

Introduction: the transformation of competition policy in Europe¹

Bruce Lyons

Competition arises when firms fight for customers by offering them a better deal in terms of price, quality, range, reliability or associated services. It is messy. Some firms lose market share and others exit. Successful firms can make substantial profits. The reward for consumers is that it gives them products they want and at a price that reflects the resource cost of providing them. This book is about how competition policy is used to maintain competition in European markets. Such policies are effective when they stimulate competition but counterproductive if they stifle it. This is a tricky balance to achieve. It requires a subtle understanding of competition economics.

The first three sections of this chapter start from a satellite picture of the economic system and progressively zoom in on the detail of individual markets and business practices. Section 1 introduces the merits of competition as the fundamental force driving the economy in the right direction. It also notes the temptation for businesses to suppress competition, though this is not always easy to do. How can we identify when business practices are likely to be harmful? And how can we balance such dangers against heavy-handed suppression of efficient and innovative strategies? The branch of economics that has developed this understanding is known as industrial organisation. It focuses on individual market outcomes and provides the intellectual foundation for what has become known as the economic (or effects-based) approach to competition policy. Section 2 provides a glimpse of this research into the implications of various business practices under alternative market structures. Section 3 identifies the channels through which a particular business practice may or may not harm competition. This is a helpful step in formulating the economic analysis in a way suitable for legal screening.

¹ I thank Steve Davies for his typically insightful comments. Neither he nor the authors of the case studies bear any responsibility for the views contained in this chapter.

The economic approach to competition policy has not always been favoured in Europe (or in North America). Different countries have had different motivations for laws relating to competition. Some interventions have been more anticompetitive than pro-competitive. In recent years, however, there has been a fundamental shift towards the economic approach. There has also been a unifying focus provided by the European Commission – the world’s only supranational competition agency. Section 4 gives a flavour of these early differences and the evolving convergence.

Each of the seventeen case studies in this book illustrates both the economic approach and how far it has (and sometimes has not) developed in Europe. Section 5 completes this introductory chapter by explaining the organisation of the book into three parts. It is left to separate introductions for each part to outline each case study and sketch the relevant legal background.

1. The benefits of competition

It is a marvel of the market economy that the apparent chaos of competition results in such significant benefits. The system works because market prices summarise a vast amount of information on supply and demand conditions in a way that is most relevant for commercial and private buyers. If these prices are set competitively, the outcome has a strong claim to be the most efficient that can be achieved.

The essential economic benefits were articulated with enduring clarity by Adam Smith in *The Wealth of Nations*, first published in 1776. Competition not only keeps prices low and close to cost,² it also reduces costs as firms fight for market share and survival.³ Individual producers may be driven by a selfish profit motive and have no direct interest in the welfare of unrelated

² ‘... the price of free competition ... is the lowest which the sellers can commonly afford to take, and at the same time continue their business’. ‘The price of monopoly is upon every occasion the highest which can be got’ (Book I, Chapter VII).

³ This applies both aggressively – ‘in order to undersell one another, have recourse to new divisions of labour, and new improvements of the art, which might never otherwise have been thought of’ – and defensively – ‘Monopoly ... is the great enemy of good management, which can never be universally established but in consequence of the free and universal competition which forces every body to have recourse to it [i.e. good management] for the sake of self-defence.’ As quoted in Vickers (1995). Sir John Hicks (1935) summarised this in his famously pithy phrase: ‘The best of all monopoly profits is a quiet life.’

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customers, but as long as the process is competitive it is as if an ‘invisible hand’ guides the outcome so that it is indeed beneficial for consumers.^{4,5}

Modern economics has honed and formalised Adam Smith’s insight in a number of ways that enable a deeper understanding of competition and its benefits. One approach, known as general equilibrium theory, derives a sufficient set of conditions such that apparently anarchic, decentralised decision making across many different markets results in a Pareto efficient economy, which is to say an outcome in which no one could be made better off without making someone else worse off. Competitive pricing is the first of these essential conditions. In contrast, textbook monopoly pricing is Pareto inefficient because output is restricted, driving a wedge between consumer valuation and marginal cost. Other conditions necessary for an efficient economy are the absence of uncompensated externalities and no distortions due to asymmetric information. This particular formalisation of the efficiency of a competitive economy is known as the first fundamental theorem of welfare economics.⁶ Other approaches highlight more dynamic aspects of the competitive process and identify further benefits for technical progress.⁷

Economic history provides much macroeconomic evidence on the economic benefits of a broadly competitive market economy. For example, Douglass North (1991) contrasts how the early colonists of North America took British institutions with them, and these enabled competitive markets to develop based on secure property rights and decentralised decision making. In contrast colonisation of South America took place at a time of bureaucratic, centralised monarchy in Spain and set in place institutions such that ‘wealth-maximizing behaviour by organizations and entrepreneurs (political and

⁴ ‘It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our necessities but of their advantages’ (Book I, Chapter II); ‘... by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention’ (Book IV, Chapter II).

⁵ Competition also has a more controversial claim to political benefits, in particular the promotion of freedom. On this view, it does more than deliver the best opportunity to satisfy consumer wants – it is also desirable because it allows individuals to make their own choices (even if those choices may be against their own best interests). Hayek (1960) makes the classic case and Sen (1993) provides a recent critique. The political benefits are also stressed in German *ordo-liberalism* where the benefits are expected not through individual choice but through the avoidance of a political process dominated by monopolies hand in hand with government (see Gerber, 1998).

⁶ A second fundamental theorem proves that concerns about social inequality should not undermine the attractions of efficient competitive markets as long as there are suitable tax and social insurance schemes.

⁷ For example, see Schumpeter (1943) on competition as ‘creative destruction’; also Kirzner (1978) on entrepreneurship and competition. See also section 2.

economic) entailed getting control of, or influence over, the bureaucratic machinery' (i.e. competition was diverted away from satisfying customers and into gaining political influence). The consequent, contrasting economic development of America north and south of the Rio Grande is clear to all.

Back in Europe, the former command economies of central and eastern Europe provided a natural experiment lasting over forty years in the second half of the twentieth century. Contrast the fortunes of Poland and Spain.⁸ Both countries were Catholic and had populations of around 25 million in the 1950s (and 40 million by the end of the century!). They had similar geographic areas and agricultural economies. In 1950, Poland had a per capita gross domestic product (GDP) of around \$750 and Spain only \$500. Over the next forty years, Poland was a highly centralised economy with little room for competitive markets. Spain's economic system was market based.⁹ By 1990, when Polish communism formally ended, Spanish per capita GDP was four times higher than in Poland. The comparative evolution of the communist command economy of East Germany and the social market economy of West Germany over the same period provides an even sharper contrast of fortunes.

This is not to say that competitive markets solve all economic problems. They do not. As we shall see in the [next section](#), there are occasions when some apparent restrictions of competition can be justified. Furthermore, competition appears to create some problems when inefficient firms lay off workers and successful firms pay huge bonuses to senior managers while their activities deplete resources and contribute to climate change. Complementary economic and social policies are essential to create a pleasant and sustainable society. This is not the place to develop the economics of unemployment, environmental pollution and social equity, though these are important issues. The point to note is that they are best addressed by complementary policies of education, environmental regulation, taxation and social insurance, but not by abandoning competitive markets.

These broad-sweep ideas and observations establish the firm presumption that a broadly competitive market economy has very much more to recommend it than one dominated by central planning or monopoly. However, there are numerous possible variants of a market system and many were tried across Europe in the second half of the twentieth century (and not just eastern communism versus western markets). Within western Europe there were

⁸ See Sachs (1993).

⁹ Though economic and political freedom were severely compromised by Franco's dictatorship until his death in 1975.

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national differences in degrees of state ownership and state subsidies to private business, price, entry and trade regulation, and policies in relation to cartels. The evidence mounted that state ownership was less efficient than private ownership and from the 1980s privatisation began to roll across Europe, reaching the East in the 1990s following the collapse of communism.

Another influence around this time was the single European market programme, which aimed to eliminate non-tariff barriers to trade within the European Community. Further reforms liberalised entry into previously regulated markets. One high-profile example was the deregulation of airline competition and consequent appearance of low-cost airlines using a very different business model to the very uniform product previously offered by national flag carriers. There are continuing moves to deregulate in other areas such as energy. Further EU initiatives have attempted to reduce the impact of state subsidies, at least inasmuch as they distort competition between firms located in different Member States.¹⁰

While many national differences remain, there is an increasing European consensus that a prosperous economy responsive to consumer needs is best achieved by private ownership, deregulation of entry and a limit on state subsidies (at least when given by other countries!).¹¹ Of course, this is a multifariously interpreted consensus that is characteristic of the cultural cassoulet that is Europe.

The issue then becomes: should firms be left completely free to compete as and how they wish, or would complete laissez-faire result in firms themselves subverting the competitive process? The pressure on firms to maximise profits provides an alert to the dangers. Business life is much easier if competition is suppressed, even if it is also less productive and less creative. This observation is not new. Adam Smith recognised it back in 1776 when he wrote about the enduring temptation to fix prices.¹² Although it can be hard for firms to act on

¹⁰ See Davies *et al.* (2004) for some interesting, accessible case studies of the benefits of deregulating markets.

¹¹ See Megginson and Netter (2001) for a review of the empirical literature on the ownership effects of privatisation. Nickell (1996) provides an example of evidence that competition enhances productivity, and Aghion *et al.* (2004) of evidence showing how foreign entry raises domestic productivity.

¹² 'People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices' (Smith, 1776, Book I, Chapter X). He was less optimistic about the ability to legislate against such conspiracies. His next sentence reads: 'It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. But though the law cannot hinder people of the same trade from sometimes assembling together, it ought to do nothing to facilitate such assemblies; much less to render them necessary.' Modern advocates of competition policy are less pessimistic. Although the law in a free society indeed cannot prevent meetings, it can try to stop competitors discussing price when they meet.

these temptations, especially if the number of rivals is high or entry is easy, some form of referee is necessary to stop the invisible hand turning into a fist. To understand the referee's role, we need to dig deeper into the operation of individual markets.

2. Understanding business practices and market competition

The economics of industrial organisation (IO) provides a detailed theoretical and empirical understanding of how firms compete, whether it be in natural resource, manufacturing, utility, retailing or other service markets. The theory develops how rational profit-maximising firms must be expected to behave in markets with a limited number of firms (i.e. oligopolies). Since senior managers are under a fiduciary duty to their shareholders to maximise shareholder value, it is reasonable to assume that this is the way that experienced managers will indeed behave. But if they are tempted to relax or pursue non-profit objectives, there are other pressures that encourage them back to profit: supervision and performance monitoring within the firm, incentive schemes (e.g. bonuses, share options), internal promotion and external job offers for the most successful managers, threat of takeover by a more profit-oriented management team and natural selection in a competitive product market.

The most familiar issue investigated in IO is how the power to set price above cost is related to the number and relative size of firms in the market.¹³ Price is always a core element of competition but it is rarely the only element. The literature has been developed to understand a very wide range of strategies used by firms. It investigates how firms compete when they choose prices, including price discrimination, quantity and bundling discounts and price restraints and guarantees, product design, quality and range, investments in capacity, distribution, marketing and research and development (R&D), the range of production and distribution activities undertaken within the firm, and the nature and content of contracts entered into with customers, other firms as suppliers, or joint ventures. IO investigates the optimal choice by each firm, the ramifications and responses of its rivals, and how these can be anticipated. Thus, even when each firm makes its decisions unilaterally, the whole market is affected and we

¹³ The core modelling technique originates from Cournot (1838), but Adam Smith already had the nub of the idea: 'If this capital [i.e. relevant assets sufficient to trade in a town] is divided between two different grocers, their competition will tend to make both of them sell cheaper, than if it were in the hands of one only; and if it were divided among twenty, their competition would be just so much the greater, and the chance of their combining together, in order to raise the price, just so much the less.' As quoted in Stigler (1987).

are interested in working out the implications for all firms and consumers once everyone has adjusted their pricing and other relevant decisions.¹⁴

Each market has different characteristics which influence the strategies firms choose and the competitiveness of outcomes. Such characteristics include the degree of production and distribution economies of scale and scope, availability of risk capital, technology, scarce skills and management expertise, market size, other entry barriers and the number of firms, scale, stability and lumpiness of demand, knowledge, sensitivity and rationality of consumer behaviour, consumer network benefits or switching costs, potential for technological improvement, scope and security of intellectual property rights, technological lock-in, transaction costs of doing business with other firms, contract, competition, trade and other laws, and market history. IO theory now provides a large and expanding toolkit for the analysis of markets with different blends of such characteristics.¹⁵

One preliminary insight is that some apparently quite different business practices can be equivalent in their effects. As a very simple example, suppose a supplier wants a retailer to charge no more than a certain maximum price when selling its product. If the demand curve is known, then the supplier could achieve exactly the same effect by requiring the retailer to sell an equivalent minimum quantity. A maximum price or a minimum quantity are alternatives that are equivalent in their effects.¹⁶ The importance of this is that a poorly designed competition policy may both prohibit resale price restrictions and allow quantity incentives. Even without considering whether intervention against such strategies is desirable, we can say that it is inconsistent to outlaw one and permit the other.

Other insights relate to pricing and investment incentives. For example, the time and effort needed to develop a new product may not be forthcoming if

¹⁴ An outcome such that no firm has an incentive to deviate from its current strategy is known as a Nash equilibrium. A companion concept of subgame perfect Nash equilibrium is appropriate when firms make long-term investment or product design decisions in anticipation of the consequences for future pricing behaviour.

¹⁵ An introduction to IO theory can be found in a number of textbooks and handbooks. Tirole (1989) is old, but it remains as a classic on the modern foundations of industrial organisation theory. Church and Ware (2000) is more recent and more applied. Motta (2004) is most recent and most direct in applying the approach of IO to competition policy issues. Three volumes of *Handbook of Industrial Organization* (Schmalensee and Willig, 1989, and Armstrong and Porter, 2007) include some excellent review articles. Less demanding textbooks that still provide good introductions to industrial economics at a level similar to the exposition in this book include Cabral (2000), which has a more European perspective than others such as Carlton and Perloff (2000) or Pepall *et al.* (2008). Klein and Lerner (2008) provide a useful compilation of classic journal articles.

¹⁶ Quantity discounts can also have an equivalent effect, though none of these strategies is exactly equivalent if the demand curve is uncertain.

non-inventors can immediately copy someone else's invention. This is familiar as the justification of patents (i.e. time-limited monopoly rights). Similarly, expert advice, samples and other services provided 'free' by some retailers would not be sustainable if low-service retailers can undercut price and free-ride. This loss of marketing support might be solved by certain types of exclusionary behaviour: refusing to sell through low-service retailers ensures that high-quality retailers capture the benefit of their investment in premises and training. Economic analysis can help distinguish such cases from others where refusal to deal is just a means of preserving or enhancing market power.

Empirical substance to IO theories is provided by a large body of econometric studies that tests theoretical predictions and identifies other patterns to explain. A general finding is that, just as the theory suggests, market outcomes are highly sensitive to the specific characteristics of the market. This means that there are no simple rules like 'four firms are necessary (or sufficient) for effective competition' or '50 per cent market share is necessary (or sufficient) for a firm to be able to raise price substantially above the competitive level'. Nevertheless, there is much empirical knowledge relating to competition and productivity growth,¹⁷ pricing,¹⁸ entry, exit and market concentration,¹⁹ contracts and investment,²⁰ and experimental markets.²¹

There is space to provide only one illustrative example of this rich econometric literature. Bresnahan and Reiss (1991) investigate five retail and professional service markets in around 150 isolated American towns of varying sizes. Entry barriers are low in these markets but each firm must incur some fixed costs. As expected, the authors find that larger towns can support more firms in each product market, but how many more? If price did not fall with entry, the number of firms should be proportional to market size, but if each extra firm introduces more competition such that price and margins fall, then greater sales for each firm will be needed to cover fixed costs. Consequently, the greater the competitive effect of entry, the larger must be the incremental size of market in order to support that entry. Using this insight, they find that reasonably competitive outcomes can be established by a market structure of between two and four firms. Thus, we learn that, even for reasonably similar types of market, different numbers of firms may be necessary to establish

¹⁷ See Ahn (2002) for a review.

¹⁸ See Berry and Reiss (2007) and Hendricks and Porter (2007) for partial reviews. There is also much econometric work on collusion and cartel behaviour, as well as numerous case studies (e.g. on airline pricing).

¹⁹ See Berry and Reiss (2007) and Sutton (2007) for reviews.

²⁰ See Lafontaine and Slade (2007) for a review.

²¹ See Holt (1995) and selective reviews in Plott and Smith (2008).

competition and this number *may* be as small as two. However, it would be unwise to project this finding on firm numbers into a wider generalisation for more complex markets; for example, these small-scale trades were chosen because they operate in the shadow of a fairly immediate threat of entry. Furthermore, more differentiated product markets may require more firms to establish a competitive outcome.

The IO approach also provides a guide to defining a meaningful market. This is important because market definition is not usually as clear-cut as well-defined trades in isolated towns. There are always two dimensions to be assessed: the range of products that compete and the geographic extent of the market. How can we determine, for example, whether apples and bananas are in the same market? Some people will find them close substitutes as healthy snack fruits but others will have a strong personal preference (e.g. it takes good teeth to bite into a crisp apple). Economic meaning can be put into the issue by asking whether a hypothetical monopolist of bananas would be able to raise price without so many consumers switching to other fruit such that this price rise would be unprofitable. If the answer is yes, then bananas can be considered to be a separate market, but if the answer is no, then the banana market is too narrowly defined for competition purposes so we need to consider a wider definition (e.g. bananas and apples). Starting from a narrow product market, potential substitutes can be added until the hypothetical monopolist could profitably raise price. This approach to market definition gets to the heart of its use to understand competition. A similar approach can be applied to geographic market definition by asking: would a hypothetical monopolist in Germany be able to raise price without losing customers to French or Dutch firms?

This summary of IO analysis has so far focused on understanding the world that we observe. It can also help in passing judgement: would a feasible intervention in the market improve social welfare? This gets to the core of the economic analysis necessary for good competition policy. Consumer welfare is measured by consumer surplus (i.e. the excess of consumer willingness-to-pay over what they actually have to pay) and producer welfare is measured by profits (which may be distributed to shareholders or shared with employees). Total welfare refers to the sum of the two. It is a virtue of the approach that the welfare of consumers and firms can be analysed separately and then an evaluation can be made using an appropriate weighting.²²

²² See Farrell and Katz (2006) for a discussion of appropriate welfare objectives in the context of competition policy.

As an example of this welfare approach, consider a horizontal agreement between firms to share a market according to regions. This conveys monopoly power in each region and raises prices and profits for all firms. However, consumer surplus falls and the standard monopoly analysis shows that consumers lose more than the firms gain. Next, consider a vertical agreement between a manufacturer and a supplier. This might take many forms, but as a freely negotiated deal it must be expected to raise profits for both. However, unlike a cartel, this need not come at the expense of the manufacturer's customers. In fact, they may benefit if some of the efficiency is passed through as a price cut. This suggests a very different welfare analysis and consequent policy stance towards horizontal and vertical restraints. Similar considerations apply to horizontal compared with vertical mergers. Nevertheless, there are specifiable circumstances where a vertical restraint or vertical merger may foreclose rivals and harm consumers. By the 1970s, the Chicago School had highlighted the benign features of vertical restraints but had used restrictive assumptions to get the message across. More nuanced game theoretic analysis began to pick away at the potential for foreclosure and it is only from the 1990s that a significant post-Chicago consensus has begun to develop.²³

The next step is to formulate the economic analysis in a way suitable for legal scrutiny.

3. Harm and redemption in competition analysis

Modern competition policy is about refereeing free markets to ensure there is no foul play. The idea is to let those offering the best deal win customers. To pursue the sporting analogy, competition economics appraises tackles so that the competition is robust and exciting without breaking down into lethargy, match fixing or kicking the other side off the field.²⁴ If there is an offence, the referee has to decide how serious it is and how to deal with it most effectively. It is not the referee's job to protect weak competitors from losing. The best referees blow their whistles infrequently but are firm and clear in their decisions when they do. They gain the respect of the players, foul play is deterred and there should be little for them to do except to observe the game very closely. I start with markets where it is not possible to create a sufficiently level playing field for a competitive game to begin.

²³ See Kovacic and Shapiro (2000) for a history of economic ideas in relation to US antitrust policy.
²⁴ Competition economics can also advise on best rules for the game (e.g. guidelines for implementing competition policy). This book focuses on the role as referee.