely net impact of regulation, many jurisdictions test for specific effects on areas of concern, such as small businesses or the environment, as well as for more generalised costs and benefits. This paper considers how best to design a negative-clearance test for the competition effects of regulations. We start by examining the well-documented UK "competition filter", which proves to have serious shortcomings. Important classes of potentially damaging measures will not trigger the UK filter, and we illustrate this by applying the filter to four controversial measures that are currently, or were recently, on the statute books in Ireland. Structural and other features of the UK filter that lead to these outcomes are identified. We then outline an alternative test structure that should reduce such "false negatives" while remaining practical to apply.

Key words: Regulatory impact assessment, cost-benefit analysis, regulation, competition.

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1. Introduction

"The problem of cost-benefit analysis is simply whether we can find workable shortcuts," suggest Atkinson and Stiglitz (1980).¹ Even where expected aggregate costs and benefits of a project are known, it may not be straightforward to arrive at total welfare effects.² One might add that the ideal data are never available and analytical time is costly. If this characterisation has resonance when discussing public expenditure evaluation, it seems even more appropriate for the *ex ante* analysis of regulatory measures: regulatory impact assessment (RIA). At least the expected cost to the exchequer of proposed public expenditures tends to be known in advance: for prospective regulatory measures, even the *sources* of likely costs and benefits may not be known to the policymaker.

The search for workable RIA shortcuts has led jurisdictions that employ this tool to adopt a wide variety of different approaches.³ However, many RIA regimes share a common feature: specific tests are employed alongside a wider cost-benefit comparison in an attempt to capture particular types of impact that are thought to be of particular concern.

Such specific tests may relate to effects on small businesses, the environment, charities and other voluntary organisations, churches, competitiveness, or a range of other areas.⁴ The focus of this paper is on when it is appropriate to apply one such specific test: the potential impact of regulatory measures on competition.⁵

¹ Atkinson and Stiglitz (1980), p.475.

² E.g. because such an assessment requires explicit or implicit distributional judgements.

³ For examples see Hopkins (1997) and EU Presidencies (2004).

⁴ See EU Presidencies (2004), Part II (Country Experiences).

⁵ We are not aware of a systematic treatment in the literature of the case for using specific tests rather than relying on a single all-encompassing test of regulatory impact, and it is not our intention to develop one here. However, we might suppose that jurisdictions use this approach for sources of costs or benefits that are considered likely to be significant (in at least some cases) and where the analytical tools used to assess effects are not expected to overlap significantly with those used for a broader review of regulatory impact. For other cases where a broader RIA review would be capable of incorporating specific costs and benefits, it might be better not to include a specific test, since this could lead to unnecessary duplication or imbalances in the treatment of different types of impact.

There is plenty of evidence that regulatory measures can damage competition and reduce consumer welfare. We briefly review the main sources of concern in Section 2. In Ireland, which is currently developing a system of regulatory impact assessment for use in central government departments,⁶ there have been debates in recent years over the impact on competition of various regulatory and self-regulatory measures: examples include the Groceries Order (e.g. banning below-invoice cost selling of groceries), aspects of pub licensing, planning restrictions on sizes of supermarkets, restrictions on the number of taxi licences, and Section 149 of the Consumer Credit Act, 1995 (which includes price controls on retail banks).

A thorough review of the competitive effects of a measure may involve a significant amount of administrative effort. Specific data collection is likely to be required into issues such as the boundaries and structures of relevant markets, extent and nature of rivalry between firms, cost structures and so forth. These tasks require specialised expertise that may be scarce, particularly in smaller jurisdictions.⁷

Given that many measures are purely administrative in nature or otherwise unlikely to have any effect on competition,⁸ it would be wasteful to require a detailed competition review for all proposed measures. Instead, some sort of negative clearance test is required – preferably one that is easy to apply but discriminates reliably between measures that need to be examined and those that do not

The UK "competition filter" is probably the best documented test of this kind, so we take it as our starting point. However, we find that the UK filter has important shortcomings – in

⁶ Work on the model is being coordinated by the Department of the Taoiseach and the Better Regulation Group: see Department of the Taoiseach (2004), p.40.

⁷ Moreover, if we assume that the administrative costs of a providing given level of scrutiny to a measure are broadly fixed, while the benefits (and some other costs) tend to depend upon the number of persons or firms affected, the net cost per taxpayer for a scrutinising a given measure is likely to be higher in a small country than in a large one.

⁸ A review of RIA in Canada reported that "About 30 percent of regulations are administrative in nature and have almost no economic impact." Treasury Board of Canada (1997), p.5.

essence, there are classes of potentially damaging measures that will not trigger it. Our focus is on finding an appropriate test for a small country such as Ireland, but our results also point to weaknesses in UK regulatory impact assessment policy.

Identifying the problems with the UK filter helps us to outline an alternative type of filter that should better discriminate between safe and potentially damaging measures, while also being administratively practicable to apply.

2. Why test the effects of regulatory measures on competition?

We assume throughout this paper that the appropriate goal of a policymaker, whether a legislator or civil servant, is to improve social welfare. This assumption places the analysis within the "public interest" approach to government intervention, in a normative sense. However, we recognise that this motive for action may not prevail in all cases: there is potential for capture of agency decisions by interest groups. This means that institutions constructed to maximise the public interest need to account for, and be robust to, the risk of capture.

To see how regulatory measures can reduce welfare, and thus identify the sorts of measures welfare-maximising governments should prefer not to take, we first consider the reasons that competition-reducing regulations are adopted and the ways in which they may reduce social welfare. The framework outlined in this section will be useful later in the paper for identifying the characteristics of measures that are likely to cause significant harm to competition.

Later in this section we look at some of the administrative measures that governments use to reduce the likelihood that damaging regulations are adopted.

⁹ For a summary of the distinctions between the "public interest" and "capture" approaches to explaining public intervention in markets, see Laffont and Tirole (1998), chapter 11.

Reasons for adopting measures that will harm competition

We can distinguish between two sorts of reasons that a policymaker might have for adopting a regulatory measure while knowing that it will have a negative impact on competition. The first sort, which we describe as **trade-offs**, is consistent with a public interest approach, in that it includes justifications that a benevolent social-welfare maximising policymaker could accept. Trade-offs are justifications that involve taking actions that will improve net social welfare, but in so doing will also cause some unavoidable harm to competition in one or more markets. Policymakers and interest groups often invoke trade-offs to justify proposed measures, and sometimes these arguments are legitimate. Examples abound; perhaps the most obvious ones are environmental or safety measures that improve welfare by correcting for externalities, but also have the effect of imposing significant sunk costs on a sector. This may in turn affect the conditions of market entry and hence reduce competition. But if the welfare gains from the measure are sufficiently strong and there is no lower-cost alternative, the policy may well be justified.

The main risk to welfare from measures involving legitimate trade-offs is that the relevant costs and benefits will be miscalculated. If the error is significant, harm to social welfare could be correspondingly large. This issue arises for all types of costs and benefits, not just those associated with competition, but competition analysis could be used to reduce the level of likelihood of error for some measures.

The second potential class of reasons we identify for adopting measures that are expected to harm competition is that involving **rent capture**. An extensive literature following Stigler (1971) sets out an "economic theory of regulation," whereby well-organised minorities obtain rents by capturing political and regulatory institutions. Of relevance to our analysis is Stigler's original classification of the types of policies through which capture may be

attempted. 10 Two of the four channels he identifies are of lesser relevance to our analysis. The first of these is direct government subsidies, and the second includes policies that support goods complementary to those of the lobbyists (or hinder substitute goods). However, the other two types of policies Stigler identifies involve regulatory measures.

The first, and probably most important of these two types, is creation of entry barriers using mechanisms such as licensing or standards. Such policies are particularly desirable for the rent-seeker because they can ensure that any rents captured will be retained by existing market participants. 11 The second type set of relevant policies involves the imposition of price controls that serve to weaken price competition. Such policies are particularly relevant in markets that are already subject to barriers to entry, either due to other administrative measures or because of structural characteristics.

Capture may lead to larger and more persistent harm to welfare than mere errors in estimating the value of legitimate trade-offs. The damage to welfare from this source is likely to include the direct distortion arising from the creation of rents, plus deadweight losses associated with the process of capturing and retaining them. In addition to static losses, there may be a dynamic effect: potential for capture of rents is likely to elicit continuing effort to obtain them. 12 Thus if we find measures with characteristics that may indicate a risk of rent capture, we should require strong justifications before allowing them to be imposed.

Ways in which measures may damage competition

Regardless of the reasons for their adoption, measures can limit the scope for competition either by adversely affecting the incentives for entry, expansion or exit of firms, or by weakening the rivalry of firms already in the market. Below we briefly review each of these classes of impact.

Stigler (1971), pp. 4-6.
 Laffont and Tirole (1998), p.504.

Limiting scope for entry, expansion or exit from markets

The most obvious way regulation can limit entry is by imposing explicit rules that govern the number or identity of market participants. The statutory public utility monopoly is a familiar, if increasingly rare, example. Even where there is no public monopoly, the state may impose quantitative limits on the number of firms allowed to serve the market, often through some form of licensing arrangement.

Regulation can also have an indirect effect on terms of entry, expansion or exit. For example, government actions that increase the cost of doing business, particularly where higher costs are imposed on actual or potential entrants than on incumbents, can reduce the number or effectiveness of entrants.¹³

Weakening rivalry

Competition may be more or less fierce for a given number of competitors in the market, and regulation may affect the level of rivalry just as it can limit entry.

Here too, direct and indirect effects are possible. Direct limits to rivalry can take the form of limits on firms' pricing behaviour, advertising, quantities offered, variety or product characteristics. Indirect effects may arise if regulation serves to reduce firms' uncertainty about competitors' likely strategic choices, making it easier for market participants to actively or passively coordinate behaviour.

¹² There is a useful survey of rent-seeking and measures used to combat it in Milgrom and Roberts (1992), pp.270-284.

Asymmetries of this kind may be explicit, as in the case of "grandfathering" provisions, or implicit, such as in cases where the cost structures of entrants and incumbents are materially different, leading to asymmetry in the incidence of a regulatory measure.

Administrative measures to reduce damaging regulation

Without knowing more about a specific regulatory measure, we cannot be sure if it will increase consumer welfare or reduce it. Even restricting ourselves to the subset of measures that have some negative impact on competition, a given measure may

- Increase welfare, if the net benefits arising from the measure are positive, taking into account the damage to competition; or
- Decrease welfare, if net benefits are not sufficiently large (e.g. the main effect of the measure is to appropriate rents for a particular group).

To help increase the likelihood that adopted regulations are welfare-increasing, some jurisdictions require policymakers to carry out additional analysis on the types of measures that are deemed to give rise to high risk of damage to competition. Such tests are analogous to merger control, whereby a class of transactions are identified that give rise to particular risks of harm to consumers, and the regulator is required to examine them using suitable analytical tools. Because mergers are difficult to reverse after completion, reliance on *ex post* controls would not be sufficient to avoid persistent harm: *ex ante* examinations are required.

Adoption of a regulatory measure might seem a more reversible process than a merger, but the very measures that cause the greatest harm are likely to have the strongest tendency towards persistence: those involving capture of rents by a small, well organised group at the expense of the wider society. Even in the absence of such political resistance to reversal, reversing a regulatory measure may involve significant administrative cost and delay. Indeed,

¹⁴ In the case of primary legislation, legislators are essentially constraining themselves by adopting RIA. With reference to secondary legislation and actions by regulatory agencies, there is an extensive literature viewing the adoption of administrative procedures such as these as a way for legislators to manage principle-agent problems in the regulatory process. See for example McCubbins *et al.* (1987).

¹⁵ The EC Merger Regulations, EC (2004), provide a recent European example.

there may even be cases where reversing the outcome of a damaging regulation could be more costly than leaving the outcome in place. An example of this might be imposition of a sub-optimal technological standard; getting back to the original first-best position could involve prohibitive adjustment costs.

Of course, measures normally have effects that go beyond an impact on competition. Policymakers normally embed competition analysis in a wider process of regulatory impact assessment. While it would be wrong to ignore the impact of a new measure on competition, it would be equally foolish to ignore the other sources of costs and benefits associated with the measure.

Indeed, since a large proportion of legislative measures are purely administrative in nature or for other reasons have no effect on competition, it would seem excessive to prescribe that all proposed legislative and regulatory measures be competition-proofed. One solution to this problem, again analogous to merger control, is to use a negative clearance test to quickly dispose of measures that are not going to raise any significant concerns.

Probably the best documented negative clearance test for the competition effects of regulations is the UK competition filter developed by the Office of Fair Trading. In the next section, we describe this mechanism and consider how well it meets its stated objectives. While this analysis has obvious relevance to the UK, where the system is used, we are particularly interested in how well a system of this kind would perform in a smaller jurisdiction such as Ireland.

¹⁶ Recitals 5 and 7 in the Merger Regulations, EC (2004), make it clear that *ex post* competition law measures were considered insufficient to prevent potential harm from some concentrations

3. The UK competition filter

The UK test for whether a regulatory measure undergoing RIA requires extra scrutiny for competition effects is called the "competition filter." While it is widely used for RIA studies in Britain and is accompanied by extensive documentation, we find that it has significant theoretical and empirical/applied shortcomings.

In this section, we describe the UK filter briefly, and then apply it to four measures that are – or were recently – on the statute books in Ireland. These measures were chosen because each has at some point been alleged to damage competition significantly and undergone some form of impact examination. We find that at least three, and possibly all four, of the measures would **not** be required to undergo competition scrutiny if the UK filter were applied to them.

Drawing on these examples and our earlier discussion of ways regulation can damage competition, we identify major problems with the UK filter. In the next section, we apply these lessons and try to outline a more appropriate competition filter for use in RIA exercises.

3.1 Description of the UK competition filter

The UK competition filter requires a policymaker to consider nine yes/no questions. If the answer to five or more of these questions is yes, a review of the competition effects of the proposed measure is deemed necessary. The rationale for the UK competition filter is set out in OFT (2002), together with detailed guidance for policymakers on how it should be applied and how a detailed review should be conducted where it proves necessary. In this section, we first list the questions in the filter and then summarise the guidance provided on each question in OFT (2002).

The nine questions are listed below.

- 1. In the market(s) affected by the new regulation, does any firm have more than 10 per cent market share?
- 2. In the market(s) affected by the new regulation, does any firm have more than 20 per cent market share?
- 3. In the market(s) affected by the new regulation, do the largest three firms together have at least 50 per cent market share?
- 4. Would the costs of the regulation affect some firms substantially more than others?
- 5. Is the regulation likely to affect the market structure, changing the number or size of firms?
- 6. Would the regulation lead to higher set-up costs for new or potential firms compared with the costs for existing firms?
- 7. Would the regulation lead to higher ongoing costs for new or potential firms compared with the costs for existing firms?
- 8. Is the market characterised by rapid technological change?
- 9. Would the regulation restrict the ability of firms to choose the price, quality, range or location of their products?

Source: OFT (2002).

The filter is intended to "quickly signal those proposals that are most at risk of impacting materially on the competitive process" and it is to be carried out early in the process of developing policy. It is clear from the guidance that the filter is to be applied to economic markets, and a simple description is given of how such a market should be defined: "a market includes the firms that compete against one another to sell the same or similar products or services." The guidance stipulates that the filter should be applied to all affected markets, or in the case of regulations with broad sectoral impact, at least those markets likely to be affected most intensely. However, it is clear from the text that users of the filter are not expected to carry out full-scale reviews of market boundaries.¹⁹

The OFT briefly describes the logic behind each of the nine questions. The questions can be grouped into two sets: four questions about market characteristics and five that focus on the

¹⁷ OFT (2002), para. 4.3.

¹⁸ *Ibid*, para. 4.7.

¹⁹ As discussed later in the paper, omitting a requirement for full-scale market reviews is probably a practical necessity.

nature of the regulatory measures under consideration. To see how the filter is constructed, we outline the rationale given for the questions, taking the market-related ones first.

Three of the nine questions in the filter relate to the *ex ante* level of market concentration. Questions 1 and 2 ask whether the market share of the largest firm (in terms of UK sales) is at least 10 or 20 per cent. The guidance states that market power is more likely to be present where one or two firms have a significant share of the market and that higher market share would be "more of a concern."

The third question is closely related to the first two, asking whether the largest three firms have at least a 50% share. This is taken to imply a greater risk both of single firm market power and potential scope for collusion – "cases where a few large firms may be able to act together."

The eighth question also relates to a characteristic of the market, asking whether it is subject to "rapid technological change." Such markets are singled out due to the "risk that regulation may restrict innovation in such markets."

We now turn to the remaining five questions, which focus on the nature of the measure.

Potential for asymmetric incidence of the measure is the focus of Question 4, which asks if "the costs of the regulation [would] affect some firms substantially more than others."²² The OFT explains that the firms considered must be ones competing with one another, and three possible sources of asymmetric costs are suggested: small firms affected differently from large ones, firms disadvantaged because of "the resources they use" and firms in some locations affected differently from those in other places. In judging whether the asymmetry is "substantial," a policymaker should consider whether firms disadvantaged by the measure could nevertheless remain in business, or whether they might exit the market.

²⁰ *Ibid*, para. 4.19.

Question 5 asks whether the measure is likely to "affect the market structure, changing the number or size of firms." From the brief guidance given, it seems that this relates to the likelihood of market consolidation or exit by firms as a result of the measure.

The sixth and seventh questions ask whether there would be higher set-up or ongoing costs for actual or potential entrants than for existing firms. Specific reference is made to the possibility that licensing or restrictions on location might be applied, inhibiting entry, or that treatment of incumbents and entrants might be asymmetrical in some way.

Finally, question 9 asks whether the measure includes other forms of economic regulation: restrictions on prices, quality, range or location of products. Examples given include product standards, price controls and permitted quantities of inputs. The guidance comments that "all will have the effect of removing one way in which firms can compete, and therefore represent a distortion to competition."²⁴

In summary, the questions regarding the nature of the measure try to capture, in a cumulative way, the possibility that the measure will change market structure, raise various barriers to entry and impose restrictions on firms' competitive behaviour.

3.2 Four examples of measures that the UK filter might exempt from scrutiny on competition grounds

In this section, we look at four actual regulatory measures that are currently in place in Ireland, or were in place in the recent past, and which are or were alleged to have potentially significant effects on competition. Our objective is not to determine if these measures are justified or not, but to use them as stylised examples for illustrating how particular types of

²¹ *Ibid*, para. 4.30.

²² *Ibid*, para. 4.20.

²³ *Ibid*, para. 4.23.

²⁴ *Ibid*, para. 4.32.

policies would fare under the UK competition filter. The underlying assumption is that the filter should flag possible concerns if such measures such as these were proposed.

In three of these cases, the filter suggests that the relevant measure does not require competition scrutiny. The result in the fourth case is ambiguous, but a case could be made for passing it.

This conflict between our prior expectations and the results of applying the UK filter helps to illustrate the shortcomings of the UK filter, and by extension, to highlight some of the features required for a better negative clearance test for the effects of regulation on competition.

Example 1 – Limitation on the number of licences issued in the Dublin taxi market

Between 1978 and 2000, restrictions were imposed on the number of taxis licensed to operate in Dublin and other parts of Ireland.²⁵ Other concurrent measures imposed price restrictions, qualifications for drivers and vehicle standards. As the relevant markets are likely to be local or regional in scope, we focus on the Dublin market.

Suppose the quantitative restrictions had been renewed rather than lifted in 2000, but that they were also subjected to a regulatory impact assessment. Would these measures have been captured by the UK competition filter? As an aside, we note that although these restrictions have been lifted, taxi regulation remains a live issue: new regulatory structures are currently being developed for the sector.²⁶

Our prior expectation is that the measure should trigger the filter. Research at the time the restriction was in place indicated that it imposed a high welfare cost by restricting the supply

²⁵ This restriction was imposed via secondary legislation, Statutory Instrument No. 292 of 1978, cited in Fingleton et al. (1998), p.4. It was removed on 21 November 2000, following a High Court decision: OECD (2001), p.28. ²⁶ The legislative framework is set out in the Taxi Regulation Act, 2003.

of taxis. One estimate put the monopoly rent associated with the restrictions at over €15 million per annum.²⁷ Long queues were commonplace.²⁸

However, application of the UK competition filter (see below) suggests that this measure would not give rise to competition concerns and that its competition impact should therefore have been exempted from a detailed examination.

Since five positive responses are required to signal a need for reviewing the competition impact, and application of the filter yields only two, this measure would apparently be waved through.

Application of UK Filter to Example 1: Limitation on the number of licences issued in the Dublin taxi market

Question(s)	Likely Answer	Reasons
1-3	No	The market was not considered to be concentrated; there were 2,374 taxi licences in place in 1998, and most were owned by owner-drivers. Some individuals and firms held sets of licences, but according to Fingleton, Evans and Hogan (1998), the share of licences held this way was "probably considerably less than 25 per cent. Hackneys, numbering about 3,000 in 1998, also served a segment of the market.
4	No	There is no reason to think that the costs of regulation affected existing firms in an asymmetrical way.
5	Yes	The measure had direct effects on the market structure, limiting the number of market participants.
6	Yes	Potential entrants would have to purchase an existing licence from an incumbent to be able to enter.
7	No	There were no apparent differences in ongoing costs for different types of competitor.
8	No	This was a mature market without rapid technological change.
9	No	The regulation did not directly restrict price, quality, range or location of services. However, other regulatory measures applied to taxis did affect such service characteristics.

²⁷ Fingleton *et al.* (1998), p.11.
²⁸ See, for example, Kaminski, J., "Dubliners still queueing for a living," *Irish Times*, 13 December 1999.
²⁹ Fingleton (1998), p.6-7.

Observations on this example

The measure passes mainly because the relevant market is not found to be concentrated. The cost asymmetry imposed by the regulation is highly focused, and the filter misses the point that barriers to entry can be narrow in focus but powerful in effect. Indeed, the filter effectively regards measures that affect both start-up and on-going costs asymmetrically for incumbents and entrants as twice as deserving of attention as measures that affect only one type of cost, regardless of the intensity of impact or extent of asymmetry.

Entry regulations affecting non-concentrated markets are not uncommon, and it seems likely that most such measures would pass the UK filter. For example, many such measures have been identified in the Irish Competition Authority's ongoing review of selected professions.³⁰

Example 2: Restriction on the eligibility of overseas-trained pharmacists to open a pharmacy in Ireland.

Under Irish law (and that of several other EU countries), pharmacists trained outside the State are not permitted to manage or supervise a pharmacy unless it has been in operation for more than three years.³¹ The OECD has recommended that the restriction be lifted to facilitate competition,³² and Purcell (2004) cites it as one of the two most important barriers to entry into Ireland's retail pharmacy market.³³ Whether or not there is an adequate "trade-off" justification for such restriction, if a measure like this were subject to a regulatory impact assessment, competition effects should be examined.

Again, we apply the UK filter to the measure (see below).

³⁰ See http://www.tca.ie/professions.html.

³¹ Purcell (2004), pp.40-41. The Irish legislation is the European Communities (Recognition of Qualifications in Pharmacy) Regulations, 1987, 1991 and 1994, transposing EC Directive 85/433/EEC.

³² OECD (2001), pp.88-89.

³³ Purcell (2004), p.*xii*.

Application of UK Filter to Example 2:

Restriction on the eligibility of overseas-trained pharmacists to open a pharmacy in Ireland

Question(s)	Likely Answer	Reasons		
1-3	No	The (national) market is not considered concentrated; the largest firm has a 4% share. ³⁴ Of course, if markets were considered to be local, they might be found to be more highly concentrated.		
4	No	There is no reason to think that the costs of regulation would affect existing firms in an asymmetrical way.		
5	Yes	Possible effects on market structure would be a concern.		
6	Yes	There would be higher set-up costs for certain types of potential firm (i.e. those that would have been run by an overseas-trained pharmacist). Indeed, the set-up costs for these firms could be said to be infinite.		
7	No	We can probably conclude that there are no extra ongoing costs for new or potential firms, given that firms affected by the regulation will simply not be permitted to enter.		
8	No	This is a mature market without rapid technological change.		
9	No	The regulation does not directly restrict price, quality, range or location of services.		

Application of the UK filter yields two 'yes' answers (or at most three, if we took Question 7 to merit a 'yes'). The measure would clearly pass the UK filter.

Observations on this example

Once again, the main reason for the measure passing the filter is that the relevant market is not deemed to be concentrated. The focused nature of the barrier to entry imposed by the measure, together with maturity of the market, contribute as well.

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³⁴ Ibid.

In this case, it is also interesting to note that the lack of price controls or other remedies in the measure helps obtain a no-scrutiny result. At first glance, this makes sense: we have noted earlier that price controls may have a significant effect on competition, even potentially capturing rents. However, treating entry and price control features in a parallel way leads to the perverse result that a policy that limits entry but not prices is treated as less likely to damage welfare than one in which both entry and price are controlled.³⁵ Yet restricting entry in a market with unconstrained prices can amount to a rent-seekers' charter.

If entry regulation proves to be necessary, consumers may be better off if prices and quality are regulated as well. Thus regulatory measures that control entry alone seem at least as deserving of examination as those that control both entry and prices.

Example 3 -Ban on selling groceries below invoice cost

Our third example involves a very different sort of measure and market, yet it too passes the filter despite having repeatedly attracted scrutiny in Ireland on grounds of possible effects on competition.³⁶

This measure is the Restrictive Practices (Groceries) Order, 1987, and it remains in force. In this examination we focus on one element of the order:³⁷ its prohibition on selling various grocery products below invoice cost:

³⁵ I am indebted to Greg Swinand for discussions on this issue.

³⁶ Several of these previous reviews are cited in CMRG (1999), p.7.

³⁷ The order also includes restrictions on a range of other practices, e.g. resale price maintenance, "hello money," refusal to supply, advertising and various types of agreements. However, none of these appears to change the results of the filter.

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Under Article 11 a retailer is prohibited from selling grocery goods (except in very limited circumstances in the case of goods whose date of minimum durability has expired) which is less than the net invoice price of the goods (including value added tax) or where charges in respect of carriage, insurance and other costs not included in the relevant invoice have to be paid by the retailer to the supplier to obtain delivery of the goods to his premises. The amount obtained when such charges or costs are added to the net invoice price of the goods (including value added tax). ³⁸

Critics of the Groceries Order argue that it damages competition by requiring grocery retailers to charge prices higher than the actual price of goods (once off-invoice discounts are taken into account). In effect, they say, it amounts to a form of resale price maintenance.³⁹ Although supporters of the measure believe there are important trade-off benefits, it is clear that competition effects of a proposed measure similar to the Groceries Order would merit examination.

The filter is applied below, based on information about market conditions reported in CMRG (1999) during a past review of the measure.

³⁸ CMRG (1999), pp.10-11.

³⁹ For three examples, CMRG (1999), p.27-31.

Application of UK Filter to Example 3:Ban on selling groceries below invoice cost

Question(s)	Likely	Reasons	
	Answer		
1-3	Yes	If we take the relevant geographical market to be	
		national and the relevant product market to be	
		groceries, one firm had 21% of the market in 1998 and	
		the top three firms had 60% share. 40	
4	No	There is no reason to think that the costs of regulation	
		would affect existing firms in an asymmetrical way.	
5	No	The measure should not cause changes in market	
		structure; indeed, its advocates argue it is needed to	
		prevent abuse of market power that would lead to	
		further consolidation.	
6	No	No obvious effect on set-up costs.	
7	No	No obvious effects on ongoing costs.	
8	No	This is a mature market without rapid technological	
		change.	
9	Yes	The regulation restricts pricing behaviour.	

In this case, the three concentration-related questions would all be likely to yield "Yes" results. The measure also involves a clear restriction on pricing, which falls under Question 9.

However, the measure does not impose asymmetrical costs or bear differently on incumbents than entrants. Like the markets in our other examples, this one is relatively mature, without rapid technological change. The net result falls short of the five "Yes" answers needed to trigger scrutiny if a policymaker were to propose a measure such as this.

Observations on this example

Even in a concentrated market, it seems that a measure that is focused on one aspect of firms' behaviour, no matter how intense its effects, may pass through the filter. Indeed, it seems from the examples we have tested that the only type of intervention likely to be captured by the filter is one for which the relevant market is concentrated (*ex ante*) *and* the measure acts

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⁴⁰ Competition and Mergers Review Group (1999), p.55.

through a range of economic channels (e.g. affecting both entry and pricing or affecting entry in a range of ways).

One suspects this result is not unique to the Groceries Order. If we were to apply the filter to other narrow but potentially harmful measures affecting concentrated markets, it seems likely that the result would be the same.

Example 4 – Price controls on retail banks

Our final example has some similarities to the third one, in the sense that the relevant market would probably be found to be concentrated under the UK filter. However, the answers to the other questions are more ambiguous in this case than in our other examples, and the nature of the ambiguity highlights the scope for exercise of discretion when applying the UK filter.

Section 149 of Ireland's Consumer Credit Act, 1995, *inter alia* imposes a price control regime on a range of products offered by retail banks (or credit institutions, to be more precise). If a regulated firm wishes to introduce a new service or increase the charge on an existing one, the proposed charges must be notified to the financial services regulator in advance, together with an administrative fee and supporting information. The regulator may then determine whether the charge is acceptable.

A study carried out for the Competition Authority argues that regulation of bank fees under Section 149 "increases costs, creates risk, and limits commercial freedom for banks. All of these effects serve to discourage entry by new providers and innovation by existing providers, and consequently they create harm to consumers." We would certainly expect that any effective competition filter would pick up a detailed price control measure such as this.

As in the previous examples, we apply the filter below.

⁴¹ LECG (2004), pp.49-50.

Application of UK Filter to Example 4:

Price controls on retail banking services

Question(s)	Likely	Reasons		
	Answer			
1-3	Yes	Data published in LECG (2004) suggests that if the relevant market were taken to encompass personal current accounts in Ireland, concentration would exceed all three thresholds in the UK filter. ⁴²		
4	No/Yes?	The measure confers discretion on the regulator as to the administrative charges that may be applied. ⁴³ The answer to this question is therefore ambiguous; costs might or might not be asymmetrical depending upon how the regulator applied the measure.		
5	No	The measure should not cause changes in market structure; like other measures discussed in this paper, it is more likely to hinder structural change than induce it.		
6	No/Yes?	Set-up costs are open to regulator discretion (see Q4 above). All new services must be submitted for price approval, but application charges are discretionary.		
7	No/Yes?	Ongoing costs are open to regulator discretion (see Q4 above). All price increases or new product introductions must be submitted for approval, but application charges are discretionary.		
8	No/Yes?	While there is a degree of technical change in retail banking, it is less obviously innovative than technology-driven sectors like computing and biotechnology. The answer to this question would depend upon the views of the person completing the filter.		
9	Yes	The regulation restricts pricing behaviour.		

It seems likely that this market would be deemed concentrated under questions 1-3 of the filter, and being a price control measure it obviously merits a "yes" for question 9. However, the answers to most of the other questions are ambiguous, and if all of these were answered in the negative the measure would pass the filter.

⁴² LECG (2004), Table 2, p.27.
43 For each price application, the regulator may charge "such fee as the Director may decide as respects each notification, being not more than a fee of £25,000 [€31,750] or such other amount as may stand specified in regulations."

It would not be difficult to construct an argument for a "no" for each of the four ambiguous questions. In considering questions 4, 6 and 7, note that the regulator has discretion as to the administrative costs it may impose. The legislation states:

The fee referred to in subsection (3) may be waived or reduced by the Director where the payment of the fee would, in the opinion of the Director, be unfair to the credit institution having regard to—

- (a) the impact of any increase in or imposition of charges on customers,
- (b) the number of customers affected by any increase in or imposition of charges,
- (c) the additional income likely to accrue from any increase in or imposition of charges, and
- (d) any other criteria that he deems appropriate.44

A policymaker keen on the proposal might assume that the regulator would exercise this discretion in a competitively neutral way, and that other costs arising from the measure (e.g. preparation of pricing applications) would be broadly symmetrical. Alternatively, a more sceptical application of the test could yield a "no" for each of these questions, for example by assuming that administrative charges would be applied uniformly and that a new entrant would have a much higher frequency of new service applications and price change applications while developing its set of offerings in unfamiliar market conditions.

Finding a way to answer "no" to question 8 is more straightforward still: there is no absolute metric in the test for whether or not a market is subject to "rapid technological change".

Observations on this example

This ambiguous result may be as problematic as a straightforward passing result for two reasons. First, the policymaker applying the filter has the unenviable task of anticipating the effects of future exercise of discretion by an agency. This may require specialised economic knowledge. Perhaps this problem could be mitigated by providing more detailed guidance

⁴⁴ Section 149 (4) of the Consumer Credit Act, 1995.

(e.g. basing the test on a worst-case scenario about discretionary actions), but this would add further complexity to the filter.

The second problem is that ambiguity heightens the risk of capture by interest groups, as discussed in Section 2 above. Capture might take the form of a "favourable" application of discretion in carrying out the test. Furthermore, the wide discretion implied by these questions might provide an added incentive for proponents to focus rent-seeking efforts on the policymaker.

Summary of examples

In the table below, we summarise the examples discussed in this section.

Summary of Examples (\checkmark = yes, - = no)

Question	Example 1	Example 2	Example 3	Example 4
	Restriction on number of taxi licences	Rule on foreign- trained pharmacists managing pharmacies	Ban on below- invoice cost selling of groceries	Price controls on retail banking services
1	-	-	√	✓
2	-	-	✓	✓
3	-	-	✓	✓
4	-	-	-	(- / ✔)
5	✓	✓	-	-
6	✓	✓	-	(- / ✔)
7	-	(-/✔)	-	(- / ✔)
8	-	-	-	(- / ✔)
9	-	-	✓	√
Overall result	Pass (Yes = 2)	Pass (Yes = 2-3)	Pass (Yes = 4)	Ambiguous (Yes = 4-7)

Source: analysis by the author.

We can distinguish between measures likely to pass mainly because the market will not be deemed to be concentrated (e.g. examples 1 and 2), and measures that pass mainly because the nature of the economic effect is (or can be presented as) narrow, despite some degree of market concentration (e.g. example 3 and 4).

3.3 Conceptual problems with the UK filter

The UK filter does not appear to be well suited to its intended function. In particular, it seems likely to allow through some measures with high risk of capture and damage to welfare. Both the structure and detailed content of the filter seem to contribute to this problem; we take each in turn.

Note first that mechanism has a *parallel* structure, in the sense that it attempts to aggregate a multi-dimensional set of market and regulation attributes in a single calculation. Applying criteria in this parallel way implies that there are important trade-offs between them, and that they can be aggregated meaningfully. Moreover, the filter combines questions about the nature of the market with questions about the nature of the measure under review. This means the implied trade-offs and weightings are very complex and hard to fathom. For example, does less concentration really equate to the absence of price regulation in driving the likelihood that a measure will harm competition?

A key problem arising from the parallel structure of the filter is that no single feature of a measure or market, no matter how significant, can lead to a positive (or negative) result. An alternative *serial* (i.e. step-by-step) approach, which takes a involves a series of binary decisions, would probably be better at picking up black and white cases, as opposed to those involving shades of grey.

Parallel structure may also lead the UK filter to give perverse incentives to policymakers, for example by encouraging them to introduce measures on a piecemeal basis. If policies with narrow economic effects are automatically deemed less likely to require a detailed

competition assessment, a policymaker wishing to get a broad measure through while minimising the administrative burden might proceed with only part of the package, and not necessarily the best part. An example mentioned earlier is the apparent incentive for introduction of entry restrictions without matching price controls – precisely the outcome that would favour capture of rents.

Turning to the content of the UK filter, a key problem arises from its focus on concentrated markets. First, high market concentration is not a necessary or sufficient condition for a regulatory measure to damage competition. Second, if there are cases where high concentration increases the likelihood that a measure will harm competition, it must be the level of concentration *after* regulation is imposed that matter, not concentration *ex ante*. Of course, *ex ante* concentration is examined in the application of some specific regulatory measures, such as horizontal merger control. But its importance in this context is as an indicator of likely post-merger concentration.

Markets that are concentrated before they are regulated are hardly the only ones, and perhaps not even the main ones, in which regulation may harm competition. To take a simple (but extreme) example, note that a rule that said only one pharmacist would henceforth be permitted to practice in the country would presumably pass the UK filter, although it would completely eliminate competition! Some of the earliest applied work on regulatory capture found the phenomenon in prospectively competitive markets such as interstate trucking. ⁴⁵ Capture models point to other factors such as scope for administrative barriers to entry and the level of organisation of the rent-seeking group vs. the wider public when explaining successful rent-seeking behaviour.

⁴⁵ See for example Stigler (1971), pp.7-10, with a more detailed treatment in Rose (1985).

There is also a potentially serious practical problem with the UK filter concerning the role of market definition. We have noted earlier the mixing of questions about market characteristics with those about the nature of the proposed regulatory measure. Detailed questions about the market, and in particular market shares, presuppose some knowledge of the boundaries of the market. While there is a well-established toolkit available for antitrust market definition, it is by no means clear that this is (or should be) applied at the early stage of regulatory impact assessment. A requirement to use these tools in all cases would be an onerous administrative burden, while not using them could imply that conclusions based on market characteristics are unsafe. One possible way to resolve this simultaneity problem would be for someone to produce a long list of candidate markets for all sectors likely to be affected by regulation. However, such an exercise might not be considered cost-effective in a large jurisdiction, never mind a small one.

The UK filter does not require a full-scale market definition exercise, but it avoids this by leaving considerable discretion with the policymaker applying the filter. This could increase the risk of regulatory capture in some instances (discussed in Section 2 above), and even where the filter is applied objectively, this element of the test may reduce certainty and increase the risk of error.

4. Towards a better competition filter

It is clear that policymakers carrying out regulatory impact assessments need some way to determine when a detailed review of competition impact is required. Not reviewing competition impact would undermine the effectiveness of the RIA process and run the risk of serious consumer detriment. However, carrying out a detailed competition review of all proposed measures is unnecessary and impractical.

In this section we attempt to outline a practicable test to meet this need. Our emphasis is on capturing measures that run the highest risk of damage to competition; making the test easy to

apply, even by staff without a great deal of technical economics training; and avoiding frequent reviews of non-problematical cases.

We start with the structure of the test, before turning to the sorts of questions that should be included in it. A sample test designed along these lines is shown in Figure 1 below. Note that this is only a sample test. The level of scrutiny to be given to measures at the filter stage as opposed to a full assessment and the balance between the specific competition assessment and the wider regulatory impact assessment process are likely to depend on the specific institutions and available administrative resources in a given jurisdiction.

Structure

A "serial" filter structure is probably most appropriate, given that the test is likely to be carried out by personnel that are not specialists in the economics of competition. This approach reduces the exercise to a set of relatively simple steps, rather than a complex multi-dimensional sum. If extra discrimination is desired and resources are available, additional steps can be added.

When examining the UK competition filter, we noted that a focus on *ex ante* concentrated markets seems to be counterproductive and makes the test very difficult for non-specialists to apply properly. A more practical alternative is to focus on the nature of the measure rather than features of the market. While the latter may be relevant to the impact of regulation under various (complex) circumstances, in practice these can only be taken into account in the context of a detailed investigation.⁴⁶ Removing most of the market-related analysis from the test should reduce the administrative burden associated with it significantly.

⁴⁶ If we were to include market structure variables in the test, this would imply that a market definition exercise would be required at the outset. Defining economic markets tends to require a significant commitment of specialist resources.

1. Is the measure purely administrative in nature, with no potential effects on economic activities of NR individuals or undertakings? Yes No 2. Does the measure have the object or likely effect of directly limiting the number or identity of individuals or undertakings that can supply particular goods or services, OR Does it confer exclusive or limited access to resources or facilities that are needed to produce goods or services? No 3. Does the measure directly restrict the prices or quantities of any goods or services? No 4. Does the measure require or encourage undertakings that compete with one another to exchange or publish significant amounts of information about the prices, costs or usage of the goods or services they sell? No 5. Is the measure likely to lead to a significant increase (e.g. >10%) in the cost of producing NR particular goods or services for some subset of No market participants, OR Are the affected goods or services subject to rapid technical progress? Yes 6. Does the measure impose significantly higher costs on some types of actual or potential market NR participants than others? (These may be start-up, ongoing or exit costs) No Yes

Figure 1: Example of a "Serial" Competition Effects Filter (Key: "R"= review needed; "NR" = no review needed)

Questions to be included in the filter

Obviously, policymakers should not be required to spend scarce competition analysis resources on measures that have no discernable economic effects. Therefore, the first question in the filter should identify measures of this kind.

The next step is to ensure that the types of measures most likely to cause harm to competition trigger further scrutiny. From the discussion in Section 2 above, these include cases where the measure involves economic regulation, such as direct regulation of entry, prices and quality. Other measures that may have related effects are ones conferring exclusive or limited access to scarce resources.

With the increasing importance of informational regulation in many sectors, it might be appropriate to review measures that run the risk of facilitating tacit or explicit collusion, e.g. by requiring publication or exchange of strategically sensitive information.

Secondary features of concern should come into play only if wider the RIA exercise suggests they are present. These might include measures that have a high cost impact as a proportion of total sector costs, asymmetric effects on different types of firms in the sector, or those that involve regulation of innovative sectors. The precise formulation of these questions should depend upon the resources available for in-depth reviews.

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